

12238

Patil P.C.

Principles and practice
with

SERVANTS OF INDIA SOCIETY'S LIBRARY,
POONA 4

Cl. No.

Date of release for loan

Ac. No. 12238

This book should be returned on or before the date last mentioned below.

Failure to comply will involve cancellation of the Borrower's Card and forfeiture of deposit.

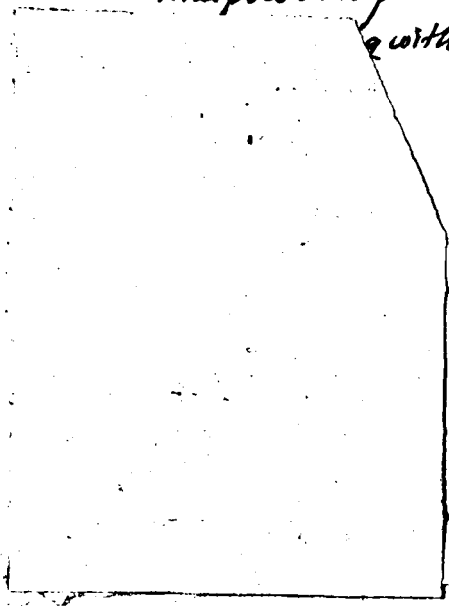
11 OCT 1962	26 FEB 1967
17 SEP 1962	1 APR 1968
23 MAY 1963	
13 JUL 1963	21 SEP 1972
24 OCT 1964	4 JUN 1981
12 DEC 1964	16 OCT 1982
25 DEC 1964	21 APR 1995
2 JUN 1966	
1 AUG 1966	
13 OCT 1966	
28 JAN 1967	

A. B. P. P.]

12238

Patil P.C.

Principles and practice
with



**SERVANTS OF INDIA SOCIETY'S LIBRARY,
POONA 4**

Cl. No.

Date of release for loan

Ac. No. 12238

This book should be returned on or before the date last mentioned below.

Failure to comply will involve cancellation of the Borrower's Card and forfeiture of deposit.

11 OCT 1962	28 FEB 1957
17 SEP 1962	1 APR 1968
23 MAY 1963	
13 JUL 1963	21 SEP 1972
24 OCT 1964	4 JUN 1981
12 DEC 1964	16 OCT 1982
25 DEC 1964	21 APR 1995
2 JUN 1966	
1 AUG 1966	
13 OCT 1965	
28 JAN 1967	

A. B. P. P.]

Dhananjayrao Gadgil Library



GIPE-PUNE-012238

Department of Agriculture, Bombay

134

PRINCIPLES & PRACTICE OF FARM COSTING
WITH
FARM STUDIES

BY

RAO BAHADUR P. C. PATIL, L.Ag., M.Sc. (Wis.), I.A.S.,
*Professor of Agricultural Economics and Ag. Principal,
College of Agriculture, Poona*

with the assistance of
T. B. PAWAR, B.Ag.
and others

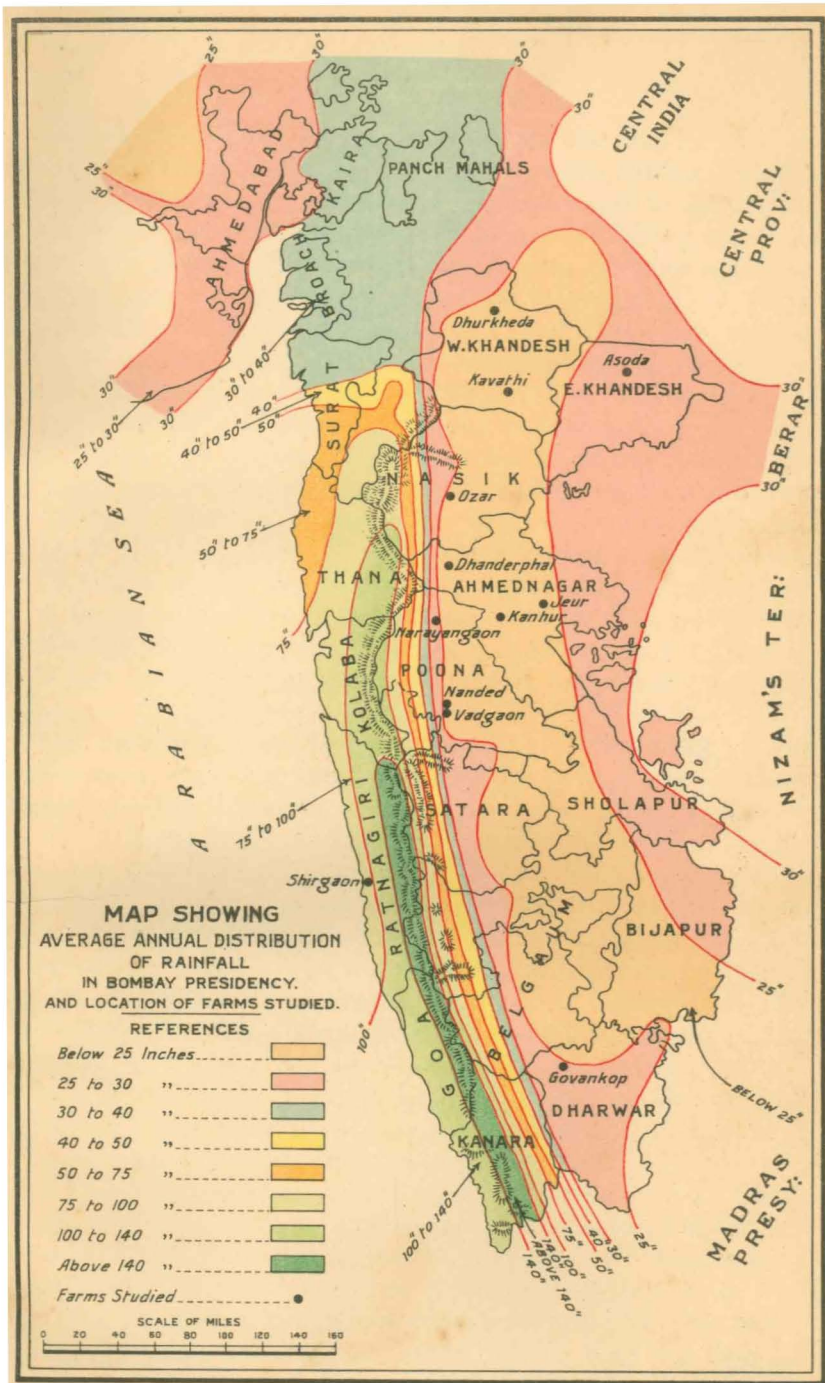
*Government do not accept responsibility for the accuracy of
the data and conclusions embodied in this publication*

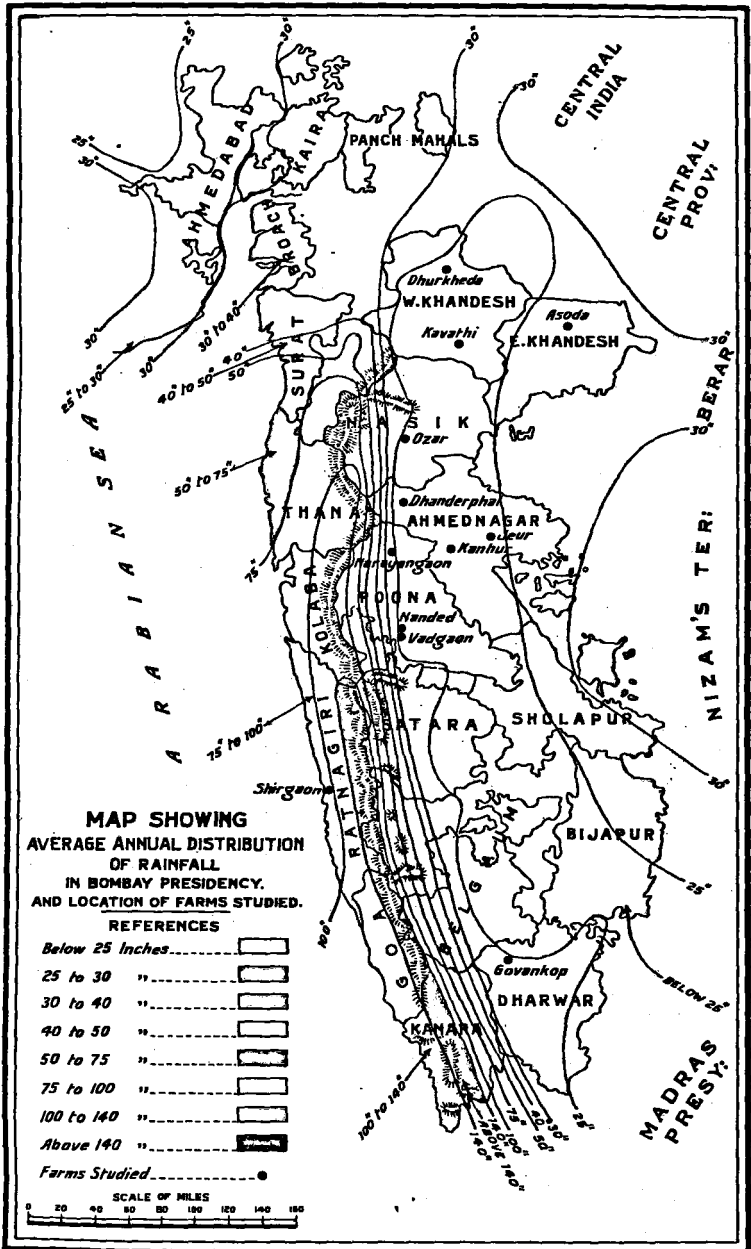
BOMBAY
PRINTED AT THE GOVERNMENT CENTRAL PRESS
1933

X9(J):873.231

G3

12238





PREFACE

From the year 1925 to 1928 studies in the cost of production of important crops in the Deccan were conducted with a view to ascertaining net profits or losses and to suggesting economies, while prices of farm produce were falling after the World War Boom. That work had its own purpose and use. Crop study, however, does not provide information to judge the economic position of the farmer and does not supply sufficient material for suggesting adjustments in crops and cropping plans. Moreover, the income measure, i.e., the net profit measure which is in vogue in India and England, does not seem to be suitable for peasant farming in India, at any rate in the Bombay Presidency where farming is followed more as a means of livelihood than as a business. This view was supported by Mr. T. F. Main, B.Sc., O.B.E., the Director of Agriculture, Bombay, and it was therefore thought desirable to investigate a few farms in different agricultural regions with a view to formulating *modus operandi* for farm cost accounting and to adopt new income measures more suitable for peasant farming in India.

After carefully considering the plan of the study, this investigation was commenced early in 1928. The income measures used in this work are the "Family Labour Income" and the "Farm Business Income." After sufficient data for discussion was collected, a note on the Accounting Principles suggesting "Family Labour Income" and "Farm Business Income" was circulated (on 29th July 1929) to the members of the Agricultural Economics Committee of the Bombay Department of Agriculture and discussed in the committee on the 10th September 1929. While this work was progressing on the new lines, it was a great satisfaction to find that in another part of the world Dr. Earnest Laur, Professor at Zurich and Director of Swiss Peasants' Union, propounded almost similar income measures in the International Review of Agriculture*. Hence I have no hesitation to place the *modus operandi* and income measures before investigators in Agricultural Cost Accounting and Farm Management in India. Dr. Laur's note on accounting principles is not yet available but from the definitions of the income measures appearing in the International Review, referred to above, I find that his income measures are the same as I have used. What I call "Family Labour Income" and "Farm Business Income" are called

* Issue of September 1929,

‘Family Labour Earnings’ and ‘Family Farm Earnings’ by Dr. Laur.

This is probably the first attempt at an exhaustive farm cost study in India, at any rate in the Bombay Presidency which opportunity costs (i.e., costs not directly incurred) are calculated and allocated in consonance with cost accounting principles avoiding arbitrary assumptions as far as possible. Not remaining content with academic research at finding suitable income measures and formulating *modus operandi* for farm cost study, I have organized the study of 14 farms carried out in 1928 to 1930, which is presented in the following pages, and which I believe elucidates the method followed and at the same time gives an idea of the position of the agricultural business and of the crops grown during the years 1928-29 and 1929-30 in some of the tracts of Bombay Presidency. Farms were selected in different tracts, worked under different climatic and economic conditions, with a view to study farm business under varying conditions. One of the farms studied was a rice farm situated in the heavy rainfall tract getting about 100 inches of rain; three cotton farms in Khandesh which are more of a *kharif* tract getting 25 to 30 inches rain; two cotton farms near Dharwar in Karnatic getting about 33 inches rain and where cotton is grown as a semi-*rabi* crop; three farms in Ahmednagar district, notorious for its poor rainfall, getting less than 20 inches; one farm in the north of Poona; one in Nasik district lying in the transition tract and three sugarcane farms, on the Mutha Canal near Poona, which grow fruit and vegetables as supplementary crops. The study comprises cases of owned farms, cash rented farms, share rented farms and farms run with the help of partners. In the case of some farmers they had yearly farm servants. There are cases in which farmers exchanged labour. It will thus be seen that the study includes cases of different kinds of cropping, ownership and climatic conditions, etc.

This statistical study of farms is restricted to farm business only. Farm costs and farm receipts are studied with a view to finding farm business income and family labour income. Household expenses on food, clothing and social functions, etc., are not considered. The newness of farm cost study and the differences of opinions on the subject are discussed in the first part. As this study progressed many difficulties cropped up. With the experience gained in India (as Deputy Director of Agriculture and Professor at the College) and in other countries I have attempted a system which, I expect will suit farm cost study under Indian conditions.

It may be remembered that the costs, receipts and incomes in the different studies are actuals belonging to particular years under conditions of rainfall, labour and market obtaining in particular years. In such investigations the investigator, not concerning himself with what the farmers should have done but with what they did. Labour used on particular plots, irrigation or manure given to particular plots, whether more or less than customary, have to be viewed in the light of the special circumstances of the farmer. Though it is quite fair to take special cases involving more or less expenditure to explain away some of the causes of more or less yield, with a view to improving efficiency, it won't be fair to pick up such cases for generalization. For example, though one will find in the book, that in the year 1929-30, *bajri* crop on the Kanhur farm did not produce a single pound of grain and that the yields of other crops on the same farm were ridiculously low, it would be hazardous to generalize from such facts. The cause of the failure of crops in the case referred to was the scarcity of rainfall. Costs and receipts referred to above hold good under particular conditions for Kanhur. It is therefore incumbent on those, who like to use the material from such investigations, to go below the surface and find the causes of the abnormal crops. Cases of crops may be found in which a farmer gave too much manure and spent too much home labour or applied no manure and spent very little labour. The explanation of such cases lies in the prices of farm produce and of the services of capital and labour, as also in the peculiar economy of the locality and of the individual. In a year of scanty rainfall a farmer may employ home labour in watching his crop, the calculated cost of which may not be covered by the crop saved. In peasant farming this is bound to happen and peasants cannot be blamed for their actions if they are based upon sound economic reasoning.

Economic investigation in Agriculture is really a work which necessitates a separate section with a fairly large staff. It is, however, not possible to persuade the Government to sanction such a separate establishment before they are convinced of the importance of such new work. Even in the United States of America it took some time before the Governments of the different States were persuaded to sanction appropriations for organizing "Agricultural Cost Accounting Sections." In the Bombay Presidency, Dr. H. H. Mann, Rao Bahadur D. L. Sahasrabudhe, Messrs. N. V. Kanitkar and V. A. Tamhane studied two villages between 1917 and 1921. The nature of their investigations was different. From 1925 to 1928,

I carried out crop studies with the help of two agricultural graduates and three agricultural teachers. The present work is the third one in the category. It was conducted with the help of ten investigators all of whom, with the exception of one, served as honorary investigators in addition to their usual work. The following gentlemen worked as investigators :—

1. Mr. T. B. PAWAR, B.Ag. Graduate Assistant under the Professor of Agricultural Economics, studied three farms at Nanded and Wadgaon near Poona.
2. Mr. K. D. GUMASTE, B.Ag. Graduate Assistant to the Deputy Director of Agriculture, Southern Division, studied two farms at Govankop near Dharwar.
3. Mr. N. V. MANDKE, B.Ag. Graduate Assistant to the Deputy Director of Agriculture, Konkan, studied one farm at Shirgaon near Ratnagiri.
4. Mr. R. M. CHOUDHARI, B.Ag. Graduate Assistant to the Deputy Director of Agriculture, North Central Division, studied one farm at Dhurkheda in West Khandesh.
5. Mr. B. L. DUMBRE. Agricultural teacher, studied one farm at Narayangaon (District Poona).
6. Mr. K. M. TAWALE. Agricultural teacher, studied one farm at Kanhur (District Ahmednagar).
7. Mr. Y. P. SUPEKAR. Agricultural teacher, studied one farm at Jeur in 1928-29 and another at Dhandarphal in 1929-30 (both in Ahmednagar District).
8. Mr. T. R. PATIL. Agricultural teacher, studied one farm at Kavthi (West Khandesh District).

comparable. In India due to the extreme variations in the meteorological and soil conditions and partly due to the peculiar economy of peasant farming there is more diversity of crops from tract to tract and even on the farms in each tract. Moreover, majority of farms are below the size of what is called 'minimum efficient unit,' thus making comparative study more difficult. The chief merit of farm costing in India will lie in bringing out facts, regarding the incomes in different crop zones, which are little known. Of course the material and their analysis will suggest adjustments in farm management and in effecting economies in the cost of production.

The United States of America leads in agricultural cost accounting. After the World War, England has been showing great interest in this line of investigation. In India some attempt is made in Bombay and by the Board of Economic Enquiry in the Punjab. Literature on Agricultural Cost Accounting is still scanty. Books on Agricultural Economics and on Farm Management treat the subject a good deal in theory without giving actual studies to illustrate the *modus operandi*. Moreover, opinions of authors on cost accounting differ widely on costing principles and in the methods followed. In the cost of production, some economists include rent of land, wages of unpaid family labour and interest on working capital; while others exclude one or the other items. Results of enquiries arrived at under varying conditions cannot be compared unless the authors give details of costing principles and illustrate their *modus operandi* by presenting actual studies. It is, therefore, very desirable for investigators to give the details until a uniform method is adopted.

METHODS OF STUDYING COSTS OF PRODUCTION*

Though most authors agree on broad principles, no two authors agree on the working details. Moreover, conditions and land policies in advanced countries, like the United States of America and England, are so different from those obtaining in India (especially in the Bombay Deccan where peasant farming is the rule) that the methods generally followed in the Western countries are not found suitable under Indian conditions, as will be seen from the following discussion. In the study of agricultural costs two methods are employed in the United States of America, (1) the Survey method and (2) the Route method.

(1) *Survey Method*.—In this method estimates of costs and receipts are collected either by sending questionnaire forms for being filled in by the farmers or the investigator visits the farms and records the information supplied by the farmers in such visits of enquiry. In either case the investigator gets more of estimates than facts, though in the questionnaire system a careful farmer may draw upon his records. In the survey method a large number (several hundreds if possible) of schedules with questions are sent to farmers and when the schedules are received, information is collated by the investigator. When the investigator

* Merrill K. Bennet: Farm Cost Studies in United States of America, 1928, pp. 3
Agri.

meets the farmers he fills schedules by asking questions and the information is worked up afterwards.

(2) *Route Method*.—In the route method an investigator or his helper visits a limited number of farmers (generally about 15 in number) at their farms and records the information on costs and receipts and his observations on the spot. In America where progressive farmers are in the habit of keeping records, monthly visits are found sufficient.

Looking to the smallness of holdings and the illiteracy of the peasant farmers, it can at once be said that survey method is not suited to Indian conditions. In connection with definite problems such as the harvesting costs of sugarcane and the labour employed in that connection, questionnaire system was tried without much success and the author had to fall back upon enquiries on the spot*. Under Indian conditions personal enquiry on the spot only yields satisfactory results. In our studies of the cost of production of crops, carried in the Deccan from 1925 to 1928, route method was tried and found useful. Monthly visits recommended by American investigators do not supply accurate information, as no accounts or notes of any kind are kept by the average Indian farmer and it is therefore found necessary to visit farms under study twice a week.

The survey and the route methods may be followed in costing either a part of farmer's business, as a particular crop raised by a number of farmers or the entire farm business of a number of farmers. It may, however, be remembered that most of the enterprizes of the farmer are designed to help each other with a view to bring more income and it is not possible to treat them separately for accurate costing purposes. In our crop studies we came across many difficulties and though we got fairly good idea of the costs and receipts for analysis and intercomparison, we feel that the study of farms is more helpful than the study of crops. In the attempts to study a particular crop, without studying the whole farm business, one cannot accurately find the labour income made by the family. In the study of a particular crop there is not much difficulty to find out profits if home labour is charged at going rates. In studying entire farms, by cost accounting, one has to study the different crops making up the farm business and, therefore, while studying the whole farm he gets all material for every crop grown. At the same time he finds full material, the analysis of which supplies the data to compare different crops and different plots under the same crop, as also the wages earned by the members of the family.

GENERAL PRINCIPLES OF COST ACCOUNTING

There is variation in cost accounting methods followed in different countries though on general grounds there is agreement.

Farm receipts or Gross Receipts include :—

(1) Cash received for the produce (the main as well as the by-products) sold.

(2) Value of the produce used in the household or held over for the use of the family. In the United States of America the produce used by

*P. C. Patil : The organisation and cost of *gul* (crude sugar) making in the Deccan sugarcane tracts. Bulletin No. 147 of 1927.

the farm family is ignored and is not shown in the outturn and receipts.

(3) Seed kept for sowing.

(4) Value of the produce given over to others gratis or as wages or *baluta* charges. (In this particular enquiry, however, the *baluta* dues are not included in receipts nor are they shown as expenses.)

(5) Value of the by-products as straw and chaff kept for animals; (part used for farm animals to be debited to their account and that used for milch and other animals maintained for the family to be debited to household account).

(6) Some investigators include increase or decrease of the inventory in the receipts and expenses respectively. Since inventory deals with assets and liabilities of the farmer, irrespective of farm business, the increase or decrease cannot be entirely attributed to the farm business. It is only in the case of farm stock which is borne on farm account that there is a solid ground to take note of such increase or decrease. When land values rise or fall, for causes outside the control of the farmer, he is not responsible for the changes in value. Moreover, under peasant farming of India, inventory is much affected by the household expenses such as marriage or death expenses. More often than not, a cultivator sells a bullock or a piece of land for the marriage of his son or daughter. Increases and decreases in the inventories therefore are not distributed on the different crops, though they are taken note of, while considering the position of the farmer at the end of the year's business.

Farm expenses include : —

(1) Wages of outside labour paid in cash or kind or partly in cash and partly as board.

(2) Wages of the farmer and his family for the work done. (Though family wage is farm cost, it is not included in the costs as it is not called for in finding out family labour income and farm business income.)

(3) Value of seed, manure and other cash expenses; (farm seed and farm manure used also enter into the farm expenditure).

(4) Rent of land whether rented or owned.

(5) Depreciation of farm animals and of implements.

(6) Insurance or death allowance for farm animals and their housing charges.

(7) Interest on working capital.

(8) Costs of marketing farm produce.

POINTS OF DIFFERENCES IN COST ACCOUNTING*

Since the methods of cost accounting adopted in this investigation differ certain details from those adopted either in England or United States

*Some of the references discussed :
 Frank App : Farm Economics, 1924, pp. 413-17, 464.
 Merrill K. Bennet : Farm Cost Studies in the United States of America, 1928, pp. 45, 46, 50, 51 and 58.
 G. F. Warren : Farm Management, 1921, pp. 485-90.
 C. S. Orwin : Farming Costs, 1917, pp. 47, 56, 57, 58, 60-63.

of America a word of explanation, justifying the methods adopted, is necessary. At present there is no uniformity of methods and international comparisons are not possible. In this study, an attempt is made to formulate costing principles and income measures to make cost studies in different countries comparable. While following the lines adopted in this investigation from 1928 the author came across proposals made by Dr. Earnest Laur of Zurich in 1929. Dr. Laur, being confronted with peasant farming problems, was thinking in the same terms as the author of this work and the corroboration received from an eminent authority like Dr. Laur naturally emboldened the author to pursue the lines he had adopted. Perhaps the method adopted is more exhaustive. It, however, guards against and meets objections that stand in the way of international comparisons.

After the accounting principles and working plans are established by scientific methods it will not be difficult to make the procedure easy and more utilitarian. In the summary of the studies (pp. 21 to 30) suggestions are made to simplify the method with a view to facilitating expansion of cost investigation. In the following lines some of the points, on which difference of opinion are more pronounced, are discussed.

Rent, Wages of Unpaid Family Labour and Interest on Working Capital.—Economists differ on the question of including land rent in the costs of production. There is also some difference of opinion regarding interest on working capital and wages for unpaid family labour. Even accepting that rent may not influence price of the produce, it is a cost to those who pay it. If it is to be considered as cost to the tenant farmer, it is fair to consider the same in the case of the owner farmer, as the investment in land, if withdrawn and invested in a bank or let out, would bring him interest. This view is prevalent in the United States of America with the difference that some farm managers, instead of charging rent, charge interest at going rate on the value of the farm; and investigators in England have recently come to the conclusion that rent of land is a farm cost. As regards interest on operating capital and wages for unpaid family labour there is still difference of opinion. General opinion in England is against including wages for unpaid family labour in the cost of production. In the United States of America, in finding labour income of the operator, charge for the unpaid labour of the other members of the family is included in the cost of production. *Since it is proposed to find what wages farm families make, the question of including wages of the family members does not arise.* Now comes the question of interest on operating capital. In the United States of America interest on operating capital, at going rate, is included in the cost of production. English view is against including interest on operating capital in the cost of production, on the ground that cost which includes interest cannot be true cost but cost plus some profit. We do not subscribe to this view, since the exclusion of interest on operating capital does not satisfy other conditions. Investment in operating capital, if withdrawn and let out, will fetch interest. Investigators in England, though still against inclusion of interest in cost, like to take count of it with a view to find whether the profit is sufficient reward of management, family labour

and capital. *In considering farming as a business it is, therefore, fair to include rent of land and interest on operating capital in the cost.*

Plea for Separating Interest on Equipment.—It may be noted that costs on account of bullock labour are given under two heads (see any of the abstracts of costs). Costs on account of the upkeep of bullocks such as feed and fodder given (minus the value of manure got), housing charges, depreciation and death allowance are put under "interest on working capital." One who wishes to know the combined cost on account of bullock labour can get it by simply adding these two, as will be seen in the cost of production statements. In the same way implement charges are also separated into depreciation and interest on their value. *The separation of interest from other charges is found convenient to pick up the same for including in the farm business income.*

Necessity of Assuming Farms as Debt-free for purposes of Cost Accounting.—It may be argued that since one farmer may have bought equipment (as work animals and implements) with his own funds and another may have purchased part of it with his own funds and part with borrowed money for which he has to pay interest, only the interest on owned capital should be entered in the farm business income. This reasoning sounds plausible. One difficulty, however, is that farmers incur debt for several purposes, including household necessities, and it is not always possible to put such debt to a particular head. Another serious objection against making difference in the treatment of borrowed and owned capital is that if this is done, the comparison of incomes is vitiated. *It has been, therefore, assumed that the farms are debt-free for the purposes of farm accounting,* debt being a liability on the household. In the inventory, however, such debts appear as liabilities and the advances made to others are shown as assets to the joint concern—the household and farm business.

There is no direct relation between the inventory balance and farm business balance, as the former includes farm business as well as household concern. Increases or decreases in the supplies on hand, as also the loans taken and advances made appearing in the inventory, do not affect farm accounts at all.

The plan adopted, moreover, supplies material to foreign investigators, if they wish, to compare out-turns per acre, product per man or per bullock, labour requirements of different crops and even net profits per acre; for arriving at net profits one has only to charge the family labour units shown in the statements at current rate of wages. American method, where the farm produce used by the family is ignored and most often the labour supplied by the family is not recorded, does not give sufficient material for finding out net profits per acre nor produce per man unit. In American cost studies, interest on the sums spent from time to time on the farm operations for each crop is not calculated on a definite basis. In this book interest on capital is calculated on definite basis, as will be seen under discussion on interest (page 16). *The methods followed and measures of income adopted, in this work, seem not only more suitable and more accurate for Indian conditions but are probably equally suitable for*

other countries. They will, it is hoped, make agricultural incomes in different countries comparable.

DISCUSSION ON INCOME MEASURES IN VOGUE AND JUSTIFICATION FOR ADOPTING NEW INCOME MEASURES

*Income.**—Income is measured in the United States of America in terms of labour income, farm income or as profit.

Labour Income means “the amount of money left over to reimburse the operator for his labour—manual or supervisory—after deducting from the gross receipts all operating expenses including depreciation, value of any unpaid labour of other members of the family and interest at going rate on the farm investment.” *In the United States the gross receipts do not include the value of the portion of the produce used by the farm family.* Thus the operator gets the produce used by his family over and above his labour income.

Farm income or Net Income means “the difference between the gross income and farm expenses†.” Farm income, therefore, includes labour income as defined above, including the value of what the farm furnishes towards the living of the operator and his family, interest on farm capital and on the value of land.

Profit means gross income minus annual operating and overhead charges (i.e., home and outside labour, outlay on materials, depreciation of stock and implements, taxes and insurance, wages of the farmer, interest on the operating capital and on the value of lands or rent of land, and costs of marketing the produce). Profit in this sense is *entrepreneur's* profit. If the wages of the farmer, according to his ability, are deducted from “labour income” one gets net profit.

In England, so far as farm business is concerned, *profit does not mean entrepreneur's profit*, since they do not debit the wages of unpaid family labour and interest on working capital towards cost of production.

The Labour Income measure commonly adopted in the United States of America does not suit Indian conditions. In the United States farms are large. Naturally, therefore, the aggregate produce is large; the farmer sells most of the produce and uses only a small part of the produce such as vegetables, fruits, chicken, eggs and milk produced on the farm. Grain is not ground on the farm and so the main supply of food is purchased from outside. In India, however, larger part of the farm produce, generally consisting of food grains, is processed and consumed on the farms by the farm families. In the Bombay Presidency about 74 per cent of the gross cropped area goes under food products, a large part of which is consumed by the farm families. Only products like cotton, *gul* and oilseeds are sold in quantities. Such money crops, however, occupy not more than 25 per cent of the cropped area. *Under the circumstances if “labour income” measure, as understood in the United*

*Merril K. Bennet, p. 89.

Frank App: Farm Economics, 1924, pp. 60, 14.

R. L. Adams: Farm Management, pp. 13, 14, 257-60.

†*Ibid* page 13.

States, be adopted, on most peasant farms there will be no "labour income" as the food products used by the farm family, forming a bulk of the total produce, are not valued and entered as receipts. Moreover, this usual American measure of income does not lend itself well for comparison in other countries. The "Farm income measure" is equally unsuitable, as here too the farm produce used by the families is ignored. The use of "profit" measure is not common in America. Entrepreneur's profit is no doubt a more scientific measure. But India is the country of small farms and there is little or no "net profit" on most of such small farms. The cultivator follows the profession of agriculture more to occupy himself and eke out livelihood. Moreover, there are several difficulties in arriving at net profits. Unless several assumptions are made and arbitrary charges for home labour fixed, net profits cannot be arrived at.

Income Measures adopted.—To suit Indian conditions, therefore, a little bit different measures of income are adopted in this work. Though they are analogous to the measures used in the United States, they do not carry the same meaning. The income measures adopted in this work are (1) Farm Business Income and (2) Family Labour Income.

"Farm Business Income" means the difference between the value of the gross produce of the farm and the out-of-pocket expenses. Out-of-pocket expenditure is taken to include the value of manure, seed, wages of hired labour, depreciation of dead-stock and work animals, feeds and fodder consumed by the latter and allowance for their housing and death rate, rent of leased land, assessment and local fund cess on owned land and costs of marketing farm produce and share of capital cost in the case of fruit plantations. By gross produce is meant all the produce—main produce as well as by-products—such as straw and chaff. (The farm produce used by the farm family is included in the gross produce.) Farm Business Income, therefore, comes to mean rent of land owned (minus assessment and local-fund cess), wages of the labour of the farmer and his family used on the farm, interest on the operating capital and the difference in the value of the gross produce of the farm and out-of-pocket expenditure.

"Family Labour Income" means Farm Business Income minus net rent of owned land (after deducting land assessment and local-fund cess actually paid) and interest on working capital. "Family Labour Income" thus includes net profits of the farmer and the wages for the labour of the farmer and his family; while "Farm Business Income" includes family labour income, the rent of owned land (minus assessment and local-fund cess) and the interest on working capital.

Roughly speaking it may be said that there is not much difference between "Farm Income" as understood in the United States and "Farm Business Income" as used in this work except that the "Farm Business Income" includes the value of the farm produce used by the farm family.

There is, however, considerable difference between "Labour Income" as understood in the United States and "Family Labour Income" as used in this investigation. "Labour Income" denotes the wage of the

operator excluding the farm produce used by the farm family, while "family labour income" means the wages of the farm family in which value of the farm produce used by the farm family is included.

Careful study of the abstracts of costs and tables of family labour income and farm business income for the farms as also the statements of costs and receipts of individual plots will illustrate the procedure in finding these incomes.

Accounting principles and methods of Investigation followed in these studies.—It should very clearly be understood that in these investigations farmer's equipment used for productive purposes is treated as producer's goods or farm capital, though both kinds of capital appear in the inventory of the property. For example his bullocks, being intended for farm work, go in farm capital; his milch buffalo, intended for supplying milk to the family, is not considered as farm capital. When, however, a farmer keeps milch animals, as a part of farm business, for selling milk products they are farm capital. In that case part of the milk used by the farm family has to be valued and credited to the dairy section (or milch animals as the enterprise may be named). On the other hand a pair of bullocks, kept for pleasure driving, is not farm capital. On rare occasions, when such bullocks are used on the farm, a charge for their work must be made against the farm. There is one such instance in these studies. In the same way monies spent on supplies (as seed for sowing, feed for farm bullocks or oils for sugarcane mill) are debited as farm costs. Monies spent on purchasing food grains, clothing or on social functions are not considered as farm costs. *In short, this investigation is restricted to only farm business.* It is only in the inventory that the distinction, between the farm and the family and between producer's goods (or capital) and consumer's goods (used for personal satisfaction), is not observed, as the intention of such inventory is to show how the farmer stands as regards his belongings, whether in the shape of producer's goods or consumer's goods.

(1) *Inventory.*—Inventory of each farm was taken when the study of the farm was commenced. Inventory is an itemized list of farm property with values of each item. It includes land, buildings, different kinds of livestock, implements, tools, grain and supplies, crops with their value if standing, cash on hand and bills receivable and payable. As has been explained before, inventories in this investigation deal with farms as well as households. Increases in the inventories are not added to farm receipts, nor decreases debited as farm costs. Any rise or fall in the inventory only shows how the farmer on the whole fared.

(2) *Valuation.*—While making inventory the question of valuation comes in. On this point economists differ widely. We have assigned values of land, buildings, implements, livestock, etc., by making enquiries from local people and observing the conditions of the items valued; and so it can be said that the values assigned are market values except in the case of land. When equipment of the farmer consists of costly machinery and implements it is better to ascertain the approximate life of the machinery and its probable scrap value. The balance between the original or the first inventory value and the scrap value

may be distributed over the number of years, the implement is expected to give work, and each year its value may be reduced by that amount. If the implement lasts longer than is expected its value during such years may be carried as scrap value. For example if a cart, likely to give work for 10 years, is worth Rs. 130 and its scrap value is estimated at Rs. 20, then its annual depreciation will be Rs. $\frac{130-20}{10} = \text{Rs. } 11$.

After 10 years its value will remain at Rs. 20. In the case of farm bullocks, since young bullocks appreciate for a time the procedure followed for implements will not do. The procedure followed in the case of bullocks is given under "cost of bullock labour."

In the case of land it is better not to change the value unless improvements are made or lands are damaged. Rise or fall in the values of land, due to causes outside the control of the farmer, cannot be attributed to him. There was, however, no such appreciable rise or fall in the prices of land during the two years of this study. Supplies on hand were valued at purchase rate. In arriving at the value of the produce held over for the use of the family, wholesale market price, at harvest, is estimated and credited to the different crops. Estimated value of by-products as straw and chaff, held over for the farm stock, is credited to different crops and debited to the stock account. The value of such by-products should be lower than the wholesale price at harvest. Unlike in the case of main products the market for by-products is restricted to the farming community and if majority of the farmers put such by-products on the market their prices will fall. In fact high prices of by-products are not tenable. Moreover, if such by-products are charged at high rates the charges for bullock labour appear unreasonably high.

(3) *Allocation*.—Allocation of costs is one of the very important questions in cost accounting. The seed sown or labour employed for sowing, weeding, harvesting and thrashing different crops can easily be recorded and their costs debited to the respective crops. The question of allocating overhead charges including the costs on account of bullocks and implements or the pay of a yearly paid farm servant, who may be working as *mukadam* or supervisor when more day-labour is employed and as a worker himself at other times, is not so simple. In the same way when manures are applied to a crop, the question as to how much of it is to be charged to that crop and how much is to be carried to the succeeding crops is equally important. In India the peasant farmer often pools his harvests of small plots under the same crop and thrashes together, and he cannot give the investigator the exact produce of each plot. A man or a woman may watch crops in more than one plot against birds. One of the plots having good crop may naturally require more attention of such a watch than the other plots. Under such circumstances the methods of allocation of watching charges cannot be uniform and much discretion has to be used by the investigator. Such difficulties, however, should not come in the way of useful investigations. *The methods of allocation followed in this investigation are described under the different heads, such as bullock labour, implement charges, manure, rent and capital cost.* When a peasant farmer, at times, pools harvests of small plots for thrashing, bundles from different plots may be counted

and their condition noted for getting at the outturns of different plots. It has been found that farmers estimate their crops fairly accurately and it is better to use such estimates in checking the estimates of the investigators. Such cases do not occur very often as harvests of large plots are thrashed separately. In the case of watching two or three plots by one person, if the crops are alike, the cost may be distributed by acreage. When a woman or a man watches two plots of *jowar*, one irrigated carrying good crop and another unirrigated carrying poor crop, division by acreage will not do. Good crop attracts more birds and so it claims more time and attention of the watch. In such a case the cost of watching may better be distributed by yields.

(4) *Labour charges.* (a) *Wages.*—Labour employed is charged to the crops or enterprizes at the rate at which it was paid. When labour was paid in kind, as at harvest time, its value is charged to the enterprize. The quantity, so paid, is added to the produce of the field. Labour of the members of family as well as labour got in exchange is not charged, as the intention is to find out what wage the family makes. The reason for not charging exchange labour is that though it is got free it has to be returned.

(b) *Cost of bullock labour.*—It consists of (i) feed, fodder, depreciation, death allowance and housing charges and (ii) interest on the value of bullocks and of the feed and fodder given to them. The motive of separating the costs in two groups is that the costs under (i) are not recoverable while those under (ii), though costs against bullocks, are saved by the farmer being the interest on the investment of the farmer, as interest on capital is charged towards the costs of production. Such division of costs facilitates picking interest for inclusion into the farm business income along with rent of land (minus assessment and local-fund cess) and family labour income.

The daily wages for bullock labour are arrived at by dividing the total cost, on account of the bullocks, by the total number of days the bullocks worked*. The charges for bullock labour are allocated to each crop and each plot, according to the number of bullock units used for that crop or plot. When a farmer keeps a pair of bullocks mostly for personal use (as for a driving carriage) the expenses on account of the pair are not a charge on the farm. When due to pressure of work such a pair is, some times, used on the farm, daily charge at going rate, is made against the farm. Since farmers exchange bullock labour, the total number of units is taken to mean the units supplied by the farmer's bullocks plus the units got in exchange, as in the case of exchange human labour. In calculating the costs on account of bullocks, the cost of fodder and feed from the farm at wholesale rate at harvest and when purchased at cost price, with interest at 12 per cent, death allowance at 5 per cent and a small charge for housing are made. From this total charge the value of the farmyard manure, produced by the bullocks, is deducted. In the absence of accurate data, in connection with the housing of animals, flat rates of Rs. 4 per year per working animal in the Deccan and Rs. 3 in the Konkan are charged. When bullocks were hired actual payment was charged.

* Bulletin No. 277, University of Illinois, p. 41, Warren p. 487.

In the present investigation, where only a few units were under observation, depreciation of bullocks was arrived at by valuing the animals at the beginning and at the end of the year. An allowance of 5 per cent due to death rate is made. When large number of farms are to be studied and allowance for death made (since cattle insurance is not in vogue), some kind of reckoner is necessary. In the following table a Deccani bullock is valued from 5th, to 16th year (without anticipating any fluctuation in bullock prices) making allowance for death rate at 5 per cent. Under normal conditions it is expected that the percentage of depreciation and death allowance, given in the last column of the subjoined table, should be satisfactory. Thus a seven year old bullock valued at Rs. 135 may fall in value by Rs. 25 at the end of the year; allowance for death rate at 5 per cent (on Rs. 135) will be Rs. 6.75. Thus the total amount of allowance will be Rs. 31.75 or 23.51 per cent (on the value of Rs. 135).

TABLE FOR WORKING DEPRECIATION AND ALLOWANCE FOR DEATH OF BULLOCKS

Age of bullock	Price	Depreciation after one year			Percentage depreciation and death allowance after one year
		Difference in value	Allowance for death at 5 per cent	Total depreciation after one year	
	Rs.	Rs.	Rs.	Rs.	Per cent
5	150	0	7.50	7.50	5.00
6	150	15	7.50	22.50	15.00
7	135	25	6.75	31.75	23.51
8	110	20	5.50	25.50	23.18
9	90	15	4.50	19.50	21.66
10	75	15	3.75	18.75	25.00
11	60	10	3.00	13.00	21.66
12	50	10	2.50	12.50	25.00
13	40	10	2.00	12.00	30.00
14	30	10	1.50	11.50	38.33
15	20	10	1.00	11.00	55.00
16	10	0	0.0	0.0	0.0
	(Hide value)				

(5) *Implement Charges.*—Actual depreciation i.e., the difference in the values of the opening and closing inventories with interest at 12 per cent (on the value at the beginning of the year) form equipment charges. As explained under "Plea for separating interest on equipment" (page 7) the interest on the value of implements is separated with a view to include it in the farm business income. Allocation of implement charges is made on the basis of bullock labour units used for each crop or plot. The use of implements is associated with the use of bullocks and, therefore, such allocation is considered to give satisfactory distribution and avoids the trouble of listing the use of the large number of implements for different crops. In one case where a farmer depended upon contract bullock labour but had to keep implements, the charges on account of such implements have been allocated on acreage basis.

(6) *Seed*.—Price of seed purchased is debited to the crop for which it was used. Farm grown seed is also charged, as it enters into the produce of the plot from which it was taken. Its value enters gross receipts of the previous year's business.

(7) *Manure*.—The value of manure, whether purchased or obtained from the farm, is allocated as under :—

No residual effect of concentrated manure is taken into account and the whole cost of concentrated manure is debited to the crop to which it was applied. As regards farmyard manure the full value of the manure is charged to the crop (like rice) in the heavy rainfall tract. In the case of sugarcane and lucerne (under perennial irrigation) 70 per cent of the value is charged to that crop and 30 per cent to the succeeding crop. In the case of dry crops and short-season irrigated crops 50 per cent of the cost is charged to the first crop, 35 per cent to the second crop and 15 per cent to the third crop. In case a dry crop or short-season irrigated crop is followed by a heavy crop like sugarcane, 50 per cent of the manure cost is charged to the first crop and the remaining 50 per cent to the next crop. Sheep-folding in off-season, when sheep are owned by a farmer, should be charged at cheaper rate, as sheep keeping is a secondary industry with him and he folds them to make use of their manure. If he has to pay for it he would not be so liberal with sheep-folding.

(8) *Marketing Costs*.—All the marketing charges such as haulage, octroi, brokerage and customary charities, when incurred, are included in marketing costs.

(9) *Land Rent*.—In England and the United States of America rent of a holding is distributed generally by acreage treating all cultivable land alike. In India land rent forms an important part of the cost of production. Rents in this investigation are ascertained by plots, as lands vary considerably from plot to plot and this seems necessary under Indian conditions. In the case of leased land the actual cash paid, or when leased on share and some perquisites, their value is charged. In the case of owned land rent is charged at rates current in the community for such lands.

In the case of fruit trees which do not bear in the first year the rent of that year goes in the capital cost. When in such a case a sub-crop is taken in the first year along with the main crop a small part of the first year's rent may be debited against the sub-crop.

✓ When two or more crops are taken in a year rent is allocated in proportion to the value of the crops. In the case of the crops like sugarcane, on the canals where sugarcane is rotated with other crops which are merely supplementary (and not competitive), the rent of the full period of rotation, is distributed over sugarcane and other crops, in proportion to the value* of the produce of the different crops entering into the rotation.

* Though the suggestion of the Departmental Committee is followed being suited for research it is rather inconvenient to keep accounts open for two or three years. It seems desirable that investigator should, after local enquiry into receipts and profits of crops, fix his own proportions of rent.

Rents in India are high and more so for the irrigated lands. Since rents are allocated in the proportion to the value of yields of crops entering into rotation, it is natural that one year (when there is valuable crop like sugarcane) the rent figure will be higher than the annual rent fixed, whereas in another year (when a less valuable crop like *bajri* succeeds) the rent figure will be lower than the annual rent. It is, therefore, plain why in some cases rents look too high or too low than the annual contract rents. Furthermore, when a small part (a few gunthas*) of a large plot (of more than one acre) which is under *jirayat* crop in *kharif* season, goes under costly irrigated crop in *rabi* season, the allocation when reduced to per acre basis looks too big. As a matter of fact the reducing of plot figures to acre basis is not very important from the point of cost accounting. The only advantage of per acre basis is that it makes comparison easy. Since along with costs and receipts allocated rents are also reduced to per acre basis in the cost of production statements, it is necessary to explain the implication of rent allocation in such cases.

Suppose a 1-acre plot leased at Rs. 40 is put to *bajri* in the *kharif* season. In the *rabi* season of the same year half of the plot is put under onion and half under gram. In the following table are given the assumptions regarding crops, areas, value of outturns, allocation of rent and the apparent per acre rents for these crops.

Crop	Area	Value of the crops	Allocated rent for the plot	Apparent rent per acre
		Rs. a. p.	Rs. a. p.	Rs. a. p.
In the <i>kharif</i> season <i>bajri</i> , followed in the same year in the <i>rabi</i> by	1 0	20 0 0	5 0 0	5 0 0
(i) Onion	0 20	125 0 0	31 4 0	62 8 0
(ii) Gram	0 20	15 0 0	3 12 0	7 8 0
		160 0 0	40 0 0	75 0 0

It may be remembered that the rent of Rs. 40 is allocated in proportion to the value of produce and therefore one acre of *bajri* is charged Rs. 5; half an acre onion Rs. 31-4-0 and half an acre gram Rs. 3-12-0 making the total of Rs. 40 which rent was fixed for the acre for the year. When these rents are reduced to per acre basis they come to Rs. 5, 62-8-0 and 7-8-0 respectively making a total of Rs. 75. It may be remembered that this sum of Rs. 75 is not for one acre of *bajri* in the *kharif* season followed by onions and gram half acre each in the *rabi* season but for one acre of *bajri* in the *kharif* season followed by onion in the whole area and also by gram in the whole area in the same year. It may be remembered that along with rent due to double cropping yields and receipts are proportionately increased. There is, therefore, no reason to think that the allocated rent for onion is high or for *bajri* low.

* One guntha is equal to of an acre.

There is another point which requires explanation. Rents of some plots and even of multiples of acres are found sometimes in fractions of rupees. It should be remembered that plots are not always multiples of acres, and when rent per acre is fixed at round sums, rent of plots will bring in fractions. Rents are often settled for blocks made up of several plots, and so the rents of individual plots cannot always be in round figures.

(10) *Interest*.—In the case of grain and other short season crops expenditure on seed, manure and outside labour (except the labour on harvest) is lumped and interest is charged on it for six months at 12 per cent. In the case of crops like sugarcane requiring heavy outlay on manure and preparatory tillage, sets and planting, such expenditure bears interest for full year while on other expenditure from planting onwards (except harvesting costs) interest is charged for six months only. It is an empirical method no doubt. On comparing such results with those arrived at by calculating interest on different items of expenses for the actual periods (i.e., from the time of operations till after the harvest, when produce is sold) it was found that there was either no difference or very little difference if any. No interest is charged on water cess, land assessment or land rent and marketing costs as these are paid after harvest. Harvesting charges are paid after harvest and no interest is charged on these. The interest on the value of bullocks and equipment goes under bullock charges and equipment charges respectively as already explained (pp. 12 to 13).

(11) *Cost of Removing Stubbles*.—Cost of removing stubbles is charged to the crop to which they belonged.

(12) *Cases of Crop failures*.—Expenses on crop which proves a total failure are shown as net loss against that crop and also on the expense side of the whole farm. In case the crop is grubbed and resown with the same crop, the extra cost of grubbing and resowing is charged to the resown crop along with other costs incurred on that crop. If, however, instead of sowing the same crop another crop is taken (as when *jowari* is taken after cotton fails in Sholapur district) the cost of seed, sowing and grubbing is shown as loss against the grubbed crop. It does not enter as cost against the new crop. It, of course, enters the total cost of the farm. At times it so happens that a crop makes some growth and then withers for want of moisture in the soil. Occasionally it does not pay even to gather the straw of such a crop for fodder. If such a crop provides a little grazing to the farm cattle, some income for such grazing must be shown and credited to the crop and debited as cost of fodder in calculating the cost of bullock labour.

(13) *Miscellaneous Costs and Receipts*.—Expenditure, which cannot be charged to a particular crop or any other farm enterprise, is considered as cost to the farm. Such expenditure is allocated on different crops before arriving at family labour income.

(14) *Costing Fruit Trees*.—Since fruit trees stand more than two years and they do not bear fruit in the first year, the method of costing, applied to annual crops, does not suit fruit cultivation. Though fruit is not

grown on a large scale in the Bombay Presidency, some of the farmers, with canal water facilities, grow small areas of fruit varying from ten gunthas to two acres. Some of these farmers take sub-crops between the trees for a year or two. In this investigation there are two farms which included some areas under fruit. The life of a fruit tree varies with the kind of fruit. Some kind of fruit trees bear in the second year, while some much later. Some kind of trees give two or three harvests while some give four, five or even more, and some like guava bear for twenty years or more. All these factors make uniform method of costing impossible. The following suggestions may only serve as a guide and investigators will have to make necessary modifications in the method, using their own discretion being on the spot.

In fruit cultivation one at once meets with two kinds of costs of production, (a) initial capital cost, i.e., the costs incurred from the time the preparation of land begins up to the beginning of the year of the first bearing or the costs required for establishing the fruit crop and (b) the recurring costs, i.e., the annual working costs which are incurred in the bearing years. Capital cost should include expenditure on preparatory tillage, digging pits, initial manure, plants, grafts or seedlings and the usual costs on cultivation like manuring, watering, rent, etc., till the beginning of the bearing year. Capital cost has to be spread over the probable number of harvests or bearing years. The number of years assumed may come true or may not; so long as the assumption is based upon local experience it is alright. It is, however, safe to make a conservative assumption than to make a liberal one. If the trees live longer than the assumed period, further years will bear no share of capital costs. Soft trees like banana and *papaya* may be termed "Few year fruit trees" as they bear only few years. Woody trees like guava and *santras* which last for a number of years may be termed "Many year fruit trees". Near Poona *papaya* may last three to four years and give two to three harvests. Banana may last five to six years and give four to five crops. *Santras* and guavas may last over twenty years. Suffice it to say that the capital cost has to be spread over the probable number of harvests.

If a banana plantation near Poona lasts for six years and gives five harvests, the capital cost may be spread over five years. In Khandesh a plantation is kept only 18 months and plants are grubbed immediately after the first harvest is gathered. In all, the period required for the crop is two years. Under latter conditions the question of working capital costs and operating costs separately does not arise. All the costs of two years may be treated as operating costs and income worked out for two years. The cost of grubbing fruit trees after the final harvest may be included in the last year's costs as the plantation yields some extra return as leaves of banana or fuel from woody trees.

(15) *Sub-crops in the Fruit Trees.*—When a sub-crop is taken while the fruit trees are young, it is fair to debit part of the common costs against the sub-crop and to that extent reduce the burden from fruit.

What part of the capital cost is to be debited to the sub-crop will depend upon the kind of sub-crop. Costs pertaining to fruit, as digging pits, purchasing plants, applying special manures, planting, etc., must necessarily go in the capital cost for fruit. For the same reason special costs on account of sub-crops must be debited to those crops. Costs of field dressing of manure, irrigation and inter-tillage required for both crops (fruit as well as sub-crop) including charges on account of equipment should be distributed between the fruit and the sub-crop, depending upon the nature of the sub-crop and time taken by it. As regards rent of land the same consideration should prevail. If the sub-crop is an irrigated crop and occupies the land for a fairly long period it may bear half the rent of the year. If it occupies smaller period it may bear smaller proportion. Allocation of costs between fruit and sub-crops will be found under Wadgaon farms.

Part II

FARM STUDIES

PRESENTATION OF THE MATERIAL IN THE INVESTIGATION

Before giving the actual studies it is thought desirable to explain the plan adopted in presenting the studies. With a view to explaining the economic and climatic conditions, general information about the village, its land distribution and seasons are given at the beginning of each study. The names of the farmer studied, his incomes and costs of production, etc. In all cases, except the Ozar farm, in addition to the costs and receipts of the whole farm, costs and receipts of each crop and plot are treated separately. In the case of the Ozar farm the whole farm as such is cost accounted. Though the latter treatment was adopted out of necessity, as the farmer found it difficult to supply information about the allocation of labour, in a way it served as an illustration to study entire farms without going to individual crops. The following gives the rough plan of the arrangement of material presented.

Village.—For each of the farm studied general description of the village is attempted giving its physical, climatic and agricultural conditions. Tables showing *per capita* land, ranges of proprietary as well as cultivating holdings and their average sizes, distribution of crops and their cropping are given. General description includes remarks on rainfall, irrigation and road and marketing facilities.

Probable *m.*—In India the amount of rainfall and its distribution vary

If a tract to tract and to some extent from year to year. Rainfall is the most important factor determining the success or otherwise of agriculture and, therefore, it is thought desirable to give the amount and the distribution of rainfall for each farm studied.

Working *n.*—Under this head is given the inventory of the property of the farmer at the beginning and close of the year. A statement giving work done, fragmentation of holding, cropping plan and treatment of crops including manuring, is given for each unit. Strength of the family and distribution of human as well as bullock labour are given in each case.

Incomes.—Two tables (XI and XII), one showing family labour income and another showing farm business income for farms studied.

are given in each case. As is explained under "Income Measures" family labour income means the remuneration for the labour of the members of the family. Farm business income means family labour income plus the rent of owned land (minus land assessment and local-fund cess), interest on the working capital and other miscellaneous farm receipts. To know how these incomes are arrived at it is necessary to give some details. For finding out family labour income all costs of production, except the wages for family labour are deducted from the value of gross produce (for illustration see table XI, page 54). Costs of production are grouped into three sub-heads (see columns 4, 5 and 6 of the table). First sub-head (column 4) "Out-of-pocket expenses" includes expenses on account of manure, seed, hired labour, land assessment and local-fund cess in the case of owned land or rent in the case of leased land, depreciation of implements and tools, depreciation, death allowance and housing charges on account of bullocks and the value of feeds and fodder given to them. Details of these may be found under "Abstracts of Costs" and "The details of out-of-pocket expenses". Second group (column 5) includes interest on working capital (which includes implements, tools, bullocks and money required for paying wages of hired labour, for seeds and manures, etc.). The third or the last group (column 6) shows rent of owned land minus land assessment and local-fund cess. Charges on account of bullocks and implements (both falling under the technical term equipment) are divided into (a) upkeep and depreciation and (b) interest on their value (see any cost of production statement as No. 1 page 700 items 4 and 5 for Kanhur). Costs under (a) are consumed in their use except the part set apart for replacement. Cost under (b) is the remuneration of the investment in capital and is saved for the farmer. This separation of the costs facilitates picking up interest on working capital and the rent of land (minus land assessment and local-fund cess) for adding up to family labour income, and these three together make up the farm business income of the farmer.

Expenditure.—Tables XI and XII are preceded by "Abstracts of Costs" and "Details of out-of-pocket expenses" which together with the cost of production statements, appended for each farm, supply the details of costs and receipts entering into tables XI and XII.

Analysis.—Table XIII gives the main products and the labour units per acre. In this case labour units include human as well as bullock labour both supplied by the farm family and hired from outside such as contract labour where labour units could be ascertained. In the cases where labour on account of piece and contract work was not available the units required for such work are estimated.

SUMMARY OF THE INVESTIGATION

Each of the units in this part is treated as a complete study. To give some idea of all the studies a short summary of the findings is attempted. Instead of giving the summary at the end of the studies it is given here to give a bird's eye view of the whole work before going into separate studies.

The summary deals with the fourteen farms that are costed in the subsequent pages. Out of the fourteen farms seven were studied for two years (1928-29 and 1929-30), five for one year in 1928-29, and two in 1929-30. Results of the study and the conclusions drawn from each are given separately in the body. Since the farms investigated were situated in different tracts, varying in climatic and economic conditions, the studies do not lend themselves well for general conclusions. In this summary, therefore, bearings regarding (1) size and fragmentation of the holdings, (2) utilization of family labour and farm bullocks, (3) incomes, (4) tenancy, (5) indebtedness, (6) distribution of capital, (7) labour requirements of crops, etc., in the south-western part of the Bombay Presidency, are reviewed in the light of the investigation, and (8) suggestions made for further studies.

(1) *Size of the farm.*—(a) The following table gives the sizes of the cultivating holdings and the number of isolated fields in each holding studied :—

TABLE A—SIZE OF FARMS

Farms and their localities		Area	Number of separate fields
Sugarcane farms—		A. g.	
Poona District	Wadgaon I.....	29 5	7
	Wadgaon II.....	5 2	3
	Nanded.....	8 17	4
Rice farm—			
Ratnagiri District	Shirgaon.....	9 10	6
Mixed farms—			
West Khandesh	Dhurkheda.....	49 9	4
Do.	Kavthi.....	48 39	5
East Khandesh	Asoda.....	23 17	6
Nasik	Ozar.....	31 22	7
Ahmednagar	Jeur.....	13 27	2
Do.	Kanhur.....	40 10	2
Do.	Dhandarphal.....	31 35	6
Poona	Narayangaon.....	25 17.5	9
Dharwar	Govankop I.....	24 0	5
Do.	Govankop II.....	19 30	5

As regards sugarcane farms, though one of the farms was much bigger than the other two, the area under sugarcane in it was not

proportionately larger. It may be said that on an average sugarcane farms have 4 to 9 acres under irrigated crops including sugarcane.

The rice farm near Ratnagiri had an area of 9 acres and 10 gunthas; yet the area under rice was only 2 acres and 10 gunthas. This may be taken as an average farm for the coastal tract of Ratnagiri.

There were ten mixed farms. The average size comes to 30 acres and 32 gunthas.

(b) *Fragmentation*.—If two plots from different survey numbers are some way joined they are considered as one piece rather than two. Often times divisions by survey numbers swell the number of fragments though plots are contiguous. *On an average each holding is made up of about five separate pieces, unconnected with each other. There are more fragments in the Konkan and Maval than in the Desh.* The Konkan farm of 9.25 acres was scattered in six places, whereas a 40.25 acre farm in Ahmednagar District was only in two parts. In some farms the separate pieces were as far apart as two miles from each other.

In the West Deccan and Konkan, due to the lie of the tract, lands vary in fertility within a narrow range, some being suitable for costly crops while others fit only to grow inferior millets, which makes *consolidation a difficult problem*. In the East Deccan, where lands are fairly homogeneous, there is not much difficulty in consolidation of holdings but the problem of fragmentation is not so acute in that tract.

Before discussing the adequacy or otherwise of the area of the holdings it is necessary to see how the farms provide work to the farm families and draft animals.

(2) *Employment of human and bullock labour on the farm.* (a) *Employment of human labour*.—Taking each farm studied for one year as one unit, the study of the twenty-one units shows that *farm families do not get sufficient work on the farm throughout the year*. In ten cases out of the twenty-one, not more than thirty per cent of the available labour could be used on the farms; in four cases about thirty to forty per cent and in seven cases forty to sixty per cent of the available labour could be used.

The fact that a fairly large proportion of farmer's time is wasted can be attributed to the smallness of holdings and the seasonal nature of rainfall. *This involuntary idleness is excusable*. One of the causes of the farmers not exerting sufficiently may be the frequent disappointments caused by the vagaries of the seasons which adversely affect the returns.

With the want of sufficient opportunities to use labour on one hand, one finds cases where farmers, instead of fully utilizing family labour, engage yearly farm servants and in a way take easy life. *In nine cases out of twenty-one there was found a yearly servant on the farm* and yet the employment of family labour was not more than 30 per cent. These nine cases were found in Khandesh and on the Deccan canals. *Such voluntary idleness on the part of peasant farmers cannot be excused*. The boom period of 1917 to 1923 brought good incomes to the cotton and

sugarcane farmers which seem to have made them slack. If the canal farmer puts in more work he can hold against the depression and tide over the difficulties.

(b) *Employment of bullock labour.*—Out of the twenty-one cases six were sugarcane farms, one a rice farm and fourteen mixed *jirayat* farms. On the sugarcane farms not more than 30 per cent of the available bullock labour could be used, while on the rice farm only about 8 per cent could be used. Of the fourteen mixed *jirayat* farms, five could utilize between 50 and 60 per cent and nine between 30 and 50 per cent of the bullock units.

One therefore sees that both the human and bullock labour are not fully utilized. If the utilization of the human and bullock labour given above is read with the table of the sizes of farms (table A given above) it can be said that the size of the farm is not sufficiently large to provide steady employment to the farm families and the draft animals throughout the year.

Apart from the fundamental difficulty of increasing the size of the farm to a minimum efficient unit because of the want of sufficient unoccupied cultivable land, there are other difficulties in the way of managing larger farms, which cannot be ignored.

(3) *Utilization of labour under different types of farming. (a) Rice farm.*—*In the Konkan the proportion of cultivated land to the population is small. Moreover, work on rice farm is restricted to a short season and consequently farm families cannot manage larger areas. The rice farmer, studied, though he could not utilize more than 35 per cent of the home human labour and 7.5 per cent of the farm bullock labour, was obliged to hire some human labour and lot of bullock labour from outside. This farmer had three bullocks throughout the year (or $3 \times 360 = 1,080$ bullock units). He could utilize only 82 out of the 1,080 bullock units and had to hire 32 units from outside because the work on the farm was restricted to a short season.*

(b) *Sugarcane farms.*—The outlay for sugarcane farming is very high and the cultivation requires more care and personal attention. That the sugarcane farmer cannot utilize the farm bullock labour fully and yet has to hire bullock labour can be explained. Sugarcane farmer on the canals needs considerable amount of bullock labour for short periods, while during the larger part of the year he does not require bullock labour at all. For preparing land for sugarcane he requires extra bullocks for one or two months. When cane is planted he has very little work for bullocks till harvesting when he requires for a month or so large amount of bullock and man labour. Under the circumstances *he cannot maintain large number of bullocks required for a short time only, and he finds it more economical to hire seasonal labour.* Due to the existence of *jirayat* villages in the neighbourhood of sugarcane zone, seasonal labour for preparing land on contract basis and for crushing cane and making *gul* on piece-work is available in any amount. Sugarcane farmer has, however, to keep a certain number of bullocks for the supplementary crops and for odd works and a certain amount of wastage of such bullock labour is unavoidable. *Though he can be excused for the unavoidable waste of*

bullock labour he cannot be lightly excused for the wastage of family labour. He employs lot of day-labour and most often one finds a *saldar* (a yearly paid servant) with him and yet very few sugarcane farmers do much manual work on the farm. It seems the war-boom spoiled him and though he is not making good income he is not adjusting himself to the changed conditions. *A sugarcane farmer on the canal, will do better with less area under sugarcane if he makes full use of the family labour.*

(c) *Jirayat farms.*—On the *jirayat* farms in the East Deccan there is some wastage of human and bullock labour because *the holdings, for the type of agriculture, are small.* The seasonal nature of rainfall and consequent dependence on one-crop-system in most parts do not allow intensive cultivation. A little larger farm will enable him to use the family labour and farm bullocks more efficiently. *Since, however, all or most of the cultivable land is brought under plough such increase in the holdings is not easy.*

Many people and even Indian Economists seem to think that if the available land is divided into larger farms India and Indian agriculture will be more prosperous and that the difficulties of the farmers will disappear. Though it may be conceded that larger holding will, to some extent, help individual farmers by way of providing him with more work, *the panacea of larger holding cannot do away with his other economic difficulties nor can it increase the total output of the country.* Larger farms under seasonal agriculture means extensive, rather than intensive farming and less out-turn per acre.

(4) *Income.*—The following table gives the abstract of the family labour income and farm business income of the cases investigated.

TABLE B—INCOME OF FARMS ACCORDING TO TYPES OF FARMING

Farms and their localities	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.
Total of all farms	1,926 15 11	7,414 3 5
Average of all farms	91 12 2	353 0 11
Total ..	2,129 2 5	3,641 10 4
Sugarcane farms—		
District Poona		
Wadgaon I A.....	283 3 8	606 1 7
Do. B.....	646 5 8	999 0 5
Do. II A.....	388 15 5	620 3 2
Do. B.....	294 13 9	565 6 11
Nanded A.....	310 15 1	494 9 5
Do. B.....	204 12 10	356 4 10
Average per farm ..	354 13 9	606 15 1

Farms and their localities	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.
Total ..	304 14 4	3,647 12 3
Mixed farms—		
West Khandesh		
Dhurkheda	—80 14 0	779 13 0
Kavithi A	171 5 9	391 5 9
Do. B	—117 13 6	18 10 4
East Khandesh, Asoda A	—39 1 10	393 13 7
Do. do. B	—117 11 2	311 7 8
Nasik, Ozar A	—67 5 0	99 8 1
Do. do. B	14 5 8	193 12 2
Ahmednagar, Dhandardhal	—94 6 0	95 7 4
Do. Kanhur	—240 13 8	13 7 9
Do. Jeur	—47 0 1	21 15 3
Poona, Narayangaon A	54 8 4	356 5 7
Do. do. B	251 14 9	542 11 0
Dharwar, Govankop I	147 5 6	314 0 5
Do. do. II	—139 5 1	115 6 4
<i>Average per farm</i> ..	—21 12 5	260 8 10
Rice farm—		
Ratnagiri, Shirgaon	102 11 10	124 12 10

The terms "*Family Labour Income*" and "*Farm-Business Income*" are defined and explained under principles of cost accounting (pp. 9 & 10). To put these in non-technical terms *Family Labour Income* is the balance after deducting from the gross farm receipts, all the costs of production except the wages of the farm family. It represents the annual wage of the farm family. *Minus Labour Income* is the sum by which the farm family fails to make costs of production excluding the unpaid wage of the farm family. *Farm Business Income* is the difference between gross farm receipts and out-of-pocket expenses.

Taking each farm studied for one year as one unit, twenty-one units were studied. Out of these, twelve made plus family labour income, while in the cases of remaining nine, family labour income was minus. The total amount of family labour income of the twenty-one units was Rs. 1,926-15-11 or Rs. 91-12-2 per family, the highest being Rs. 646-5-8 in the case of a sugarcane farm (Wadgaon I-B). Since these twenty-one concerns put in 5,267 days' work (or man units) the daily wage per man unit comes to Re. 0-5-10. (One man working for one day or about 10 hours is one unit. One woman or one boy working one day is equal to $\frac{1}{2}$ unit). This wage of Re. 0-5-10 is for working days only. Since the workers could not employ themselves on the farm throughout the year, average wage, if calculated on all the days of the year, comes only to Re. 0-1-10. *The wage of Re. 0-5-10 for the employed days is not bad on one's own farm. The average daily wage (Re. 0-1-10) for the busy as well as idle days is no doubt very meagre to support a person.* Though in the case of owned farms and part-owned farms rent of land comes handy to support the family, the total amount is hardly sufficient and hence majority of the farmers had to incur debts.

The total farm business income of the 21 cases was Rs. 7,414-3-5 or Rs. 353-0-11 per farm, the highest being Rs. 999-0-5 for a sugarcane

farm (Wadgaon I-B.) and lowest Rs. 13-7-9 for a farm at Kanhur in the Ahmednagar district. The season of 1929-30 for Kanhur was very bad, the crop estimate being six annas. *The average amount of farm business income (Rs. 353-0-1) cannot be called sufficient remuneration for the labour of the family and the investment in land and capital. This income somehow keeps the farmers going.*

If the farms are classified by their types of farming, the analysis given in the table above shows that all the sugarcane farms have yielded positive labour and business incomes. The average family labour income and farm business income per farm being Rs. 354-13-9 and Rs. 606-15-1 respectively. *It should be remembered that all these farms were near Poona city and they grew fruit and vegetables in addition to sugarcane.*

In the case of the rice farm the tenant farmer made Rs. 102-11-10 as family labour income and Rs. 124-12-10 as farm business income. *Though the family labour income looks small, the daily wage earned per working day is quite good (being Re. 0-7-0).* The reason for this apparent paradox is the paucity of the actual number of working days.

Out of the fourteen mixed *jirayat* farms in the Deccan, only five could make positive family labour income, while nine failed to make any labour income. The average family labour income for the group of fourteen farms was minus Rs. 21-12-5. *The average farm business income of the fourteen farms was Rs. 260-8-10.* These incomes are very meagre. This is more due to the rise in the costs of production and low prices of farm produce.

Family labour incomes and farm business incomes of individual units will be found under their respective studies in the text.

(5) *Tenancy*.—If each farmer studied either for one or two years is counted as one it is found that of the 14 farmers observed, 10 had to take some land on lease. *This shows that on the whole the actual tiller has insufficient land to cultivate.*

Since rents are distributed on different crops, entering into rotation, in proportion to the value of the produce, they look too high for certain crops and too low for others. Rents given in the statements of costs will not give true idea of the annual rental per acre. In the East Deccan (*jirayat* tract) average annual rent comes to Rs. 11-12-0 per acre. On the Mutha canal rent per acre comes to about Rs. 24-8-0 if no distinction is made between irrigated and unirrigated lands put under different crops. It may be said that in the *jirayat* lands in the East Deccan rent claims 59 per cent of the gross produce and on the canals 20·8 per cent of the produce. For irrigated lands alone rent varies from Rs. 40 to 60 per acre. *Rents may therefore be called high as compared to labour incomes.* It does not mean that the landlord makes too much on the investments in land as land values are comparatively high. Since the landlord does not make heavy dividend and since the farmer cannot make decent wage for the labour of the family it only means that *there is less surplus and that the distribution of agricultural income is not equitable.*

(6) *Indebtedness*.—Of the 14 different farmers studied 13 owe money to others. The total indebtedness (of the 14 farmers) comes to Rs. 16,491 or Rs. 1,178 per farmer. One took a loan from a relative at 6 per cent,

two from co-operative credit societies at the usual rate of about 10 per cent and ten from *sahukars* at 12 to 24 per cent interest. *This shows that there is much indebtedness. The rate of interest for agricultural business, yielding small income, is no doubt too high.*

(7) *Distribution of capital.*—The following table gives the amount and distribution of capital for the fourteen farms studied :—

TABLE C—AVERAGE DISTRIBUTION OF FARM CAPITAL

	Capital	Per cent
*Average farm capital (average of 14 farms) ..	Rs. 5,202	100·00
Land.....	4,435	85·25
Buildings.....	398	7·65
Draft animals.....	273	5·25
Implements and tools.....	96	1·85

*Includes value of owned land, one-third the value of the buildings (two-thirds being considered purely for the use of the family and only one-third for the farm cattle, implements, etc.), work animals (milk animals are excluded) and implements and tools, etc.

The following table gives the percentage distribution of the farm capital on the farms studied.

TABLE D—PERCENTAGE DISTRIBUTION OF FARM CAPITAL

Name of the farm		Land	Buildings ($\frac{1}{3}$ d value)	Work animals	Imple- ments and tools
<i>Average of 14 farms</i> ..		Per cent 85·25	Per cent 7·65	Per cent 5·25	Per cent 1·85
Owned farms	1 Wadgaon II.....	87·94	7·35	3·31	1·40
	2 Dhurkheda.....	90·23	5·69	2·50	1·58
	3 Kanhar.....	84·12	5·02	9·79	1·07
	<i>Average</i> ..	87·43	6·02	5·2	1·35
Part- owned farms	4 Wadgaon I.....	86·29	5·46	6·19	2·06
	5 Nanded.....	81·12	10·87	5·07	2·94
	6 Kavthi.....	74·22	12·37	10·64	2·77
	7 Asoda.....	83·59	13·20	1·76	1·45
	8 Ozar.....	75·16	5·81	13·97	5·06
	9 Jeur.....	68·41	14·49	9·80	7·30
	10 Dhandarphal.....	80·71	5·38	12·67	1·24
	11 Narayangaon.....	84·68	8·33	5·87	1·12
	12 Govankop I.....	85·79	4·33	7·40	2·48
13 Govankop II.....	96·08	0·74	1·62	1·56	
<i>Average</i> ..	81·60	8·09	7·49	2·79	
Rented farm	14 Shirgaon.....	..	22·00	66·00	12·00

It will be seen from the above table that in the case of owner farmers the proportion of investment in land is highest and in the case of pure tenants they have no investment in land. If the owner farmer and part-owner farmer groups are compared, the latter invests comparatively more in work animals and implements. In the case of tenant farmers naturally the work animals have absorbed the largest percentage of capital.

(8) *Labour requirements of principal crops studied.*—In calculating the labour requirements of the crops, the crops studied during the two years are treated together as if grown by one farmer in one year. Crops grown on a small scale are not taken into account. Similarly crops grown by the Ozar farmer, being grouped together for cost accounting, are not included in the following considerations. In the case of contract or piece-work, as far as possible, actual labour units required are recorded. When, however, the amount of labour could not be ascertained only the cost is entered in the cost statements, and in the following table probable units for contract and piece-work are added to the recorded units.

TABLE E—SHOWING LABOUR REQUIREMENTS OF CROPS

Crop	Per acre		
	Man units	Bullock units	Total
Sugarcane.....	251·60	124·00	375·60
Ratoon cane.....	172·95	61·80	234·75
Onions.....	194·80	201·60	396·40
Green peas.....	12·20	7·80	20·00
Rice.....	102·00	50·20	152·20
Jowar (all varieties).....	12·52	13·24	25·76
Bajri.....	16·40	12·03	28·43
Wheat.....	12·70	17·30	30·00
Gram.....	8·50	6·60	15·10
Groundnut.....	44·00	17·00	61·00
Cotton.....	16·30	11·50	27·80

The table gives the average per-acre needs of the more important crop and will be useful to farm managers in planning their cropping scheme to utilize the available farm labour efficiently. The present work does not deal with the actual farm management side but the data, if arranged by crops giving chronological distribution of labour, will enable farm managers to select crops in their cropping to make the best use of the available labour.

(9) *Suggestions for simplifying farm cost studies.*—In the fundamental research one has to make deep investigations and arrive at the results by meticulous scientific processes. When, however, one comes to making practical use of the important findings of research he has to see which of the items are more vital and which are less vital in getting at the average results. Since it is found that variations due to seasons and prices make much more differences in the incomes than by careful allocations, it seems more desirable to handle larger number of farms with less meticulous methods than fewer farms with absolute precision. There is therefore no doubt that large scale cost study on more utilitarian lines will give a better picture of the incomes and costs than intensive study of each of the plots on a few farms.

The following suggestions are offered to simplify cost accounting of farms with a view to extending the work and to bringing it within the reach of farm managers without encroaching much on their time.

(a) When farms are studied by Government, semi-Government or private institutions, it is not necessary to treat each plot of the farm as a separate unit of study. Homogeneous land under the same crop (though in different plots) may be treated as one plot. If a farm manager himself wishes to study as to why some of his plots give better return than others, he might cost study each plot separately as is done in this investigation.

(b) When farmers are unwilling to take the trouble of supplying details of every plot and every crop or when an investigator wishes to find out comparative labour and farm business incomes of a large number of farms in different zones, a method adopted for one of the units (e.g. Ozar) seems to be less laborious. It involves less calculation and allocation of costs. Instead of treating each plot or crop separately the farm is taken as a unit for costs and receipts. It is true this method does not supply data as to which crop or enterprize pays more. Yet it supplies quite accurate information to compare whole farms and the economic conditions of farmers.

(c) Small areas, put under different crops, may be treated as one plot without attempting to find costs and receipts of each crop. Allocation of costs in the case of a number of small plots becomes difficult. If the results of small plots are reduced to per acre basis, sometimes they present unworkable data.

(d) If there are very small plots worked by the family at odd times, it is better not to treat these as plots. If there is substantial income from these it may be shown separately and added to the farm business income after it is worked out.

(e) Rather than allocate land rent on the basis of the values of crops entering into rotation which necessitates keeping accounts open sometimes two to three years, allocation of rents may be left to the investigator who may make local enquiries in the average valuation of crops entering into rotation and fix some proportion.

Slight differences due to the arbitrary allocation do not affect results. They will not make a quarter as much difference as the vagaries of rainfall or variation in prices do. Near Poona the following allocation is suggested.

(i) Sugarcane rotation :

I	Rotation	1 plant cane	55	per cent	} of the aggregate rent of three years.
		2 Ratoon cane	30	do.	
		3 A dry crop	15	do.	
II	Do.	1 Plant cane	45	do.	} Do.
		2 Plant cane	45	do.	
		3 A dry crop	10	do.	
III	Do.	1 Plant cane	85	do.	} of the rent of two years.
		2 A dry crop	15	do.	

(ii) *Kharif* and *rabi* division : When two crops are taken in the year, annual rent may be allocated according to their importance. If (*jirayat*) peas or gram follow rice in the same year as in Maval, probably 25 per cent may be charged to *rabi* and 75 per cent to *kharif*. Near Poona $\frac{1}{3}$ of the rent may be charged to *rabi* and $\frac{2}{3}$ to *kharif*.

WADGAON BUDRUK, FARMER 1 (PART A), 1928-29

Wadgaon is a small *jahagir* village in the district of Poona under the command of the Mutha Right Bank Canal to the south-west of the city of Poona, the headquarters of the district and a market town for the surrounding tract. Being only 7 miles by the side of a good road, going to Khadakwasla, the village has very good facilities to move its fresh perishable farm produce to the Poona market. Poona District is roughly divided into three belts (a) the Maval or the hilly western part receiving heavy rainfall, (b) the Desh or the eastern part more or less plain tract getting precarious rainfall and (c) the transition tract lying between the Maval and the Desh getting a fair amount of certain rainfall in which the village under reference lies. Before the advent of the canal, Wadgaon was a very healthy place. At present it is damp and malarious.

Three different kinds of soils are met with in the village: *kali* or the black soil, reddish-black soil and *barad* or light soil. Black soil is deep and rich; the reddish-black fertile soil lies along the banks of the river Mutha, while *barad* soil occupies the southern portion of the revenue village. *Murum* underlies all these soils and provides very good drainage. Due to this natural advantage the lands, though under canal irrigation for the last thirty-five years, have not been spoiled.

Tables I, II, III, IV and V given in the following pages are worked from the information extracted from the revenue records and supplemented by personal enquiry on the spot:—

TABLE I—LAND AND POPULATION

Area held	Area cultivated	Population according to 1921 census	Cultivated area per capita
A. g.	A. g.		A. g.
881 19	610 7	47	0 28·81

The census of 1931 shows considerable decrease in population but since definite figures are not available, the incidence of area per capita is found on the basis of the census of 1921. Per capita area of less than 29 gunthas is, no doubt, too small.

For the cultivated area of 610 acres, out of which about one-third is generally under irrigated crops, the number of draft animals (only 67) is no doubt very inadequate. Economy of sugarcane farming on the Deccan canals, especially on the Mutha canal, is such that the irrigator finds it more economical to hire bullock labour than carry on his own bullocks idle over a greater period of the year. The total number of cattle was 256, and of horses, sheep and goat only 49. This number is obviously too small to supply manure in the irrigated tract and irrigators have naturally to draw upon the surrounding dry tract and the Poona Municipality for its bulky manure.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held		No. of <i>khatedars</i>	Average area per <i>khatedar</i>	
Total area	Cultivated area		Total area	Cultivated area
A. g.	A. g.		A. g.	A. g.
881 19	610 7	97	9 3·5	6 11·6

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated	No. of cultivators	Area per cultivator
A. g.		A. g.
610 7	79	7 28·95

Since the number of cultivators is smaller than the number of *khatedars*, the average cultivating holding (of cultivated area) is slightly larger than the average proprietary holding of cultivated area. Yet the cultivating holding is small. Since, however, large area is under sugarcane, fruits and vegetables, there is more than sufficient work for the people of the village.

TABLE IV—SIZE AND DISTRIBUTION OF PROPRIETARY HOLDINGS

Size of holding Acres	No. of holdings owned by		Total	Per cent
	Agriculturists	Non-agriculturists		
Total ..	63	34	97	100·00
Below 5	42	20	62	63·92
5 to 10	15	4	19	19·59
10 to 20	3	3	6	6·183
20 to 30	2	3	5	5·153
30 to 40	1	2	3	3·092
40 to 50	0	0	0	0·0
50 to 75	0	1	1	1·031
75 to 100	0	0	0	0·0
Above 100	0	1	1	1·031

Of the total number of 97 *khatedars*, 63 are classed as agriculturists and hold about 419 acres and the remaining 34 classed as non-agriculturists hold about 463 acres, which means that more than half the village land is held by non-agriculturists. The average holding of the

non-agricultural *khatedar* is much bigger (13 acres and 24.26 gunthas) than the average holding of the agricultural *khatedar*, which is only 6 acres and 25.95 gunthas.

TABLE IV(a)—SIZE AND DISTRIBUTION OF CULTIVATING HOLDINGS

Size of holding Acres	No. of holdings	Per cent
Total ..	79	100.00
Below 5	37	46.83
5 to 10	22	27.85
10 to 20	10	12.65
20 to 30	4	5.06
30 to 40	2	2.53
40 to 50	3	3.81
50 to 75	1	1.27
75 to 100	0	0.0
Above 100	0	0.0

Comparison of tables IV and IV (a) shows that while there were at least two proprietary holdings of more than 50 acres, there was only one of that size in the cultivating holdings. The comparison also shows that while 36 per cent of the proprietary holdings were above 5 acres there were about 53 per cent of the cultivating holdings above that size. This shows that the small proprietor has to take on lease some land from the large proprietors. It can be said that even then the cultivating holdings are generally small.

There were 12 wells in this village ; but they were not in use since the village is served by a canal. In the year 1928-29 about 189 acres received canal water. There was sufficient work for the village people all the year round and in fact considerable amount of bullock and man labour had to be drawn from outside. Due to the smallness of holdings the irrigators cannot maintain necessary number of bullocks to make large teams for ploughing, preparing land or milling cane and they find it convenient and economical to engage seasonal labour from outside. Most of the ploughing for and crushing of sugarcane are given on piece-work to cultivators from neighbouring dry villages, who go in the canal area with their teams for three to four months every year. The irrigators also find it difficult to cart their small lots of vegetables and fruits to Poona market and about 10 to 15 people in Wadgaon have made it their business to ply carts on hire.

The position of the village as regards distribution of rainfall and water supply is satisfactory.

TABLE V—CROPS OF THE VILLAGE

1928-29			1929-30						
Crops	Area		Per cent.	Crops	Area		Per cent.		
	A.	g. A. g.			A.	g. A. g.			
Total ..	849	9 849	9 100'00	100'00	608	25 608	25 100'00		
<i>Kharif</i> crops		419	37	64'68	<i>Kharif</i> crops....		221	11	36'35
<i>Bajri</i>	152	20		23'49	<i>Bajri</i>	99	29		16'39
<i>Nilva jowar</i>	149	9		22'98	<i>Jowar</i>	84	29		13'92
Rice	30	5		4'64	Rice	4	15		0'72
Vegetables	59	22		9'17	Vegetables	27	9		4'47
Others	28	21		4'40	Others	5	9		0'85
<i>Rabi</i> crops		82	25	12'72	<i>Rabi</i> crops		198	33	32'68
<i>Shalu jowar</i>	71	37		11'08	<i>Shalu jowar</i>	191	25		31'49
<i>Tur</i>	10	28		1'64	<i>Tur</i>	5	19		0'90
Gram					Gram	1	29		0'29
Perennial crops ..		72	17	11'16	Perennial crops ..		78	4	12'83
Sugarcane	57	14		8'84	Sugarcane	78	4		12'83
Lucerne	15	3		2'32					
Fruits		74	10	11'44	Fruits		110	17	18'14
Guavas	28	8		4'35	Guavas	49	21		8'13
<i>Papayas</i>	24	20		3'77	<i>Papayas</i>	10	11		1'68
Lemons	9	23		1'47					
<i>Mosumbi</i>	3	0		0'47	<i>Mosumbi</i>	3	0		0'50
Banana	8	39		1'38	Banana	47	25		7'83

The proportion of *kharif* and *rabi* crops in the village vary with the nature of the season. When monsoon opens well and timely, the area under *kharif* crops increases. When early rains are deficient, as in 1929-30, *kharif* area falls. *Bajri*, *nilva* and vegetables are important in *kharif* season and *shalu jowar* in *rabi* season. Irrigated crops are very important in the village economy of Wadgaon. Sugarcane, guava, *papaya* and vegetables claim the most attention of the people. All the fruits, vegetables and larger part of sugarcane are sold in the Poona market.

The table shows considerable increase in the areas of sugarcane and fruit in the year 1929-30 over the previous year. With the fall in prices of *gul* the area of sugarcane on all canals was going down, whereas a substantial increase in cane area is noticed in this village, which fact demands a word of explanation. The village is only 6 miles from Poona and the irrigated area lies along the metalled road. Sugarcane has a good demand from the merchants and juice shops of the city for chewing and juice purposes and hence unlike sugarcane area with no transport facilities for a close market, the area of sugarcane at Wadgaon is not influenced by the prices of *gul*. It is worth while noting that the sugarcane area at Nanded, a village not very far from Wadgaon but situated

away from the road, has gone down in sympathy with the general fall in the prices of *gul*.

On light and medium types of soil *bajri* is followed by *nilva* with an occasional change with *shahu*, depending upon how the monsoon opens. In the case of vegetables there is no fixed rotation. The prices obtained in the Poona market determine the areas under different vegetables. *Bhendi*, *khira*, brinjals, *dudhya* are among the important vegetables. *Bhendi* and *khira* are sown as sub-crops in the plant cane. Guava, banana and *papaya* are the important fruit crops.

Banana occupies land for six years; then comes *dudhya* which is followed by sugarcane with sub-crops of *bhendi* and *khira*. The area under banana and *papaya* is increasing to meet the market demand at Poona.

Bagayat lands receive ploughing and manuring regularly. Sugarcane lands are ploughed three to four times and are given 30 to 40 cartloads of municipal refuse per acre from Poona, besides heavy doses of oilcake or fish.

The average rainfall at the nearest raingauge (College of Agriculture, Poona) is about 22 inches, most of which is received from the south-west monsoon. The average monthly distribution of rainfall at the College of Agriculture, Poona (1919-20 to 1928-29), is given in the following table.

TABLE VI (a)—MONTHLY DISTRIBUTION OF RAINFALL (Inches)

Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Total
0.24	0.71	0.90	3.16	5.93	3.62	5.35	1.2	0.93	0.01	0.17	0.08	22.30

It may be noted that nearly 82 per cent of the total rain precipitates from June to September. October gets very little rain which makes the tract less favourable for *rabi* crops.

THE SEASON, 1928-29

TABLE VI (b)—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1928 (Inches)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
0.0	0.0	0.0	0.0	0.0	1.64	1.96	0.88	0.45	0.22	0.0	0.0	23.17
0.0	0.37	0.0	0.82	0.0	2.11	4.01	4.28	5.17	1.26	0.0	0.0	

It will be seen that most of the rainfall was received in four months—June to September. The regular monsoon opened in the second week of June; it was not strong and there was no fall in the third week of

June. There was, however, sufficient precipitation in the last week of the month. Sowing was commenced in the first week of July and finished by the end of the third week of the month. The rainfall from the middle of July to the close of August was useful, though it interfered with the interculturing operations. Then came a break of two weeks in the month of September. The showers in the third week of September helped the formation of grain. Larger part of October, however, passed off almost dry and crops like *bajri* and *nilva* suffered. Since October and November had no rains to speak of, the area under *rabi* crops fell.

The severe cold and frost of February 1929 checked the growth of *rabi* and perennial crops. Banana and sugarcane suffered very much. The quality and quantity of *gul* were consequently poor. Since, however, most of the plant cane was sold for the Poona market, the financial loss of the cane farmers was considerably minimised. *Khira*, *bhendi* and cucurbits were badly damaged by insect pests and naturally their harvest was poor.

The crop estimate for the *kharif* as well as *rabi* crops was 10 annas.

THE FARMER

The farmer owned 8 acres and 3 gunthas of land, 38 gunthas of which were not cultivable. The uncultivable area provided only some grass. He had taken 22 acres of land on lease. Out of the cultivating holding of 30 acres and 3 gunthas, 29 acres and 5 gunthas were under cultivation, while none of the area was double cropped. The net cropped area was thus 29 acres and 5 gunthas.

The following table shows the cropping of the farmer for 1928-29 and 1929-30:—

1928-29			1929-30			Remarks
Crop	Area	Per cent	Crop	Area	Per cent	
	A. g.			A. g.		
Total ..	29 5	100·00		30 25	100·00	
Plant-sugarcane	1 20	5·175	Plant-sugarcane	2 0	6·54	
Ratoon-cane	2 20	8·625	Ratoon-cane	0 20	1·63	
<i>Papayas</i>	1 0	3·4	<i>Papayas</i>	1 0	3·27	
<i>Bhopala</i>	1 0	3·4	Brinjals	2 20	8·17	
<i>Khira</i> and tomatoes	0 20	1·7	Guavas	1 5	3·55	
Guavas	1 5	3·8	Banana	3 0	9·81	
Banana	3 0	10·3	<i>Bajri</i>	2 0	6·54	<i>Bajri</i> in <i>kharif</i> and grain in <i>rabi</i> .
<i>Bajri</i>	6 20	22·3	Gram	2 0	6·54	
<i>Shalu</i>	12 0	41·3	<i>Shalu</i>	2 0	6·54	
			<i>Nilva</i>	14 20	47·41	

The type of farming was predominantly *bagayat* where fruit and sugarcane were important and grain crops supplementary.

(a) *Human labour*

The farmer's family consisted of five members.

(1) The farmer	35	years.
(2) The farmer's wife	25	"
(3) Widow of his brother.....	38	"
(4) The eldest son of the widow.....	14	"
(5) The second son of the widow	12	"

The farmer and the two female members of the family worked on the farm. Both the boys were going to school. The farmer had one *saldar*. The distribution of the work of the farmer and the two women in the family, from January to December 1928, is given in table VII. The table shows how much of the home labour was utilized on the farm. The total shown in the last but one column of the table will not tally with the total home labour spent by the family on the crops grown in the year as given in the analysis, as the period of crop production does not synchronize with the calendar year.

The table shows that the farmer put in only 69·5 days' work during the 12 months from January to December. He, of course, worked as a manager organizing work and looking after the disposal of crops. The two women put in 145 days' work. As a matter of fact the work on the crops lasted for fifteen months during which time their total work amounted to 214 days. The servant in the course of the year, worked 236 days though during this period and in the remaining part of the year he had to look after the farm cattle and attend to odd jobs on the farm. It may be said that the family and the servant attended the farm work fairly well. It would have been better if the farmer himself had done more work instead of employing a *saldar*.

The distribution of the work of the *saldar* is given in table VII(a). Though the *saldar* put in 236 days' work in the course of the year, since the work on the crops lasted for 15 months his work days for the crops were 299·25.

The yearly wages of the *saldar* are distributed on different crops in proportion to the number of work days spent on them. Rs. 28-12-9 and Rs. 15-13-11 shown against banana and *papayas* (Statement Nos. 7 and 10) respectively are carried over as capital costs against these crops to be distributed over the bearing years.

(b) *Bullock work*.—The farmer owned three bullocks. Monthly distribution of their work, from January to December 1928, is given in table VIII. For the reasons given under human labour the total bullock work, shown in the last but one column of the table, will not tally with the total home bullock work utilized on the crops grown in 1928-29.

During the course of the year 29·1 per cent of the available bullock labour was utilized. For the whole period (i.e. 15 months) of crop production this comes to 31 per cent. Even this cannot be called efficient utilization. Since most of the work had to be given on piece-work basis, the farmer could have dispensed with at least one of the three bullocks.

The economic difficulties regarding maintaining large number of bullocks on sugarcane farms will be dealt with while writing about the Nanded unit.

TABLE VII (a)—THE DISTRIBUTION OF THE WORK OF THE SALDAR

Name of crop	Area	Distribution of work days	Distribution of wages
			Rs. a. p.
Total ..	A. g. 29 5	299·25	180 0 0
Sugarcane	1 20	59·5	35 12 7
Ratoon-cane	2 20	35·25	21 3 3
Vegetables in banana	} 2 0	{ 14·625	8 12 9
Banana alone .....				{ 47·875	28 12 9
Banana (fifth year).....	1 0	29·0	17 7 1
Vegetables in <i>papaya</i>	} 1 0	{ 7·125	4 4 6
<i>Papaya</i> alone.....				{ 26·375	15 13 11
<i>Bhopala</i>	1 0	7·5	4 8 3
<i>Khira</i> and tomatoes	0 20	6·5	3 14 7
<i>Bajri</i>	6 20	26·5	15 15 0
<i>Shalu</i>	12 0	39·0	23 7 4
Guava.....	1 5	<i>Nil</i>	<i>Nil</i>

The inventory of the property of the farmer is given in table IX. The net worth of the farm at the end of the year 1928-29 increased by Rs. 327-8-6. It may be noted that the farmer had two prospective plantations which raised the value.

Though the farmer paid Rs. 245-6-0 as interest and Rs. 609-10-0 as part payment of the loan of Rs. 2,045, he had to borrow Rs. 800-0-0 (at 12 per cent interest). Moreover, payment of land rent had to be deferred. At the end of the year 1929-30, net worth of the farm went down by Rs. 156-7-2.

Nature of holding, lands, crops and cropping.—The nature of land, crops and cropping and treatment of different fields held by the farmer in the years 1927-28, 1928-29 and 1929-30 are given in table X.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Percentage of labour used to labour available
Farmer	$\frac{4}{31}$	$\frac{14}{29}$	$\frac{14}{31}$	$\frac{6}{30}$	$\frac{3.5}{31}$	$\frac{0}{30}$	$\frac{7}{31}$	$\frac{16}{31}$	$\frac{1}{30}$	$\frac{3}{31}$	$\frac{0}{30}$	$\frac{1}{31}$	$\frac{69.5}{366}$	19
Farmer's wife and his brother's widow.....	$\frac{0}{62}$	$\frac{0}{58}$	$\frac{20}{62}$	$\frac{21}{60}$	$\frac{17.5}{62}$	$\frac{20.0}{60}$	$\frac{13.5}{62}$	$\frac{15}{62}$	$\frac{17.75}{60}$	$\frac{4.75}{62}$	$\frac{1.25}{60}$	$\frac{14.25}{62}$	$\frac{145}{732}$	19.8

Note.—The denominators denote the available labour units, while the numerators show labour units employed.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Percentage of units employed to units available
Three bullocks	$\frac{20}{93}$	$\frac{79.5}{87}$	$\frac{93}{93}$	$\frac{29}{90}$	$\frac{6}{93}$	$\frac{0}{90}$	$\frac{48}{93}$	$\frac{40}{93}$	$\frac{4}{90}$	$\frac{0}{93}$	$\frac{0}{90}$	$\frac{0}{93}$	$\frac{319.5}{1,098}$	29.1

Note.—The denominators denote available bullock units, while the numerators show the units employed.

TABLE IX—INVENTORY OF THE PROPERTY

Item	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
Assets	A. g.	Rs. a. p.		A. g.	Rs. a. p.		A. g.	Rs. a. p.	
1 Real estate									
(A) Land									
(a) Field No. 1 ..	2 24	1,820 0 0	Valued at Rs. 700 per acre. Dry land at Rs. 300 per acre. Valued at Rs. 1,000 per acre.	2 24	1,820 0 0		2 24	1,820 0 0	
(b) Field No. 2 ..	8 26	1,095 0 0		8 26	1,095 0 0		8 26	1,095 0 0	
(c) Field No. 3 ..	1 33	1,825 0 0		1 33	1,825 0 0		1 33	1,825 0 0	
(B) Buildings	8 8	4,740 0 0		8 3	4,740 0 0		8 8	4,740 0 0	
(a) Village house .	1	600 0 0		1	600 0 0	Some repairs were made and hence no depreciation.	1	600 0 0	Some repairs were made.
(b) Farm house ..	1	800 0 0		1	800 0 0		1	800 0 0	
Total real estate ..		5,640 0 0			5,640 0 0			5,640 0 0	
2. Livestock									
(a) Bullocks	3	220 0 0		3	215 0 0		3	200 0 0	
(b) Cow	1	40 0 0	Milch cow.	1	20 0 0	Dry.	1	40 0 0	Milch cow.
(c) Buffalo	1	80 0 0	Milch buffalo.	1	40 0 0	Dry.	1	75 0 0	Milch buffalo.
(d) Bull calf	1	20 0 0		1	....	Sold for Rs. 80.	....	....
(e) Buffalo calf	1	5 0 0		....	....	Died.	....	....
Total livestock ..		865 0 0			275 0 0			815 0 0	

3. Implements and tools, etc.								
(a) Iron plough	1	50 0 0	With a spare share.	1	40 0 0	1	15 0 0	Share worn out, wheel lost and handles broken.
(b) Harrows	2	4 0 0	Old implements.	2	3 0 0	2	2 8 0	
(c) <i>T'fan</i>	1	1 8 0	Needs repairs.	1	1 8 0	1	1 0 0	Repaired.
(d) Cart	1	70 0 0		1	56 0 0	1	46 0 0	
(e) Hand tools .....	....	7 8 0		....	5 0 0	....	3 12 0	
(f) Baskets, etc. ....	....	3 0 0		....	3 0 0	....	1 8 0	
(g) Yokes	2	4 0 0		2	3 0 0	2	2 8 0	
(h) Ropes, etc. ....	....	12 8 0		....	5 0 0	....	2 0 0	
Total implements and tools		152 8 0			116 8 0		74 4 0	
4. Value of standing crops								
(i) Banana plot No. 4 .	....	....		....	....	....	500 0 0	Plantations were damaged to some extent.
(ii) <i>Papaya</i> plot No. 6	....	....		....	....	....	150 0 0	First year's cost.
(iii) Banana plot No. 6 (a) .....	....	....		....	735 0 0	....	....
(iv) Banana plot No. 7	....	200 0 0		....	200 0 0	....	....
(v) <i>Papaya</i> plot No. 8 (a) .....	....	....		....	166 0 0	....	....
Total value of standing crops		00 0 0			1,101 0 0		650 0 0	

WADDAON, FARMER I(A)

TABLE IX—INVENTORY OF THE PROPERTY—*concl.*

1928				1929			1930		
Item	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
		Rs. a. p.			Rs. a. p.			Rs. a. p.	
<i>Assets—contd.</i>									
5. Farm produce and supplies on hand									
(a) Bajri.....	660 lbs. ..	30 0 0		1,320 lbs.	72 0 0		1,320 lbs.	72 0 0	
(b) Jowar	120 lbs. ..	5 0 0		120 lbs.	6 0 0		120 lbs.	6 0 0	
(c) Wheat	60 lbs. ..	4 0 0		....	....		....	....
(d) Sarmad.....	800 bundles ..	16 0 0		1,600 bundles	24 0 0		1,600 bundles	24 0 0	
(e) Nihoa-todder ..	500 bundles..	25 0 0		....	....		....	....
(f) F. Y. M.	20 cart-loads	40 0 0		40 cart-loads	80 0 0		....	....
(g) Til .....	....	....		192 lbs.	8 0 0		....	....
(h) Udid.....	....	....		70 lbs.	5 9 0		70 lbs.	5 9 0	
(i) Matki .....	....	....		30 lbs.	2 6 0		30 lbs.	2 6 0	
(j) Kadbi .....	....	....		2,500 bundles	100 0 0		2,500 bundles	100 0 0	
Total farm produce and supplies on hand....		120 0 0			297 15 0			209 15 0	
6. Cash on hand .....	....	30 0 0		....	150 0 0		....	200 0 0	
7. Amounts receivable ..	....	300 0 0		....	300 0 0		....	300 0 0	
<i>Total Assets</i> ..		6,807 8 0			7,880 7 0			7,389 3 0	

<i>Liabilities</i>						
(a) Debt incurred from <i>soukar</i> at 12 per cent. ....	....	2,045 0 0	....	1,435 6 6	....	1,435 6 6
(b) Rent of land to be paid.....	....	....	....	555 0 0	....	....
(c) Interest on (a) ....	....	....	....	....	....	172 8 2
(d) Debt at 12 per cent. ....	....	....	....	....	....	800 0 0
(e) Interest on (d) ....	....	....	....	....	....	48 0 0
(f) Fresh debt borrowed at 12 per cent. ....	....	....	....	800 0 0	....	....
<i>Total Liabilities</i> ..		2,045 0 0		2,790 6 6		2,455 9 8
<i>Net Worth of the Farm</i>		4,762 8 0		5,090 0 6		4 938 9 4

Interest for 12 months.
Only half the interest paid.

SUMMARY

	Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928 ..	4,762 8 0	
Net worth of the farm at the beginning of 1929 ..	5,090 0 6	
<i>Gain in net worth in 1928</i>		327 8 6
Net worth of the farm at the beginning of 1929 ..	5,090 0 6	
Net worth of the farm at the beginning of 1930 ..	4,933 9 4	
<i>Loss in net worth in 1929</i>		156 7 2
<i>Therefore net gain in two years</i>		171 1 4

WADGAON, FARMER 1(A)

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Field No.	Area	Nature of land	1927-28		1928-29		1929-30												
			Crop	Treatment	Crop	Plot No.	Treatment	Crop	Plot No.	Treatment									
1	A. g.	The land level, black well-drained soil.	<i>Dudhya bhopala</i>	Ploughed and harrowed. Two cartloads of municipal refuse were applied. <i>Bhopala</i> was a rain fed crop.	Sugarcane with <i>khira</i> , <i>bhendi</i> and leafy vegetables.	1	Four ploughings and a ridging were given. Fifty cartloads of municipal refuse, one bag of Sulphate of Ammonia and 14 <i>pallas</i> of safflower cake were applied.	Sugarcane with vegetables such as <i>bhendi</i> , <i>khira</i> and other leafy vegetables.	1	Three ploughings and a ridging were given. One bag of Sulphate of Ammonia and 15 <i>pallas</i> of safflower cake were given.									
	0 20										Do.....	Brinjals.....	One ploughing and three harrowings were given. Three cartloads of municipal refuse were applied.	Sugarcane with vegetables.	2	Four ploughings and ridging were given. One bag of Sulphate of Ammonia and 10 <i>pallas</i> of safflower cake were applied.	Sugarcane (ra-toon).	3	Six <i>pallas</i> of safflower cake were applied.
	1 0										Do.....	Sugarcane with vegetables.	Four ploughings and one ridging were given. Sixty cartloads of municipal refuse and some artificials were applied.	Sugarcane (ra-toon).	3	Fourteen <i>pallas</i> of safflower cake were applied.	Brinjals.....	7	One ploughing and four harrowings were given. The plot was not manured.
	1 0										Do.....	Do.....	Three ploughings and one ridging were given. Forty cartloads of municipal refuse and some artificials were applied.	Do.....	4	Fifteen <i>pallas</i> of safflower cake were applied.	Do.....	8	One ploughing and two harrowings were given. The plot was not manured.
	0 20										Do.....	Do.....	Three ploughings and ridging were given. Twenty cartloads of municipal refuse and some artificials were applied.	Do.....	5	Four and half <i>pallas</i> of safflower cake were applied.	Do.....	7	One ploughing and four harrowings were given. The plot was not manured. Plot Nos. 3 and 5 of 1928-29 were worked as one plot (No. 7) in 1929-30.

1	0	Black retentive and well-drained.	Banana plantation (fourth year).	No other treatment except regular irrigation.	Banana (fifth year).	7	Regular irrigation was given; no other treatment.	Banana (sixth year).	5	Regular irrigation and no other treatment was given. At the end of the year the plantation was pulled off.											
1	0	The land level; soil black, retentive and well-drained.	Chillies	One ploughing and four harrowings were given. Four cartloads of municipal refuse were applied.	Papaya with vegetables.	8	Two ploughings were given. One <i>palla</i> of safflower cake was applied as top dressing. The plot suffers from canal seepage.	Popaya	6	One hand digging was given. The plot was not manured.											
1	0	Do.....	Sugarcane (ratoon).	Top dressing and regular irrigation were given.	Dudhyabhopala	9	One ploughing and two harrowings were given. One cartload of municipal refuse was applied.	Sugarcane with vegetables.	2	Four ploughings and a ridging were given. Fifteen <i>pallas</i> of safflower cake were applied.											
0	20	Do.....	Fallow	No treatment	Khira and tomatoes.	10	Four ploughings and ridging were given. This plot was prepared for sugarcane but could not be planted in time; so <i>khira</i> and tomatoes were taken.	The plot was returned to its owner.											
2	2	0	Reddish-black and retentive soil. Being near the canal, the plot suffers from seepage and is shadowed by mango trees.	Sugarcane with vegetables.	Four ploughings and a ridging were given. Forty cartloads of municipal refuse and some artificials were applied.	Banana (first year).	6	Four ploughings and a ridging were given. Fifty-four cartloads of municipal refuse and 44 cartloads of F. Y. M., 14 <i>pallas</i> of safflower cake were applied.	Banana (2nd year).	4	The plot was not given any manure.										
3	3	0	The land sloping and is washed off to some extent. The soil is light reddish-black.	Shalu.....	Three harrowings were given. The plot was not manured for the last 10 years.	Bajri	11	One ploughing and two harrowings were given. The plot was not manured.	Nilwa jowar..	9	The plot was not manured.										
4	3	26	The soil is black, retentive but is washed off. Six gunthas were uncultivable waste.	Shalu.....	Two harrowings were given. The plot did not receive any manure.	Bajri	12	One ploughing and four harrowings were given. The plot was not manured.	<table style="margin-left: auto; margin-right: auto;"> <tr><td>A. g.</td><td></td></tr> <tr><td>Nilwa</td><td>1 20</td></tr> <tr><td>Bajri</td><td>2 0</td></tr> <tr><td>Waste</td><td>0 6</td></tr> <tr><td></td><td>3 26</td></tr> </table>	A. g.		Nilwa	1 20	Bajri	2 0	Waste	0 6		3 26	10 14	} The plots were not manured. Only harrowings were given.
A. g.																					
Nilwa	1 20																				
Bajri	2 0																				
Waste	0 6																				
	3 26																				
							After <i>dairi</i> gram was taken in the same year.	15	Gram was sown after plough.												

WADGAON, FARMER 1(A)

TABLE X—CROPS, CROPPING AND THEIR TREATMENT—*concl'd.*

Field No.	Area	Nature of land	1927-28		1928-29			1929-30														
			Crop	Treatment	Crop	Plot No.	Treatment	Crop	Plot No.	Treatment												
	A. g.																					
5	4 0	The land sloping; light shallow.	Fallow	Nil.	Shalu.....	13	One ploughing and four harrowings were given. The plot was not manured.	Nilua.....	11	Three harrowings were given. The plot was not manured.												
6	8 0	The land is sloping and shadowed by mango trees. The soil is black.	Nilua	Three harrowings were given. This plot was used by a nomad tribe for camping and therefore it got advantage of cattle droppings.	Do.....	14	Do.	<table style="margin-left: auto; margin-right: auto;"> <tr> <td>A.</td> <td>g.</td> <td></td> </tr> <tr> <td>Nilua..</td> <td>6</td> <td>0</td> </tr> <tr> <td>Shalu..</td> <td>2</td> <td>0</td> </tr> <tr> <td></td> <td>8</td> <td>0</td> </tr> </table>	A.	g.		Nilua..	6	0	Shalu..	2	0		8	0	12 13	} Only harrowings were given and the plot was not manured.
A.	g.																					
Nilua..	6	0																				
Shalu..	2	0																				
	8	0																				
7	1 33	The soil is reddish black and well-drained, 28 gunthas of land is fallow.	Guava	The plot was manured with twenty cartloads of municipal refuse.	Guava	15	Twenty cartloads of municipal refuse were given.	Guava	16	Twenty cartloads of municipal refuse were given.												

Of the cultivating holding of 30 acres and 3 gunthas, 8 acres and 3 gunthas belonged to the farmer. Of the owned land 38 gunthas were not cultivable, remaining 7 acres and 5 gunthas were under canal. Of the 22 acres taken on lease, 7 acres were under canal. The annual rent of the leased land was Rs. 379.

In the year 1928-29 the area under irrigation was 19 acres and 25 gunthas. The holding consisted of seven blocks which were close to each other. The farmer lived on the farm.

COSTS AND RECEIPTS

An Abstract of the Expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost of the total cultivated area (viz., 29 acres and 5 gunthas)	
	Rs.	a. p.
*I. Out-of-pocket expenses :		
✓(a) Manures	651	12 3
✓(b) Seeds	139	11 1
✓(c) Outside hired labour	802	15 4
✓(d) Cost on account of <i>saldar</i>	135	5 4
✓(e) Depreciation on implements and tools ..	30	1 1
✓(f) Bullock labour cost (excluding interest)	95	10 3
✓(g) Marketing charges	69	8 6
✓(h) Assessment and L. F. C. for owned land..	17	11 1
✓(i) Charges for equipments hired and <i>gurhal</i> expenses	24	9 0
✓(j) Irrigation charges	315	15 3
✓(k) Rent on leased land	337	10 8
✓(l) Miscellaneous expenses	20	8 0
(m) Capital cost on account of banana (Plot No. 7)	73	0 0
II. Rent of owned land, excluding assessment and L. F. C.	138	13 8
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	138	0 0
✓(b) Interest on the value of equipment and tools	15	4 7
✓(c) Interest on the value of bullocks, feeds and fodder fed to them	30	11 8
		2,714 5 10
		138 13 8
		184 0 3
<i>Total cost of production (excluding wages for family labour)</i>	3,037	3 9

*DETAILS OF OUT-OF-POCKET EXPENSES

	Rs. a. p.	Rs. a. p.
1. Manures :		
(A) Bulky manure		
(a) Fifty cartloads of municipal refuse at 8 annas per cart given to plot No. 1; 70 per cent charged	17 8 0	
(b) Ninety-eight cartloads of municipal refuse given to plot No. 6. Fifty-four cartloads at Re. 1, 9 carts at As. 8 and 35 at As. 4, each. Since this manure was applied after vegetables were harvested the cost is treated as capital cost against banana (statement No. 7) and nothing is debited in this year.....	.....
(c) One cart of F. Y. M. (Rs. 2) to plot No. 9; 50 per cent of the cost is charged to this crop.....	1 0 0	
(d) Twenty cartloads of municipal refuse at 8 annas each given to plot No. 15; 70 per cent of the cost is charged to this crop ..	7 0 0	
	<hr/>	
	25 8 0	
(B) Concentrated manures		
(a) Seventy-two and half <i>pallas</i> of safflower cake (Rs. 658-5-6). Out of this sum Rs. 136-14-0 go as capital cost to banana (statement No. 7) and <i>papaya</i> (statement No. 10)		
	Rs. a. p.	
Plot No. 1	127 0 0	
Plot No. 2	90 12 0	
Plot No. 3	127 0 0	
Plot No. 4	135 13 0	
Plot No. 5	40 14 6	
	<hr/>	
	521 7 6	
(b) Two bags of Sulphate of Ammonia (Rs. 34)		
Plot No. 1	17 0 0	
Plot No. 2	17 0 0	
	<hr/>	
	34 0 0	
	<hr/>	
	555 7 6	
(C) Residual manure		
Plot No. 1.....	1 8 0	
Plot No. 2.....	2 4 0	
Plot No. 3.....	27 0 0	
Plot No. 4.....	18 0 0	
Plot No. 5.....	9 0 0	
Plot No. 6.....	9 0 0	
Plot No. 8.....	1 0 9	
Plot No. 15.....	3 0 0	
	<hr/>	
	70 12 9	
	<hr/>	
	651 12 3	

	Rs. a. p.	Rs. a. p.
2. Seeds :		
(a) Sugarcane sets, 21,000 at Rs. 4 per 1,000	84 0 0	
Cartage for the same	2 14 0	
(b) Banana suckers, 900 at Rs. 11-8-0 per 100 (Rs. 103-8-0). This sum goes as capital cost on banana (plot No. 4 of 1929-30) for the succeeding years		
(c) Vegetables	30 15 0	
(d) Two <i>bhopala</i> fruits	1 8 0	
(e) <i>Shalu jowar</i> , 221 lbs.	14 11 8	
(f) <i>Bajri</i> , 60.5 lbs.	3 10 8	
(g) <i>Tur</i> , 5 lbs.	0 8 0	
(h) <i>Udid</i> , 11 lbs.	0 12 9	
(i) <i>Matki</i>	0 8 0	
(j) <i>Til</i>	0 3 0	
	<hr/>	139 11 1
3. Wages of outside labour :		
(a) Sugarcane (plot Nos. 1 and 2), 178 men, 209 women and 56 bullocks	182 2 5	
(b) Ratoon cane (plot Nos. 3, 4 and 5), 260.5 men, 206.5 women and 124 bullocks	338 15 11	
(c) Vegetables in banana (plot No. 6). Out of the common labour of 228 men, 278 women and 56 bullocks (costing Rs. 235-7-2) only 5 men, 61.5 women (costing Rs. 16-15-0) are charged to vegetables	16 15 0	
(d) Banana alone (plot No. 7), 14.5 men and 66 women	23 12 0	
(e) Vegetables in <i>papaya</i> (plot No. 8). Out of the common labour of 20.5 men, 235.5 women and 28 bullocks (costing Rs. 82-6-0) only 3.75 men, 36 women and two bullocks (Rs. 12-12-0) are charged to <i>papaya</i> plot	12 12 0	
(f) <i>Dudhya</i> (plot No. 9), 4 men and 31.5 women	18 2 0	
(g) <i>Khira</i> and tomatoes (plot No. 10), 16.5 men, 16 women and 12 bullocks ..	17 8 0	
(h) <i>Bajri</i> (plot Nos. 11 and 12), 53 men, 106 women and 48 bullocks	91 4 0	
(i) <i>Shalu</i> (plot Nos. 13 and 14), 57 men, 36 women and 104 bullocks	87 8 0	
(j) <i>Guava</i> (plot No. 15), 10 men and 20 women	14 0 0	
	<hr/>	802 15 4
4. Depreciation on implements and tools :		
	Rs. a. p.	
Opening inventory	152 8 0	
Closing inventory	116 8 0	
	<hr/>	
	36 0 0	
Out of the depreciation of Rs. 36, only Rs. 5-14-11 go as capital cost against banana and <i>papaya</i>	30 1 1	
	<hr/>	30 1 1

	Rs. a. p.	Rs. a. p.
5. Bullock labour cost (excluding interest) :		
(a) Depreciation on the value of three bullocks as per inventory		
	Rs. a. p.	
Opening inventory	220 0 0	
Closing inventory	215 0 0	

		5 0 0
(b) Death allowance at 5 per cent on Rs. 220, the value of three bullocks		11 0 0
(c) Charges on account of housing at Rs. 4 per bullock per year		12 0 0
(d) Feeds and fodder		
	Rs. a. p.	
• Value of fodder	83 8 0	
Charges for grazing	15 0 0	

		98 8 0
Against the above costs from (a) to (d) must be set off Rs. 12, the value of 6 cartloads of F. Y. M.		-12 0 0

		114 8 0
Out of Rs. 114-8-0, Rs. 18-13-9 go as capital cost to <i>banana</i> and <i>papaya</i> plots in the following year		-18 13 9

		95 10 3
6. Charges for marketing of the produce :		
(a) Ratoon sugarcane (plot Nos. 3, 4 and 5)		
	Rs. a. p.	
Brokerage on <i>gul</i>	36 5 3	
<i>Dharmadaya</i>	0 8 0	
<i>Batta</i>	9 0 0	

		45 13 3
(b) Fruit (plot No. 7)		
Brokerage	16 0 0	
<i>Batta</i>	1 2 3	

		18 2 3
(c) Vegetables (plot Nos. 1, 2, 8 and 10)		
	Rs. a. p.	
Brokerage	4 2 6	
<i>Batta</i>	2 0 6	

		6 3 0

		69 8 6
7. Assessment and L. F. C. :		
	A. g.	Rs. a. p.
Plot No. 3	1 0	3 2 3
Plot No. 5	0 20	1 2 1
Plot No. 9	1 0	0 2 3
Plot No. 12	3 20	9 2 6
Plot No. 15	1 5	4 2 0

		17 11 1

8. <i>Wages of sardar :</i>	Rs. a. p.	Rs. a. p.
The annual wage of Rs. 180 of the <i>sardar</i> is distributed in proportion to the work put on the plots by him. Charges on account of banana and <i>papaya</i> (Rs. 44-10-8) are carried over to the subsequent years as capital cost.....		135 5 4

9. <i>Irrigation charges :</i>	Rs. a. p.
Plot No. 1	47 13 0
Plot No. 2	23 14 6
Plot No. 3	47 13 0
Plot No. 4	47 13 0
Plot No. 5	23 14 6
Plot No. 6 and statement No. 7	70 2 0
Plot No. 7	35 1 0
Plot No. 8 and statement No. 10.....	35 1 0
Plot No. 10.....	23 14 6
Plot No. 15.....	39 7 0
	<hr/>
	394 13 6
Out of the sum of Rs. 394-13-6, Rs. 78-14-3 are carried as capital cost to banana and <i>papaya</i> ..	-78 14 3

315 15 3

10. <i>Hire of equipment and petty gural expenses :</i>	
(a) Hire of mill with accessories at Rs. 1-8-0 a day for 14 days plus cartage Re. 0-12-0.	21 12 0
(b) Petty charges	2 13 0

24 9 0

11. <i>Rent of leased land :</i>	Rs. a. p.
Plot No. 1	54 11 4
Plot No. 2	35 1 10
Plot No. 4	54 13 6
Plot No. 6 and statement No. 7	80 0 0
Plot No. 7	40 0 0
Plot No. 8 and statement No. 10.....	39 0 0
Plot No. 10.....	10 0 0
Plot No. 11.....	40 0 0
Plot No. 13.....	30 0 0
Plot No. 14.....	40 0 0

423 10 8

Out of Rs. 423-10-8, Rs. 86 go as capital cost towards banana and <i>papaya</i> plots in the following years	-86 0 0
--	---------

337 10 8

	Rs. a. p.	Rs. a. p.
12. <i>Miscellaneous expenses :</i>		
	Rs. a. p.	
Plot No. 1	10 0 0	
Plot No. 2	5 0 0	
Plot No. 3	3 0 0	
Plot No. 4	2 8 0	
	-----	20 8 0
13. <i>Capital cost of banana plot No. 7</i>	73 0 0	
	-----	73 0 0
<i>Total out-of-pocket expenses</i>		----- 2,714 5 10

Family Labour Income.—Table XI gives the family labour income i.e., the remuneration obtained by the farmer and his family for the labour and management of the farm. The figures of cost of production have already appeared above. The value of produce is taken from the cost and receipt statements of the various plots (pp. 53 to 114).

The value of the gross produce obtained from the farm was Rs. 3,320-7-5, while the cost of production, excluding the unpaid wages of the farm family, came to Rs. 3,037-3-9 leaving Rs. 283-3-8 as Family Labour Income. The farmer put in two acres under new banana plantation and one acre under *papaya*. These crops do not give any return in their first year. Farmers, therefore, take subsidiary crops like vegetables in the interspace during the first year which give some yield. Part of the common costs are shared by the vegetables. The balance which is really a capital cost of the fruit plantation is distributed over the bearing period. In the case of banana it is spread over from 2nd to 6th year and in the case of *papaya* 2nd and 3rd year. The actual allocation will be found in the details of costs and the statements of costs and receipts. See plot Nos. 6 and 8 of 1928-29 and plot Nos. 4 and 6 of 1929-30. For details of costs see pages 48 to 52.

Farm Business Income.—The family labour income of Rs. 283-3-4 was not the only income from the farm. The rent of owned land and interest on the capital, debited as costs in finding family labour income were saved and hence the farm business income came to Rs. 606-1-7 as shown in table XII.

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production excluding wages for family labour				Family labour income	Remarks
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total		
1	2	3	4	5	6	7	8	9
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Total ..	29 5	3,320 7 5	2,714 5 10	184 0 3	138.13 8	3,037 3 9	+283 3 8	
Sugarcane	1 20	1,163 14 0	785 7 10	67 7 4	....	852 15 2	+310 14 10	Leased land.
Ratoon-cane	2 20	1,252 2 0	988 13 1	54 8 10	59 11 1	1,103 1 0	+149 1 0	Owned land.
Vegetables in banana plot	2 0	54 15 0	83 4 8	2 9 3	....	85 13 11	- 30 14 11	Leased land. Vegetables were taken as subsidiary crop with banana during the first year. Expenses on banana alone during this first year being capital cost are equally distributed on the five bearing years (see plot No. 6 of 1928-29 and No. 4 of 1929-30).
Banana	1 0	200 6 6	206 12 4	9 14 5	....	216 10 9	-16 4 3	This being the fifth year of the plantation Rs. 73, the share of the capital cost, are added to the cost of production. The land was leased.

WADGAON, FARMER I(A)

TABLE XI—FAMILY LABOUR INCOME—*concl'd.*

Name of crop	Area	Value of produce	Cost of production excluding wages for family labour				Family labour income	Remarks
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total		
1	2	3	4	5	6	7	8	9
Vegetables in <i>papaya</i> plot	A. g. 1 0	Rs. a. p. 34 14 0	Rs. a. p. 50 2 1	Rs. a. p. 1 7 3	Rs. a. p.	Rs. a. p. 51 9 4	Rs. a. p. —16 11 4	The land was leased. Vegetables were taken as subsidiary crops with <i>papaya</i> during the first year. Expenses on <i>papaya</i> alone during this first year are equally distributed on the two bearing years (see plot No. 8 of 1928-29 and plot No. 6 of 1929-30).
<i>Bhopala</i>	1 0	22 13 0	27 0 10	1 14 2	2 7 1	31 6 1	— 8 9 1	Owned land.
<i>Khira</i> and tomatoes..	0 20	16 7 0	60 2 7	2 0 8	....	62 3 3	— 45 12 3	Leased land.
<i>Bajri</i>	6 20	229 15 11	193 3 11	14 13 6	35 13 6	243 14 11	— 13 15 0	Owned land.
<i>Shalu</i>	12 0	157 8 0	251 13 6	26 6 9	....	278 4 3	— 120 12 3	Leased land.
<i>Guava</i>	1 5	162 8 0	67 9 0	2 14 1	40 14 0	111 5 1	+ 51 2 11	Owned land.
Miscellaneous receipts	....	25 0 0	....	....	....	....	+ 25 0 0	The receipts from the sale of mangoes from a tree on the farm.

Column 4.—Out-of-pocket expenses include costs of manure, seed, hired labour on daily wages and piece-work, depreciation on deadstock, cost of upkeep of bullocks, cost of permanent servant, irrigation charges, marketing expenses, hire of equipment and *gurhal* cash expenses, rent of leased land, assessment and L. F. C. on owned land and other miscellaneous cash expenses. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on the current agricultural operations and on feed and fodder for the work animals. Fixed capital includes implements and work animals. *Column 6* denotes the estimated rent on owned land minus the assessment and L. F. C. *Column 8* shows wages earned by the family.

The following table gives the Farm Business Income or the aggregate income of the farmer i.e., the value of the produce minus the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area		Value of produce		Out-of-pocket expenses		Farm business income		
	A.	g.	Rs.	a.	p.	Rs.	a.	p.	
Total ..	29	5	3,320	7	5	2,714	5	10	+606 1 7
Sugarcane	1	20	1,163	14	0	2,714 5 10			
Ratoon-cane	2	20	1,252	2	0				
Banana	1	0	200	6	6				
Vegetables from banana plot	2	0	54	15	0				
Vegetables from papaya plot	1	0	34	14	0				
Bhopala	1	0	22	13	0				
Khira and tomatoes.....	0	20	16	7	0				
Bajri	6	20	229	15	11				
Shalu	12	0	157	8	0				
Guava	1	5	162	8	0				
Miscellaneous receipts from mangoes .....	..		25	0	0			

The gross receipts obtained, as seen above, were Rs. 3,320-7-5, while the out-of-pocket expenses came to Rs. 2,714-5-10, thus leaving Rs. 606-1-7 to the farmer in the form of farm business income.

The farm business income made up of the family labour income, interest on working capital and rent of owned land as shown below tallies with the figure arrived at in the table above.

	Rs. a. p.
Family labour income	283 3 8
Interest on working capital.....	184 0 3
Rent of owned land minus assessment and L. F. C.	138 13 8

606 1 7

In addition to the farm business income the farmer got Rs. 58 by way of selling buffaloe milk and Rs. 48 by selling cattle-dung cakes. Milch cattle are not considered as a part of farm business and so the costs and sale proceeds on account of milch cattle are not included in the regular farm accounts. The farmer besides made a net profit of Rs. 158 in purchasing and selling fruit. He purchased *jambul* fruit on a neighbour's trees and consigned to Bombay and made this profit. The aggregate income of the family was therefore Rs. 870-1-7.

ANALYSIS

The farm family contributed 79·5 man units and 214 woman units towards the crops of 1928-29 and made Rs. 283-3-8 as family labour income. Taking two woman units equal to one man unit the farmer made Rs. 1-8-3 per unit, a very good wage indeed. The farmer had to employ 842 man units, 1,184·5 woman units and 542 bullock units at a

cost of Rs. 802-15-4 on daily wages and contract work. Besides he had to pay Rs. 135-5-4 to the yearly servant. The farmer made farm business income of Rs. 606-1-7.

The following table shows the yields of the main produce, labour units spent per acre and general remarks on crops. Labour includes home labour, hired and contract labour and also bullock labour. (Man unit=bullock unit=two woman units.)

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of produce	Quantity lbs.		
1	Sugarcane	Standing crop was sold.	395	Plot Nos. 1 and 2 include 14 and 4·75 units respectively for contract payment. The three plots (Nos. 3, 4 and 5) were in one block. Yields of plot Nos. 3 and 4 were not bad. Yield of plot No. 5 was low. Its cultivation was neglected. Plots Nos. 3, 4 and 5 include 7·25, 7·25 and 5 units respectively, for contract payment.
2	Do.	Do.	346·25	
3	Ratoon-cane (<i>gul.</i>)	4,862	268·75	
4	Do.	5,930	262·75	
5	Do.	3,170	180·0	
6	Vegetables in banana plot....	Standing crop was sold.	27·9	Variety of vegetables sown as subsidiary crops in the banana plot.
7	Old banana plantation	Produce sold in lots without weighing.	79·5	It was an established plantation. Frost affected the yield. 41·5 per cent of the labour units were required for taking the produce on head to the market.
8	Vegetables in papaya plot....	70 lbs. of dry chillies and other vegetables.	46·375	Subsidiary crop in new banana plantation. Labour includes 2 units for contract payment.
9	<i>Bhopala</i>	Produce sold in lots without weighing.	53·0	Crop was attacked by insect pests and so it failed. Labour includes 16·5 units for contract payment.
10	<i>Khira</i> and tomatoes.....	Do.	112·0	This plot was originally prepared for growing sugarcane but as it was not passed by irrigation authorities it was put under <i>khira</i> and tomatoes. The labour spent being for sugarcane was too much for <i>khira</i> etc.
11	<i>Bajri</i>	176	51·49	The poor yields of these plots are attributable to unfavourable rains.
12	Do.	226·29	42·00	
13	<i>Shalu</i>	Used as fodder	46·75	
14	Do.	Standing crop was sold.	26·62	The crop was poor and hence was cut for green fodder.

Plant-sugarcane (plot Nos. 1 and 2).—During the year under study the area under plant-cane was one acre and twenty gunthas in two plots. Both the plots were in one block. Plot No. 1 received fifty cartloads of municipal refuse before planting and 15 *pallas* of safflower cake and one bag of Sulphate of Ammonia at the time of top dressing, while plot No. 2 received only 20 *pallas* of safflower cake and two bags of sulphate without any bulky manure. Frost of February 1929 affected the crop in both the plots, especially in plot No. 2 which had not received manure before planting. Plot No. 2 was weedy and required more labour for cleaning. Apart from the poorer crop in plot No. 2 it took more money for weeding and hence there was wide difference between the incomes. The farmer made labour income of Rs. 264-1-2 per acre from plot No. 1 and only Rs. 93-11-4 from plot No. 2. *Bhendi* and *khira*, taken as inter-crop in sugarcane, totally failed.

Ratoon-sugarcane (plot Nos. 3, 4 and 5).—There were three plots under ratoon-cane. The plots being adjacent there was no difference in their quality. The difference in the yields was due to the differential treatment received by them. Plot Nos. 5, 3 and 4 received 9, 14 and 15 *pallas* of cake and yielded 3,170 ; 4,862 and 5,930 lbs. of *gul* respectively. Moreover, plot No. 5 had missed two turns of watering.

Banana (plot Nos. 6 and 7).—The plots are not comparable, since plot No. 6 was laid during the year, while plot No. 7 was in its fourth bearing. The costs on the former are considered as capital costs to be distributed over the bearing years, while there was no out-turn in the first year of planting. The capital cost of about Rs. 365 is to be distributed over five bearing years. The cost of production of the inter-crop of vegetables including the share of common costs came to Rs. 85-13-11, while the receipts from vegetables came only to Rs. 54-15-0. The loss was due to bad season. Since the sub-crop shares in the overhead expenses of the farm and in the expenditure on cultivation and manuring of the main crop, one need not think that the practice of taking sub-crops in the fruit plantation in its early years is bad.

Plot No. 7 was in its fourth year of bearing. The cost of production (including part of the capital cost and recurring expenses) came to Rs. 216-10-9, while the receipts of the produce were Rs. 200-6-6. It may be noted that the frost of February 1929 spoiled the leaf which is a saleable by-produce in the Poona city. As a matter of fact in the fourth and fifth years the leaf is more important than the fruit. The harvest of fruit was also affected by the frost in yield and quality.

Vegetables in papaya (plot No. 8).—This plot had first year *papaya* with vegetables as inter-crop. The *papaya* bears in the second and third years. The consideration of capital cost need not be repeated, except that the capital cost of Rs. 166-0-8 would be distributed over the two following bearing years. Vegetables fared badly due to unfavourable climatic conditions.

The following are the detailed statements of individual crops.

SUGARCANE—1 acre in 1928-29

Previous Crop—Dudhya bhopala, 1927-28

STATEMENT No. 1

PLOT No. (1)

(a) Cost of Production

58

Item of Expenditure	Home labour			Exchange labour on co-operation	Labour on daily wages and contract			Total units	Cost excluding that of family labour	Remarks	
	Man ¹	Women ¹	Bullocks ²		Bullocks ²	Men	Women				Bullocks
1. Preparatory tillage									Rs. a. p.		
(a) Ploughing .....	..	..	18	9	36	18	..	..	81	9 0 0	Four ploughings were given. A plough required 3 men and 6 bullocks. Eighteen men were paid at annas 8 each.
b) Putting bunds.....	..	..	..	..	..	30	..	..	30	15 0 0	Men were paid at annas 8 each.
c) Ridging and dressing beds.....	2	..	2	5	2	11	..	..	22	5 8 0	Eleven men were paid at annas 8 each.
2. Manure and manuring											
(a) Manures											
(i) Residual manure ..	..	..	..	..	..	..	..	..	..	1 8 0	Six carts of municipal refuse at annas 8 per cart were given to the previous crop; 50 per cent of the cost is charged to this crop for residue.
(ii) Municipal refuse..	..	..	..	..	..	..	..	..	..	17 8 0	For the plot 50 carts of municipal refuse at annas 8 per cart; 70 per cent of the cost is charged to this crop.

FARM STUDIES

(iii) Sulphate of Ammonia.....	..	..	..	..	..	..	..	..	..	17 0 0	For the plot one bag of Sulphate of Ammonia as top-dressing. The cost includes carting charges.
(iv) Safflower cake ...	..	..	..	..	..	..	..	..	..	127 0 0	For the plot 14 <i>pallas</i> of safflower cake were applied at Rs. 8-13-0 per <i>palla</i> ..123 6 0 Carting the cake to the field .. 3 0 0 <i>Hamali</i> .. 0-10 0
(b) Carting municipal refuse .....	..	..	..	..	..	25	..	50	75	35 0 0	Cartage for 50 carts of municipal refuse at Rs. 1 per cart: 70 per cent of the cost is charged to this crop.
(c) Manuring.....	1	..	..	1	..	14	12	..	22	7 14 5	Nine men for spreading bulky manure at annas 8 each; 70 per cent charged to the plot .. 3 2 5 Five men for breaking cake at annas 8 each .. 2 8 0 Twelve women for applying cake and sulphate at annas 3 each .. 2 4 0
3. Seeds and sowing											
(a) Sets .....	..	..	..	..	..	..	..	..	..	54 14 0	For the plot 13,000 sets at Rs. 4 per thousand .. 52 0 0 Carting sets .. 2 14 0
											7 14 5
											54 14 0

WADGAON, FARMER 1(A)

STATEMENT No. 1—contd.

40

Item of Expenditure	Home labour			Saldar ^a	Exchange labour on co-operation	Labour on daily wages and contract ₂			Total units	Cost excluding that of family labour	Remarks
	Men ¹	Women ¹	Bullocks ^a			Bullocks ^a	Men	Women				Bullocks	Per acre
3. Seeds and sowing— <i>contd.</i>										Rs. a. p.	
(b) Vegetable seeds....	..	..	..	..	..	..	..	..	..	11 12 0	<i>Khira</i> and <i>bhendi</i> seeds. Two men were paid at annas 8 each and 13 women at annas 4 each per day. Irrigation charges at Rs. 45 per acre plus L. F. C. one anna in the rupee.
(c) Planting.....	3.5	..	..	3	..	2.0	13	..	15	4 4 0	
4. Irrigation											
(a) Canal water charges	..	..	..	..	..	..	..	..	..	47 13 0	
(b) Labour	5.0	..	..	18	..	..	..	..	23	..	
5. After-care and tillage											
(a) Weeding.....	..	8	..	..	..	4.5	59	..	38	16 0 0	Four weeding were given. Outside labour was paid Rs. 16 (20 women at annas 3 each, 39 women at annas 4 each and 4.5 men at annas 8 each. Extra four annas were spent for sweets).
(b) Earthing up .....	..	..	..	..	..	18.0	..	..	18	18 0 0	
6. Harvesting											
(a) Vegetables.....	..	30	..	..	..	..	30	..	30	7 8 0	Thirty women were paid at annas 4 each.
(b) Sugarcane .....	..	..	..	..	..	..	..	..	..	..	No harvesting cost as standing crop was sold.
7. Marketing											
(a) Labour .....	..	..	..	..	..	..	..	..	..	4 0 0	Contract work at the rate of annas 2 per headload for taking vegetables to Poona.
(b) Brokerage, etc. ....	..	..	..	..	..	..	..	..	..	1 0 0	The <i>datal</i> deducted 3 pies per rupee sale of produce.

STATEMENT No. 1—concl'd.

(b) Yield and Value

Name of Product	Value	Remarks
	Per acre	
	Rs. a. p.	
Sugarcane	750 0 0	Standing crop was sold to a <i>bagwan</i> on cash terms. Sold at different rates by auction.
<i>Bhendi</i> and <i>khira</i> ..	63 14 0	
Total ..	813 14 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3),	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and local fund cess) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre ..	813 14 0	549 12 10	(b)43 15 8	+264 1 2	+308 0 10

SUGARCANE—Half acre in 1928-29
Previous Crop—Brinjal, 1927-28

STATEMENT No. 2
 PLOT No. (2)
 (a) *Cost of Production*

ITEM OF EXPENDITURE	Home labour			Sal- dar ²	Exchange labour on co- operation	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Wo- men ¹	Bul- locks ²		Bullocks ²	Men	Wo- men	Bul- locks			For the plot	Per acre		
											Rs. a. p.	Rs. a. p.		
1. Preparatory tillage														
(a) Ploughing, har- rowing, breaking clods, etc.....	11	5.5	22	11.0	..	..	49.5	99.0	5 8 0	11 0 0	Four ploughings were given. Eleven men were paid at as. 8 each.	
(b) Putting bunds	15.0	..	..	15.0	30.0	7 8 0	15 0 0	Fifteen men were paid at as. 8 each.	
(c) Ridging and preparing beds.	2	3.0	2	7.0	..	..	14.0	28.0	3 8 0	7 0 0	Seven men were paid at as. 8 each.	
2. Manure and manuring														
(a) Manures														
(i) Residual manure.....	2 4 0	4 8 0	Nine carts of municipal refuse at as. 8 per cart; fifty per cent of the cost is charged to this crop.	
(ii) Sulphate of Ammonia	17 0 0	34. 0 0	For the plot one bag of 112 lbs. of Sulphate of Ammonia as top dressing. It includes carting cost.	

WADGAON, FARMER I (A)

STATEMENT No. 2—contd.

64

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Exchange labour on co- operation	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²			Bullocks ²	Men	Wo- men			Bul- locks	For the plot		Per acre
											Rs. a. p.	Rs. a. p.	
(iii) Safflower cake .....	..	..	..	..	..	..	..	..	..	..	90 12 0	181 8 0	Rs. a. p. For the plot 10 <i>pallas</i> of safflower cake were given at Rs. 8-13-0 per <i>palla</i> .. 88 2 0 Cartage .. 2 0 0 <i>Hamali</i> .. 0 10 0 90 12 0
(b) Manuring .....	..	..	..	..	..	4.5	7	..	8.0	18.0	4 0 0	8 0 0	Seven women and 4.5 men were paid at as. 4 and 8 respectively.
3. Seeds and planting													
(a) Sets .....	..	..	..	..	..	..	..	..	..	..	32 0 0	64 0 0	Eight thousand sets at Rs. 4 per thousand.
(b) Vegetable seeds	..	..	..	..	..	..	..	..	..	..	2 0 0	4 0 0	<i>Bhendi</i> and <i>khira</i> seeds.
(c) Planting	2	2.0	..	..	..	..	7	..	8.5	13.0	1 12 0	3 8 0	Seven women were paid at as. 4 each per day.
4. Irrigation													
(a) Canal water charges .....	..	..	..	..	..	..	..	..	..	..	23 14 6	47 13 0	Irrigation charges at Rs. 45 per acre plus local-fund cess.
(b) Labour .....	..	..	..	15.0	..	..	..	..	15.0	30.0	..	..

FARM STUDIES

STATEMENT No. 2—concl'd.

ITEM OF EXPENDITURE	Home labour			Sal- dar ²	Exchange labour on co- operation	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Bullocks ²	Men	Wo- men	Bul- locks			For the plot	Per acre	
											Rs. a. p.	Rs. a. p.	
11. Charges for imple- ments and tools....	..	..	..	..	..	..	..	..	..	..	1 10 8	3 5 4	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Deprecia- tion .. Rs. 1-1-8													
(b) Interest. Re. 0-9-0													
12. Miscellaneous ex- penses .....	..	..	..	..	..	..	..	..	..	..	5 0 0	10 0 0	
13. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure)	..	..	..	..	..	..	..	..	..	..	21 12 7	43 9 2	Charged at 12 per cent per annum.
14. Rent of land .....	..	..	..	..	..	..	..	..	..	..	35 1 10	70 3 8	The land was rented. Rent charged to sugarcane is more as it is charged in proportion to the value of crops entering sugarcane rotatio
Total ..	2	28.5	13	23.5	24	46.5	95	..	170.75	341.5	303 2 4	606 4 8	

¹ Family labour not charged. ² Home and exchange bullock labour charged under item 10. ³ Wages of *saldar* charged un³

(b) *Yield and Value*

Name of product	Value		Remarks
	For $\frac{1}{2}$ acre	Per acre	
	Rs. a. p.	Rs. a. p.	
Sugarcane.....	325 0 0	650 0 0	Standing crop was sold. Sold at different rates.
Bhendi, etc.	25 0 0	50 0 0	
Total ..	350 0 0	700 0 0	

(c) *Summary*

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and local-fund cess) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For half acre .	350 0 0	303 2 4	(b)23 7 8	+46 13 8	+70 5 4
Per acre	700 0 0	606 4 8	46 15 4	+93 11 4	+140 10 8

WADGAON, FARMER 1(A)

STATEMENT No. 3

SUGARCANE (RATOON)—One acre in 1928-29

PLOT No. (3)

(a) Cost of Production

68

ITEM OF EXPENDITURE	Home labour			Sal- dar ²	Labour on daily wages and contract			Total units	Cost ex- cluding that of family labour	REMARKS
	Men ¹	Wo- men ¹	Bul- locks ¹		Men	Wo- men	Bul- locks		Per acre	
1. Manure and Manuring									Rs. a. p.	
(a) Manures										
(i) Residual manure	27 0 0	Thirty per cent of the cost of municipal refuse including cartage, given to the previous crop, is charged.
(ii) Oil-cake]	127 0 0	Rs. a. p. For one acre 14 <i>pallas</i> of safflower cake were given as top dressing at Rs. 8-13-0 per <i>palla</i> .. 123 6 0 Cartage .. 3 0 0 <i>Hamali</i> .. 0 10 0 <hr/> 127 0 0
(b) Manuring	15	10	..	20.0	10 0 0	Fifteen men were paid at annas eight each and ten women at four annas each.
2. Irrigation										
(a) Canal water charges.	47 13 0	Irrigation charges at Rs. 45 per acre plus local-fund cess.
(b) Labour	12.5	..	..	..	12.5	....

FARM STUDIES

3. After-care and tillage												
(a) Weeding .....	..	8	..	..	..	78	..	43.0	19 8 0		Two weedings were given. First required 26 women and second 60 women. Seventy-eight women were paid at annas four each.
(b) Earthing up.....	..	..	..	..	20	..	..	20.0	20 0 0		This was contract labour paid at Rs. 20 per acre.
4. Harvesting and preparing for market												
(a) Crushing and boiling.	..	..	..	..	72	..	48	120.0	82 14 0		This was contract work at Rs. 35 a <i>bhargadi</i> . (The work lasted for six days.) Value of cane tops Rs. 30-6-0.
(b) Extra labour .....	..	6	..	..	..	..	..	3.0	...		
(c) Hire of equipment ..	..	..	..	..	..	..	..	..	9 0 0		Hired at Rs. 1-8-0 per day for six days.
(d) <i>Gurhal</i> expenses and oil flour, etc. ....	..	..	..	..	..	..	..	..	1 2 0		
5. Marketing												
(a) Carting	3	..	6	..	..	..	..	9.0	1 8 0		Octroi at as. 8 per cart on three carts.
(b) Brokerage, etc. ....	..	..	..	..	..	..	..	..	18 0 0		Rs. a. p. Brokerage at as. 12 per <i>palla</i> , for 19 <i>pallas</i> and 62 lbs. 14 4 2 Discount for cash payment .. 3 8 9 <i>Dharmadaya</i> at one anna per cart .. 0 3 0 <hr/> 18 0 0
6. Removing stubbles	3	6	14	..	7	..	7	34.0	7 0 0		Seven men and seven bullocks were paid at annas eight each.	
7. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	7 8 4		The total annual cost, on account of the <i>saldar</i> , is distributed on different plots in proportion to the anits used on them.

STATEMENT No. 3—concl'd.

ITEM OF EXPENDITURE	Home labour			Sal- dar ²	Labour on daily wages and contract			Total units	Cost exclud- ing that of family labour	REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Wo- men	Bul- locks		Per acre	
8. Charges for bullock labour .....	..	..	..	..	..	..	..	..	Rs. s. p. 7 2 3	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. s. p. (a) Feeds, fodder, depreciation, etc. 5 6 6 (b) Interest on the value of bul- locks, feeds and fodder 1 11 9										
9. Charges for implements and tools .....	..	..	..	..	..	..	..	..	2 9 0	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. s. p. (a) Depreciation 1 11 3 (b) Interest 0 13 0										
10. Miscellaneous expenses.	..	..	..	..	..	..	..	..	3 0 0	
11. Interest on fluid capital (i.e., wages of hired labour and cost of manure) ....	..	..	..	..	..	..	..	..	19 12 6	Charged at 12 per cent per annum. The land was owned. Rent charged to sugarcane is more since it is allocated in proportion to the value of crops entering sugarcane rotation.
12. Rent of land .....	..	..	..	..	..	..	..	..	47 6 11	
Total ..	6	20	20	12.5	144	88	55	261.5	458 4 0	

¹ Family labour not charged. ² Home bullock labour charged under item 8. ³ Wages of *saldar* charged under item 7.

(b) Yield and Value

Name of product	Quantity	Value	Remarks
	For 1 acre	Per acre	
	Lbs.	Rs. a. p.	
Gul	4,862	433 1 9	Sold at different rates.
Sets	4,500 (sets)	18 0 0	Valued at Rs. 4 per 1,000 sets.
Sugarcane tops ..	8,103	40 8 0	Estimated value at 200 lbs. per rupee.
Total ..	....	491 9 9	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5 +4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus as- sessment and local- fund cess) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre ..	491 9 9	458 4 0	(a)44 14 8 (b)22 6 0	+33 5 9	+100 0 5

WALDAON, FARMER 1(A)

STATEMENT No. 4

SUGARCANE (RATOON)—One acre in 1928-29

PLOT No. (4)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Sal- dar ^a	Labour on daily wages and contract			Total units	Cost exclud- ing that of family labour	REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Wo- men	Bul- locks		Per acre	
1. Manure and manuring									Rs. a. p.	
(a) Manures										
(i) Residual manure..	18 0 0	Thirty per cent of the cost of municipal refuse including cartage given to the previous crop is charged.
(ii) Oil-cake	135 13 0	Rs. a. p. The plot received 15 <i>pallas</i> of safflower cake as top dressing at Rs. 8-13-0 per <i>palla</i> .. 132 3 0 Cartage 3 0 0 <i>Hamali</i> 0 10 0 <hr/> 135 13 0
(b) Manuring	14	22	..	25·0	12 8 0	Fourteen men were paid at annas 8 and 22 women at annas 4 each.
2. Irrigation										
(a) Canal water charges	47 13 0	Irrigation charges at Rs. 45 per acre plus local-fund cess.
(b) Labour	14	..	..	..	14·0	....

3. After-care and tillage												
(a) Weeding .....	..	6	..	..	..	51	..	28.5	12 12 0	One weeding was given. Fifty-one women were paid at annas four each.		
(b) Earthing up.....	..	..	..	..	20	..	..	20.0	20 0 0	Contract work at Rs. 20 per acre.		
4. Harvesting and preparing for market												
(a) Crushing and boiling	..	..	..	..	72	..	48	120.0	94 12 6	Contract work at Rs. 33 per <i>bhargadi</i> . The work lasted for seven days .. 57 12 0 Value of tops fed to <i>gurhal</i> bullocks .. 37 0 6	Rs. a. p.	
(b) Extra labour .....	..	6	..	..	..	..	..	3.0	....	Collecting broken cane.	94 12 6	
(c) Hire of equipment ..	..	..	..	..	..	..	..	..	10 8 0	Hired at Rs. 1-8-0 per day for seven days.		
(d) <i>Gurhal</i> expenses and oil.....	..	..	..	..	..	..	..	..	1 5 0			
5. Marketing												
(a) Carting	1	..	6	2	..	..	..	9.0	2 12 0	Octroi at annas 8 per cart for 4½ carts.		
(b) Brokerage, etc. ....	..	..	..	..	..	..	..	..	21 15 3	Brokerage at annas 12 per <i>palla</i> for 23 <i>pallas</i> and 42 lbs. .. 17 6 6 Discount for cash payment .. 4 4 9 <i>Dharmadaya</i> at one anna per cart .. 0 4 0	Rs. a. p.	
											21 15 3	
6. Removing stubbles	3	..	12	..	6	18	6	36.0	9 6 0	Six men and six bullocks were paid at as. 8 and 18 women at 3 annas each.		
7. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	9 10 0	The annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.		

STATEMENT No. 4—concl'd.

74

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Labour on daily wages and contract			Total units	Cost-exclud- ing that of family labour	REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Wo- men	Bul- locks		Per acre	
8. Charges for bullock labour.....	..	..	..	..	..	..	..	..	Rs. s. p. 6 6 11	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. s. p. (a) Feeds, fodder, depreciation, etc. 4 13 10 (b) Interest on the value of bul- locks, feeds and fodder .. 1 9 1										
9. Charges for implements and tools.....	..	..	..	..	..	..	..	..	2 4 11	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. s. p. (a) Depreciation 1 8 6 (b) Interest 0 12 5										
10. Miscellaneous expenses.	..	..	..	..	..	..	..	..	2 8 0	
11. Interest on fluid capital (i.e., wages of hired labour and cost of manure)	..	..	..	..	..	..	..	..	22 9 5	Charged at 12 per cent per annum. The land was taken on lease. Rent charged to sugarcane is more since it is allocated in propor- tion to the value of crops entering sugarcane rotation.
12. Rent of land.....	..	..	..	..	..	..	..	..	54 13 6	
Total ..	4	12	18	16	112	91	54	255·5	485 13 6	

¹ Family labour not charged. ² Home bullock labour charged under item 8. ³ Wages of *saldar* charged under item 7

(b) Yield and Value

Name of product	Quantity	Value	Remarks
	For one acre	Per acre	
	Lbs.	Rs. a. p.	
Gul.....	5,930	525 13 9	Sold at different rates.
Sets	3,500 (sets)	14 0 0	Valued at Rs. 4 per 1,000 sets.
Sugarcane tops ..	9,833	49 6 0	Estimated value at 200 lbs. per rupee.
Total ..	.....	589 3 9	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and local-fund cess) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For one acre.	589 3 9	485 16 6	(b) 24 14 11	+103 6 3	+128 5 2

WADGAON, FARMER I(A)

STATEMENT No. 5

SUGARCANE (RATOON)—Half acre in 1928-29

PLOT No. (5)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bul- locks ¹		Men	Wo- men	Bul- locks			For the plot	Per acre	
1. Manure and manuring												
(a) Manures												
(i) Residual manure..	9 0 0	18 0 0	Thirty per cent of the cost of municipal refuse given to the previous crop is charged for the residue.
(ii) Oil-cake	40 14 6	81 13 0	For the plot 4½ <i>pallas</i> of safflower cake at Rs. 8-13-0 per <i>palla</i> (Rs. 39-10-6), in addition annas 4 were paid for <i>hamali</i> and Re. 1 for cartage.
(b) Manuring	3-0	8-0	..	7-0	14-0	3 8 0	7 0 0	Three men were paid at annas eight and eight women at annas four each.
2. Irrigation												
(a) Canal water charges.	23 14 6	47 13 0	Irrigation charges at Rs. 45 per acre and local-fund cess one anna in the rupee.
(b) Labour	6-75	..	..	..	6-75	13-5	..	..

STATEMENT No. 5—concl'd.

73

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- ¹ men.	Bul-locks ³		Men	Wo-men	Bul-locks			For the plot	Per acre	
8. Charges for bullock labour	Rs. a. p. 2 14 0	Rs. a. p. 5 12 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
(a) Feeds, fodder, depreciation, etc. Rs. 2-2-10												
(b) Interest on the value of bullocks, feeds and fodder .. Re. 0-11-2												
9. Charges for implements and tools.....	1 0 5	2 0 10	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.	
Rs. a. p.												
(a) Depreciation 0 10 11												
(b) Interest .. 0 5 6												
10. Interest on fluid capital (i.e., wages of hired labour and price of manure)	6 3 3	12 6 6	Charged at 12 per cent per annum. The land was owned. Rent charged to sugarcane is more since it is charged in proportion to the value of yield of crops entering sugarcane rotation.	
11. Rent of land.....	..	..	..	..	..	..	..	..	16 8 6	33 1 0
Total ..	5.5	8	8	6.75	34.5	27.5	15	87.5	175.0	158 15 6		317 15 0

¹ Family labour not charged. ² Home bullock labour charged under item 8. ³ Wages of *saldar* charged under item 7

(b) Yield and Value

Name of product	Quantity		Value		REMARKS
	For $\frac{1}{2}$ acre	Per acre	For $\frac{1}{2}$ acre	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gul	1,585	3,170	140 1 3	280 2 6	Sold at different rates. Valued at Rs. 4 per 1,000 sets.
Sets	4,500 (sets)	9,000	18 0 0	36 0 0	
Sugar cane tops ..	2,641	5,283	13 3 3	26 6 6	
Total ..	..	..	171 4 6	342 9 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and local-fund cess) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For $\frac{1}{2}$ acre.	171 4 6	158 15 6	(a) 15 6 5 [(b) 7] 3 11	+12 5 0	+34 15 4
Per acre ..	342 9 0	317 15 0	30 12 10	+24 10 0	+69 14 8

WADGAON, FARMER 1(A)

STATEMENT No. 6

VEGETABLES IN BANANA—Two acres in 1928-29

PLOT No. (6)

Previous crop—Sugarcane, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Sal- dar ^s	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bul- locks ^s		Men	Wo- men	Bul- locks			For the plot	Per acre	
1. Preparatory tillage										Rs. s. p.	Rs. s. p.	
(a) Ploughing	Cost of ploughing is charged to the main crop of banana (statement No. 7).
(b) Harrowing	3	1.5	..	..	..	4.5	2.25	..	..	Half the cost of harrowing is charged to bananas, under item 7.
(c) Ridging and furrowing	2	1.0	..	..	..	3.0	1.5	..	..	Half the cost of making ridges is charged to bananas, under item 7.
(d) Making beds	3.5	5	..	..	8.5	4.25	2 8 0	1 4 0	Man units at eight annas a day.
2. Manure and manuring												
(a) Residual manure	9 0 0	4 8 0	For common costs of manures see remarks on statement No. 7.
3. Seeds and sowing												
(a) Seeds	9 14 0	4 15 0	Mixture of vegetable seeds (jowar, khira, bhendi and dodka).

	(b) Sowing vegetable seeds	..	..	..	..	4.0	..	2.0	1.0	1 0 0	0 8 0	Four women were paid at annas four each.
4.	Irrigation											
	(a) Canal water charges..	..	..	..	..	..	..	..	..	17 8 6	8 12 3	Irrigation charges at Rs. 33 per acre and local-fund cess one anna in the rupee. Twenty-five per cent is charged to this crop and 75 per cent to banana (statement No. 7).
	(b) Labour .....	..	..	..	8.625	..	..	8.625	4.3125	..	..	.
5.	After-care and tillage											
	(a) Weeding .....	..	1	..	..	57.5	..	29.25	14.625	13 7 0	6 11 6	One weeding was given. Fifteen women were paid at 3 annas each and 42.5 at 4 annas each.
6.	Harvesting and preparing for market											
	(a) <i>Bhendis</i> and <i>khira</i> .....	..	..	..	..	..	..	..	..	..	..	Standing crop was sold.
7.	Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	8 12 9	4 6 4.5	The annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
8.	Charges for bullock labour .....	..	..	..	..	..	..	..	..	1 2 6	0 9 3	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
	Re. a. p.											
	(a) Feeds, fodder, depreciation, etc.	0	14	0								
	(b) Interest on the value of bullocks, feeds and fodder	..	0	4	6							

STATEMENT No. 6—concl.

82

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Wo- men	Bul- locks			For the plot	Per acre		
										Rs. a. p.	Rs. a. p.		
9. Charges for implements and tools	0 6 8	0 3 4	The total annual charges are distributed on different plots in proportion to the bullock labour, used on them.	
Re. a. p.													
(a) Depreciation 0 4 5													
(b) Interest 0 2 3													
10. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure).....	2 2 6	1 1 3	Charged at 12 per cent per annum.	
11. Rent of land	20 0 0	10 0 0	The land was taken on lease at Rs. 40 per acre. The crop being a sub-crop (as per statement No. 7) one-fourth the rent (Rs. 10) is charged.	
Total.....	..	1	5	14·625	5	61·5	..	55·875	27·9375	85 13 11	42 14 11·5		

¹ Family labour not charged. ² Home bullock labour charged under item 8. ³ Wages of *saldar* charged under item 7.

FARM STUDIES

(b) Yield and Value

Name of product	Value		Remarks
	For 2 acres	Per acre	
	Rs. a. p.	Rs. a. p.	
Vegetables	54 15 0	27 7 6	Standing crop was sold.
Total ..	54 15 0	27 7 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and local-fund cess) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres..	54 15 0	85 13 11	(b) 2 9 3	-30 14 11	-28 5 8
Per acre	27 7 6	42 14 11.5	1 4 7.5	-15 7 5.5	-14 2 10

WADGAON, FARMER I(A)

AREA—Two acres in 1928-29

STATEMENT No. 7

84

Previous crop—Sugarcane, 1927-28

Capital Cost of Banana (See Plot No. 7 of 1928-29 and No. 4 of 1929-30)

ITEM OF EXPENDITURE	Home labour			Saldar ^a	Exchange labour on co-operation	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Wo-men ¹	Bul-locks ²			Bullocks ²	Men	Wo-men			Bul-locks	For the plot		Per acre
1. Preparatory tillage														
(a) Ploughing....	10.5	..	43	11.0	32	16	..	..	112.5	56.25	8 0 0	4 0 0	Four ploughings were given. A plough required one man and two bullocks. No ploughing cost goes to the subsidiary vegetable crop (see plot No. 6). Men were paid at 8 annas each.
(b) Harrowing....	..	..	3	1.5	..	..	..	..	4.5	2.25	..	..	Two harrowings were given. Half the units are debited to this crop and the remaining half to plot No. 6.
(c) Making ridges and furrows....	..	..	2	1.0	..	..	..	..	3.0	1.50	..	..	Half the units are debited to this crop and the remaining half to plot No. 6.

FARM STUDIES

(d) Making beds..	..	..	..	3.5	..	5	..	..	8.5	4.25	2 8 0	1 4 0	Five men were paid at annas 8 each. This is half the total cost. Remaining half goes to vegetables (Plot No. 6).
(e) Putting bunds.	..	..	..	..	..	30	..	..	30.0	15.0	20 0 0	10 0 0	Contract work at Rs. 10 per acre. Whole cost charged to this crop.
2. Manure and manuring													
(a) Manures													
(i) Residual manure .....	..	..	..	..	..	..	..	..	..	..	9 0 0	4 8 0	Thirty per cent of the cost of municipal refuse applied to the previous crop comes to Rs. 18. Half the cost is charged to this crop and the remaining half goes to vegetables (Plot No. 6).
(ii) Farmyard manure .....	..	..	..	..	..	..	..	..	..	..	37 12 9	18 14 4	For the plot 54 carts of F. Y. M. at Re. 1 each were given; seventy per cent of the cost is charged.

WADGAON, FARMER I(A)

STATEMENT No. 7—contd.

ITEM OF EXPENDITURE	Home labour			Sal- dar ²	Exchange labour on co- operation	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Wo- men ¹	Bul- locks ²			Bullocks ²	Men	Wo- men			Bul- locks	For the plot		Per acre
(iii) Municipal refuse	9 4 5	4 10 2	For the plot 44 carts of municipal refuse were given. Nine carts at annas eight and the rest at annas four each; seventy per cent of the cost is charged.		
(iv) Oil-cake	127 0 0	63 8 0	Fourteen <i>pallas</i> (<i>palla</i> = 240 lbs.) of safflower cake at Rs. 8-13-0 per <i>palla</i> . Cartage Rs. 3 and <i>hamali</i> ; 10 annas.		
(b) Carting F. Y. M. and municipal refuse.....	6	3-0	..	28	..	56	93-0	46-5	30 15 7	15 7 10	The total cost of cartage (excepting the 18 carts brought by home labour) came to Rs. 44-4-0; seventy per cent of the cost is charged to this crop.	

(c) Manuring ....	..	5	..	2.0	..	10	44.0	..	36.5	18.25	12	13	7	6	6	10	Out of the labour engaged on daily wages, 10 men and 2 women units were required for applying oil-cake. Ten men were paid at annas 8 and 2 women at annas 4 each. This comes to Rs. 5-8-0. This is fully charged. Remaining 42 women employed on spreading bulky manures were paid at annas 4 each. This comes to Rs. 10-8-0. Seventy per cent of this is charged.
3. Seeds and sowing	..	..	..	..	..	..	..	..	..	..	103	8	0	51	12	0	For the whole plot 900 suckers at Rs. 11-8-0 per hundred.
(a) Banana suckers.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(b) Planting suckers .....	..	..	..	..	..	46	..	..	46.0	23.0	37	4	0	18	10	0	Sixteen men were paid at annas 8 each and 30 men on contract work for Rs. 29-4-0.
4. Irrigation	..	..	..	..	..	..	..	..	..	..	52	9	6	26	4	9	Irrigation charges at Rs. 33 per acre and local-fund cess one anna in the rupee. Seventy-five per cent is charged to banana and twenty-five per cent to vegetables (Plot No. 6).
(a) Canal water charges .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(b) Labour .....	..	..	..	25.875	..	..	..	..	25.875	12.9375	..	..	..	..	..	..	..

WADDAON, FARMER 1(A)

STATEMENT No. 7—concl'd.

ITEM OF EXPENDITURE	Home labour			Saldar ^a	Exchange labour on co-operation	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
5. After-care and tillage											Rs. a. p.	Rs. a. p.	
(a) Weeding	3	..	..	..	..	172.5	..	87.75	43.875	40 5 0	20 2 6	Three weeding were given. The total cost of weeding came to Rs. 53-12-0; seventy-five per cent of the cost is charged to this crop. The remaining 25 per cent goes to vegetables (Plot No. 6).
(b) Earthing up	88	..	..	88.0	44.0	66 0 0	33 0 0	Contract work at Rs. 33 per acre. Whole is charged to banana.
6. Wages of <i>saldar</i>	28 12 9	14 6 4.5	Annual cost of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
7. Charges for bullock labour	19 14 8	9 15 4	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc. Rs. 15 1 3													

(b) Interest on the value of bullocks, feeds and fodder Rs. 4 13 5																			
8. Charges for imple- ments and tools.... Rs. a. p.	..	..	..	..	..	..	..	..	..	..	..	7 2 3	3 9 2						
(a) Depre- ciation 4 11 10																			
(b) Interest 2 6 6																			
9. Interest on fluid capital (i.e., wages of hired labour and cost of suckers and manures) ....	..	..	..	..	..	..	..	..	..	..	..	59 14 0	29 15 0						
10. Rent of land ..	..	..	..	..	..	..	..	..	..	..	..	60 0 0	30 0 0						
11. Miscellaneou expenses.....	..	..	..	..	..	..	..	..	..	..	..	1 0 4	0 8 2						
Total ..	10·5	8	54	47·875	32	223	216·5	56	535·625	287·8125		733 12 10	366 14 5						

The total annual charges are distributed on different plots in proportion to the bullock labour used on them.

Charged at 12 per cent per annum.
The land was taken on lease at Rs. 40 per acre. One-fourth the rent (Rs. 10) is charged to the sub-crop (Plot No. 6) and remaining Rs. 30 to the crop for the first year.

The capital cost of the plantation incurred in the first year thus comes to Rs. 366-14-5 per acre. Plantation begins to yield from the second year and generally gives five harvests. Annual capital cost per acre may be taken at Rs. 73.

WADGAON, FARMER (A)

¹ Family labour not charged. ² Home bullock labour charged under item 7. ³ Wages of *saldar* charged under item 6.

STATEMENT No. 8

BANANA (five years' old plantation)—
1 acre in 1928-29

PLOT No. (7)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ^a	Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks		Men	Women	Bullocks		Per acre	
1. Capital cost	Rs. a. p. 73 0 0	Capital cost of Rs. 73 is taken on the basis of Statement No. 7 as this study was taken after the plantation was established.
2. After-care and tillage										
(a) Earthing up and making ring plots.....	2.5	14.5	..	..	17.0	7 4 0	14.5 men were paid at annas 8 each.
(b) Cutting dry leaves	4.0	..	..	..	4.0	..	
3. Irrigation										
(a) Canal water charges	35 1 0	Irrigation charges at Rs. 33 per acre and L. F. C. one anna in the rupee.
(b) Labour.....	19.5	..	..	..	19.5	..	

4. Harvesting and preparing for market.....	3	..	..	3.0	..	..	..	6.0	..	
5. Marketing (a) Carrying the produce to market.....	..	..	..	..	..	66	..	33.0	16 8 0	Sixty-six women were paid at annas 4 each.
(b) Brokerage, etc.....	..	..	..	..	..	..	..	..	17 8 3	Rs. a. p. Dalali 1 anna in the rupee for fruit and 2 annas for leaves .. 16 6 0 Batta .. 1 2 0
6. Charges on account of <i>saldar</i>....	..	..	..	..	..	..	..	..	17 7 1	The annual cost of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
7. Interest on fluid capital (i.e. wages of hired labour and capital cost).....	..	..	..	..	..	..	..	..	9 14 5	Charged at 12 per cent per annum.
8. Rent of land.....	..	..	..	..	..	..	..	..	40 0 0	The land was taken on lease.
Total ..	3	..	..	29.0	14.5	66	..	79.5	216 10 9	

¹ Family labour not charged.

² Wages of *saldar* charged under item 6.

WALDGAON, FARMER 1(A)

STATEMENT No. 8—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Banana (fruit)	138 15 6	Sold at different rates.
Banana leaves	61 7 0	Do.
Total....	200 6 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment & L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For one acre..	200 6 6	216 10 9	(b) 9 14 5	-16 4 3	-6 5 10

STATEMENT No. 9

PLOT No. (8)

VEGETABLES IN PAPAYA PLOT—1 acre in 1928-29
 Previous crop—Chillies (irrigated), 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Sal- dar ^s	Labour on daily wages and contract			Total units	Cost exclud- ing that of family labour	REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Women	Bul- locks		Per acre	
1. Preparatory tillage									Rs. a. p.	
(a) Opening furrows and prepar- ing beds.....	..	..	2	1·0	3·0	..	2	8·0	2 6 0	One man and two bullocks were paid Rs. 1-6-0 and two men were paid at annas 8 each.
2. Manure and manuring										
(a) Residual manure.....	..	..	..	..	..	..	..	..	1 0 9	Thirty-five per cent of the total cost (Rs. 3) of municipal refuse applied to the previous crop is charged for the residue.
3. Seeds and sowing										
(a) Seeds.....	..	..	..	..	..	..	..	..	6 1 0	For the whole plot vegetable seeds (<i>bhendi</i> , <i>guvar</i> , <i>khira</i> , <i>dadka</i> and <i>brinjals</i>).
(b) Sowing.....	2	..	..	1·0	0·75	6	..	6·75	1 14 0	Man and woman units were paid at annas 8 and 4 each respectively.

WADGAON, FARMER I(A)

93

STATEMENT No. 9—contd.

94

ITEM OF EXPENDITURE	Home labour			Sal- dar ²	Labour on daily wages and contract			Total units	Cost exclud- ing that of family labour	REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Women	Bullocks		Per acre	
4. Irrigation									Rs. a. p.	
(a) Canal water charges.....	8 12 3	Irrigation charges at Rs. 33 per acre and L. F. C. 1 anna in the rupee; twenty-five per cent is charged to this crop and seventy-five per cent to <i>papaya</i> (Statement No. 10).
(b) Labour.....	5.125	..	..	..	5.125	..	
5. After-care and tillage										
(a) Weeding.....	30	..	15.0	7 8 0	One weeding was given. Thirty women were paid at annas 4 each.
6. Harvesting and preparing for market.....	..	19	..	..	..	..	..	9.5	..	
7. Marketing										
(a) Labour.....	1 0 0	Contract work at annas 4 per head-load. There were four head-loads.
(b) Brokerage, etc.....	3 8 3	<i>Dalali</i> Rs. 3-2-0 and <i>batta</i> Re. 0-6-3.

FARM STUDIES

8. Wages of <i>saldar</i>.....	..	..	..	..	..	..	..	..	4 4 6	The annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
9. Cost of bullock labour.....	..	..	..	..	..	..	..	..	0 11 6	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
	Rs. a. p.									
(a) Feeds, fodder, depreciation, etc. ..	0	8	8							
(b) Interest on the value of bullocks, feeds and fodder ..	0	2	10							
10. Charges for implements and tools.....	..	..	..	..	..	..	..	..	0 4 1	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.
	Rs. a. p.									
(a) Depreciation ..	0	2	8							
(b) Interest ..	0	1	5							
11. Interest on fluid capital (i.e. wages of hired labour and price of seeds and manure).....	..	..	..	..	..	..	..	..	1 3 0	Charged at 12 per cent per annum.
12. Rent of land.....	..	..	..	..	..	..	..	..	13 0 0	The land was taken on lease at Rs. 30 per acre. The crop being a sub-crop as per statement No. 10, one-third the rent (Rs. 13) is charged.
Total....	2	19	2	7·125	3·75	36	2	44·375	51 9 4	

WADGAON, FARMER I(A)

¹ Family labour not charged. ² Home bullock labour charged under item 9. ³ Wages of *saldar* charged under item 8.

STATEMENT No. 9—concl'd.

96

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	For one acre	Per acre	
Vegetables...	..	Rs. a. p. 24 14 0	Sold at different rates. Valued at 7 lbs. per rupee. <i>Bhendi, guwar and khira</i> did not yield anything due to attack of pests.
Chillies (dry)..	70 lbs.	10 0 0	
Total	..	34 14 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment & L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For one acre....	34 14 0	51 9 4	(b) 1 6 3	-16 11 4	-15 5 1

FARM STUDIES

STATEMENT No. 10

AREA—1 acre in 1928-29

CAPITAL COST OF *Papaya**Previous crop*—Chillies, 1927-28

ITEM OF EXPENDITURE	Home labour			Saldar ^s	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ^s		Men	Women	Bullocks		Per acre	
1. Preparatory tillage									Rs. a. p.	
(a) Ploughing.....	12	6·0	12·0	..	24	54·0	16 8 0	Two ploughings were given. A plough required 3 men and 6 bullocks; 12 men and 24 bullocks were paid at Rs. 1-6-0 per man and two bullocks. No ploughing cost goes to the subsidiary vegetable crops (Plot No. 8).
(b) Opening furrows for planting.....	2	1·0	3·0	..	2	8·0	2 6 0	One man and two bullocks were paid Rs. 1-6-0. Two men were paid at annas 8 each. Of the total, half the units and costs are charged to this crop. The remaining half goes to vegetables (Plot No. 8).

WADGAON, FARMER I(A)

STATEMENT No. 10—contd.

98

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Wo-men ¹	Bul-locks ²		Men	Women	Bul-locks		Per acre	
2. Manure and manuring									Rs. a. p.	
(a) Residual manure.....	..	..	..	..	..	..	..	..	1 0 10	Thirty-five per cent of the cost of municipal refuse applied to the previous crop is charged for residue. Half the cost is charged to this crop and the remaining half goes to vegetables (Plot No. 8).
(b) Safflower cake.....	..	..	..	..	..	..	..	..	9 14 0	For one acre one <i>palla</i> (240 lbs.) of safflower at Rs. 8-13-0 per <i>palla</i> . Cartage and <i>hamali</i> costs Rs. 1-1-0.
(c) Manuring.....	..	3	..	..	1-0	..	..	2-5	0 8 0	One man was paid annas 8.
3. Seeds and sowing										
(a) Seeds.....	..	..	..	..	..	..	..	..	0 3 0	<i>Papaya</i> seeds.
(b) Sowing and transplanting..	2	..	..	1-0	0-75	6-0	..	6-75	1 14 0	Man and woman units were paid at annas 8 and 4 each respectively.

2. Irrigation									
(a) Canal water charges.....	..	..	..	..	..	..	..	..	26 4 9
(b) Labour.....	..	..	..	15.375	..	..	..	15.375	..
5. After-care and tillage									
(a) Weeding.....	..	7	..	3.0	..	193.5	..	103.25	48 6 0
6. Wages of <i>saldar</i>									
	..	..	..	..	..	..	..	..	15 13 11
7. Charges for bullock labour...									
	..	..	..	..	..	..	..	..	4 15 11
	Rs. a. p.								
(a) Feeds, fodder, depreciation, etc. . .	3	12	6						
(b) Interest on the value of bullocks, feeds and fodder . .	1	3	5						

Irrigation charges at Rs. 33 per acre and L. F. C. one anna in the rupee; seventy-five per cent charged to this crop and twenty-five per cent to vegetables (Plot No. 8).

Seventy-five per cent of the total units are debited to this crop and the remaining twenty-five per cent go to vegetables (Plot No. 8).

Five weedings were given. First weeding required 3 men and 78.5 women. Forty-four, twenty-four, nineteen and thirty-five women were required respectively for the 2nd, 3rd, 4th and 5th weeding. 193.5 hired women were paid at annas 4 each.

The annual wage of *saldar* is distributed on different plots in proportion to the units used on them.

The total annual charge, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.

STATEMENT No. 10—concl'd.

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks		Per acre	
									Rs. a. p.	
8. Charges for implements and tools.....	..	..	..	..	..	..	..	..	1 12 9	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
(a) Depreciation..Rs. 1 3 1										
(b) Interest ..Rs. 0 9 8										
9. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure).....	..	..	..	..	..	..	..	..	10 5 6	Charged at 12 per cent per annum.
10. Rent of land.....	..	..	..	..	..	..	..	..	26 0 0	The land was taken on lease at Rs. 39 per acre. One-third the rent (Rs. 13) is charged to the sub-crop (Plot No. 8) and remaining Rs. 26 to this crop for the first year.
Total ..	2	10	14	26·375	16·75	199·5	26	189·875	166 0 8	The capital cost of the <i>papaya</i> plantation incurred in the first year thus comes to Rs. 166-0-8 per acre. Plantation begins to yield from the second year and gives two harvests. Annual capital cost per acre may therefore be taken at Rs. 83.

¹ Family labour not charged. ² Home bullock labour charged under item 7. ³ Wages of *saldar* charged under item 6.

STATEMENT No. 11

BHOPALA—1 acre in 1928-29

PLOT No. (9)

Previous crop—Sugarcane, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Wo-men ²	Bullocks ³		Men	Women	Bullocks		Per acre	
1. Preparatory tillage									Rs. a. p.	
(a) Ploughing.....	8 4 0	Piece-work paid at Rs. 8-4-0 per acre.
(b) Harrowing and levelling	4	2·0	..	..	..	6·0	..	
2. Manure and manuring										
(a) Farmyard manure	1 0 0	One cart of Farmyard manure was given (Rs. 2). Fifty per cent of the cost is charged to this crop.
(b) Carting and manuring	1	2·5	..	..	..	3·5	..	
3. Seeds and sowing										
(a) Seeds.....	1 8 0	Men were paid at annas eight each.
(b) Dibbling	4	..	..	4·0	2 0 0	
4. After-care and tillage										
(a) Weeding	5·5	..	2·0	..	31·5	..	20·5	7 14 0	Three weedings were given. Hired labour was paid at annas 4 each.
5. Harvesting and preparing for market.....	..	3 0	..	1·0	..	..	..	2·5	..	

WADGAON, FARMER I(A)

STATEMENT No. 11—concl'd.

102

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ³		Men	Women	Bullocks		Per acre	
6. Wages of <i>saldar</i>	Rs. a. p. 4 8 3	The annual wages of <i>saldar</i> are distributed over different plots in proportion to the units used on them.	
7. Charges for bullock labour.... (a) Feeds, fodder, depreciation, etc. Rs. 1 5 7 (b) Interest on the value of bullocks, feeds and fodder. Rs. 0 6 11	1 12 6	The annual cost, on account of draft bullocks, is distributed on different plots, in proportion to the units used on them.	
8. Charges for implements and tools..... (a) Depreciation..Rs. 0 6 9 (b) Interest ..Rs. 0 3 6	0 10 3	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.	
9. Interest on fluid capital (i.e., wages of hired labour and price of seeds and manure).....	1 3 9	Charged at 12 per cent per annum.	
10. Rent of land.....	2 9 4	The land was owned.	
Total	8·5	5	7·6	4	31·5	..	36·5	31 6 1	

¹ Family labour not charged. ² Home bullock labour charged under item 7. ³ Wages of *saldar* charged under item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Bhopala (fruit)..	22 13 0	Sold at different rates. Crop failed due to unsatisfactory growth of the creepers.
	.	
Total ..	22 13 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
For one acre.....	Rs. a. p. 22 13 0	Rs. a. p. 31 6 1	Rs. a. p. (a) 2 7 1 (b) 1 14 2	Rs. a. p. — 8 9 1	Rs. a. p. — 4 3 10

WADGAON, FARMER 1(A)

STATEMENT No. 12

PLOT No. (10)

KHIRA AND TOMATOES— $\frac{1}{2}$ acre in 1928-29

(a) Cost of Production

104

FARM STUDIES

ITEM OF EXPENDITURE	Home labour			Sal- dar ²	Labour on daily wages and con- tract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Wo- men	Bul- locks			For the plot	Per acre	
1. Preparatory tillage										Rs. a. p.	Rs. a. p.	
(a) Ploughing and ridging..	6.5	3.25	6.0	..	12	27.75	55.5	8 4 0	16 8 0	Four ploughings were given. A plough required 3 men and 6 bullocks. Outside man and bullock labour paid at Rs. 1-6-0 for a man and a pair of bullocks.
(b) Putting bunds and making beds	10.5	..	..	10.5	21.0	5 4 0	10 8 0	Men were paid at annas eight each.
2. Seeds and sowing												
(a) Seeds	1 4 0	2 8 0	For the plot half a pound of khira seed worth Rs. 1-4-0. Tomato seedlings got free.
(b) Sowing	2	..	..	..	6	..	4.0	8.0	1 8 0	3 0 0	Six women were paid at annas four each.
3. Irrigation												
(a) Canal water charges....	23 14 6	47 13 0	Irrigation charges at Rs. 45 per acre and L. F. C. at one anna in the rupee.
(b) Labour	3.25	..	..	..	3.25	6.5	..	..

4. After-care and tillage	..	6	..	..	..	10	..	8.0	16.0	2 8 0	5 0 0	One weeding was given. Outside woman labour was paid at annas four each.
(a) Weeding												
5. Harvesting and preparing for market .....	..	5	..	..	..	..	..	2.5	5.0	..	..
6. Marketing	..	..	..	..	..	..	..	..	..	1 4 6	2 9 0	<i>Batta annas 4. Brokerage Re.1-0-6.</i>
(a) Brokerage, etc.....	..												
7. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	..	3 14 7	7 13 2	The annual wage of <i>saldar</i> is distributed over different plots, in proportion to the units used on them.
8. Charges for bullock labour .	..	..	..	..	..	..	..	..	..	2 5 2	4 10 4	The total annual cost, on account of draft bullocks, is distributed on different plots, in proportion to the units used on them.
Rs. a. p.													
(a) Feeds, fodder, depreciation, etc.	1 12 2												
(b) Interest on the value of bullocks, feeds and fodder	0 9 0												
9. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	0 13 4	1 10 8	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.													
(a) Depreciation	0 8 10												
(b) Interest	0 4 6												
10. Interest on fluid capital (i.e. wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	1 3 2	2 6 4	Charged at 12 per cent per annum.
11. Rent of land .....	..	..	..	..	..	..	..	..	..	10 0 0	20 0 0	The land was taken on lease.
Total ..	..	13	6.5	6.5	16.5	16	12	56.0	112.0	62 3 3	124 6 6	

¹ Family labour not charged. ² Home bullock labour charged under item 8. ³ Wages of *saldar* charged under item 7.

WADGAON, FARMER 1(A)

STATEMENT No. 12—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For $\frac{1}{4}$ acre	Per acre	
	Rs. a. p.	Rs. a. p.	
<i>Khira</i>.....	.....	.....	Crop failed.
Tomatoes...	16 7 0	32 14 0	Sold at different rates.
Total ..	16 7 0	32 14 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For $\frac{1}{4}$ acre.....	16 7 0	62 3 3	(b) 2 0 8	-45 12 3	-43 11 7
Per acre.....	32 14 0	124 6 6	4 1 4	-91 8 6	-87 7 2

STATEMENT No. 13

BAJRI—3 acres in 1928-29

PLOT No. (11)

Previous crop—*Shalu.jowar*, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Sal- dar ^s	Labour on daily wages and con- tract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Wo- men	Bul- locks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing.....	..	..	20	10	5	..	10	45·0	15·0	6 14 0	2 4 8	One ploughing was given. A plough required 3 men and six bullocks. Hired men and bullocks were paid at Rs. 1-6-0 for a man and a pair of bullocks.
(b) Harrowing.....	3	..	6	..	..	..	..	9·0	3·0	..	..	Three harrowings were given.
2. Seeds and sowing												
(a) Seeds.....	..	..	..	..	..	..	..	..	..	3 12 9	1 4 3	Rs. a. p. <i>Bajri</i> seed .. 2 0 0 <i>Udid</i> .. 0 12 9 <i>Tur</i> .. 0 8 0 <i>Matki</i> .. 0 8 0 <hr/> 3 12 9
(b) Sowing and covering...	..	1	..	..	2	..	4	6·5	2·16	5 0 0	1 10 8	Contract work.

VADGAON, FARMER I(A)

107

STATEMENT No. 13—contd.

108

ITEM OF EXPENDITURE	Home labour			Sal- dars ^s	Labour on daily wages and con- tract			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Wo- men ¹	Bul- locks ^s		Men	Wo- men	Bul- locks			For the plot	Per acre		
										Rs. a. p.	Rs. a. p.		
3. After-care and tillage													
(a) Weeding.....	..	9	..	..	..	35	..	22·0	7·33	8 12 0	2 14 8	One weeding was given. Hired woman labour was paid 4 annas each.
(b) Watching.....	..	..	..	..	15	..	..	15·0	5·0	8 0 0	2 10 8	A man for 15 days at Rs. 16 per month.
4. Harvesting and preparing for market.....	4	11	6	2	14	51	..	57·0	19·0	25 0 0	8 5 4	Rs. a. p. Three men were paid at 8 annas each. 1 8 0 Eleven men were paid at 10 annas each. 6 14 0 Thirty-one women were paid at annas 6 each. 11 10 0 Twenty women were paid at annas 4 each. 5 0 0	
												25 0 0	

FARM STUDIES

5. Wages of <i>saldar</i>.....	..	..	..	..	..	..	..	..	..	7 3 6	2 6 6	The annual wage of <i>saldar</i> is distributed on different plots, in proportion to the units used on them.
6. Charges for bullock labour.....	..	..	..	..	..	..	..	..	..	11 6 11	3 13 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.	8	10	5									
(b) Interest on the value of bullocks, feeds and fodder	2	12	6									
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	4 1 9	1 5 11	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation	2	11	7									
(b) Interest	1	6	2									
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	1 15 1	0 10 4	Charged at 12 per cent per annum.
9. Rent of land.....	..	..	..	..	..	..	..	..	..	40 0 0	13 5 4	The land was taken on lease.
Total ..	7	21	32	12	36	86	14	154.5	51.49	122 2 0	40 11 4	

¹ Family labour not charged.

² Home bullock labour charged under item 6.

³ Wages of *saldar* charged under item 5.

STATEMENT No. 13—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3 acres	Per acre	For 3 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri (grain)	528	176	28 12 9	9 9 7	Valued at Rs. 18 per <i>palla</i> of 330 lbs.
Sarmad (600 bundles)..	900	300	9 0 0	3 0 0	Valued at Rs. 1-8-0 per 100 bundles.
Udid.....	70	23·3	11 0 0	3 10 8	Estimated value.
Matki.....	30	10·0			
Bhoos.....	..	..	1 0 0	0 5 4	Do.
Total ..	..	..	49 12 9	16 9 7	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3 acres..	49 12 9	122 2 0	(b) 6 1 9	-72 5 3	-66 3 6
Per acre	16 9 7	40 11 4	2 5 7	-23 1 9	-22 1 2

STATEMENT No. 14

PLOT No. (12)

BAJRI AND SHALU JOWAR— $3\frac{1}{2}$ acres in 1928-29

(a) Cost of Production

Previous crop—Jowar, 1927-28.

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Wo- men	Bul- locks			For the plot	Per acre		
										Rs. a. p.	Rs. a. p.		
1. Preparatory tillage													
(a) Ploughing .....	..	..	30	7.5	15	..	30	82.5	23.57	20 10 0	5 14 3	One ploughing was given. A plough required three men and eight bullocks. Hired men and bullocks were paid at Rs. 1-6-0 for a man and a pair of bullocks.
(b) Harrowing	6	..	2	..	..	..	..	18.0	5.14	..	..	Four harrowings were given.

WADGAON, FARMER 1(A)

111

STATEMENT No. 14—contd.

112

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Wo- men	Bul- locks			For the plot	Per acre	
2. Seeds and sowing										Rs. a. p.	Rs. a. p.	
(a) Seeds .....	..	..	..	..	..	..	..	..	..	3 4 0	0 14 10	For the whole plot following seeds were required :—
												Rs. a. p.
												<i>Shalu</i> —20 lbs. at 15 lbs. per rupee. ..1 5 4
												<i>Bajri</i> —27·5 lbs. at 16·5 lbs. per rupee. ..1 10 8
												<i>Til</i> ..0 4 0
												3 4 0
(b) Sowing and covering ..	2	..	4	..	2	..	4	12·0	3·43	3 0 0	0 13 9	Two men and four bullocks were paid at as. 8 each.
3. After-care and tillage												
(a) Watching .....	..	..	..	..	..	..	..	..	..	9 0 0	2 9 2	One man for three weeks at Rs. 3 per week.

FARM STUDIES

4. Harvesting and preparing for market.....	..	23	6	7.0	..	20	..	34.5	9.86	5 0 0	1 6 10	Twenty women were paid at as. 4 each.	
5. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	..	8 11 6	2 7 10	The annual wage of <i>saldar</i> is distributed on different plots, in proportion to the units used on them.
6. Charges for bullock labour..	..	..	..	..	..	..	..	..	..	18 9 2	5 4 11	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
<i>Rs. a. p.</i>													
(a) Feeds, fodder, depreciation, etc. ..										14 0 11			
(b) Interest on the value of bullocks, feeds and fodder ..										4 8 3			
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	6 10 9	1 14 6	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
<i>Rs. a. p.</i>													
(a) Depreciation ..										4 6 9			
(b) Interest										2 4 0			
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	1 15 6	0 9 0	Charged at 12 per cent per annum.
9. Rent of land.....	..	..	..	..	..	..	..	..	..	45 0 0	12 13 8	The land was owned.
Total	8	23	52	14.5	17	20	34	147.0	42.0	121 12 11	34 12 9	

¹ Family labour not charged, ² Home bullock labour charged under item 6. ³ Wages of *saldar* charged under item 5.

STATEMENT No. 14—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Yield		Value		REMARKS
	For 3½ acres	Per acre	For 3½ acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i> grain (six maunds) ..	792	226·29	43 3 2	12 5 6	Valued at Rs. 18 per <i>palla</i> (830 lbs.).
<i>Sarmad</i> (1,000 bundles) ..	1,500	428·57	15 0 0	4 4 7	Valued at Rs. 1½ per 100 bundles.
<i>Shalu</i> grain (one maund) ..	120	34·29	6 0 0	1 11 5	Valued at Rs. 6 per maund (of 120 lbs.).
<i>Kadbi</i> (2,500 bundles) ..	5,000	1,428·57	100 0 0	28 9 1	Valued at Rs. 4 per 100 bundles.
<i>Til</i> (two maunds) ..	192	54·86	8 0 0	2 4 7	Valued at Rs. 4 per maund of 96 lbs.
Grass ..	..	..	8 0 0	2 4 7	Sold in a lot.
Total ..	..	..	180 8 2	51 7 9	

(c) Summary

1	2	3	4	5 (i.e.col. 2-3)	6 (i.e.col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3½ acres ..	180 3 2	121 12 11	(a) 35 13 9 (b) 8 11 9	+58 6 3	+102 15 6
Per acre ..	51 7 9	34 12 9	12 11 9	+16 11 0	+29 6 9

STATEMENT No. 15

PLOT No. (13)

SHALU JOWAR—4 acres in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE.	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bul-locks ²	Saidar ³	Men	Wo-men	Bul-locks			For the plot	Per acre	
1. Preparatory tillage										Rs. a. p.	Rs. a. p.	
(a) Ploughing .....	..	..	42	10.5	21	..	42	115.5	28.87	28 14 0	7 3 6	One ploughing was given. A plough required three men and eight bullocks. Twenty-one men and forty-two bullocks paid at Rs. 1-6-0 for a man and a pair.
(b) Harrowing	11	..	22	..	..	..	..	33.0	8.25	....	....	Five harrowings were given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	5 0 0	1 4 0	Seventy-five lbs. of seed at 15 lbs. per rupee.
(b) Sowing and covering	1	..	8	4.0	2	..	4	18.0	4.5	5 0 0	1 4 0	Two men and four bullocks were paid Rs. 5.
3. Harvesting and preparing for market												
.....	..	4	..	..	4	12	..	12.0	3.0	5 0 0	1 4 0	Four men were paid at as. 8 and 12, women at as. 4 each.
4. Collecting stubbles												
.....	..	..	..	..	1	15	..	8.5	2.13	4 4 0	1 1 0	One man was paid as. 8 and 15, women at as. 4 each.
5. Wages of saidar												
.....	..	..	..	..	..	..	..	..	..	8 11 6	2 2 10	The annual wage of saidar is distributed on different plots in proportion to the units used on them.

WADGAON, FARMER 1(A)

STATEMENT No. 15—concl.

116

ITEM OF EXPENDITURE	Home Labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Wo-men ¹	Bullocks ²		Men	Wo-men	Bullocks			For the plot	Per acre		
										Rs. a. p.	Rs. a. p.		
6. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	25 11 5	6 6 10	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc. Rs. a. p.													
(b) Interest on the value of bullocks, feeds and fodder Rs. a. p.													
7. Charges for implements and tools ..	..	..	..	..	..	..	..	..	..	9 3 8	2 4 11	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
(a) Depreciation .. Rs. a. p.													
(b) Interest .. Rs. a. p.													
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) .....	..	..	..	..	..	..	..	..	..	2 5 4	0 9 4	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	30 0 0	7 8 0	The land was taken on lease on cash system.
Total ..	11	4	72	14.5	28	27	46	187.0	46.75	124 1 11	81 0 5		

¹ Family labour not charged, ² Home bullock labour charged under Item 6. ³ Wages of *saldar* charged under ite

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For four acres	Per acre	
	Rs. a. p.	Rs. a. p.	
Green fodder (750 bundles from about three acres) and receipts for grazing from the remaining part	26 8 0	6 10 0	Fodder valued at Rs. per 100 bundles.
Green grass from bunds	6 0 0	1 8 0	Sold for cutting.
Total	32 8 0	8 2 0	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For four acres ..	32 8 0	124 1 11	(b)11 11 1	-91 9 11	-79 14 10
Per acre	8 2 0	31 0 5	2 14 9	-22 14 5	-19 15 8

WADGAON, FARMER I(A)

STATEMENT No. 16

SHALU JOWAR—Eight acres in 1928-29

PLOT No. (14)

Previous crop—Nilwa jowar, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bullocks ²		Men	Wo-men	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing .....	..	..	54	13.5	27	..	54	148.5	18.56	37 2 0	4 10 3	One ploughing was given. A plough required three men and eight bullocks. Twenty-seven men and fifty-four bullocks were paid at Rs. 1-8-0 per man and two bullocks.
(b) Harrowing and levelling	7	..	28	7.0	..	..	..	42.0	5.25	....	....	Five harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	8 5 4	1 0 8	For the plot 125 lbs. of bajri.
(b) Sowing and covering .....	..	..	8	4.0	2	..	4	18.0	2.25	5 0 0	0 10 0	Two men and four bullocks were paid Rs. 5.
3. Harvesting and marketing .....	..	..	..	..	..	..	..	..	..	....	....	Standing crop was sold.
4. Collecting stubbles .....	..	..	..	..	..	9	..	4.5	0.56	2 4 0	0 4 0	Nine women were paid at as. 4 each.
5. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	..	14 11 10	1 13 0	The annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.

6. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	32	2	4	4	0	3	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.																
(a) Feeds, fodder, depreciation, etc. 24 5 3																
(b) Interest on the value of bullocks, feeds and fodder .. 7 18 1																
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	11	8	5	1	7	0	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.																
(a) Depreciation .. 7 10 3																
(b) Interest .. 3 14 2																
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) .....	..	..	..	..	..	..	..	..	..	3	0	5	0	6	1	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	40	0	0	5	0	0	The land was taken on lease on cash basis.
Total ..	7	..	90	24.5	29	9	58	218 0	26.62	154	2	4	19	4	3	

¹ Family labour not charged. ² Home bullock labour charged under item 6. ³ Wages of *saldar* charged under item 5.

WADGAON, FARMER I(A)

STATEMENT No. 16—concl'd.

120

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For eight acres	Per acre	
	Rs. a. p.	Rs. a. p.	
Jowar fodder	125 0 0	15 10 0	Standing crop was sold.
Total	125 0 0	15 10 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For eight acres ..	125 0 0	154 2 4	(b) 14 11 8	-29 2 4	-14 6 8
Per acre	15 10 0	19 4 3	1 13 5	-3 10 3	-1 12 10

FARM STUDIES

STATEMENT No. 17

GUAVA—1 acre 5 gunthas in 1928-29

PLOT No. (15)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks	Men	Women	Bullocks			For the plot	Per acre	
1. Capital cost	The plot with established guava plantation was rented for Rs. 325 for a period of two years. The costs shown below are the costs for the operations which were to be undertaken by the owner. The owner supplied water and manure. The other operations which were performed by the tenant are not detailed as the tenant did not like to be bothered with the visits of the investigator. Thirty per cent of the cost of municipal refuse applied to the previous crop is charged for the residue. Twenty carts of municipal refuse at annas 8 per cart were given; seventy per cent of the cost is charged to this crop.
2. Manure and manuring											
(a) Residual manure	3 0 0	2 10 8		
(b) Municipal refuse	7 0 0	6 3 6		
(c) Carting and manuring	10	..	20	30	26'6	14 0 0	12 7 1	
3. Irrigation											Irrigation charges at Rs. 33 per acre plus L.F.C. one anna in the rupee.
(a) Canal water charges	39 7 0	35 1 0		
4. Interest on fluid capital (i.e., wages of hired labour and cost of manures)	2 14 1	2 9 0	Charged at 12 per cent per annum.
5. Rent of land	45 0 0	40 0 0	The land was owned.
Total	10	..	20	30	26'6	111 5 1	98 15 3	

WADGAON, FARMER (A)

121

STATEMENT No. 17—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 1 acre and 5 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Guava	162 8 0	144 7 1	Contract sale for 2 years (for Rs. 325).
Total ..	162 8 0	144 7 1	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 5 gunthas	162 8 0	111 5 1	(a) 40 14 0 (b) 2 14 1	+51 2 11	+94 15 0
Per acre	144 7 1	98 15 3	39 7 2	+45 7 10	+84 15 0

WADGAON, FARMER 1 PART (B), 1929-30

General information about the village, including its geographical position, climate, rainfall, communications, distribution of land, crops, cropping and inventory of the property etc., is given under Wadgaon, Farmer 1 Part (A), 1928-29.

THE SEASON, 1929-30

There were a few antemonsoon showers in the year. The rainfall of 2·10 inches during the month of April helped preparatory tillage. The regular monsoon opened weak in the second week of June; moreover the third week of June passed almost dry. The last week of June, however, brought 4·49 inches of rain and sowing was finished by the end of the first week of July. The heavy rainfall amounting to 3·61 inches in the second half of September damaged *bajri*, and the *sarmad* of early harvests was spoiled. This rain was, however, useful for *rabi* sowing which was further helped by the October rains. The total rainfall during the year amounted to 20·68 inches which was 1·62 inches below the average of the place. On the whole the season was not bad, the crop estimate being 7 *annas* for *kharif* and 12 for *rabi*.

The fortnightly distribution of rainfall during the year is given below.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1929-30
(Inches)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						} 20·68
0·0	0·02	0·0	0·97	0·0	0·45	3·47	0·48	0·29	0·0	0·27	0·03	
						Second fortnight						
0·0	0·0	0·09	1·13	0·0	4·06	0·75	0·67	5·61	2·36	0·0	0·03	

THE FARMER

In the previous year (1928-29) the area held by the farmer was 30 acres and 3 gunthas (including the 22 acres taken on lease) out of which 29 acres and 5 gunthas were cultivated. During the year under study rented area being only 21·5 acres the cultivating holding was reduced to 28 acres and 25 gunthas. Two acres were double cropped and thus the gross cropped area was 30 acres and 25 gunthas.

(a) *Human labour*.—There was no change in the strength of the family. Both the nephews of the farmer were going to school. There were thus three adult members in the family—farmer himself, his wife and his brother's widow. The old *saldar* was retained.

Monthly distribution of family labour for 12 months from January to December 1929, is shown in table VII. The table shows

how home labour was utilized on the farm. The total given in the last but one column will not tally with the total home labour contributed by the family towards the crops grown in 1929-30 as the periods do not synchronize.

Sixty-seven days' work in course of the year cannot be considered sufficient work on the part of the farmer, though in addition he looked after organization and supervision of work. The two women together put in about 183 days' work. The farmer's wife was in the family way and could not move out for four months. The women had, moreover, to look after children and do other household work. The actual number of work days for the women on the year's crop came to 130·5.

The farm servant put in 264·5 days' work in addition to his doing odd jobs like looking after the cattle and keeping watch on the farm, etc. The women folk and the servant can be said to have put in decent amount of work on the farm.

The following table gives the distribution of the labour supplied by the farm servant and the allocation of his wages on different crops :—

TABLE VII (a)—THE DISTRIBUTION OF THE WORK OF THE *Saldar*

Name of crop	Area		Number of days' work put in	Amount charged
	A.	g.		
Total ..	30	25	264·5	150 0 0
Sugarcane	2	0	59·0	33 6 9
Ratoon-cane	0	20	7·0	3 15 7
Banana	3	0	92·5	52 7 5
Papaya	1	0	27·5	15 9 6
Brinjals	2	20	15·5	8 12 8
Nilva	14	20	40·25	22 13 5
Shalu	2	0	9·25	5 4 0
Bajri	2	0	5·5	3 2 0
Gram	2	0	8·0	4 8 8
Guavas	1	5	0·0	0 0 0

The yearly wages of the *saldar* are distributed on the different crops in proportion to the number of work days spent on them.

(b) *Bullock work*.—The farmer had three bullocks as in the previous year. The monthly distribution of their work, from January to December 1929, is given in table VIII. For the reasons given in the first year's study the total bullock labour shown in the last but one column of the table, will not tally with the total home bullock work utilized on the crops grown in 1929-30.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Percentage of labour employed to labour available
Farmer	$\frac{7.5}{31}$	$\frac{2}{28}$	$\frac{14.5}{31}$	$\frac{0.5}{30}$	$\frac{3}{31}$	$\frac{0}{30}$	$\frac{6}{31}$	$\frac{0}{31}$	$\frac{7}{30}$	$\frac{13.5}{31}$	$\frac{11}{30}$	$\frac{2}{31}$	$\frac{67}{365}$	18.35
Farmer's wife and his brother's widow	$\frac{29.5}{62}$	$\frac{2.5}{56}$	$\frac{19}{62}$	$\frac{5.5}{60}$	$\frac{21.5}{62}$	$\frac{4}{60}$	$\frac{18}{62}$	$\frac{4}{62}$	$\frac{26}{60}$	$\frac{14}{62}$	$\frac{20}{60}$	$\frac{19}{62}$	$\frac{183}{730}$	25.06

Note.—The denominators denote the available labour units, while the numerators show labour units employed.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Percentage of the total units employed to total labour units available
3 bullocks	$\frac{54}{93}$	$\frac{28}{84}$	$\frac{0}{93}$	$\frac{12}{90}$	$\frac{30}{93}$	$\frac{26}{90}$	$\frac{54}{93}$	$\frac{7}{93}$	$\frac{21}{90}$	$\frac{0}{93}$	$\frac{0}{90}$	$\frac{0}{93}$	$\frac{232}{1,095}$	21.18

Note.—The denominators denote available labour units, while the numerators show the units employed.

Though in the course of one year the bullocks put in 232 days' work, the actual number of days put on the year's crops were 264, as crop production went beyond the year.

The inventory of the property, crops and cropping etc., are given in the first part of this study.

COST AND RECEIPTS

Expenditure.—In the following statement an abstract of expenditure for the farm is given:—

ABSTRACT OF COSTS

Item of expenditure	Cost for the total holding (viz., 30 acres and 25 gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses:		
(a) Manures	369 8 10	
(b) Seeds.....	163 14 10	
(c) Day-labour and contract labour	439 5 11	
(d) Wages of <i>saldar</i>	150 0 0	
(e) Depreciation on implements and tools ..	42 4 0	
(f) Cost of bullock labour excluding interest on the value of feeds and fodder	150 2 0	
(g) Marketing charges	76 8 9	
(h) Assessment and L. F. C. on owned land..	19 13 0	
(i) Irrigation charges	331 1 6	
(j) Rent of leased land.....	338 11 1	
(k) Miscellaneous expenses	20 0 0	
(l) Capital cost on account of banana		
(i) Plot Nos. 4 and 5 (Rs. 219)		
(ii) <i>Papaya</i> Plot No. 6 (Rs. 83)	302 0 0	
		2,403 5 11
II. Rent of owned land excluding assessment and L. F. C.	162 5 2	
		162 5 2
III. Interest on working capital:		
(a) Interest on fluid capital required for current agricultural operations	137 1 5	
(b) Interest on the value of implements and tools.....	13 15 8	
(c) Interest on the value of bullocks, feeds and fodder consumed by them	39 4 6	
		190 5 7
<i>Total cost of production (excluding wages for family labour) .....</i>	.....	2,756 0 8

*DETAILS OF OUT-OF-POCKET EXPENSES

Rs. a. p.	Rs. a. p.
1. Manures :	
(A) Bulky manure	
(a) Plot No. 16, twenty cartloads of municipal refuse at 6 annas per cart given; only 70 per cent of the total cost is charged ..	5 4 0
(B) Concentrated manure	
(a) Plot No. 1, fifteen <i>pallas</i> of safflower cake at Rs. 8-8-0 per <i>palla</i> plus Rs. 4 for carting	131 8 0
(b) Plot No. 1, one bag of Sulphate of Ammonia at Rs. 17	17 0 0
(c) Plot No. 2, fifteen <i>pallas</i> of safflower cake at Rs. 8-8-0 per <i>palla</i> plus Rs. 4 for cartage	131 8 0
(d) Plot No. 3, six <i>pallas</i> of cake at Rs. 8-8-0 per <i>palla</i> plus Re. 1 for cartage	52 10 0
(C) Residual manure	
(a) Plot No. 1, in the year 1928-29, having sugarcane received 50 cartloads of municipal refuse worth Rs. 25; 30 per cent for the residue	7 8 0
(b) Plot No. 2, in the year 1928-29 having a dry crop (<i>bhopala</i>) received one cart of F. Y. M. worth Rs. 2; 50 per cent for the residue	1 0 0
(c) Plot No. 16, in the year 1928-29 having guava received 20 cartloads of municipal refuse worth Rs. 10; 30 per cent for the residue	3 0 0
(d) Plot No. 4 in the year 1928-29 having banana received 54 cartloads of F. Y. M. worth Rs. 54, nine cartloads of municipal refuse worth Rs. 4-8-0 and 35 cartloads worth Rs. 8-12-0 (total cost Rs. 67-4-0); 30 per cent for the residue	20 2 10
2. Seeds :	369 8 10
(a) Sugarcane sets, 24,000 sets at Rs. 4; 5,000 at Rs. 3-4-0 per thousand...	112 4 0
(b) Vegetable seeds	14 14 0
(c) Brinjal seeds	8 8 0
(d) <i>Niloa</i> , 155 lbs.	17 4 10
(e) <i>Shatu</i> , 25 lbs.	2 0 0
(f) Safflower	1 0 0
(g) <i>Bajri</i>	2 0 0
(h) Gram	6 0 0
	163 14 10
3. Wages of outside labour on daily wages or piece-work and contract work :	
(a) Plant cane (plot Nos. 1 and 2), 175·5 men, 142 women and 53 bullocks	190 4 0
Cartage of <i>bhopala</i> from plot No. 1, contract	1 2 0
(b) Ratoon-cane (plot No. 3), 15·5 men, 19 women and 3 bullocks	18 4 0
Cutting sets, contract	5 8 0
(c) Banana (plot No. 4), 126·5 woman units, plot No. 5	40 3 5
Carrying fruit to market by contract	20 0 0
Removing stubbles, contract	12 0 0
(d) <i>Papaya</i> (plot No. 6), 30 men and 46 women	37 1 6
Removing stubbles, contract	5 0 0
Carrying fruit to market, contract	12 0 0
(e) Brinjals (Nos. 7 and 8), 3 men and 45·5 women	10 14 0

3. <i>Wages of outside labour on daily wages or piece-work and contract work—contd.</i>	Rs. a. p.	Rs. a. p.
(f) <i>Nilva</i> (Nos. 9, 10, 11 and 12), 23·5 men, 64 women and 3 bullocks.....	43 4 0	
Carrying produce of No. 9 to market, contract.....	7 8 0	
(g) <i>Shalu</i> (No. 13), 37 woman units	6 15 0	
(h) <i>Bajri</i> (No. 14), 20 woman units	5 0 0	
(i) Gram (No. 15), 8 woman units	2 0 0	
(j) <i>Guava</i> (No. 16), carting manure	21 12 0	
	<hr/>	439 5 11
4. <i>Wages of sallar</i>		150 0 0
5. <i>Depreciation on implements and tools</i> :		
Rs. a. p.		
Opening inventory	116 8 0	
Closing inventory	74 4 0	
	<hr/>	42 4 0
6. <i>Bullock labour cost (excluding interest)</i> :		
(a) <i>Depreciation on the value of the three bullocks</i>		
Rs. a. p.		
Opening inventory	215 0 0	
Closing inventory	200 0 0	
	<hr/>	15 0 0
(b) <i>Death allowance on the three bullocks at 5 per cent on Rs. 215</i>	10 12 0	
(c) <i>Charges on account of housing at Rs. 4 per head</i>	12 0 0	
(d) <i>Feed and fodder</i>		
Rs. a. p.		
Fodder	106 6 0	
Grazing	18 0 0	
	<hr/>	124 6 0
Against the above costs Rs. 12 have to be set off for 6 cartloads of manure produced by the bullocks	-12 0 0	
	<hr/>	150 2 0
7. <i>Marketing charges</i> :		
Plot No. 1 (sugarcane), brokerage on vegetables	1 14 3	
Plot No. 4 (banana), octroi (Rs. 3-12-0) and brokerage (Rs. 43-12-0)	47 8 0	
Plot No. 5 (banana), brokerage	10 12 3	
Plot No. 6 (<i>papaya</i>), brokerage	12 6 3	
Plot No. 7 (brinjal ^s), brokerage	2 2 0	
Plot No. 9 (<i>nilva</i>), octroi and toll	1 14 0	
	<hr/>	76 8 9
8. <i>Assessment and L. F. C. on owned land</i> :		
A. g.		
Plot No. 2	1 0	5 9 0
Plot No. 7	1 20	0 15 6
Plot No. 10	1 20	3 14 9
Plot No. 14	2 0	2 13 6
Plot No. 15	2 0	2 6 3
Plot No. 16	1 5	4 2 0
	<hr/>	19 13 0
9. <i>Irrigation charges</i> :	Rs. a. p.	
Plot No. 1	47 13 0	
Plot No. 2	47 13 0	
Plot No. 3	23 14 6	
Plot No. 4	70 2 0	
Plot No. 5	35 1 0	
Plot No. 6	35 1 0	
Plot No. 7	31 14 0	
Plot No. 16	39 7 0	
	<hr/>	331 1 6

	Rs. a. p.	Rs. a. p.
10. <i>Rent of leased land :</i>		
Plot No. 1	56 2 5	
Plot No. 3	13 8 8	
Plot No. 4	80 0 0	
Plot No. 5	40 0 0	
Plot No. 6	39 0 0	
Plot No. 9	40 0 0	
Plot No. 11	30 0 0	
Plot No. 12	24 0 0	
Plot No. 13	16 0 0	
		338 11 1
11. <i>Miscellaneous expenses :</i>		
Plot No. 1	10 0 0	
Plot No. 2	10 0 0	
		20 0 0
12. <i>Capital cost for banana and papaya ..</i>		302 0 0
<i>Total out-of-pocket expenses ..</i>		2,403 5 11

Family Labour Income.—The following table gives the family labour income, i.e., the remuneration obtained by the farmer and his family for their work on the farm. The details of cost of production have already appeared above. The value of produce is taken from the cost and receipt statements of the various plots (pp. 134 to 179).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production excluding wages for family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land minus assessment and L.F.C.	Total	
1	2	3	4	5	6	7	8
Total ..	A. g. 30 25	Rs. a. p. 3,402 6 4	Rs. a. p. 2,403 5 11	Rs. a. p. 190 5 7	Rs. a. p. 162 5 2	Rs. a. p. 2,756 0 8	Rs. a. p. +646 5 8
Sugarcane	2 0	1,519 2 0	896 14 4	93 14 0	71 13 8	1,062 10 6	+456 7 6
Batoon-cane ..	0 20	135 0 0	122 2 9	8 8 3	..	180 11 0	+4 5 0
Banana	3 0	789 8 0	658 3 10	89 10 2	..	697 14 0	+91 10 0
Papaya	1 0	159 7 0	239 12 3	13 0 5	..	252 12 8	-93 5 8
Brinjals	2 20	152 8 6	76 4 0	4 12 8	13 12 0	94 12 8	+57 11 10
Nilva	14 20	309 4 10	234 0 7	14 0 5	15 5 10	263 6 10	+45 14 0
Shatu	2 0	70 0 0	46 13 8	4 8 0	..	51 6 2	+18 9 10
Bajri	2 0	76 0 0	23 2 10	3 1 10	11 1 11	37 6 7	+38 9 5
Gram	2 0	29 0 0	32 6 8	5 3 3	9 5 9	46 15 8	-17 15 8
Guava	1 5	162 8 0	73 9 0	3 9 7	40 14 0	118 0 7	+44 7 5

Column 4.—Out-of-pocket expenses include costs of manure, seeds, *sadar*, hired labour on daily wages and piece-work, depreciation on dead-stock, cost of upkeep of bullocks, irrigation charges, marketing expenses, rent of leased land, assessment and L. F. C. on owned land and other miscellaneous cash expenses. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on the current agricultural operations and on feed and fodder for the work animals. Fixed capital includes implements and work animals. *Column 6* denotes the estimated rent of owned land minus the assessment and L. F. C. *Column 8* shows wages earned by the family.

Gross receipts obtained from the farm amounted to Rs. 3,402-6-4, while the cost of production, excluding the wages of the farm family, came to Rs. 2,756-0-8 leaving family labour income of Rs. 646-5-8.

Farm Business Income.—In addition to the family labour income shown in the Table XI the farmer saved the rent of his land (minus the assessment and L. F. C.) and interest on the working capital, which have been debited as costs of production.

The following table gives the farm business income or the aggregate income of the farmer, i.e., the value of the produce minus only the out-of-pocket expenses :—

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area		Value of produce		Out-of-pocket expenses		Farm business income	
	A.	g.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.
Total ..	30	25	3,402	6 4	2,403	5 11	+999	0 5
Sugarcane	2	0	1,519	2 0	2,403	5 11	+999	0 5
Ratoon-cane	0	20	135	0 0				
Papaya	1	0	159	7 0				
Brinjals	2	20	152	8 6				
Nilva	14	20	309	4 10				
Shalu	2	0	70	0 0				
Bajri	2	0	76	0 0				
Gram	2	0	64	0 0				
Banana	3	0	789	8 0				
Guava	1	5	162	8 0				

When the out-of-pocket expenses (Rs. 2,403-5-11) are deducted from the gross receipts (Rs. 3,402-6-4) the balance of Rs. 999-0-5 represents the farm business income or the sum of the wages of the farm family, the interest on working capital and the rent of owned land (minus the assessment and L. F. C.) as shown below—

			Rs.	a.	p.
Family labour income ..	..	..	646	5	8
Interest on working capital ..	..	..	190	5	7
Rent of owned land minus assessment and L.F.C.			162	5	2
			<hr/>		
			999	0	5

ANALYSIS

As compared with the previous year there was a rise of one acre and twenty gunthas in the gross cultivated area and yet the human and bullock labour required during the year was less. This was due to the large amount of labour required in the previous year on the two acres of new banana and one acre of *papaya* plantations. Moreover, ploughing was given to *jirayat* lands.

The farm family contributed 41·5 man units and 130·5 woman units towards the crops of 1929-30 and made Rs. 646-5-8 as family labour income. Taking two women equal to one man the farmer made Rs. 6-0-9 per unit. The labour income is more in the nature of profits as very little work was done by the family. The family made farm business income of Rs. 999-0-5.

General remarks about crops.—The following table shows the yield of the main produce and the labour units spent per acre and general remark on crop condition. All labour including home labour, hired and contract labour and even bullock labour is counted to get some idea as to the labour requirements of different crops per acre. (Man unit = bullock unit = 2 woman units.)

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR SPENT PER ACRE

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of produce	Quantity or receipts		
		Rs. a. p.		
1	Sugarcane with vegetables	834 0 0	227·5	There was not much difference in the crops. Advantage in favour of plot No. 1 is due to the better prices in the early part of the season. Plot No. 1 includes two units for contract payment.
2	Do.	684 8 0	265·5	
3	Ratoon-cane	44,000 sets	104·0	The plot was neglected and had to be sold for sets. Includes 22 units for contract payment.
		Rs. a. p.		
4	Banana	279 14 0	67·625	Plot No. 4 was in its 2nd year while plot No. 5 was in its last year. The latter was kept more for leaf and hence it did not require much labour. High winds in summer damaged crops in both the plots. Plot No. 5 includes 64 units for contract payment.
5	Do.	229 12 0	99·5	

TABLE XIII—concl'd.

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of produce	Quantity or receipts		
		Rs. a. p.		
6	Papaya	159 7 0	119·0	This plantation was in its 2nd year. Due to canal seepage the crop was poor. Produce sold in lots. Includes 35·5 units for contract payment.
7	Brinjals	101 11 0	58·5	The crop followed ratoon sugarcane. The crop was good being irrigated.
8	Do.....	Crop failed	16·25	It was unirrigated crop. The rainfall of the year was unsatisfactory and consequently the crop failed.
9	Nilva grain	80 lbs.	31·46	Plot Nos. 10 and 11 were intended for fodder, while Nos. 9 and 12 for fodder as well as grain. Harvesting of plot No. 11 was given on contract work and hence labour units could not be recorded. Plot Nos. 9 and 11 include 6·3 and 7 units respectively, for contract payment.
10	Fodder	833·3 lbs.	13·66	
11	Do.	450 lbs.	12·25	
12	Grain	80 lbs.	10·958	
	Fodder	700 lbs.	..	
		Rs. a. p.		
13	Shalu.....	35 0 0	24·625	The plot was full of weeds which increased the cost of production. Standing crop was sold.
14	Bajrs grain	528 lbs.	17·5	The yield and labour requirements of the plot were normal.
	Fodder	1,300 lbs.	..	
15	Gram	210 lbs.	20·75	It was an irrigated crop and its yield was not bad.
		Rs. a. p.		
16	Guava	144 7 1	40·0	The plot was rented out. All units calculated from contract payment.

Sugarcane, plot Nos. 1 and 2.—Of the two plots, the second having *dudhya* as previous crop looked more promising than plot No. 1, which had sugarcane after sugarcane. Crops in these plots were sold in different parts of the season and that turned the scales in favour of plot

No. 1. Crop in plot No. 1 was sold early when prices were better and it fetched Rs. 800 per acre (for only cane) while crop in plot No. 2 which was a heavier crop fetched only Rs. 675 as it was sold when prices had gone down. As a result the family labour income from plot No. 1 was Rs. 323-3-2 as against Rs. 133-4-4 from plot No. 2.

Ratoon-cane, plot No. 3.—The plot was not well cared for and the poor crop had to be used for sets. Family labour income from this plot was only Rs. 8-10-0 per acre. It is no use attempting ratoon on the old canals where lands have become cane sick. It does not mean that the farmers do not know this. They are, however, handicapped for want of sufficient land. The cultivated area in the village is small while rents and water-cess are high and irrigators cannot afford to go in for dry crops. Especially when price of *gul* is low the canal farmer has to labour under difficulties on account of these peculiar economic conditions.

Banana, plot Nos. 4 and 5.—There were two plots under banana. Plot No. 4 (i.e., plot No. 6 of the previous year) was in its second year or first bearing. Plot No. 5 (i.e., plot No. 7 of the previous year) was in its fifth or last year. The family labour incomes were Rs. 40-14-9 and Rs. 9-12-7 per acre respectively. When frost of February 1929 occurred plants in the former plot were small and consequently they were not as much affected as the old plants in plot No. 5. The strong summer winds broke many plants and tore leaves in both the plots. Plot No. 5, however, being intended more for leaves (in its last year) could not give the expected yield of leaf. The difference in the family labour income was further due to the cost of removing banana stubbles from plot No. 5 which was in its final year.

Other plots.—They do not present much material for interpretation or comparison. Produce per acre and labour requirements for the same are given in Table XIII and in the separate statements of costs and receipts.

STATEMENT No. 18

134

SUGARCANE—1 acre in 1929-30

PLOT No. (1)

Previous crop—Sugarcane, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Cost exclud- ing that of family labour	REMARKS
	Men ¹	Women ¹	Bul- locks ^a		Men	Women	Bullocks		Per acre	
1. Preparatory tillage									Rs. s. p.	
(a) Ploughing.....	..	..	28	..	15	..	14	57'0	14 8 0	Three ploughings were given. A plough required two men and six bullocks for seven days. One extra man was required for one day for cutting shrubs. Men and bullocks paid at eight annas per day.
(b) Ridging and making beds .....	..	..	4	..	14	..	2	20'0	8 0 0	Man and bullock units at 8 annas each.
(c) Putting bunds and digging corners .....	..	..	..	..	14	..	..	14'0	7 0 0	Man unit paid at 8 annas.
2. Manure and manuring										
(a) Manures										
(i) Residual manure and cartage .....	..	..	..	..	..	..	..	..	22 8 0	Fifty cartloads of municipal refuse at Rs. 1-8-0 per cart (including cartage) were given to the previous crop; thirty per cent of the total cost is charged to this crop.
Rs. s. p. Manure	7	8	0							
Cartage	15	0	0							
(ii) Sulphate of Ammonia .....	..	..	..	..	..	..	..	..	17 0 0	Cost of one bag of Sulphate of Ammonia including cartage.
(iii) Safflower cake .....	..	..	..	..	..	..	..	..	181 8 0	Fifteen <i>pallas</i> of cake at Rs. 8-8-0 per <i>palla</i> plus Rs. 4 for carting.
(b) Manuring	2'0	2	..	2	6	10	..	16'0	5 8 0	Man and woman units paid at annas 8 and 4 respectively.

FARM STUDIES

3. Seeds and sowing												
(a) Sets .....	..	..	..	..	..	..	..	..	48 4 0		Eight thousand sets at Rs. 4 per thousand and five thousand at Rs. 3-4-0 per thousand.
(b) Vegetable (seeds) .....	..	..	..	..	..	..	..	..	6 4 0		<i>Bhendī</i> Rs. 8-12-0, radish Rs. 0-12-0, <i>jowar</i> Rs. 0-4-0, <i>chawalī</i> Rs. 1 and maize annas 8.
(c) Planting .....	..	5	..	1	4	..	..	7-5	2 0 0		Man unit paid at annas 8.
4. Irrigation												
(a) Canal water charges .....	..	..	..	..	..	..	..	..	47 13 0		At Rs. 45 per acre plus one anna in the rupee as L.F.C.
(b) Labour	4-5	..	..	22	..	..	..	26-5	....		Thirty-six waterings were given.
5. After-care and tillage												
(a) Weeding .....	..	6	..	3	..	53	..	32-5	10 12 0		Three weeding were given. 1st required 12 women, 2nd 14 and the 3rd 27. 26 women paid at 3½ annas and 27 at 3 annas each. Three men and six women required for cleaning bunds and channels.
(b) Earthing up .....	..	..	..	..	17	..	..	17-0	17 0 0		Contract work.
6. Harvesting and preparing for market												
(a) Sugarcane .....	..	..	..	..	..	..	..	..	....		Standing crop was sold.
(b) Vegetables .....	..	6	..	5	..	..	..	8-0	....		
7. Marketing												
(a) Carting <i>bhopala</i> .....	..	..	..	..	..	..	..	..	1 2 0		Contract work.
(b) Brokerage, etc. ....	..	..	..	..	..	..	..	..	1 14 3		<i>Dajali</i> Rs. 1-6-0 and <i>batta</i> Rs. 0-8-3.
8. Removing stubbles .....	..	..	12	..	9	..	6	27-0	7 8 0		Man and bullock units paid at 3 annas each.

STATEMENT No. 18—concl'd.

136

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Cost excluding that of family labour.	REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks		Per acre	
9. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	Rs. s. p. 18 11 2	Annual wages of <i>saldar</i> are distributed on different plots in proportion to the units used on them.
10. Charges for bullock labour .....	..	..	..	..	..	..	..	..	31 9 1	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. s. p. (a) Feeds, fodder, depreciation etc.									25 0 4	
(b) Interest on the value of bullocks, feeds and fodder									6 8 9	
11. Charges for implements and tools..	..	..	..	..	..	..	..	..	9 5 11	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. s. p. (a) Depreciation									7 0 8	
(b) Interest									2 5 5	
12. Interest on fixed capital (i.e., wages for hired labour and cost of seeds and manure) .....	..	..	..	..	..	..	..	..	37 1 0	Charged at 12 per cent per annum.
13. Miscellaneous expenses .....	..	..	..	..	..	..	..	..	10 0 0	
14. Rent of land .....	..	..	..	..	..	..	..	..	56 2 5	The land was taken on lease. The rent is distributed in proportion to the value of crop entering sugarcane rotation.
Total	6·5	19	44	88	79	68	22	225·5	511 6 10	

¹ Family labour not charged. ² Home bullock labour charged under item 10. ³ Wages of *saldar* charged under item 9.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Sugarcane	800 0 0	Standing crop was sold.
Vegetables	10 14 0	Sold at different rates.
Maize	11 0 0	Estimated value.
Bhopala	12 12 0	Sold at different rates.
Total	834 10 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	834 10 0	511 6 10	(b) 45 15 0	+ 323 3 2	+ 369 2 2

VALDEAON, FARMER I(B)

STATEMENT No. 19

SUGARCANE—1 acre in 1929-30

PLOT No. (2)

Previous crop—Bhopala, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks		Per acre	
1. Preparatory tillage									Rs. a. p.	
(a) Ploughing	46	..	23.0	..	23	92.0	23 0 0	Four ploughings were given. A plough required two men and six bullocks. Man and bullock units paid at annas eight each.
(b) Ridging	4	1.0	2.0	..	2	9.0	2 0 0	Man and bullock units paid at annas eight each.
(c) Collecting shrubs etc.	3.5	..	..	3.5	1 12 0	Man unit paid at annas eight.
(d) Putting bunds and making beds	20.0	..	..	20.0	20 0 0	Contract work.
2. Manure and manuring										
(a) Manures										
(i) Residual manure	1 0 0	One cart of F.Y.M. at Rs. 2 was given to the previous crop; fifty per cent of the cost is charged to this crop.
(ii) Safflower cake	181 8 0	Fifteen <i>pallas</i> of cake at Rs. 8-8-0 per <i>palla</i> plus Rs. 4 for cartage.
(b) Manuring	4.0	21	..	14.5	7 4 0	Man and woman units paid at annas eight and four respectively.
3. Seeds and sowing										
(a) Sets	04 0 0	Sixteen thousand sets at Rs. 4 per 1,000.
(b) Vegetables (seeds)	8 10 0	<i>Bhend</i> Rs. 8-12-0, <i>khira</i> Rs. 2-14-0, radish Re. 0-12-0, <i>Guwar</i> annas four and <i>chavali</i> Re. 1.
(c) Planting	1	..	..	7.0	4	..	9.5	4 0 0	Planting was done by contract,

4. Irrigation												
(a) Canal water charges .....	..	..	..	..	..	..	..	..	..	47 13 0	At Rs. 45 per acre plus one anna in the rupee L.F.C.
(b) Labour	4.5	..	..	25.0	..	..	..	..	20.5	....	Thirty-seven waterings were given.
5. After-care and tillage .....	..	..	..	..	..	..	..	..	..	..
(a) Weeding .....	..	..	..	..	2.0	54	..	..	29.0	14 8 0	Three weedings were given. 1st required 12 woman, 2nd 12 and 3rd 80. Women units paid at annas four and man at eight annas.
(b) Earthing up .....	..	..	..	..	17.0	..	..	..	17.0	17 0 0	Contract work.
6. Harvesting and preparing for market,												
(a) Sugarcane .....	..	..	..	..	..	..	..	..	..	....	Standing crop was sold.
(b) Vegetables .....	..	11	..	..	..	..	..	..	5.5	....	
7. Removing stubbles .....	..	..	12	..	9.0	..	6	..	27.0	7 8 0	Man and bullock units paid at annas eight each.
8. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	..	14 11 7	Annual wages of <i>saldar</i> are distributed on different plots in proportion to the units used on them.
9. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	44 7 9	The total annual cost on account of draft bullock is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation etc. .. Rs. 35-4-2												
(b) Interest on the value of bullocks, feeds and fodder .. Rs. 9-3-7												
10. Charges for implements and tools ..	..	..	..	..	..	..	..	..	..	13 3 3	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation .. Rs. a. p. 9 14 9												
(b) Interest .. 3 4 6												
11. Interest on fluid capital (i.e., wages for hired labour and cost of seeds and manure) .....	..	..	..	..	..	..	..	..	..	35 7 5	Charged at 12 per cent per annum.
12. Miscellaneous expenses .....	..	..	..	..	..	..	..	..	..	10 0 0	
13. Rent of land .....	..	..	..	..	..	..	..	..	..	77 6 8	The land was owned. The rent is distributed in proportion to the value of crops entering sugarcane rotation.
Total ..	4.5	12	62	26.0	96.5	79	31	265.5	551 3 8			

¹ Family labour not charged. ² Home bullock labour charged under item 9. ³ Wages of *saldar* charged under item 8.

STATEMENT No. 19—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Sugarcane	675 0 0	Standing crop was sold.
Vegetables	9 8 0	Sold at different rates.
Total ..	684 8 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2—3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital.	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	684 8 0	551 3 8	(a)71 13 8 (b)47 15 6	+133 4 4	+253 1 6

STATEMENT No. 20

SUGARCANE (*Ratoon*)— $\frac{1}{2}$ acre in 1929-30

PLOT No. (3)

Previous crop—Plant cane, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Ex- change man labour	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women ¹	Bul- locks ²			Men	Women	Bul- locks			For the plot	Per acre	
1. Manure and manuring											Rs. a. p.	Rs. a. p.	
(a) Safflower cake	62 10 0	105 4 0	Six <i>pallas</i> of cake at Rs. 8-8-0 per <i>palla</i> plus cartage Rs. 1-10-0
(b) Manuring	1	8	..	2.5	5.0	1 4 0	2 8 0	Man and woman units paid at annas eight and four respectively.
2. Irrigation													
(a) Canal water charges	23 14 0	47 13 0	At Rs. 45 per acre plus one anna in the rupee as L.F.C.
(b) Labour	7	..	..	..	..	7.0	14.0	....	..
3. After-care and tillage													
(a) Weeding	16	..	8.0	16.0	4 0 0	8 0 0	One weeding was given. Woman unit paid annas four.
(b) Earthing up	10	..	..	10.0	20.0	10 0 0	20 0 0	Contract work at Rs. 20 per acre.
4. Harvesting and pre- paring for market	5 8 0	11 0 0	Piece-work. Four annas per 1,000 sets for cutting. In addition cane tops were given free. The crop was used as sets.

WADGAON, FARMER (B)

141

STATEMENT No. 20—concl'd.

142

ITEM OF EXPENDITURE	Home Labour			Saldar ³	Ex- change man labour ¹	Labour on daily wages and contract			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women ¹	Bul- locks ²			Men	Women	Bullocks			For the plot	Per acre	
	Rs. a. p.		Rs. a. p.			Rs. a. p.	Rs. a. p.						
5. Removing stubbles	6	..	1.5	3	..	3	13.5	27.0	3 0 0	0 0 0	Man and bullock unit paid at annas eight each. Annual wage of <i>saldar</i> is distributed over different plots in proportion to the units used on them.
6. <i>Saldar</i>	3 15 7	7 15 2	
7. Charges for bullock labour	4 5 0	8 10 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc. .. 8 6 8													
(b) Interest on the value of bullocks, feeds and fodder .. 0 14 4													
8. Charges for implements	1 4 5	2 8 10	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation 0 16 4													
(b) Interest .. 0 5 1													
9. Interest on fluid capital (i.e., wages for hired labour and price of manure)	7 4 10	14 9 8	Charged at 12 per cent per annum. The land was taken on lease on cash system. The rent is distributed in proportion to the value of crops entering sugarcane rotation.
10. Rent of land	13 8 8	27 1 4	
Total	6	7	1.5	14	19	8	41.0	82.0	130 11 0	261 6 0	

¹ Family and exchange human labour not charged. ² Home bullock labour charged under item 7. ³ Wages of *saldar* charged under item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For $\frac{1}{4}$ acre	Per acre	For $\frac{1}{4}$ acre	Per acre	
Sugarcane sets	sets. 22,000	sets. 44,000	Rs. a. p. 110 0 0	Rs. a. p. 220 0 0	Valued at Rs. 5 per 1,000 sets. Tops were given as part payment for harvesting and stripping cane.
Sale of fruits on <i>jambul</i> tree	25 0 0	50 0 0	
Total	135 0 0	270 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For $\frac{1}{4}$ acre ..	135 0 0	130 11 0	(b) 8 8 3	+ 4 5 0	+12 13 3
Per acre	270 0 0	261 6 0	17 0 6	+ 8 10 0	+25 10 6

WADGAON, FARMER 1(B)

STATEMENT No. 21

PLOT No. (4)

BANANA—2 acres in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saddar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks ¹		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Capital cost	146 0 0	73 0 0	For details of capital cost see statement No. 7.	
2. Preparatory tillage	Being a second year plantation there was no preparatory tillage.	
3. Manure and manuring												
(a) Residual manure and carting.....	33 7 3	16 11 7.5	Fifty-four cartloads of F.Y.M. at Rs. 1 per cart, 3 cartloads of municipal refuse at 3 annas and 85 at 4 annas per cart were given to this plot in the previous year. Cartage had amounted to Rs. 44-4-9. Thirty per cent of the total cost is charged to this crop.	
Rs. a. p.												
Manure .. 20 2 10												
Cartage .. 13 4 5												
4. Irrigation												
(a) Canal water charges	70 2 0	35 1 0	At Rs. 33 per acre plus 1 anna in the rupee as L. F. C.	
(b) Labour	36	..	..	..	36.0	13.0	....	....
5. After-care and tillage												
(a) Weeding	126.5	..	63.25	31.6	26 15 0	13 7 6	Two weedings were given. Seventy-five women paid at 3 annas and the rest at 4 annas each.

6. Harvesting and preparing for market .. .. .	..	..	..	6	..	..	..	6'0	3'0	..	....
7. Marketing													
(a) Haulage .. .. .	..	..	15	15	..	..	..	30'0	15'0	3 12 0	1 14 0	Rs. 8-12-0 paid as octroi.
(b) Brokerage, etc. ....	..	..	..	..	..	..	..	..	..	43 12 0	21 14 0	Dalaki at 1 anna per rupee and <i>badli</i> at 3 pies per rupee on the sale of produce.
8. <i>Saldar</i> .. .. .	..	..	..	..	..	..	..	..	..	32 5 3	16 2 7'5	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
9. Charges for bullock labour	..	..	..	..	..	..	..	..	..	10 12 2	5 0 1	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.													
(a) Feeds, fodder, depreciation, etc. 8 8 6													
(b) Interest on the value of bullocks, feeds and fodder 2 3 8													
10. Charges for implements and tools .. .. .	..	..	..	..	..	..	..	..	..	3 3 1	1 9 6'5	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.													
(a) Depreciation 2 6 5													
(b) Interest 0 12 8													
11. Interest on fluid capital (i.e., wages of hired labour and price of manure) .. .	..	..	..	..	..	..	..	..	..	27 9 10	13 12 11	Charged at 12 per cent per annum.
12. Rent of land .. .. .	..	..	..	..	..	..	..	..	..	80 0 0	40 0 0	The land was taken on lease.
Total .. .. .	..	..	15	57	..	126'5	..	135'25	67'6	477 14 7	238 15 3'5	

¹ Home bullock labour charged under item 9. ² Wages of *saldar* charged under item 8.

STATEMENT No. 21—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 2 acres	Per acre	
	Rs. a. p.	Rs. a. p.	
Banana (fruit)	559 12 0	279 14 0	Sold at different rates.
Total	559 12 0	279 14 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres ..	559 12 0	477 14 7	(b) 30 10 2	+81 13 5	+112 7 7
Per acre ..	279 14 0	238 15 3.5	15 5 1	+40 14 8.5	+56 3 9.5

STATEMENT No. 22

PLOT No. (5)

(a) Cost of Production

BANANA—1 acre in 1929-30

No. 11 Q 84-102

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on dally wages			Total units	Cost exclud- ing that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Rs. a. p.	
1. Capital cost	73 0 0	Sixth year plantation and therefore no preparatory tillage. Estimated capital cost for the year is based on experience, statement No. 7.	
2. Irrigation										
(a) Canal water charges	35 1 0	At Rs. 33 per acre plus 1 anna in the rupee as L.F.C.	
(b) Labour*.....	17'5	..	..	..	17'5	....
3. Harvesting and preparing for market	18'0	..	..	..	18'0	....
4. Marketing										
(a) Cartage	20 0 0	Eighty headloads at 4 annas per headload.	
(b) Brokerage, etc.	10 12 3	Batts at 3 pias per rupee on the sale of bananas and brokerage at different rates on the sale of fruits and leaves.	
5. Removing stubbles	12 0 0	Contract work. Plantation was pulled.	
6. Wages of <i>saldar</i>	20 2 2	Allocated wages of <i>saldar</i> .	
7. Charges for bullock labour	Established banana garden does not require bullocks and implements and hence no charges are made.	
8. Charges for implements and tools.....		
9. Interest on fixed capital (i.e., wages of hired labour)	9 0 0	Charged at 12 per cent. per annum.	
10. Rent of land	40 0 0	The land was taken on lease.	
Total.....	35'5	35'5	219 15 5	

¹ Wages of *saldar* charged under item 6.

WADGAON, FARMER (1/B)

147

STATEMENT No. 22—concl.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Banana (fruit) ..	83 8 0	Sold at different rates.
Banana leaves ..	146 4 0	Do. do.
Total.....	229 12 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	229 12 0	219 15 5	(b) 9 0 0	+9 12 7	+18 12 7

PAPAYA—1 acre in 1929-30

STATEMENT No. 23

PLOT No. (6)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on dally wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men	Women ¹	Bullocks		Men	Women	Bullocks			
1. Capital cost	Rs. a. p. 83 0 0	For details of capital cost see statement No. 10 of 1928-29. Being a second year plantation there was no preparatory tillage.
2. Preparatory tillage	
3. Irrigation										
(a) Canal water charges	35 1 0	At Rs. 33 per acre per year plus 1 anna in the rupee as L.F.C.
(b) Labour	17.5	..	..	..	17.5	....
4. After-care and tillage										
(a) Weeding	6	..	..	..	46	..	26.0	11 8 0	One weeding was given. Woman unit paid at 4 annas.
(b) Hand digging	30	..	..	30.0	25 9 6	Contract work.
5. Harvesting and preparing for market	10.0	..	..	..	10.0	....
6. Marketing										
(a) Labour for carrying produce	12 10 0	Fifty headloads at 4 annas each and one small headload at 2 annas. Contract work. Brokerage at 1 anna per rupee (Rs. 9-15-0) and <i>batta</i> at 8 pies per rupee on the sale of the produce (Rs. 2-7-3).
(b) Brokerage, etc.	12 6 3	
7. Removing stubbles	5 0 0	Contract work.
8. Wages of <i>saldar</i>	15 9 6	Annual wages of <i>saldar</i> are distributed on different plots in proportion to the units used on them.
9. Interest on fluid capital	18 0 5	Charged at 12 per cent per annum.
10. Rent of land	39 0 0	The land was taken on lease.
Total.....	..	6	..	27.5	30	46	..	83.5	259 12 8	

¹ Family labour not charged. ² Wages of *saldar* charged under item 8.

WADGAON, FARMER (B)

STATEMENT No. 23—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
<i>Papaya</i> (fruit) ..	159 7 0	Sold at different rates.
Total	159 7 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	159 7 0	252 12 8	(b) 13 0 5	-93 5 8	-80 5 3

STATEMENT No. 24

PLOT No. (7)

BRINJALS—1½ acres in 1929-30

Previous crop—Ratoon sugarcane

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bullo- cks ²		Men ¹	Wo- men ¹	Men	Women	Bullocks			For the plot	Per acre	
												Rs. a. p.	Rs. a. p.	
1. Preparatory tillage														
(a) Harrowing ..	..	..	4	2	..	..	..	..	0·0	4·0	..	..	..	Four harrowings were given.
2. Seeds and sowing														
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	5 1 7	8 6 5		
(b) Planting seedlings .....	..	1·0	..	..	2	4	..	..	4·5	3·0	..	..
3. Irrigation														
(a) Canal water charges .....	..	..	..	..	..	..	..	..	..	..	31 14 0	21 4 0	At Rs. 20 per acre for the season plus one anna in the rupee as L.F.O.	
(b) Labour .....	..	..	..	12	..	..	..	..	12·0	8·0	..	..	Twelve waterings were given.	
4. After-care and tillage														
(a) Weeding .....	..	12·0	..	..	..	25	..	..	18·5	12·84	6 4 0	4 2 8	Two weeding were given. First 19 women and second 18 women. Woman unit paid at four annas.	
5. Harvesting and preparing for market .....	..	45·5	..	..	..	..	..	..	22·75	15·16	..	..
6. Marketing														
(a) Haulage	12	..	12	..	..	..	..	..	24·0	16·0	..	..	..	Batta at 3 pies per rupee sale of produce.
(b) Batta .....	..	..	..	..	..	..	..	..	..	..	2 2 0	1 6 8	Dalaki is paid by the purchaser	

WADGAON, FARMER (B)

131

STATEMENT No. 24—concl'd.

152

ITEM OF EXPENDITURE	Home labour			Saldar ³	Exchange labour on co-operation		Labour on dally wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men ¹	Women ¹	Men	Women	Bullocks			For the plot	Per acre	
7. Wages of <i>saldar</i>...	..	..	..	..	..	..	..	..	..	..	..	7 15 0	5 4 8	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
8. Charges for bullock labour.....	..	..	..	..	..	..	..	..	..	..	..	11 7 8	7 10 5	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. s. p.														
(a) Feed s, fod d e r, depreca-tion, etc. 9 1 7														
(b) Interest on the value of bullocks, feeds and fodder .. 2 6 1														
9. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	..	..	3 8 7	2 4 5	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. s. p.														
(a) Depreci-ation... 2 9 0														
(b) Interest 0 13 7														
10. Interest on fluid capital (i.e., wages for hired labour and cost of seeds).	..	..	..	..	..	..	..	..	..	..	..	0 10 10	0 7 2	Charged at 12 per cent per annum. The land was owned. Rent is distributed in proportion to the value of crops entering into the rotation.
11. Rent of land ....	..	..	..	..	..	..	..	..	..	..	..	14 11 0	9 13 0	
Total.....	12	58·5	10	14	2	4	..	25	..	87·75	58·5	83 9 2	55 1 6	

¹ Family and human exchange labour not charged. ² Home bullock labour charged under item 8. ³ Wages of *saldar* charged under item 7.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 1½ acres	Per acre	
	Rs. a. p.	Rs. a. p.	
Brinjals	136 8 6	91 0 4	Sold at different rates.
Brinjal seeds	16 0 0	10 10 0	Estimated value of seed held over for sale.
Total....	152 8 6	101 11 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1½ acres	152 8 6	83 9 2	(a) 13 12 0 (b) 3 14 6	+68 15 4	+86 9 10
Per acre	101 11 0	55 1 6	11 12 4	+45 15 7	+57 11 11

WADGAON, FARMER I (B)

STATEMENT No. 25

154

BRINJALS—1 acre in 1929-30

PLOT No. (8)

Previous crop—Ratoon cane*(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Labour on dally wages			Total units	Cost exclud- ing that of family labour	REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²		Men	Women	Bullocks		Per acre	
									Rs. a. p.	
1. Preparatory tillage										
(a) Harrowing and levelling.....	2	1'0	..	..	..	3'0	....	Two harrowings were given.
2. Seeds and sowing										
(a) Seeds	3 6 5	
(b) Planting seedlings	1	..	0'5	1	2'5	..	3'25	1 2 0	Men and women units paid at annas 8 and 4 respectively.
3. After-care and tillage										
(a) Weeding	0	..	..	..	14'0	..	10'0	3 8 0	Two weedings were given. 1st and 2nd required 8 and 12 women respectively. Woman units paid at annas four.
4. Harvesting and preparing for market	The crop failed.

FARM STUDIES

5. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	0 13 8	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
6. Charges for bullock labour .....	..	..	..	..	..	..	..	..	1 6 11	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.										
(a) Feeds, fodder, depreciation, etc.....	1	2	2							
(b) Interest on the value of bullocks, feeds and fodder	0	4	9							
7. Charges for implements and tools.	..	..	..	..	..	..	..	..	0 6 9	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.										
(a) Depreciation.....	0	6	1							
(b) Interest.....	0	1	8							
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) .....	..	..	..	..	..	..	..	..	0 7 9	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	....	The land was taken on lease. Rent charged is nil as the crop failed. The rent is distributed in proportion to the value of yield.
Total.....	..	7	2	1.5	1	16.5	..	16.25	11 3 6	

¹ Family labour not charged. ² Home bullock labour charged under item 6. ³ Wages of *saldar* charged under item 5.

WADGAON, FARMER 1(B)

STATEMENT No. 25—concl'd.

156

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Brinjals	0 0 0	Crop failed.
Total	0 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	11 3 6	(b) 0 14 2	-11 3 6	-10 5 4

FARM STUDIES

STATEMENT No. 26

NILWA FOR FODDER—3 acres in 1929-30

PLOT No. (9)

Previous crop—Bajri, 1928-29

(a) Cost of Production.

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage.....	..	..	8	4	..	..	..	12.0	4.0	....	....	Four harrowings were given.
2. Seeds and sowing												
(a) Seeds.....	..	..	..	..	..	..	..	..	..	4 1 9	1 5 11	For the plot 55 lbs. of <i>jowar</i> seed.
(b) Sowing and covering ..	..	..	4	2	..	..	..	6.0	2.0	....	....
3. Harvesting, tying, carting to the thrashing floor, thrashing, etc.....	10	1	6	13	22	12	..	57.5	19.16	14 0 0	4 10 8	Man and woman units paid at 6 and 4 annas respectively.
4. Marketing												
(a) Carting fodder to Poona.....	..	..	..	..	..	..	..	..	..	9 6 0	3 2 0	Contract labour.
5. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	..	10 12 5	3 9 6	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.

WADGAON, FARMER (B)

157

STATEMENT No. 26—concl'd.

158

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
6. Charges for bullock labour.	..	..	..	..	..	..	..	..	..	12 14 7	4 4 10	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Es. a. p.												
(a) Feeds, fodder, depreciation, etc.....	10	3	9									
(b) Interest on the value of bullocks, feeds and fodder.....	2	10	10									
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	3 18 4	1 4 5	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Es. a. p.												
(a) Depreciation.....	2	14	1									
(b) Interest.....	0	15	3									
8. Interest on fluid capital (i.e., wages for hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	1 1 4	0 5 9	Charged at 12 per cent per annum.
9. Rent of land.....	..	..	..	..	..	..	..	..	..	40 0 0	13 *5 4	The land was taken on lease.
Total.....	10	1	18	10	22	12	..	75*5	25*16	96 1 5	32 0 5	

¹ Family labour not charged. ² Home bullock labour charged under item 6. ³ Wages of *saldar* charged under item 5.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3 acres	Per acre	For 3 acres	Per acre	
Jowar grains.	Lbs. 240	Lbs. 80.0	Rs. a. p. 9 9 7	Rs. a. p. 3 3 2	Valued at 25 lbs. per rupee.
Bhoos.....	..	..	1 8 0	0 8 0	Estimated value.
Green fodder (1,050 bundles) ....	..	..	54 0 0	18 0 0	Sold at different rates.
Kadbi (1,100 bundles)...	2,750	916.7	66 0 0	22 0 0	Sold at Rs. 6 per 100 bundles.
Total....	..	..	131 1 7	43 11 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3 acres..	131 1 7	96 1 5	(b) 4 11 5	+35 0 2	+39 11 7
Per acre.....	43 11 2	32 0 5	1 9 1	+11 10 9	+13 3 10

WADGAON, FARMER I(B)

STATEMENT No. 27

NILWA FOR FODDER—1½ acres in 1929-30

PLOT No. (10)

Previous crop—Bajri, 1928-29

(a) Cost of Production

TERM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage										Rs. a. p.	Rs. a. p.	
(a) Harrowing.....	..	..	7	3·5	..	..	..	10·5	7·0	..	..	Six harrowings were given.
2. Seeds and sowing												
(a) Seeds.....	..	..	1	0·5	..	..	..	1·5	1·0	2 1 11	1 6 7	For the plot 30 lbs. of <i>jowar</i> seeds.
(b) Sowing and covering ..	..	..	..	..	..	..	..	..	..	..	..
3. Harvesting, tying and preparing for market.....	1·5	4	..	..	..	10	..	8·5	5·66	2 8 0	1 10 8	Woman unit paid at 4 annas.
4. Wages of <i>saldar</i>.....	..	..	..	..	..	..	..	..	..	2 4 4	1 8 2	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
5. Charges for bullock labour.												
(a) Feeds, fodder, depreciation, etc. Rs.4-8-0	..	..	..	..	..	..	..	..	..	5 11 9	3 13 2	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
(b) Interest on the value of bullocks, feeds and fodder Rs.1-8-0	..	..	..	..	..	..	..	..	..	..	..
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	1 11 3	1 2 2	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation... 1 4 5	..	..	..	..	..	..	..	..	..	..	..
(b) Interest..... 0 6 10	..	..	..	..	..	..	..	..	..	..	..
7. Interest on fluid capital (i.e., wages for hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	0 2 0	0 1 4	Charged at 12 per cent per annum.
8. Rent of land.....	..	..	..	..	..	..	..	..	..	19 4 7	12 13 9	The land was owned.
Total	1·5	4	8	4·0	..	10	..	20·5	13·66	83 11 10	22 7 10	

¹ Family labour not charged. ² Home bullock labour charged under item 5. ³ Wages of *saldar* charged under item 4.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1½ acres	Per acre	For 1½ acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Grains.....	<i>Nil</i>	<i>Nil</i>	....	....
Fodder (500 bundles)...	1,250	833·3	30 0 0	20 0 0	Valued at Rs. 6 per 100 bundles.
Total....	..	..	30 0 0	20 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1½ acres.	30 0 0	33 11 10	(a) 15 5 10 (b) 1 11 10	-3 11 10	+13 5 10
Per acre	20 0 0	22 7 10	11 6 5	-2 7 10	+ 8 14 7

WADGAON, FARMER 1(B)

STATEMENT No. 28

162

NILWA FOR FODDER—4 acres in 1929-30

PLOT No. (11)

Previous crop—*Shalu jowar*, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			<i>Saldar</i> ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks ¹		Men	Women	Bullocks			For the plot	Per acre	
										Rs. s. p.	Rs. s. p.	
1. Preparatory tillage												
(a) Harrowing	8	4'0	..	..	..	12	3'0	....	....	Three harrowings were given.
2. Seeds and sowing												
(a) Seeds	5 0 0	1 4 0	For the plot 70 lbs. of <i>jowar</i> seed.
(b) Sowing and covering	3	1'5	1'6	..	3	9	2'25	2 4 0	0 0 0	Man and bullock units paid at 8 annas.
3. Harvesting and preparing for market	14 0 0	3 8 0	Contract work.
4. Wages of <i>saldar</i>	3 2 0	0 12 6	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.

FARM STUDIES

MO-II-984-11a

5. Charges for bullock labour.	..	..	..	..	..	..	..	..	..	7 14 3	1 15 7	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.													
(a) Feeds, fodder, depreciation, etc.	6	4	1										
(b) Interest on the value of bullocks, feeds and fodder.....	1	10	2										
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	2 5 6	0 9 4	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.													
(a) Depreciation..	1	12	2										
(b) Interest.....	0	9	4										
7. Interest on fluid capital (i.e. wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	0 7 0	0 1 9	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	..	30 0 0	7 8 0	The land was taken on lease on cash system.
Total.....	..	..	11	5.5	1.5	..	3	21	5.25	65 0 9	16 4 2	

¹Home bullock labour charged under item 5.²Wages of *saldar* charged under item 4.

WALGAON, FARMER (B)

STATEMENT No. 28—concll.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4 acres	Per acre	For 4 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Kadbi (900 bundles)...	1,800	450	36 0 0	9 0 0	Valued at Rs. 4 per 100 bundles.
Grass from bunds.....	..	..	7 0 0	1 12 0	Contract sale.
Total.....	..	..	43 0 0	10 12 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4 acres	43 0 0	65 0 9	(b)2 10 6	-22 0 9	-19 6 3
Per acres..	10 12 0	16 4 2	0 10 7	-5 8 2	-4 13 7

STATEMENT No. 29

NILWA FOR FODDER—6 acres in 1929-30

PLOT No. (12)

Previous crop—*Shalu jowar*, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home Labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bul-locks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing .....	..	..	13'5	0'75	..	..	20'25	3'375	..	..	..	Three harrowings were given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	6 1 2	1 0 3	..	For the plot 80 lbs. of <i>jowar</i> seed.
(b) Sowing and covering ..	..	..	4'0	2'0	..	..	6'0	1'0	..	..	..
3. Harvesting, tying bundles and carting to the thrashing floor, thrashing, etc. ..	2	17	5'0	3'0	..	42	39'5	0'583	10 8 0	1 12 0	..	Outside woman labour charged at annas 4 each.
4. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	6 10 8	1 1 9	..	Wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.

WADGAON, FARMER I(B)

STATEMENT No. 29—concl'd.

166

FARM STUDIES

ITEM OF EXPENDITURE	Home Labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	Rs. a. p. 16 2 3	Rs. a. p. 2 11 0	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p. (a) Feeds, fodder, depreciation, etc. ..12 12 8												
(b) Interest on the value of bullocks, feeds and fodder .. 3 5 7												
Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	4 12 9	0 12 9	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p. (a) Depreciation 3 9 8 (b) Interest .. 1 3 1												
Interest on fixed capital (i.e., wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	0 6 0	0 1 0	Charged at 12 per cent per annum.
Rent of land .....	..	..	..	..	..	..	..	..	..	24 0 0	4 0 0	The land was taken on lease on cash system.
Total.....	2	17	22·5	11·75	..	42	..	65·75	10·958	68 8 10	11 6 9	

¹Family labour not charged.

²Home bullock labour charged under item 5.

³Wages of *saldar* charged under item 4.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 6 acres	Per acre	For 6 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar grains	480	80	19 3 3	3 3 2	Valued at 25 lbs. per rupee.
Kadbi (1,400 bundles) ..	4,200	700	84 0 0	14 0 0	Valued at Rs. 6 per 100 bundles.
Bhoos .....	..	..	2 0 0	0 5 4	Estimated value.
Total.....	..	..	105 3 3	17 8 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 6 acres	105 3 3	68 8 10	(b) 4 14 8	+ 36 10 5	+ 41 9 1
Per acre ..	17 8 6	11 6 9	0 13 1	+ 6 1 9	+ 6 14 10

WADGAON, FARMER I(B)

STATEMENT No. 30

SHALU JOWAR—2 acres in 1929-30

PLOT No. (13)

Previous crop—*Shalu jowar*, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Salder ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing and leveling	17.5	7.25	..	..	..	24.75	12.375	..	..	Plot was harrowed with four bullock harrow twice and with two bullock harrow twice.
2. Seeds and sowing												
(a) Seeds	8 0 0	1 8 0	For the plot 25 lbs. of <i>shalu</i> seed (Rs. 2) and 10 lbs. of safflower (Rs. 1).
(b) Sowing and covering	4.0	2.0	..	..	..	6.0	3.0	..	..
3. After-care and tillage												
(a) Weeding	87	..	18.5	9.25	6 15 0	8 7 0	Woman unit paid at annas 8 each. The plot was weeded before sowing.

4. Harvesting and preparing for market ..	..	..	..	..	..	..	..	..	..	..	..	..	Standing crop was sold.
5. Wages of <i>saldar</i> ..	..	..	..	..	..	..	..	..	..	5 4 0	2 10 0	Annual wages of <i>saldar</i> are distributed on different plots in proportion to the units used on them.	
6. Charges for bullock labour ..	..	..	..	..	..	..	..	..	..	15 6 11	7 11 5 5	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.	
Rs. s. p.													
(a) Feeds, fodder, depreciation, etc. ..			12	3	7								
(b) Interest on the value of bullocks, feed and fodder ..			3	3	4								
7. Charges for implements and tools ..	..	..	..	..	..	..	..	..	..	4 0 4	2 4 8	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.	
Rs. s. p.													
(a) Depreciation ..			3	7	1								
(b) Interest ..			1	2	3								
8. Interest on fluid capital (i.e., wages for hired labour and cost of seeds) ..	..	..	..	..	..	..	..	..	..	0 2 11	0 1 5 5	Charged at 12 per cent per annum.	
9. Rent of land ..	..	..	..	..	..	..	..	..	..	16 0 0	8 0 0	The land was taken on lease on cash system.	
Total ..	..	..	21	5	9 25	..	37	..	49 25	24 625	51 6 2	25 11 1	

¹Family labour not charged.

²Home bullock labour charged under item 6.

³Wages of *saldar* charged under item 5.

STATEMENT No. 30—concl.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 2 acres	Per acre	
	Rs. a. p.	Rs. a. p.	
<i>Shalu</i>	70 0 0	35 0 0	Standing crop was solid. Crop failed.
<i>Safflower</i>.....	.....	.....
Total....	70 0 0	35 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a)Rent of owned land (minus assess- ment and L. F. C.) (b)Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres..	70 0 0	51 6 2	(b)4 8 6	+18 9 10	+23 2 4
Per acre	35 0 0	25 11 1	2 4 3	+ 9 4 11	+11 9 2

STATEMENT No. 31

BAJRI—2 acres in 1929-30

PLOT No. (14)

Previous crop—Bajri, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing	7	3·5	..	..	..	10·5	5·25	....	....	Four harrowings were given.
2. Seeds and sowing												
(a) Seeds	2 0 0	1 0 0	For the plot 20 lbs. of bajri at 10 lbs. per rupee.
(b) Sowing and covering	2	1·0	..	..	..	8·0	1·5	....	....
3. Harvesting, thrashing and preparing for market..	..	11	5	1·0	..	20	..	21·5	10·75	5 0 0	2 8 0	Woman units paid at annas four.
4. Wages of <i>saldar</i>	3 2 0	1 9 0	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.

WADGAON, FARMER (B)

171

STATEMENT No. 31—concl'd.

ITEM OF EXPENDITURE	Home labour			Saddar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
5. Charges for bullock labour.	10 0 8	5 0 4	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.....												
7 15 5												
(b) Interest on the value of bullocks, feeds and fodder												
2 1 3												
6. Charges for implements and tools	2 15 9	1 7 10·5	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.	
Rs. a. p.												
(a) Depreciation..												
2 3 11												
(b) Interest.....												
0 11 10												
7. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).....	0 4 9	0 2 4·5	Charged at 12 per cent per annum.	
8. Rent of land	13 15 5	6 15 8·5		
Total....	..	11	14	5·5	..	20	..	35·0	17·5	37 6 7	18 11 3·5	

¹Family labour not charged.

²Home bullock labour charged under Item 5.

³Wages of *saddar* charged under Item 4.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres	Per acre	For 2 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i>	1,056	528	48 0 0	24 0 0	Valued at 22 lbs. per rupee.
<i>Sarmad</i> (1,300 bundles) ..	2,600	1,300	26 0 0	13 0 0	Valued at Rs. 2 per 100 bundles.
<i>Bhoos</i> .....	..	..	2 0 0	1 0 0	Estimated value.
Total .....	..	..	76 0 0	38 0 0	

(c) Summary

1	2	3	4	5	6
				(i.e. col. 2-3)	(i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres	76 0 0	37 6 7	(a) 11 1 11 (b) 3 1 10	+38 9 5	+52 13 2
Per acre ..	38 0 0	18 11 3·5	7 1 10·5	+19 4 8·5	+26 14 7

WADGAON, FARMER (B)

STATEMENT No. 32

GRAM—2 acres in 1929-30

PLOT No. (15)

Previous crop—Bajri, 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ³		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage .....	..	..	..	..	..	..	..	..	..	....	....	As gram was sown behind the plough no preparatory tillage was given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	6 0 0	3 0 0	For the plot 60 lbs. of gram.
(b) Sowing after plough ..	5	..	20	5	..	..	..	30.0	15	....	....
3. Harvesting, thrashing and Carrying home .....	..	1	4	3	..	8	..	11.5	5.75	2 0 0	1 0 0	Woman units paid at annas four.
4. Wages of <i>saldar</i> .....	..	..	..	..	..	..	..	..	..	4 8 8	2 4 4	Annual wages of <i>saldar</i> are distributed on different plots in proportion to the units used on them.
5. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	17 3 6	8 0 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.

(a) Feeds, fodder, depreciation, etc.	Rs. a. p.																					
(b) Interest on the value of bullocks, feeds and fodder	8 9 2																					
6. Charges for implements and tools		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Rs. a. p.																					
(a) Depreciation	3 13 5																					
(b) Interest.....	1 4 4																					
7. Interest on the fixed capital (i.e., wages for hired labour and cost of seeds) ..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8. Rent of land .....		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total....		5	1	24	8	..	8	..	41.5	20.75	46 15 8	23 7 10										

The total annual charges are distributed on different plots in proportion to the bullock labour used on them.

Charged at 12 per cent per annum.

The land was owned. The plot had *bajra* in the same year. The rent is therefore distributed in proportion to the value of yields of these crops.

¹Family labour not charged. ²Home bullock labour charged under item 5. ³Wages of *salidar* charged under item 4.

WADGAON, FARMER 1(B)

STATEMENT No. 32—concl.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres	Per acre	For 2 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	420	210	28 0 0	14 0 0	Valued at Rs. 8 per 120 lbs. Estimated value.
Bhoos .....	..	..	1 0 0	0 8 0
Total.....	..	..	29 0 0	14 8 0

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres	29 0 0	46 15 8	(a) 9 5 9 (b) 5 3 3	-17 15 8	-3 6 8
Per acre ..	14 8 0	23 7 10	7 4 6	-8 15 10	-1 11 4

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage	The garden was 20 years old. The farmer did not remember the capital cost. Moreover even if such cost was available it is not desirable to spread it over more than 20 years. Hence capital cost is not charged. The plot is rented to a tenant for Rs. 325 for two years. The costs shown in the statement are costs of the operations which were undertaken by the farmer. The owner supplied water and manure. The other operations performed by the tenant are not detailed here, as the study is restricted to the man who owns the land.
2. Manure and manuring											
(a) Residual manure	8 0 0	2 10 7	Twenty cartloads of municipal refuse at 8 annas each were given to the previous crop; thirty per cent of the total cost is charged to this crop.
(b) Carting for residual manure	6 0 0	5 5 4	Cartage was Rs. 20; thirty per cent of the total cost is charged to this crop.

WADGAON, FARMER I (B)

STATEMENT No. 33—concl.

178

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks	Men	Women	Bullocks			For the plot	Per acre	
(c) Municipal refuse	Rs. s. p. 5 4 0	Rs. s. p. 4 10 8	Twenty cartloads of municipal refuse at annas six were given. Seventy per cent of the cost is charged to this crop.
(d) Carting	15 12 0	14 0 0	Cartage was Rs. 22-8-0; seventy per cent of the cost is charged to this crop.
3. Irrigation											
(a) Canal water charges	39 7 0	35 1 0	At Rs. 33 per acre per year plus one anna in the rupee as L.F.C.
4. Interest on fluid capital (i.e., wages for hired labour and cost of manure)											
..	8 9 7	8 8 2	Charged at 12 per cent per annum.
5. Rent of land											
..	45 0 0	40 0 0	The land was owned.
Total....	118 0 7	104 14 9	

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 1 acre and 5 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Guavas	162 8 0	144 7 1	
Total....	162 8 0	144 7 1	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 5 gunthas ..	162 8 0	118 0 7	(a) 40 14 0 (b) 3 9 7	+44 7 5	+88 15 0
Per acre	144 7 1	104 14 9	40 1 5	+39 8 4	+79 9 9

WADGAON, FARMER 2, PART (A), 1928-

This is a second farmer at Wadgaon whose farm was costed for two years in 1928-29 and 1929-30. General information about the village, its geographical situation, climate, communications, distribution of land, crops and cropping and the seasonal conditions obtaining in the year 1928-29, are given under Wadgaon farmer No. 1, Part (A).

This farmer owned 6 acres and 35 gunthas of land in two places. Out of the area, 4 acres and 2 gunthas had facilities of canal water. Of the irrigated land, one acre was rented out, one acre was put to sugarcane and six gunthas remained uncultivated. (It may be noted that the canal authorities generally allow water to multiples of 10 gunthas and hence these 6 gunthas could not get water.) Out of the two acres and 33 gunthas of *jirayat* land, 27 gunthas were very poor. This poor piece supplied a little grazing to farm cattle. Thus the farmer had only 5 acres and 2 gunthas under cultivation. As there was no double cropping on any part, the net cropped area came to only 5 acres and 2 gunthas. The farmer's family consisted of five members :—

1. Husband	35 years.
2. Wife	30 „
3. Son	14 „
4. Eldest daughter	8 „
5. Second daughter	4 „

The farmer did not do much manual work on the farm. He, however, organized farm labour, supervised work and attended to the marketing of farm produce. His wife also was not of much use on the farm. She only looked after the household work. Their son was at school, while the daughters were too young to be able to render any assistance on the farm. All the farm work, therefore, had to be paid for. The farmer had employed a *saldar* who took care of cattle and kept watch on the crops. In addition to such miscellaneous work he put in 138 days' active work on the farm in the course of the year (or 176·5 days on the crops of the year). The farmer had to employ 331 man units, 288 woman units and 263 bullock units and also give some work on contract basis. For the outside labour including contract work the wage bill came to Rs. 399-12-8, besides the wage of *saldar* Rs. 142. It may, however, be remembered that part of the expenses considered as capital cost against banana plantation are not included in the account of the year 1928-29. Of the cost of the outside labour, only the cost of 190·5 man units, 244 woman units and 214 bullock units and of part of the contract work together amounting to Rs. 298-10-7 and the share of the wages of *saldar* (Rs. 131-11-11) are debited against the crops of

1928-29. In the first year of the banana plantation the farmer took a sub-crop of brinjal. In the year's debit will be found only the full share of the brinjal (plot No. 2) as far as the new banana plantation is concerned. There was another banana plot (No. 3) already established and by way of the share of the capital cost Rs. 53 are debited.

The following table gives the allocation of the wages of the *saldar* on the different crops. The yearly wages of the *saldar* are distributed on the different crops in proportion to the number of work days spent on them :—

TABLE VII (a)—THE DISTRIBUTION OF THE WORK OF THE FARM SERVANT

Name of the crop	Area	Distribution of work days	Distribution of wages
	A. g.			Rs. a. p.
Total ..	5 2	176·5	142 0 0
Plot No. 1 Sugarcane	1 0	57·0	45 13 10
Plot No. 2 Brinjal (in banana)	1 0	39·75	31 15 9
Capital cost on banana (Statement No. 36).				12·75	10 4 1
Plot No. 3 Banana (fourth year)	1 0	23·50	18 14 6
Plot No. 4 <i>Dudhya bhopala</i>	1 0	31·5	25 5 4
Plot No. 5 Guava	1 2	12·0	9 10 6

Bullock Labour.—The farmer did not keep bullocks for farm work. He had kept two bullocks for a *dhamni* (driving cart) for going to Poona and other places. All bullock labour was taken on hire.

The opening and closing inventories of the property for two years 1928-29 and 1929-30 are given in table IX.

The net worth of the farm business increased by Rs. 204-8-0 at the end of the first year as the banana crop came into bearing. In the course of the second year there was further small rise of Rs. 9-12-0. Thus in the course of two years the net rise in the inventory was Rs. 214-4-0.

Nature of the holding, lands, crops and cropping.—The nature of land, crops and cropping and treatment of different fields held by the farmer in 1927-28, 1928-29 and 1929-30 are given in table X.

TABLE IX—INVENTORY OF THE PROPERTY OF THE FARMER NO. 2

Items	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
<i>Assets</i>	A. g.	Rs. a. p.		A. g.	Rs. a. p.		A. g.	Rs. a. p.	
1. Real estate									
(A) Land									
(a) Field No. 1	2 6	1,290 0 0	Valued at Rs.600 per acre.	2 6	1,290 0 0		2 6	1,290 0 0	
(b) Field No. 2	2 20	2,065 0 0	1 acre and 2 gunthas were under guavas. This land was valued at Rs. 1,000 per acre; rest of the land at Rs. 700 per acre.	2 20	2,065 0 0		2 20	2,065 0 0	
(c) Field No. 3	2 9	1,835 0 0	2 acres and 9 gunthas valued at Rs. 600 per acre.	2 9	1,835 0 0		2 9	1,835 0 0	
	6 85	4,690 0 0		6 85	4,690 0 0		6 85	4,690 0 0	
(B) Buildings									
(a) Village house ...	1	1,000 0 0		1	1,000 0 0	Some repairs were made.	1	1,000 0 0	House and shed were repaired.
(b) Farm house	1	150 0 0		1	150 0 0		1	150 0 0	
(c) Cattle shed on the farm	1	25 0 0		1	25 0 0		1	25 0 0	
Total real estate		5,865 0 0			5,865 0 0			5,865 0 0	

2. Livestock									
(a) Bullocks	2	200 0 0	For driving purposes.	1	100 0 0	One bullock died.	1	90 0 0	
(b) Cow	1	25 0 0	Cow (dry).	1	40 0 0	Cow in milk.	1	20 0 0	Cow (dry).
(c) Calf	1	5 0 0		1	10 0 0		1	15 0 0	
Total livestock		280 0 0			150 0 0			125 0 0	
3. Implements and tools, etc.									
(a) Plough	1	35 0 0		1	20 0 0	Plough share worn out.	1	15 0 0	
(b) Harrow	1	2 0 0		1	1 8 0		1	1 4 0	
(c) Cart (<i>dhamni</i>) ..	1	40 0 0		1	80 0 0		1	24 0 0	Old cart.
(d) Tools	---	6 0 0		---	4 0 0		---	8 0 0	
(e) Yokes	2	2 8 0		2	2 0 0		2	1 8 0	Old.
(f) Ropes	---	5 0 0		---	2 0 0		---	14 0 0	New purchases.
Total implements and tools		90 8 0			59 8 0			56 12 0	

TABLE IX—INVENTORY OF THE PROPERTY OF THE FARMER NO. 2—concl'd.

1928				1929			1930		
Items	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
		Rs. a. p.			Rs. a. p.			Rs. a. p.	
4. Value of standing crop									
(a) Bananas plot No. 3 .....	....	200 0 0		....	200 0 0		....	150 0 0	
(b) Banana plot No. 2 .....	....	....		....	270 0 0		....	350 0 0	
Total value of standing crop		200 0 0			470 0 0			500 0 0	
5. Farm produce and supplies on hand									
(a) Bajri	880 lbs.....	20 0 0		660 lbs.....	36 0 0		880 lbs.....	17 0 0	
(b) Kadbi	800 bundles..	12 0 0		500 bundles ..	7 8 0		100 bundles .	5 0 0	
(c) F. Y. M.	10 cart-loads.	20 0 0		12 cart-loads	24 0 0		8 cart-loads	16 0 0	
Total farm produce on hand		52 0 0			67 8 0			38 0 0	
6. Cash on hand .....	....	100 0 0		....	65 0 0		....	40 0 0	
Total Assets		6,587 8 0			6,677 0 0			6,626 12 0	

<i>Liabilities</i>					
(a) Debt at 12 per cent.	775 0 0		700 0 0	Rs. 75 from the capital amount and the interest have been paid.	700 0 0
(b) Miscellaneous debts	50 0 0		80 0 0		
<i>Total Liabilities</i>	<u>825 0 0</u>		<u>780 0 0</u>	....	<u>700 0 0</u>
<i>Net worth of the Farm at the beginning of the year</i>	<u>5,712 8 0</u>		<u>5,917 0 0</u>		<u>5,926 12 0</u>

The farmer paid the interest on Rs. 700.

SUMMARY

	Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928....	5,712 8 0	
Net worth of the farm at the beginning of 1929	<u>5,917 0 0</u>	
<i>Gain in net worth in 1928</i>		204 8 0
Net worth of the farm at the beginning of 1929....	5,917 0 0	
Net worth of the farm at the beginning of 1930....	<u>5,926 12 0</u>	
<i>Gain in net worth in 1929</i>		<u>9 12 0</u>
<i>Therefore net gain in two years</i>		214 4 0

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Field No.	Area	Nature of land	1927-28		1928-29			1929-30		
			Crop	Treatment	Crop	Plot No.	Treatment	Crop	Plot No.	Treatment
1	A. g. 1 0	Soil good, slopping and liable to be washed; shaded by trees.	<i>Nilava</i>	Harrowed three times and sown; no manure was applied.	Sugarcane.....	1	Four ploughings and one ridging; 100 carts of municipal refuse and 20 bags of fish manure were applied. Four hand weedings and an earthing up were done.	<i>Bhopala</i>	4	One ploughing and clod crushing; One cart of municipal refuse and three bags of fish were given; Received regular watering.
2	1 0	Black retentive soil; well drained and level.	Sugarcane.....	Four ploughings and ridging were given. 60 carts of municipal refuse and artificial manure were applied.	Banana with brinjals as subsidiary crop.	2	Two ploughings; 81 carts of municipal refuse and 4 bags of fish sand given. 4 weedings and one hand digging were given.	Banana.....	2	Regular watering at the interval of 10 days; one hand weeding.
3	1 0	Do.	Banana.....	Regular watering and hand weeding were given.	Banana.....	3	Two weedings and regular watering and nothing else.	Banana.....	3	Two weedings and regular watering.
4	1 0	Do.	Banana.....	No other treatment except watering.	<i>Bhopala</i>	4	Hand digging for taking out banana suckers; 2 harrowings; 3 carts of municipal refuse were given. It was a rainfed crop.	Sugarcane.....	1	Four ploughings and one ridging were given. 20 carts of municipal refuse, 4 bags of fish sand and 15 <i>pallas</i> of sawflower cake were given. 4 hand weedings and earthing up were done.
5	1 2	Do.	Guava	Received regular watering and 25 carts of municipal refuse.	Guava	5	Regular watering. 14 carts of municipal refuse were given.	Guava	5	Regular watering. 5 carts of municipal refuse and one hand digging.

The following table shows the cropping of the farmer for 1928-29 and 1929-30.

TABLE X (a)—DISTRIBUTION OF CROPS

1928-29			1929-30		
Crop	Area	Per cent	Crop	Area	Per cent
	A. g. 5 2	100·00		A. g. 5 2	100·00
Sugarcane	1 0	19·8	Sugarcane.....	1 0	19·8
Banana	2 0	39·6	Banana.....	2 0	39·6
<i>Dudhya</i>	1 0	19·8	<i>Dudhya</i>	1 0	19·8
Guava	1 2	20·8	Guava	1 2	20·8

COSTS AND RECEIPTS

An abstract of expenditure.—In the following statement an abstract of expenditure for the farm is given:—

ABSTRACT OF COSTS

Item of Expenditure	Cost for the total cultivated area (viz., 5 acres and 2 gunthas)	
	Rs. a. p.	Rs. a. p.
I.* Out-of-pocket expenses :		
(a) Manures	189 14 5	
(b) Seeds	77 10 0	
(c) Day-labour and contract labour	298 10 7	
(d) <i>Saldar</i>	131 11 11	
(e) Depreciation on implements and tools	27 14 11	
(f) Marketing charges	21 5 9	
(g) Assessment and L. F. C. for owned land ..	14 8 8	
(h) Irrigation charges	137 3 7	
(i) Miscellaneous	12 0 0	
(j) Capital cost on account of banana (see plot No. 3)	53 0 0	
		963 15 10
II. Rent of owned land excluding assessment and L. F. C.	160 8 1	160 8 1
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	60 15 2	
(b) Interest on the value of equipment and tools	9 12 6	
		70 11 8
<i>Total cost of production excluding the wages of family labour</i>		1,195 3 7

*DETAILS OF OUT-OF-POCKET EXPENSES

	Rs.	a.	p.	Rs.	a.	p.
1. Manures :						
(A) Bulky manure						
(a) Hundred cartloads of municipal refuse at 6 annas per cart were given. 70 per cent of the cost is charged to this plot	26	4	0			
(b) Plot No. 2; thirty-one cartloads of municipal refuse at 8 annas per cart were given. The cost is treated as capital cost against banana and nothing is debited in this year	0	0	0			
(c) Plot No. 4; three carts of municipal refuse (at Rs. 1-8-0 per cart on the spot) were given. 50 per cent of the total cost is charged to the crop	2	4	0			
(d) Plot No. 5; Fourteen cartloads of municipal refuse at 8 annas per cart were given. 70 per cent of the total cost is charged to this crop ..	4	14	5			
	<hr/>					
	33	6	5			
(B) Concentrated manures						
(a) Plot No. 1; twenty bags of fish manure at Rs. 6 per bag	120	0	0			
(b) Plot No. 2 (Brinjal); four bags of fish manure refuse at Rs. 1-4-0 per bag	5	0	0			
	<hr/>					
	125	0	0			
(C) Residual manure						
(a) In the year 1927-28 plot No. 2 having sugarcane received sixty cartloads of municipal refuse worth Rs. 90 including carting. Half of the residue of 30 per cent is carried as capital cost to banana and half to brinjals	13	8	0			
(b) In the year 1927-28 plot No. 3 having banana received 15 cartloads of municipal refuse worth Rs. 22-8-0 including carting; 30 per cent of the residue	6	12	0			
(c) In the year 1927-28 plot No. 5 having guavas received 15 cartloads of municipal refuse worth Rs. 37-8-0; 30 per cent of the residue	11	4	0			
	<hr/>					
	31	8	0			
				<hr/>	189	14 5
2. Seeds :						
(a) Sugarcane sets, 13,000 sets at Rs. 5 per thousand.....	65	0	0			
(b) Banana suckers, 450 at Rs. 12 per 100 (Rs. 54). This sum goes as capital cost to banana in the following years and nothing is debited in this year .....	....				
(c) Two <i>bhopla</i> fruits for seed	2	0	0			
(d) Vegetable seeds (plot Nos. 1 and 2)	10	10	0			
	<hr/>				77	10 0

3. <i>Wages of outside labour :</i>			
(a) Sugarcane (plot No. 1), 140 men, 150 women and 175 bullocks		Rs. a. p. 188 10 10	Rs. a. p.
(b) Brinjals in banana (plot No. 2). Out of the common labour of 139 men, 101 women and 49 bullocks (costing Rs. 139-14-7), only 18·5 men and 57 women (costing Rs. 35-12-6) are charged to brinjals		35 12 6	
(c) Banana alone (plot No. 3), 13 men and 15 women. Carrying fruit to market		10 4 0 9 2 0	
(d) <i>Dudhya dhopla</i> (plot No. 4) 15 men, 8 women and 28 bullocks		21 14 0	
(e) Guava (plot No. 5), 29 men, 14 women and 14 bullocks		32 15 3	
			298 10 7
4. <i>Depreciation on implements and tools :</i>			
	Rs. a. p.		
Opening inventory	90 8 0		
Closing inventory	59 8 0		
	31 0 0		
Out of the depreciation of Rs. 31 only Rs. 3-1-1 go as capital cost against banana	- 3 1 1	27 14 11	27 14 11
5. <i>Charges for marketing of the produce :</i>			
Vegetables (plot Nos. 2 and 4)			
Brokerage and <i>batta</i>		15 13 9	
<i>Batta</i> (on fruit, plot No. 3)		5 8 0	
			21 5 9
6. <i>Assessment and L. F. C. :</i>			
	A. g.		
Plot No. 1	1 0	5 3 6	
Plot No. 2	1 0	2 7 6	
Plot No. 3	1 0	3 7 9	
Plot No. 4	1 0	1 0 5	
Plot No. 5	1 2	3 9 3	
		15 12 5	
Of this sum of Rs. 15-12-5 Rs. 1-3-9 go as capital cost to banana for the following years	- 1 3 9		14 8 8
7. <i>Wages of saldar :</i>			
The annual pay Rs. 142 is distributed on different crops as per table VII (a) page 181, Rs. 10-4-1 go as capital cost to banana			131 11 11
8. <i>Irrigation charges :</i>			
Plot No. 1		47 13 0	
Plot No. 2 and statement No. 36		35 1 0	
Plot No. 3		35 1 0	
Plot No. 5		36 13 1	
Out of the sum of Rs. 154-12-1, Rs. 17-8-6 are carried as capital cost to banana	- 17 8 6		137 3 7
9. <i>Miscellaneous expenses on plot No. 1</i>		12 0 0	12 0 0
10. <i>Capital cost of banana plot No. 3</i>		53 0 0	53 0 0
			963 15 10
<i>Total out-of-pocket expenses</i>			963 15 10

Family Labour Income.—The following table gives the family labour Income i.e., the remuneration obtained by the farmer for the management of the farm. The details of the cost of production have already appeared. The value of produce is taken from the cost and receipt statements of the various plots (pages 193 to 209).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production excluding wages of family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total....	5 2	1584 3 0	963 15 10	70 11 8	160 8 1	1195 3 7	+388 15 5
Sugarcane ..	1 0	704 0 0	523 9 4	47 3 5	62 11 6	633 8 3	+70 7 9
Banana (in 4th year)..	1 0	236 12 0	158 9 2	10 0 11	35 8 3	204 2 4	+32 9 8
Brinjals (in banana plot)	1 0	196 13 0	115 2 7	3 13 5	11 12 3	130 12 3	+66 0 9
Bhopla.....	1 0	156 10 0	61 0 11	2 10 10	12 1 4	75 13 1	+80 12 11
Guava.....	1 2	250 0 0	105 9 10	6 15 1	38 6 9	150 15 8	+99 0 4
Miscellaneous receipts of mangoes from farm trees.....	..	40 0 0	..	..	..	..	+40 0 0

Column 4.—Out-of-pocket expenses include cost of manure, seed, hired labour on daily wages and piece-work, wages of *saldar*, depreciation on deadstock, irrigation charges, marketing expenses, assessment and L. F. C. on owned land and other miscellaneous cash expenses. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on the current agricultural operations and on feed and fodder for the work animals. Fixed capital includes implements and work animals. *Column 6* denotes the estimated rent of owned land, minus assessment and L. F. C. *Column 8* shows wages earned by the family.

The value of the gross produce from the farm was Rs. 1,584-3-0, while the cost of production excluding the wages of the farmer came to Rs. 1,195-3-7 which left Rs. 388-15-5 as family labour income.

The family labour income (Rs. 388-15-5) was not the only income of the farmer, since the rent of owned land and the interest on the working capital, which are debited to the cost, were saved to the farmer.

Farm Business Income.—The following table gives the farm business income of the farmer i.e., the value of the produce minus only the out-of-pocket expenses :—

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	5 2	1,584 3 0	963 15 10	+620 3 2
Sugarcane	1 0	704 0 0	} 963 15 10	} +620 3 2
Banana	1 0	236 12 0		
Brinjals (in banana plot)....	1 0	196 13 0		
Bhopala	1 0	156 10 0		
Guava	1 2	250 0 0		
Miscellaneous receipts of mangoes from farm trees..		40 0 0		

The gross receipts obtained, as given above, were Rs. 1,584-3-0, while the out-of-pocket expenses came to Rs. 963-15-10 leaving a sum of Rs. 620-3-2 in the form of farm business income.

The farm business income, made up of the family labour income, interest on working capital and the rent of owned land (minus assessment and L. F. C.) as shown below, tallies with the figures arrived at in the table above :—

	Rs. a. p.
Family labour income	388 15 5
Interest on working capital	70 11 8
Rent of owned land	160 8 1
	<hr/>
	620 3 2

Over and above Rs. 620-3-2 the farmer received Rs. 41-14-10, the rent of land which was leased out, making up total income of Rs. 662-2-0.

ANALYSIS

The farmer and his wife did not take part in active farm operations. On a small farm, unless farm family works it, is expecting too much to make a decent living. The farmer had engaged one *saldar* at Rs. 142

a year, besides paying Rs. 298-10-7 for day and contract work. Had the farmer dispensed with the *saldar* and put his shoulders to work he could certainly have made much larger income. The family labour income of Rs. 388-15-5 or a farm business income of Rs. 620-3-2 was only due to the advantageous position of the farm, within easy reach of the market and on the road. Unlike other farm produce, fruit had not gone down in prices and though the price of *gul* was low that of sugarcane, required by the Poona public for chewing and juice, was not bad. Taking into account the fact that the farm family did not work on the farm, the family labour income can in this case be considered as net profit.

GENERAL REMARKS ABOUT CROPS GROWN

Sugarcane plot No. 1.—There was only one plot of sugarcane. The land was not well levelled and so water used to accumulate in lower portions. Due to the roots and shade of mango tree in the plot, the stand of the crop was poor and further the crop was badly touched by frost in February. The plot was well manured; yet the crop could not be very good. The farmer did well in selling standing crop to a merchant who sold the same in small lots for chewing and juice purposes in Poona. Looking to the depression in sugarcane the income from cane was not bad.

Banana and brinjal; plot Nos. 2 and 3.—The farmer had two acres under banana in two plots (plot Nos. 2 and 3).

Plot No. 2.—One acre was under banana with brinjals as subsidiary crop. Since banana does not bear in the first year the costs incurred in connection with banana are considered as capital costs against that crop and only the cost incurred for brinjals and part of the common costs are debited to brinjals. As will be seen from table XI page 190, the sub-crop of brinjals left a fair amount of family labour income, i.e. Rs. 66-0-9. Since rent of land and interest on working capital are debited as costs the farm business income amounted to Rs. 81-10-5.

Plot No. 3.—This banana plantation of one acre was in its fourth year. Near Poona in the fourth and fifth years leaves of banana are considered as an important source of income. The plot did not receive canal water in February and March; moreover it was touched by frost and as a result leaves were spoiled. The family labour income was only Rs. 32-9-8 and farm business income Rs. 78-2-10.

Plot No. 4—Dudhya bhopla.—The previous crop in the plot was banana. Banana leaves the land rich and makes a very good seed-bed for *dudhya*, because of the residual manure left and the beneficial effect of thick shade in smothering weeds. *Dudhya* gave good yield and left Rs. 80-12-11 as family labour income which might be considered as net profit as the farm family did not work themselves.

STATEMENT No. 34

PLOT No. (1)

(a) Cost of Production

SUGARCANE—One acre in 1928-29

Previous crop—Jowar, 1927-28

MO-1 Q 84-13

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men	Women	Bullocks		Per acre					
1. Preparatory tillage									Rs. a. p.	
(a) Ploughing.....	18	..	54	72	45 0 0	Four ploughings were given. A plough required two men and six bullocks. Contract was given for Rs. 45.
(b) Clod crushing and breaking	1	19	..	4	24	10 8 0	Nineteen men and four bullocks were paid Rs. 10-8-0.
(c) Digging corners.....	4	..	..	..	4	....
2. Manure and manuring										
(a) Manures										
(i) Municipal refuse	26 4 0	For the plot 100 carts of municipal refuse at 6 annas per cart were given; seventy per cent of the cost is charged to this crop.
(ii) Fish manure	120 0 0	For the plot 20 bags of fish manure were given as top dressing at Rs. 6 per bag at the farm.
(b) Carting municipal refuse	50	..	100	150	52 8 0	Hundred cartloads at 12 annas a trip; seventy per cent of the cost is charged to this crop.
(c) Manuring	2	20	8	..	26	9 4 10	Eighteen men were required for spreading municipal refuse; they were paid at 8 annas each. Seventy per cent of this cost is charged to this crop (Rs. 6-4-10). Two men and eight women were paid at 8 annas and 4 annas each respectively (Rs. 3). They were required for spreading fish manure and hence full cost is charged.

WADGAON, FARMER 2(A)

193

STATEMENT No. 34—concl.

194

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
3. Seeds and sowing								Rs. s. p.		
(a) Sets	65 0 0		For the plot 13,000 sets at Rs. 5 per thousand. <i>Khira</i> seed Re. 1-0-0; <i>kurdi</i> , Re. 0-12-0; <i>charali</i> , Re. 0-0-0; <i>gurur</i> , Re. 0-12-0; <i>bhendi</i> , Rs. 3-12-0. Two bullocks were paid at 8 annas each. Four men were paid at 8 annas and ten women at 3 annas each.
(b) Vegetable seeds	6 10 0		
(c) Carting sets	1	..	10	2	1 0 0		
(d) Planting	2	4	..	..	3 14 0		
4. Irrigation										
(a) Canal water charges	47 13 0		Irrigation charges at Rs. 45 per acre and local-fund cess 1 anna in the rupee.
(b) Labour	41	..	..	..	..
5. After-care and tillage										
(a) Weeding	6	..	132	..	72	33 0 0	Five weeding were given. Women were paid at 4 annas each.
(b) Earthing up	18	..	..	18	18 0 0	Contract work at Rs. 18 per acre.
6. Harvesting and preparing for market	Standing crop was sold.
7. Charges for removing cane stubbles	11	..	15	20	15 8 0	Contract work.
8. Saldar	45 13 10	Annual wage of <i>saldar</i> is distributed over different plots in proportion to the units used on them.
9. Charges for implements and tools	8 4 7	The total annual charges are distributed over different plots according to their area.
(a) Depreciation .. Rs. 6 2 2										
(b) Interest .. Rs. 2 2 5										
10. Miscellaneous expenses	12 0 0	
11. Interest on fixed capital (i.e., wages of hired labour and cost of seeds and manure)	45 1 0	Charged at 12 per cent per annum.
12. Rent of land	67 15 0	The land was owned. Rent charged to sugarcane is more being charged in proportion to the value of crops entering sugarcane rotation.
Total	57	140	150	175	447	633 8 3	

FARM STUDIES

¹Wages of *saldar* charged under item 8.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
Sugarcane.....	Rs. a. p. 650 0 0	Standing crop was sold.
Vegetables	50 0 0	Do. do.
<i>Shevri</i> branches (32 bundles).	4 0 0	At 2 annas per bundle.
Total....	704 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	704 0 0	633 8 3	(a) 62 11 6 (b) 47 3 5	+70 7 9	+180 6 8

WADGAON, FARMER 2(A)

STATEMENT No. 35

196

BRINJALS IN BANANA—1 acre in 1928-29

PLOT No. (2)

Previous crop—Sugarcane, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on dally wages			Total units	Cost exclud- ing that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
1. Preparatory tillage									Rs. a. p.	
(a) Ploughing.....	Cost of ploughing is charged to the main crop of banana (statement No. 36).
2. Manure and manuring										
(a) Residual manure.....	13 8 0	For common costs of manures see remarks in the statement.
(b) Fish powder mixed with sand	5 0 0	Four bags of fish manure at Re. 1-4-0 per bag were given to brinjals as top dressing.
(c) Manuring.....	6'0	..	..	6'0	3 0 0	Six men at 8 annas each were required for top dressing with fish.
3. Seeds and sowing										
(a) Seeds.....	4 0 0	
(b) Transplanting.....	3'0	13	..	9'5	4 5 6	Three men were paid at 8 annas and thirteen women at 3½ annas each.

FARM STUDIES

4. Irrigation												
(a) Canal water charges .....	..	..	..	..	..	..	..	..	17	8	0	Irrigation charges at Rs. 33 per acre and local-fund cess 1 anna in the rupee. Half the cost is charged to brinjals and half to banana (statement No. 86).
(b) Labour.....	..	..	..	8.75	1.0	..	..	9.75	0	8	0	One man was paid 8 annas.
5. After-care and tillage												
(a) Weeding .....	..	..	..	..	..	44	..	22.0	11	0	0	Two weedings were given. Women were paid at 4 annas each.
(b) Earthing up (brinjals) .....	..	..	..	..	7.5	..	..	7.5	4	11	0	Men were paid at 10 annas.
6. Harvesting and preparing for market .....	..	..	..	31.0	1.0	..	..	32.0	0	8	0	Man was paid 8 annas.
7. Marketing												
(a) Labour.....	..	..	..	..	..	..	..	..	11	12	0	Contract work at 4 annas per headload. Forty-seven headloads were taken from the field to the Poona market (contract labour not shown in labour units).
(b) Brokerage, etc. ....	..	..	..	..	..	..	..	..	3	1	0	Brokerage at 3 pies per rupee sale of produce.
8. <i>Saldar</i>.....	..	..	..	..	..	..	..	..	31	15	9	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
9. Charges for implements and tools .....	..	..	..	..	..	..	..	..	4	2	3	The total annual charges are distributed over different plots according to their area. Half of the cost is charged to brinjals the remaining half to banana.
(a) Depreciation ..	Rs. a. p.	3	1	1								
(b) Interest ..	1	1	2									
10. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure).....	..	..	..	..	..	..	..	..	2	12	3	Charged at 12 per cent per annum.
11. Rent of land.....	..	..	..	..	..	..	..	..	13	0	0	The land was owned. Annual rent is calculated at Rs. 39 per acre. The crop being a sub-crop (statement No. 86) one-third of the rent (Rs. 13) is charged.
Total.....	..	..	..	39.75	18.5	57	..	86.75	180	12	3	

¹Wages of *saldar* charged under item 8.

STATEMENT No. 35—concl.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Brinjals.....	191 13 0	Sold at different rates.
Brinjal seedlings....	5 0 0	Got Rs. 5 by selling seedlings that were left.
Total....	196 13 0	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For one acre.	196 13 0	130 12 3	(a) 11 12 3 (b) 3 13 5	+66 0 9	+81 10 5

BANANA—1 acre in 1928-29

STATEMENT No. 36

Previous crop—Sugarcane, 1927-28

Capital Cost of Banana (Plot No. 3 of 1928-29 and No. 3 of 1929-30)

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
									Rs. a. p.	
1. Preparatory tillage.....	All preparatory cost is charged to banana. No cost goes to brinjil crop in the plot which is termed (Plot No. 2).	
(a) Ploughing.....	6·0	..	18	24·0	15 0 0	Two ploughings were given. A plough required two men and six bullocks. It was contract work for Rs. 15.
(b) Putting bunds.....	6·0	..	..	6·0	3 0 0	Six men were paid at 8 annas each.
(c) Digging pits.....	28·0	..	..	28·0	14 0 0	Twenty-eight men were paid at 8 annas each.
2. Manure and manuring										
(a) Residual manure.....	13 8 0	Thirty per cent of the cost of municipal refuse given to the previous crop comes to Rs. 27. Half of the cost is charged to this banana; remaining half is charged to brinjil (Plot No. 2).
(b) Municipal refuse.....	10 13 7	For the plot 31 carts of municipal refuse at 8 annas per cart; seventy per cent of the cost is charged to banana crop. None of this cost goes to the subsidiary crop.
(c) Carting municipal refuse.....	15·5	..	31	46·5	21 11 2	Haulage of 31 carts at Re. 1 per cart; seventy per cent of the cost is charged to banana; no cost goes to subsidiary crop.
(d) Manuring.....	2·0	14·0	..	..	16·0	4 14 5	For spreading municipal refuse 14 men were paid at 8 annas each; seventy per cent of the cost is charged to this crop.
3. Seeds and sowing										
(a) Suckers.....	54 0 0	For the plot 450 suckers at Rs. 12 per hundred.
(b) Planting.....	2·0	20·0	..	..	22·0	10 0 0	Twenty men were paid at 8 annas each.

WADGAON, FARMER 2(A)

STATEMENT No. 36—concl^d.

200

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on dally wages and contract			Total units	Cost exclud- ing that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
									Rs. a. p.	
4. Irrigation										
(a) Canal water charges	17 8 6	Irrigation charges at Rs. 33 per acre and local-fund cess 1 anna in the rupee. Half the cost is charged to banana and the remaining half to brinjals (Plot No. 2). One man paid at 8 annas. Cost is equally distributed over banana and brinjals (Plot No. 2).
(b) Labour	8.75	1.0	..	..	9.75	0 8 0	
5. After-care and tillage										
(a) Weeding	44	..	22.0	10 0 6	Two weedings were given. Thirteen women were paid at 4 annas each and 31 at 3½ annas each. Cost is equally distributed over banana and brinjals (Plot No. 2). Contract work at Rs. 25 per acre. Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them. The total annual charges are distributed over different plots according to their area. Half the cost is charged to banana, remaining half to brinjals (Plot No. 2).
(b) Earthing up	30.0	..	..	30.0	25 0 0	
6. <i>Saldar</i>	10 4 1	
7. Charges for implements and tools										
(a) Depreciation .. Rs. a. p.										
(b) Interest .. 3 1 1										
(c) Interest .. 1 1 8										
8. Interest on fixed capital (i.e., wages of hired labour and price of suckers and manure)	23 1 0	Charged at 12 per cent per annum. The land was owned. Rent is calculated at Rs. 89 per acre. One-third of the rent (Rs. 13) is charged to the sub-crop (Plot No. 2) and remaining Rs. 26 to this crop for the first year.
9. Rent of land	26 0 0	
Total	12.75	120.5	44	49	204.25	268 8 4	The capital cost of the banana plantation incurred in the first year thus comes to Rs. 268-8-4 per acre. Banana begins to yield from the second year and generally gives five harvests. Annual capital cost per acre may therefore be taken at Rs. 53.

¹ Wages of *saldar* charged under item 6.

FARM STUDIES

STATEMENT No. 37

BANANA—1 acre, 1928-29

PLOT No. (3)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on daily wages and contract			Total units	Cost excluding that of family labour	REMARKS
	Men	Women	Bullocks		Per acre					
									Rs. a. p.	
1. Capital cost.....	53 0 0	Since cost study was taken after the plantation was established annual capital cost is taken at Rs. 53 (on the analogy of statement No. 36 such cost comes to Rs. 53).
2. Preparatory tillage.....	The plantation being 5-year old preparatory tillage was not required.
3. Manure and manuring										
(a) Residual manure.....	6 12 0	Thirty per cent of the cost of municipal refuse applied during the previous year is charged for the residue.
4. After-care and tillage										
(a) Weeding and cutting dry leaves.....	2'0	13	15	..	22'5	10 4 0	Two weeding were given. Men were paid at 8 annas and women at 4 annas each.
5. Irrigation										
(a) Water charges.....	35 1 0	Irrigation charges at Rs. 33 per acre and local-fund cess 1 anna in the rupee.
(b) Labour.....	15'5	..	..	..	15'5	....

WADGAON, FARMER 2(A)

STATEMENT No. 37—concl'd.

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on dally wages and contract			Total units	Cost exclud- ing that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
Harvesting and preparing for market.....	6'0	..	..	..	6'0	Rs. a. p.	
Marketing										
(a) Labour.....	0 2 0	Seventy-three bunches were taken to the market. Contract work at 2 annas a bunch.
(b) Brokerage, etc.	15 13 9	Rs. a p. Brokerage .. 12 11 0 Batta .. 3 2 0 15 13 9
Saldar	18 14 6	Annual wages of <i>saldar</i> are distributed over different plots in proportion to the units used on them.
Cost of equipment.....	8 4 7	Annual charges are distributed over different plots according to their area.
(a) Depreciation ..										
(b) Interest ..										
Interest on fluid capital	7 14 6	Charged at 12 per cent per annum.
Rent of land.....	39 0 0	The land was owned.
Total.....	23'5	18	15	..	44'0	204 2 4	

¹ Wages of *saldar* charged under item 8.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Banana fruit	203 6 0	Sold at different rates.
Banana leaves	33 6 0	Do. do.
Total....	236 12 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	236 12 0	204 2 4	(a) 35 8 3 (b) 10 0 11	+32 9 8	+78 2 10

WADGAON, FARMER 2(A)

STATEMENT No. 38

DUDHYA BHOPALA—I acre in 1928-29

PLOT No. (4)

Previous crop—Banana

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on daily wages			Total units	Cost exclud- ing that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
									Rs. a. p.	
1. Preparatory tillage										
(a) Harrowing and levelling	1	1	..	4	6	2 8 0	Four harrowings were given. Man and bullocks were paid at annas eight each.
(b) Fencing (temporary).....	2	..	..	..	2	....
2. Manure and manuring										
(a) Manure										
Municipal refuse	2 4 0	Three carts of municipal refuse at Rs. 1-8-0. Fifty per cent of the cost is charged to this crops.
(b) Manuring	4	..	..	..	4	....
Seeds and sowing										
(a) Seeds	2 0 0	Seed from two <i>dudhya</i> fruits (Rs. 2).
(b) Dibbling	2	4	..	4	2 0 0	For dibbling and making ring plots; two men were paid at annas eight and four women at annas four each.

4. Irrigation												
(a) Labour .....	..	..	..	1	..	4	..	3	1 0 0	Hand watering was given from some adjoining source of water. Outside labour was paid at annas four each.
5. After-care and tillage												
(a) Weeding .....	..	..	..	6	..	..	..	6	....	Two weedings were given.
6. Harvesting and preparing for market .....	..	..	..	17·5	..	..	..	17·5	....		
7. Marketing												
(a) Carting .....	..	..	..	..	12	..	24	36·0	16 6 0	Twenty-four cartloads of the produce were taken to the market. Twenty-three carts were paid at annas 11 and one cart at annas nine a trip.
(b) <i>Batta</i> .....	..	..	..	..	..	..	..	..	2 7 0	<i>Batta</i> is charged at 3 pies per rupee sale of produce.
8. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	25 5 4	Annual wages of <i>saldar</i> are distributed on different plots in proportion to the units used on them.
9. Charges for implements and tools												
Rs. a. p.												
(a) Depreciation ..	6	2	2									
(b) Interest ..	2	2	5									
10. Interest on fixed capital (i.e., wages of hired labour and cost of seeds and manure).....	..	..	..	..	..	..	..	..	0 8 5	Charged at 12 per cent per annum.
11. Rent of land .....	..	..	..	..	..	..	..	..	13 1 9	The land was owned. Rent is distributed in proportion to the value of the yield of crops entering in the rotation.
Total ..	..	..	..	31·5	15	8	28	78·5	75 13 1	

¹Wages of *saldar* charged under item 8.

STATEMENT No. 38—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
<i>Bhopala</i> (fruits 2,416) ..	156 10 0	Sold at different rates in Pona market.
Total ..	156 10 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre ..	156 10 0	75 13 1	(a) 12 1 4 (b) 2 16 10	+80 12 11	+95 9 1

STATEMENT No. 39

PLOT No. (5)

GUAVA—1 acre 2 gunthas in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on daily wages and contract			Total units	Unit per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Capital cost	The garden was about 20 years old. The farmer did not remember its initial cost. Moreover, even if such cost was available it is not desirable to spread it over more than 20 years. Hence capital cost is not charged.
2. Manure and manuring												
(a) Residual manure....	11 4 0	10 11 5	Thirty per cent of the cost of municipal refuse applied to the previous crop, is charged for the residue.
(b) Municipal refuse....	4 14 5	4 10 8	For the plot 14 carts of municipal refuse at annas 8 each; seventy per cent of the cost is charged to this crop.
(c) Carting manure	7	..	14	21	20 0	0 12 10	0 5 4	Cartage of 14 carts at Re. 1 each; seventy per cent of the cost is charged to this crop.
(d) Manuring	2	14	..	0	8 57	3 2 5	3 0 0	Two men were paid at annas 8 and 14 women at annas 4 each; seventy per cent of the cost is charged to this crop.

WADGAON, FARMER 2(A)

STATEMENT No. 39—concl'd.

208

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on daily wages and contract			Total units	Unit per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks			For the plot	Per acre	
										Rs. s. p.	Rs. s. p.	
3. After-care and tillage												
(a) Bending branches	20	..	..	20	19'05	20 0 0	19 0 5	Contract work at Rs. 20 for the whole plot.
4. Irrigation												
(a) Canal water charges	36 13 1	35 1 0	Irrigation charges at Rs. 33 per-acre plus one anna in the rupee as local fund cost.
(b) Labour	12	..	..	..	12	11'43	..	..
5. Saldar	9 10 6	9 3 2	The cost of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
6. Charges for implements and tools.....	8 11 5	8 4 10	The total annual charges are distributed over different plots according to their area.
Rs. s. p.												
(a) Depreciation 6 7 4												
(b) Interest 2 4 1												
7. Interest on fluid capital (i.e., wages of hired labour and cost of manure)	4 11 0	4 7 5	Charged at 12 per cent per annum.
8. Rent of land	42 0 0	40 0 0	The land was owned.
Total	12	29	14	14	82	59'05	150 15 8	143 12 7	

¹Wages of *saldar* charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 1 acre and 2 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Guava (fruit).....	250 0 0	238 1 6	Standing crop was sold.
Total ..	250 0 0	238 1 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 2 gunthas	250 0 0	150 15 8	(a) 38 6 9 (b) 6 15 1	+99 0 4	+144 6 2
Per acre	238 1 6	143 12 7	43 3 3	+94 4 11	+137 8 2

WADGAON, FARMER 2(A)

WADGAON, FARMER No. 2, PART (B), 1929-30

In the opening lines of part (A) dealing with this farm general information about the farmer is given.

There was no change whatsoever in the area cultivated by the farmer during the year under study. The area of his cultivating holding was 5 acres and 2 gunthas. There was no double cropping in any part of the farm.

(a) *Human labour*.—There was no change in the family. Farmer's son continued going to school. As in the previous year the farmer only looked to the supervision of the farm and managed purchases and sales of the farm supplies and farm products. His wife looked after household work and the children. The services of the *saldar* were continued. The *saldar* in addition to putting 75·5 days' active work looked after the farm cattle and kept watch on the crops.

The following table gives the distribution of the labour of the *saldar* and the allocation of his wages.

TABLE VII (a)—DISTRIBUTION OF THE WORK OF THE *Saldar*

Name of crops	Area		Number of days' work put in	Amount charged
	A.	g.		
Total....	5	2	75·5	Rs. a. p. 150 0 0
<i>Bhopala</i>	1	0	....	....
<i>Banana</i>	2	0	42·5	84 7 0
<i>Sugarcane</i>	1	0	23·0	45 11 2
<i>Guava</i>	1	2	10·0	19 13 10

The yearly wage of the *saldar* is distributed on crops in proportion to the number of work days spent on them.

The nature of the holding, land, crops, cropping and treatment of different fields held in 1928-29 and 1929-30 have already been given in table X on page 186.

COSTS AND RECEIPTS

Expenditure.—In the following statements an abstract of expenditure for the farm is given:—

ABSTRACT OF COSTS

Item of expenditure	Cost of the total cultivated area (viz., 5 acres and 2 gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses :		
(a) Manures.....	226 4 2	
(b) Seeds.....	50 14 0	
(c) Day-labour.....	186 15 6	
(d) Contract labour.....	54 14 5	
(e) Wages of <i>saldar</i>	150 0 0	
(f) Depreciation on implements and tools..	14 12 0	
(g) Cost of bullock labour excluding interest on the value of feeds and fodder.	50 8 0	
(h) Marketing charges.....	47 5 9	
(i) Assessment and L. F. C. on owned land.	16 14 5	
(j) Irrigation charges.....	154 12 1	
(k) Miscellaneous expenses.....	10 0 0	
(l) Capital cost on account of banana Statement No. 36.....	106 0 0	
		1,069 4 4
II. Rent of owned land excluding assessment and L. F. C.....	182 0 10	182 0 10
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations.....	64 6 4	
(b) Interest on the value of implements and tools.....	8 5 6	
(c) Interest on the value of bullocks, feeds and fodder consumed by them.....	15 12 6	
		88 8 4
<i>Total cost of production (excluding wages for family labour).....</i>		1,339 13 6

*DETAILS OF OUT-OF-POCKET EXPENSES

	Rs. a. p.	Rs. a. p.
1. <i>Manures</i> :		
(A) Bulky manure		
(a) Plot No. 1; twenty cartloads of municipal refuse, 5 cartloads at 6 annas and 15 at 8 annas a cart; only 70 per cent of the total cost is charged.....	6 9 0	
(b) Plot No. 4; two cartloads of municipal refuse at Rs. 1-8-0 a cart; 50 per cent of the cost is charged.....	1 8 0	
(c) Plot No. 5; five cartloads of municipal refuse at 8 annas a cart; 70 per cent of the total cost is charged.....	1 12 0	
	9 13 0	

	Rs. a. p.	Rs. a. p.
(B) Concentrated manures		
(a) Plot No. 1; four bags of fish powder at Rs. 6 per bag.....	24 0 0	
(b) Plot No. 4; three bags of fish sand at Re. 1 each	3 0 0	
(c) Plot No. 1; fifteen <i>pallas</i> of safflower cake at Rs. 9-8-0 per <i>palla</i>	142 8 0	
	<hr/>	
	169 8 0	
(C) Residual manures		
(a) Plot No. 1, having dry crop of <i>bhopla</i> in the year 1928—29 had received 3 cartloads of municipal refuse worth Rs. 4-8-0 including carting; 50 per cent for the residue.....	2 4 0	
(b) In the year 1928—29 plot No. 2 having banana received 31 cartloads of municipal refuse worth Rs. 15-8-0; 30 per cent for the residue.....	4 10 5	
(c) In the year 1928—29 plot No. 4 having sugarcane received 100 cartloads of municipal refuse worth Rs. 112-8-0 including cartage; 30 per cent for the residue.....	33 12 0	
(d) In the year 1928—29 plot No. 5 having guavas received 14 cartloads of municipal refuse worth Rs. 21 including carting; 30 per cent for the residue.....	6 4 9	
	<hr/>	
	46 15 2	
		226 4 2
2. Seeds :		
(a) Sugarcane sets (13,000).....	45 0 0	
(b) <i>Khira</i> , <i>bhendi</i> and other seeds.....	3 14 0	
(c) Two <i>bhopala</i> fruits for seed.....	2 0 0	
	<hr/>	
		50 14 0
3. Labour on daily wages or piece-work :		
(a) Plot No. 1; plant cane, 118 men, 99 women and 35 bullocks.....	111 3 6	
(b) Plot Nos. 2 and 3; banana, 252 women.....	63 0 0	
(c) Plot No. 4; <i>dudhya</i> , 17 men, 13 women and two bullocks	12 12 0	
	<hr/>	
		186 15 6
4. Contract labour :		
(a) Plot No. 2; banana, carting municipal refuse	11 6 5	
(b) Plot No. 5; guava, carting municipal refuse..	3 8 0	
Hand-digging the plot	40 0 0	
	<hr/>	
		54 14 5
5. Depreciation on implements and tools excluding new purchases :		
Opening inventory.....	59 8 0	
Closing inventory.....	44 12 0	
	<hr/>	
		14 12 0

	Rs. a. p.	Rs. a. p.	Rs. a. p.
6. <i>Bullock labour cost (excluding interest) :</i>			
(a) Depreciation on one bullock			
Opening inventory.....	100 0 0		
Closing inventory.....	90 0 0		
	<hr/>	10 0 0	
(b) Death allowance on one bullock at 5 per cent on Rs. 100.....		5 0 0	
(c) Charges on account of housing at Rs. 4 per bullock per year.....		4 0 0	
(d) Feed and fodder			
	Rs. a. p.		
Fodder	23 8 0		
Grazing	12 0 0		
	<hr/>	35 8 0	
Against the above cost from (a to d) must be set off Rs. 4 the value of two cartloads of F. Y. M.		- 4 0 0	
		<hr/>	50 8 0
7. <i>Marketing charges :</i>	Rs. a. p.		
Plot No. 2 (banana)			
Brokerage	22 0 0		
Batta	5 8 0		
	<hr/>	27 8 0	
Plot No. 3 (banana)			
Brokerage	17 3 6		
Batta	2 10 3		
	<hr/>	19 13 9	
			47 5 9
8. <i>Assessment and L. F. C. on owned land :</i>			
	A. g.		
Plot No. 1	1 0	0 14 10	
Do. 2	1 0	4 6 6	
Do. 3	1 0	2 12 3	
Do. 4	1 0	5 3 7	
Do. 5	1 2	3 9 3	
	<hr/>		16 14 5
	5 2		
9. <i>Wages of saldar :</i>			
The annual wage (Rs. 150) is distributed in proportion to the work put on the plots by him			150 0 0
10. <i>Irrigation charges :</i>			
Plot No. 1		47 13 0	
Do. 2		35 1 0	
Do. 3		35 1 0	
Do. 5		36 13 1	
		<hr/>	154 12 1
11. <i>Miscellaneous expenses of plot No. 1.....</i>		10 0 0	
		<hr/>	10 0 0
12. <i>Capital cost over two banana plots (Nos. 2 and 3)....</i>		106 0 0	
		<hr/>	106 0 0
<i>Total out-of-pocket expenses</i>			<hr/> 1,069 4 4

Family Labour Income.—The following table gives the family labour income, i.e. the remuneration obtained by the farmer and his family for their work on the farm. The details of cost of production have already appeared above. The value of produce is taken from the cost and receipt statements of the various plots (pages 217 to 232).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production excluding wages for family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total.....	5 2	1,634 11 3	1,069 4 4	88 8 4	182 0 10	1,339 13 6	+294 13 9
Sugarcane	1 0	800 0 0	497 9 0	54 11 2	61 10 8	613 14 10	+186 1 2
Banana.....	2 0	539 11 3	399 15 10	20 1 2	70 13 3	490 14 3	+48 13 0
Dudhya bhopala.....	1 0	125 0 0	56 13 7	5 10 8	11 2 2	73 10 5	+51 5 7
Guava.....	1 2	135 0 0	114 13 11	8 1 4	38 6 9	161 6 0	-26 6 0
Miscellaneous receipts of mangoes from farm trees.....	..	35 0 0	..	..	..	..	+35 0 0

Column 4.—Out-of-pocket expenses include costs of manure, seeds, wages of *saldar*, day and contract labour, depreciation on deadstock, irrigation charges, marketing expenses, assessment and L.F.C. on owned land and other miscellaneous expenses. Column 5.—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on the current agricultural operations and on feed and fodder for the work animals. Column 6 denotes the estimated rent of owned land minus assessment and L. F. C. Column 8 shows wages earned by the family.

Gross receipts of the farm amounted to Rs. 1,634-11-3 while the cost of production (excluding the supervision charges of the farmer) came to Rs. 1,339-13-6 leaving a family labour income of Rs. 294-13-9.

Farm Business Income.—In addition to the family labour income shown in table No. XI, the farmer saved the rent of his land (minus the assessment and L. F. C.) and interest on the working capital which have been debited as costs.

The following table gives the farm business income of the farmer, i.e., the value of the produce minus only out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area		Value of produce		Out-of-pocket expenses		Farm business income	
	A.	g.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.
Total....	5	2	1,634	11 3	1,069	4 4	+565	6 11
Sugarcane	1	0	800	0 0	} 1,069 4 4		+565	6 11
Banana.....	2	0	539	11 3				
<i>Dudhya bhopala</i>	1	0	125	0 0				
Guava.....	1	2	135	0 0				
Miscellaneous receipts of mangoes from farm trees.....	..		35	0 0				

If from the gross receipts Rs. 1,634-11-3, the out-of-pocket expenses Rs. 1,069-4-4 are subtracted the farm business income comes to Rs. 565-6-11. The farm business income is made up of the family labour income, the interest on working capital and the rent of owned land (minus land assessment and L. F. C. on the same) as shown below :—

	Rs. a. p.
Family labour income	294 13 9
Interest on working capital	88 0 4
Rent of owned land	182 0 11
	565 6 11

In addition the farmer received Rs. 41-14-10, the net rent of a piece of land rented out. The total income of the farmer was thus Rs. 607-5-9.

ANALYSIS

As in the previous year the farmer and his wife did not do manual work on the farm. The farmer worked more as a manager and attended towards marketing of farm produce, etc. In the previous year the farmer had no farm bullocks. He had maintained two bullocks for *dhamni* (riding cart). When, however, one of the bullocks died the farmer arranged with a neighbouring farmer to exchange bullock labour and thereby got 105 days' work from his bullock. Unlike in the previous year the bullock, during the year under consideration, is treated as farm equipment.

The family labour income of Rs. 294-13-9 for the supervising family was therefore net profits of farming. The farm business income shown in table XII amounted to a decent sum of Rs. 565-6-11.

Remarks about individual crops are given below.

Sugarcane plot No. 1.—The crop was good. Since price of *gul* was low the farmer sold the crop to Poona merchants for retailing cane for juice and chewing. Total receipts, including receipts for sub-crop of vegetables, came to Rs. 800 while the cost of cultivation excluding wages of family labour amounted to Rs. 613-14-10. The family labour income and farm business income came to Rs. 186-1-2 and Rs. 302-7-0 respectively.

Banana plot No. 2.—The plantation was in its first bearing and had not any subsidiary crop in it. During summer it badly suffered on account of strong winds which broke number of plants. Due to the undersized bunches of the first bearing and low prices, the value of the produce came to Rs. 352, while the cost of production excluding wages of family labour, amounted to Rs. 232-6-11 leaving a sum of Rs. 119-9-1 as family labour income.

Banana plot No. 3.—The plantation was in its last year. Near Poona, in the final year banana plants are kept more for their leaf and so the crop did not receive much attention. The strong summer winds, referred to under plot No. 2 did more damage. The leaves for which the crop was intended were badly torn. The harvest of fruit was also small. Instead of making any surplus the farmer lost on this plantation.

Dudhya bhopala plot No. 4.—The plot was under sugarcane in the previous year and had received sufficient manure. In the early stages of the crop there was shortage of rain and the farmer had to water the vines by hand. This careful watering helped the crop considerably. The cost of production excluding unpaid wage for family labour, came to Rs. 73-10-5. The crop was sold standing and it fetched Rs. 125, leaving family labour income of Rs. 51-5-7. If the rent of owned land and interest on working capital are added, the farm business income comes to Rs. 68-2-5 per acre.

Guava plot No. 5.—It was an old plantation. Due to the low prices the receipts could not cover the cost of production. In the normal time the farmer could have made decent family labour income.

STATEMENT No. 40

SUGARCANE—1 acre in 1929-30

PLOT No. (1)

*Previous crop—Bhopala, 1928-29**(a) Cost of Production*

ITEM OF EXPENDITURE	Homelabour			Saidar ³	Ex- change labour on co- opera- tion	Labour on daily wages and contract			Total units	Cost exclud- ing that of family labour	REMARKS
	Men ¹	Women ¹	Bul- locks ²			Bul- locks ²	Men	Women				Bullocks
1. Preparatory tillage										Rs. a. p.	
(a) Ploughing	28	..	56	28	..	..	112·0	12 4 6	Four ploughings were given. A plough required two men and six bullocks. Fourteen men paid at 8 annas each, thirteen at 6 annas each and one man at 6½ annas.
(b) Breaking clods	5	..	10	5	..	..	20·0	2 3 0	A clod crusher required two men, six bullocks. Outside man labour at 7 annas each.
(c) Ridging	2	..	4	2	..	..	8·0	0 14 0	Man unit at 7 annas.
(d) Making and repairing beds and channels	16	..	..	16·0	8 0 0	Man unit at 8 annas.
(e) Digging corners	6	..	..	6·0	3 0 0	
2. Manure and manuring											
(a) Manures											
(i) Residual manure	2 4 0	Three cartloads of municipal refuse at Re. 1-8-0 each (including cartage). Fifty per cent of the total cost is charged to this crop, <i>bhopala</i> being a short period crop.

WADGAON, FARMER 2(B)

217

STATEMENT No. 40—contd.

218

ITEM OF EXPENDITURE	Home labour			Saldar ^a	Ex- change labour on co- opera- tion	Labour on daily wages and contract			Total units	Cost exclud- ing that of family labour	REMARKS
	Men ¹	Women ¹	Bul- locks ²		Bul- locks ²	Men	Women	Bullocks		Per acre	
(ii) Municipal refuse and carting.....	10	..	20	30'0	Rs. a. p. 23 11 0	For the plot 20 cartloads of municipal refuse were required. Five cart- loads charged at annas 6 per cart and fifteen at annas 8. Cartage Rs. 18-12-0; seventy per cent of this cost is charged to this crop. Rs. 17-2-0 includes the allocated cartage of the municipal refuse Rs. 13-2-0 and the cartage of safflo- wer cake Rs. 4 (shown under 2 (iv)). Four bags at Rs. 6 per bag including cartage.
Rs. a. p.											
Manure .. 6 9 0											
Cartage .. 17 2 0											
(iii) Fish manure	24 0 0	Fifteen <i>pallas</i> of cake at Rs. 9-8-0 per <i>palla</i> .
(iv) Safflower cake	142 8 0	
(b) Spreading manure	4	..	9	16	..	21'0	8 8 0	Man and woman units at annas 8 and 4 respectively.
3. Seeds and sowing											
(a) Seeds											
(i) Sets	45 0 0	Thirteen thousand sets Rs. 8-8-0 per thousand. Annas 8 were paid less.
(ii) Vegetable seed	8 14 0	<i>Khira</i> Re. 1-2-0, <i>charali</i> annas 6, <i>karali</i> annas 8 and <i>bhendi</i> Rs. 1-14-0.
(b) Planting cane and dibbling vegetable seeds.	10	..	..	10'0	5 0 0	Man unit paid at 8 annas.
4. Irrigation											
(a) Canal water charges	47 13 0	At Rs. 45 per acre per year plus on anna per rupee as L. F. C.
(b) Labour	19	..	..	..	..	19'0	....	Twenty-five waterings were given.

FARM STUDIES

(a) Weeding .....	..	..	..	..	..	6	83	..	47'5	23 12 0	Four weedinges were given. 1st required 22 women, 2nd 15, 3rd 16 and 4th 6 men and 30 women. Men and women units paid at annas 8 and 4 respectively.
(b) Earthing up .....	..	..	..	..	..	15	..	..	15'0	15 0 0	Contract work.
6. Harvesting and preparing for market .....	..	..	..	..	..	..	..	..	....	....	Standing crop was sold.
7. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	....	45 11 2	Wages of <i>saldar</i> are distributed over different plots in proportion to the units used on them.
8. Charges for bullock labour	..	..	..	..	..	..	..	..	....	66 4 6	Annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc ..						50	8	0			
(b) Interest on the value of bullocks, feeds and fodder ..						15	12	6			
9. Charges for implements and tools .....	..	..	..	..	..	..	..	..	....	4 9 2	The total annual charges are distributed on different plots on acreage basis.
Rs. a. p.											
(a) Depreciation ..						2	14	9			
(b) Interest ..						1	10	5			
10. Interest on fixed capital (i.e., wages of hired labour and price of seeds and manure) .....	..	..	..	..	..	..	..	..	....	37 4 8	Charged at 12 per cent per annum.
11. Rent of land .....	..	..	..	..	..	..	..	..	....	66 14 8	The land was owned. Rent is distributed in proportion to the value of crops entering into sugarcane rotation.
12. Removing stubbles .....	..	..	..	..	..	11	..	15	26'0	15 8 0	Contract work.
13. Miscellaneous expenses ..	..	..	..	..	..	..	..	..	....	10 0 0	Tips. (Includes the share of cartage of vegetables tips, etc.)
Total .....	..	..	85	28	70	118	99	35	330'5	618 14 10	

¹ Family labour not charged. ² Home and exchange bullock labour charged under item 8. ³ Wages of *saldar* charged under item 7.

STATEMENT No. 40—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	Per acre		
	Rs.	a. p.	
Sugarcane ..	775	0 0	Standing crop was sold.
Vegetables ..	25	0 0	Do.
Total ..	800	0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	800 0 0	613 14 10	(a) 61 10 8 (b) 54 11 2	+186 1 2	+302 7 0

STATEMENT No. 41

PLOT No. (2)

BANANA—1 acre in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Soldar ¹	Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
1. Capital cost .....	..	..	..	..	..	..	..	..	Rs. a. p. 53 0 0	Capital cost as per statement No. 86. The crop was in its second year.
2. Preparatory tillage .....	..	..	..	..	..	..	..	..	....	Being a second year plantation there was no preparatory tillage.
3. Manure and manuring										
(a) Residual manure, carting and manuring .....	..	..	..	..	..	..	..	..	16 0 10	Thirty-one cartloads of municipal refuse at 8 annas per cart, besides cartage Rs. 31 and manuring Rs. 7 to previous crop. Thirty per cent of the total cost is charged to this crop for residue.
Es. a. p.										
Manure	4	10	5							
Cartage	9	4	10							
Manuring	2	1	7							
4. Irrigation										
(a) Canal water charges .....	..	..	..	..	..	..	..	..	85 1 0	At Rs. 33 per acre plus one anna in the rupee as local-fund cess.
(b) Labour .....	..	..	..	15.5	..	..	..	15.5	....
5. After-care and tillage										
(a) Weeding .....	..	..	..	..	..	16	..	8.0	4 0 0	One weeding was given. Woman unit paid at 4 annas.

WADGAON, FARMER 2(B)

221

STATEMENT No. 41—conold.

222

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on dally wages			Total units	Cost exclud- ing that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
6. Harvesting and preparing for market										
(a) Labour	56	..	27 5	13 12 0	Piece-work. Four annas per headload.
(b) Brokerage, etc.	27 8 0	Dalakh Rs. 22 at one anna per rupee sale and butta Rs. 5-8-0 at 8 ples per rupee sale.
7. Saldar	30 12 9	Annual wage on account of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
8. Charges for bullock labour	In the established garden bullock labour could not be used.
9. Charges for implements and tools	4 9 2	The total annual charges are distributed over different plots on acreage basis.
Rs. s. p.										
(a) Depreciation										
(b) Interest										
10. Interest on fluid capital (i.e., wages of hired labour and price of manure)	8 11 2	Charged at 12 per cent per annum.
11. Rent of land	39 0 0	The land was owned.
Total	15 5	..	71	..	51	232 6 11	

¹Wages of *saldar* charged under item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
Banana fruit	Rs. a. p. 352 0 0	Sold at different rates.
Total ..	352 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital.	Family labour income	Farm business income
Per acre	Rs. a. p. 352 0 0	Rs. a. p. 232 6 11	Rs. a. p. (a) 34 9 6 (b) 10 5 7	Rs. a. p. +119 9 1	Rs. a. p. +164 8 2

WADGAON, FARMER 2(B)

STATEMENT No. 42

PLOT No. (3)

BANANA—1 acre in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ¹	Labour on dally wages			Total units	Cost excluding that of family labour	REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks		Per acre	
									Rs. s. p.	
1. Capital cost	53 0 0	Approximate capital cost of Rs. 53 is based on the experience (Statement No. 36).
2. After-care and tillage										
(a) Weeding	106	..	53·0	26 8 0	Two weeding were given. 1st weeding required 84 and the second 42 women, paid at annas 4 each.
3. Irrigation										
(a) Canal water charges	85 1 0	At Rs. 33 per acre per year plus one anna in the rupee local-fund cess.
(b) Labour	14	..	..	..	14·0	....
4. Harvesting and preparing for market.....	18	..	..	..	18·0	....

(a) Labour .....	..	..	..	..	..	75	..	37.5	18 12 0	Piece-work at annas four per headload.
(b) Brokerage .....	..	..	..	..	..	..	..	..	19 18 9	<i>Dalali</i> on green <i>banana</i> leaves (Rs. 13-2-0) at annas 2 per rupee sale. <i>Batta</i> (Rs. 1-10-0) at 3 pies per rupee sale. <i>Dalali</i> on plantain (Rs. 4-1-0) at one anna per rupee sale and <i>batta</i> (Rs. 1-0-3) at 3 pies per rupee sale.
5. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	53 10 3	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
6. Charges for bullock labour .....	..	..	..	..	..	..	..	..	....	In the established garden bullock labour could not be used.
7. Charges for implements and tools. Rs. a. p.	..	..	..	..	..	..	..	..	4 9 2	The total annual charges are distributed over different plots on acreage basis.
(a) Depreciation	2	14	9							
(b) Interest	1	10	5							
8. Interest on fluid capital (i.e. wages of hired labour) .....	..	..	..	..	..	..	..	..	8 1 2	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	30 0 0	The land was owned.
Total .....	..	..	..	27	..	181	..	117.5	258 7 4	

1 Wages of *saldar* charged under item 5.

STATEMENT No. 42—concl'd.

228

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	Per acre		
	Rs.	a. p.	
Banana fruit ..	65	6 3	Sold at different rates.
Green leaves ..	104	14 0	Do.
Dry leaves ..	17	7 0	Do.
Total ..	187	11 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre ..	187 11 3	258 7 4	(a) 36 3 9 (b) 9 11 7	-70 12 1	-24 12 9

FARM STUDIES

STATEMENT No. 43

BHOPALA—1 acre in 1929-30

PLOT No. (4)

Previous crop—Plant cane, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men	Women	Bullocks	Men	Women	Bullocks		Per acre	
								Rs. a. p.	
1. Preparatory tillage	Plant cane was taken before <i>bhopala</i> . Cost of removing stubbles is charged against sugarcane and there was no special preparatory tillage.
2. Manure and manuring									
(a) Manures									
(i) Residual manure	88 12 0	Hundred cartloads of municipal refuse at Rs. 1-2-0 per cart including cartage were given to the previous crops; 80 per cent of the total cost is charged to this crop.
(ii) Fish sand	8 0 0	At one rupee per bag including cartage.
(iii) Municipal refuse	1 8 0	Two cartloads of municipal refuse at Rs. 1-8-0 per cart on the spot; 50 per cent of the cost is charged to this crop.
(b) Manuring	5	..	2.5	1 4 0	Woman units paid at 4 annas.

STATEMENT No. 43—concl'd.

228

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men	Women	Bullocks	Men	Women	Bullocks		Per acre	
3. Seeds and sowing									
(a) Seeds	2 0 0	<i>Bhopala seed (Rs. 2).</i>
(b) Dibbling	3	..	..	3·0	1 8 0	Man unit paid at 8 annas.
4. Watering by hand	13	8	..	17·0	8 8 0	Watered six times by carrying water in buckets from adjoining source. Man and woman units paid at 8 and 4 annas respectively.
5. After-care and tillage									
(a) Mulching by harrow.....	1	..	2	3·0	1 8 0	Man and bullock units paid at 8 annas each.
6. Harvesting and preparing for market	Standing crop was sold.
7. Charges for implements and tools.	4 9 2	The total annual charges are distributed over different plots on acreage basis.
Rs. a. p.									
(a) Depreciation								2 14 0	
(b) Interest								1 10 5	
8. Interest on fluid capital (i.e. wages for hired labour and price of seeds and manure)	4 0 8	Charged at 12 per cent per annum.
9. Rent of land	12 1 0	The land was owned. Rent is distributed in proportion to the value of yield of crops entering into one rotation.
Total	17	13	2	25·5	73 10 5	

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
Bhopala fruit..	125 0 0	Standing crop was sold.
Total ..	125 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
Per acre	Rs. a. p. 125 0 0	Rs. a. p. 73 10 5	Rs. a. p. (a) 11 2 2 (b) 5 10 8	Rs. a. p. +51 5 7	Rs. a. p. +68 2 5

WADGAON, FARMER 2(B)

STATEMENT No. 44

PLOT No. (5)

GUAVA—1 acre 2 gunthas in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saidari	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage	The garden was about 20 years old. The farmer did not remember the capital cost. Moreover even if such cost was available it is not desirable to spread it over more than 20 years. Hence capital cost is not charged.
2. Manure and manuring.												
(a) Residual manure	6 4 9	5 15 11	Fourteen cartloads of municipal refuse at Re. 1-8-0 per cart including cartage to previous crop; 80 per cent of the total cost is charged to this crop.
(b) Municipal refuse	1 12 0	1 10 8	For the plot five cartloads of municipal refuse at 8 annas per cart were given; 70 per cent of the cost is charged.
(c) Carting	8 8 0	8 5 4	Cartage was Rs. 5; 70 per cent of the total cost is charged to this crop.

3. After-care and tillage													
(a) Hand digging .....	..	..	..	..	..	..	..	..	..	40 0 0	38 1 6	Contract work (Rs. 40) for the plot.
4. Irrigation													
(a) Canal water charges....	..	..	..	..	..	..	..	..	..	36 13 1	35 1 0	At Rs. 33 per acre plus one anna in the rupee local-fund cess.
(b) Labour .....	..	..	..	10	..	..	..	10	9'52	....	....
5. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	..	19 13 10	18 14 8	Wages of <i>saldar</i> are distributed on different plots in proportion to the units used on them.
6. Charges for bullock labour..	..	..	..	..	..	..	..	..	..	....	....	In the established garden bullock labour was not required.
7. Charges for implements and tools.....													
	..	..	..	..	..	..	..	..	..	4 12 10	4 9 2	The total annual charges are distributed on different plots on acreage basis.
(a) Depreciation	Rs. a. p.												
(b) Interest	3	1	0	1	11	10							
8. Interest on fluid capital (i.e. wages, for hired labour and price of manure).....	..	..	..	..	..	..	..	..	..	6 5 6	6 0 0	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	42 0 0	40 0 0	The land was owned.
Total .....	..	..	..	10	..	..	..	10	9'52	161 6 0	153 11 0	

1 Wages of *saldar* charged under item 5.

WADGAON FARMER 2(B)

STATEMENT No. 44—concl'd.

232

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 1 acre and 2 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Guava fruit....	135 0 0	128 9 1	Standing crop was sold.
Total....	135 0 0	128 9 1	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 2 gunthas.....	135 0 0	161 6 0	(a) 38 6 9 (b) 8 1 4	-26 6 0	+20 2 1
Per acre	128 9 1	153 11 0	43 4 8	-25 1 11	+18 2 9

FARM STUDIES

NANDED, PART (A), 1928-29

It is a small irrigated village (near Wadgaon) under the command of the Mutha Right Bank Canal, to the south-west of the city of Poona at a distance of 10 miles by the side of a good road going to Khadakwasla tank. Poona is the district headquarters as well as the market town for the village.

The revenue village of Nanded is bounded on the north and west by the river Mutha, on the south by the villages Khadakwasla and Kirkatwadi and on the east by Wadgaon Budruk.

Soils of the village represent four different types : (1) deep black, (2) reddish black mixed with alluvium washed down from the adjoining hills, (3) light soil, commonly known *barad* and lastly (4) the whitish coloured soil known as *bhurki*. Whitish patches of *bhurki* soil are found here and there and some of them have gone marshy due to the accumulation of percolation water from the surrounding irrigated lands. The reddish black alluvial lands lying to the north of the village, along the banks of the river Mutha, are rich and fertile. Eastern portion represents black soils being the next best class varying in depth from 2 to 4 feet, while the southern portion of the revenue village comprises of lighter class of soils. Below all these soils is found a substratum of *murum* and consequently the lands are well drained. Though more than half of the village lands have been receiving perennial water from 1897 they have not been spoiled, because of the good natural drainage. Larger percentage of the village land is level, gently sloping to the river side and is fit to grow perennial crops such as sugarcane, guava, etc. Tables I, II, III, IV and V given below are worked out from village records and information collected in personal enquiry.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Total area held	Total gross cropped area in 1928-29	Net cropped area	Population (1921 census)	Net cultivated area per capita
A. g.	A. g.	A. g.		A. g.
1,034 19	862 12	761 0	1,630	0 18.67

Of the total area held, 273 acres and 19 gunthas were fallow, while 101 acres and 12 gunthas carried two crops in 1928-29. It should be noticed that the village has not got sufficient land and consequently holdings are very small, and per capita area too little. For the cultivated area of 761 acres there were only 168 draft bullocks, a number too small especially because about 300 acres were under irrigated crops. The irrigators find it more convenient and economical to hire bullocks than to carry them idle over a larger part of the year. The number of milch animals was 110. This number is not large and yet part of the milk goes to Poona. The total number of cattle, horses and donkeys was 430 and of

sheep and goat only 211. For an irrigated village this number is too small for supplying farmyard manure and irrigators have to purchase farmyard manure from the surrounding dry villages and municipal refuse from the Poona city. The census of 1931 shows about 14 per cent reduction in population. Since the figures of 1931 are not officially known, figures of 1921 are used for finding per capita area.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held	Number of <i>khatedars</i>	Average area per <i>khatedar</i>
A. g.		A. g.
1,034 19	135 .	7 26·51

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated (1928-29)	Number of cultivators	Average area per cultivator
A. g.		A. g.
862 12	107	8 2·35

The average cultivating holding cannot be said to be sufficiently large. Sugarcane, fruit and vegetables requiring large amount of labour, however, provide more than sufficient work to the village people.

TABLE IV—SIZE AND DISTRIBUTION OF THE PROPRIETARY HOLDING

Size of holding Acres	Number of holdings		Total	Per cent of total number of holdings
	Owned			
	Agricul- turst	Non-agricul- turst		
Total ..	107	28	135	100·00
Below 5.....	79	11	90	66·67
5 to 10.....	15	5	20	14·82
10 to 20.....	11	3	14	10·37
20 to 30.....	1	3	4	2·96
30 to 40.....	1	2	3	2·22
40 to 50.....	0	1	1	0·74
50 to 75.....	0	1	1	0·74
75 to 100.....	0	1	1	0·74
Above 100.....	0	1	1	0·74

Of the total number of 135 *khatedars*, 107 were classed as agriculturists and held 436 acres; the remaining 28 *khatedars*, classed as non-agriculturist, held 598 acres and 19 gunthas, which means more than half of the village land was held by non-agriculturists. The average holding of the non-agriculturists was much bigger than the average holding of the agriculturists. The position of the village as regards rainfall and water supply was good. The perennial water supply from canal was available for about half the area of the village. There were 20 wells in the village out of which only few were working. In the year 1928-29, only 9 acres were put under well irrigation. Due to the smallness of holdings and paucity of grazing, individual cultivators could not maintain necessary number of bullocks and most of the ploughing of sugarcane fields and the crushing of cane was done through the seasonal labour coming from the neighbouring villages. As cultivators found it difficult to cart their small lots of vegetables and fruits to Poona, about 20 persons in the village had made it their business to cart such commodities.

The following table gives the area and percentages of the *kharif*, *rabi* and perennial crops during the years 1928-29 and 1929-30.

TABLE V—CROPS OF THE VILLAGE

Crops	1928-29.			Crops	1929-30		
	A. g.	A. g.	Per cent		A. g.	A. g.	Per cent
Total	862 12	862 12	100·00	100·00	698 10	698 10	100·00
<i>Kharif</i> crops	405	32	47·06	<i>Kharif</i> crops	392	10	56·58
<i>Bajri</i>	224	2	25·98	<i>Bajri</i>	161	38	28·36
<i>Nīva</i>	68	9	7·93	<i>Nīva</i>	60	6	8·68
Vegetables	61	39	7·18	Vegetables	62	9	8·97
Others	51	21	5·97	Cotton	82	10	4·65
<i>Rabi</i> crops	98	33	10·87	<i>Rabi</i> crops	75	27	10·92
<i>Shalu</i>	18	29	1·94	<i>Rabi</i> crops	31	10	4·51
Wheat	2	35	0·33	<i>Shalu</i>	31	10	4·51
Gram	74	9	8·60	Perennials	269	30	38·91
Perennials	362	28	42·07	Sugarcane	66	7	9·54
Sugarcane	107	31	12·50	Fruits	203	28	29·37
Fruits	254	37	29·57				

From the point of the spread of work, the distribution of the *kharif* and *rabi* crops, was good; the smaller demand of *rabi* crops was made good by the larger area of irrigated crops.

In the year 1929-30, there was a decided fall in sugarcane area due to the fall in prices of *gul*. The fall in the area cultivated in the year 1929-30

was partly due to the low prices of all agricultural commodities and partly to the poor season. It may be noticed that the area under *bajri* fell considerably and there was very little *rabi* cultivation in 1929-30.

The important irrigated crops of the village are sugarcane, guava, *mosumbi*, banna, brinjals and *bhopala*: Nanded guava is well known in the Poona market. Banana is a recent introduction in the village.

In the lighter and medium soils *bajri* is rotated with *nilva*. If *kharif* rains are scanty, *shalu*, to some extent, takes the place of *nilva* and *bajri*. At times *bajri* is taken after sugarcane. When *bajri* follows sugarcane the former gives very good yield due to the residual effects of the heavy manuring given to the latter. In the heavier soils sugarcane is usually ratooned in the second year. Ratoon cane is followed by *bhopala* or brinjals and then the land is again put under sugarcane. This is the regular rotation in *bagayat* lands. *Khira* and *bhendi* are invariably taken as sub-crops with sugarcane. Only *bagayat* lands receive ploughing and manuring regularly. Sugarcane lands are ploughed three or four times and are manured with 40 to 60 cartloads of municipal refuse per acre. They besides get heavy doses of oil cake or fish.

Being situated in the transition tract the climate at Nanded is neither very hot nor very cold. Due to the continuous irrigation, however, the climate has become somewhat malarious. The average rainfall at the nearest rainguage is about 22 inches and is received principally from the south-west monsoon.

THE SEASON, 1928-29

There being no rainguage at Nanded rainfall figures were obtained from the Agricultural College Farm, Poona, which is nine miles from the village. The fortnightly distribution of rainfall in the year 1928 is given in the following table:—

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL (INCHES)
AT POONA IN 1928

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
					First Fortnight							
0.0	0.0	0.0	0.0	0.0	1.64	1.96	0.88	0.45	0.22	0.0	0.0	} 23.17
					Second Fortnight							
0.0	0.37	0.0	0.82	0.0	2.11	4.01	4.28	5.17	1.26	0.0	0.0	

It will be seen that most of rainfall is received during four months—June to September. Regular monsoon broke in the second week of June. Rains were not sufficient for sowing till the end of the third week. The rains however came in full vigour by the end of June and sufficient

rain was received in the second half of July. The sowing of *kharif* crops was completed by the end of the third week of July. The rainfall in the month of August interfered with interculturing operations and checked the growth of crops to some extent. The break of rainfall in the first fortnight of August followed by the rainfall in the third week of the month was useful to the crops. For want of rains in October *kharif* crops suffered. Since there was no rain in October and November area under *rabi* crops fell.

Severe cold and frost of February 1929 checked the growth of the *rabi* and perennial crops. Banana and sugarcane suffered much. As a result of frost, quality of *gul* was poor and most of the farmers sold standing crops of cane for juice and chewing. *Khira*, *bhendi* and cucurbits were attacked by insect pest and thus the cultivators could not secure satisfactory harvests.

The crop estimate for *kharif* as well as *rabi* crops was 10 *annas*.

THE FARMER

The farmer, whose farm business was costed, owned 3 acres and 30 gunthas of land, 23 gunthas of which were uncultivable. The uncultivable area provided only some grass. He had taken 5 acres and 10 gunthas of land on lease. The cultivating holding thus consisted of 8 acres and 17 gunthas of cultivated land and 23 gunthas uncultivable waste.

(a) *Human labour*.—The farm family consisted of five members as given below :—

	Year.
(1) The farmer	50
(2) Farmer's wife	35
(3) Their first daughter	14
(4) Their second daughter	6
(5) Their third daughter	2

The farmer himself did not do any manual work on the farm. He was more of a manager, organizing and supervising farm work. Moreover, he was ill during the latter part of the year. Farmer's wife helped in light work such as weeding, gathering vegetables and preparing them for market. She put in only 68 days' work during the year in connection with the farm. Their eldest daughter put in only four days' work. The other two children were too young for any work.

The following table gives the distribution of the labour supplied by the *saldar* and the allocation of his wages on different crops. On other days the man supervised farm work and watched the crops. His wages are allocated to the different crops in proportion to the actual manual labour he put on each.

TABLE VII (a)—THE DISTRIBUTION OF THE WORK OF THE *Saldar*

Name of crop	Area	Number of days' work put in	Amount charged
	A. g.		Rs. a. p.
Total ..	8 17	116·25	150 0 0
Sugarcane	1 20	75·00	96 12 1
Ratoon	0 20	17·50	22 9 4
Jowar	2 20	3·75	4 13 6
Brinjal	1 0	12·00	15 7 10
Dudhya bhopala	0 30	8·00	10 5 3
Guava	2 7	0·0	0 0 0

(b) *Bullock work*.—As has been remarked in the inventory the two bullocks were not intended for farm work but for going about in a driving cart. During the year, however, they were used for about 23·5 days on the farm. Their cost of maintenance is not debited to the farm; charge for their labour on the farm is made at 8 annas a day which is the usual charge made for hired bullocks.

As is the usual practice with the majority of sugarcane growers near Poona, all the farm work was done through hired bullocks either on contract system or on daily rates.

The opening and closing inventories of the property of the farmer for two years 1928-29 and 1929-30 are given in table IX.

The inventory value of the farm business went down by Rs. 262 in the first year. It increased by Rs. 93-8-9 in the second year. There was thus a fall of Rs. 168-7-3 in the course of the two years.

Nature of the holding, lands, crops and cropping.—The nature of land, crops and cropping and the treatment given to the different fields in 1927-28, 1928-29 and 1929-30 are given in table X.

The farmer owned 3 acres and 30 gunthas of land and had taken on lease 5 acres and 10 gunthas. Of this holding, 23 gunthas (of his own land) were uncultivable and grew only grass. Two acres and seven gunthas of his own land and two acres and ten gunthas of the leased land received canal water. For the leased land the farmer paid Rs. 145 rent, while for his own land he paid land assessment and L.F.C. together amounting to Rs. 8-6-3. The holding was situated in three blocks, the nearest being at a distance of half a mile from farmer's house.

TABLE IX—INVENTORY OF THE PROPERTY

ITEM	1928			1929			1930		
	Quantity or number	Approximate value	REMARKS	Quantity or number	Approximate value	REMARKS	Quantity or number	Approximate value	REMARKS
<i>Assets</i>	A. g.	Rs. a. p.		A. g.	Rs. a. p.		A. g.	Rs. a. p.	
1. Real estate.									
(A) Land									
(a) Field No. 1	1 23	550 0 0	Of the No. 1, 23 gunthas waste.	1 23	550 0 0		1 23	550 0 0	
(b) Field No. 2	2 7	1,800 0 0		2 7	1,800 0 0		2 7	1,800 0 0	
	3 30	2,350 0 0		3 30	2,350 0 0		3 30	2,350 0 0	
(B) Buildings									
(a) Village house ..	1	500 0 0		1	450 0 0		1	400 0 0	
(b) Cattle Shed	1	200 0 0		1	175 0 0		1	150 0 0	
(c) Farm Cottage ..	1	25 0 0		1	20 0 0		1	15 0 0	
(d) Open yard	1	300 0 0		1	300 0 0		1	300 0 0	
		1,025 0 0			945 0 0			865 0 0	
Total real estate		3,375 0 0			3,295 0 0			3,215 0 0	
2. Livestock.									
(a) Bullocks	2	120 0 0	Old bullocks.	2	100 0 0		2	80 0 0	
(b) Cows	2	50 0 0	Cows dry.	2	90 0 0	In milk.	1	40 0 0	One cow with her calf sold for Rs. 60.
(c) Calf (one year) ..	1	5 0 0		2	15 0 0		....	....
Total Livestock..		175 0 0			205 0 0			120 0 0	

NANDED(A)

TABLE IX—INVENTORY OF THE PROPERTY—*contd.*

1928			1929			1930			
ITEM	Quantity or number	Approximate value	REMARKS	Quantity or number	Approximate value	REMARKS	Quantity or number	Approximate value	REMARKS
		Rs. a. p.			Rs. a. p.			Rs. a. p.	
3. Implements tools, etc.									
(a) Iron plough	1	30 0 0		1	28 0 0		1	24 0 0	Repaired.
(b) Harrow	1	2 0 0		1	1 12 0		1	2 0 0	..
(c) Cart	1	50 0 0		1	45 0 0		1	40 0 0	
(d) Yokes	2	4 0 0		2	3 8 0		2	3 0 0	
(e) Hand tools . . . . .	....	5 12 0		....	3 8 0	1 spade lost.	....	2 4 0	
(f) Ropes		3 0 0			1 0 0			4 4 0	New purchase of Rs. 4-4-0.
Total implements and tools		94 12 0			82 12 0			75 8 0	
4. Farm produce and supplies on hand									
(a) Bajri	330 lbs.	18 0 0		330 lbs.	17 0 0		264 lbs.	16 0 0	
(b) Gram . . . . .	....	....		....	....		360 lbs.	54 0 0	

MO-11-01-91	(c) Sarmad .....	.....	.....	.....	.....	250 bundles	5 0 0
	(d) Nitva fodder ..	100 bundles	5 0 0	.....	.....	.....	.....
	(e) Farm Yard manure.....	15 carts	30 0 0	25 carts	50 0 0	.....	.....
	Total farm produce and supplies on hand.....		53 0 0		67 0 0		75 0 0
	5. Cash on hand ....	.....	50 0 0	.....	80 0 0	.....	20 0 0
	6. Amounts receivable .....	.....	20 0 0	.....	6 0 0	.....	.....
	<i>Total Assets</i> ..		3,767 12 0		3,685 12 0		3,505 8 0
	<i>Liabilities</i>						
	(a) Debt incurred from a sowkar at 12 per cent. ....	.....	1,000 0 0	.....	.....	.....	.....
	(b) Debt incurred from a sowkar at 9 per cent. ....	.....	2,000 0 0	.....	.....	.....	.....
(c) Old debt at 9 per cent.....	.....	.....	.....	2,000 0 0	.....	2,000 0 0	
(d) Old debt at 12 per cent. ....	.....	.....	.....	1,000 0 0	.....	.....
(e) Interest on (c) and (d) .....	.....	.....	.....	180 0 0	.....	.....

Returned old debt of Rs. 1,000 and its interest and took fresh loan of Rs. 500.

TABLE IX—INVENTORY OF THE PROPERTY—*concl.*

ITEM	1928			1929			1930		
	Quantity or number	Approximate value	REMARKS	Quantity or number	Approximate value	REMARKS	Quantity or number	Approximate value	REMARKS
		Rs. a. p.			Rs. a. p.			Rs. a. p.	
(f) Interest on the sum accumulated...	376 3 3	
(g) New debts	500 0 0	
(h) Interest on (g) for 6 months	30 0 0	
<i>Total Liabilities</i>		3,000 0 0			3,180 0 0			2,900 3 3	
<i>Net worth of the Farm at the beginning of the year</i>		767 12 0			505 12 0			599 4 9	

SUMMARY

	Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928	767 12 0	
Net worth of the farm at the beginning of 1929	505 12 0	
<i>Loss in net worth in 1928</i>		262 0 0
Net worth of the farm at the beginning of 1929	505 12 0	
Net worth of the farm at the beginning of 1930	599 4 9	
<i>Gain in net worth in 1929</i>		93 8 9
<i>Therefore net loss in two years</i>		168 7 3

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

NO-II Q 84-16a

Field No.	Area	Nature of land	1927-28 (i.e. the year previous to starting the investigation)		1928-29			1929-30		
			Name of crop	Treatment	Name of crop	Plot No.	Treatment	Name of crop	Plot No.	Treatment
1	1 20	Reddish black soil level well drained represents the best type of the soils of the village.	<i>Bajri</i> (dry)	Harrowed thrice. No manure was given for the last ten years.	Sugarcane...	1	Three ploughings and one ridging. Manure 19 carts of municipal refuse, 80 carts of ash, 2 bags of fish powder and 24 bags of fish manure were given.	Ratoon cane..	1	Four bags of Sulphate of Ammonia and 22½ <i>pallas</i> of safflower cake.
	0 20	Reddish black soil well drained and level.	Sugarcane.....	Ten carts of municipal refuse, also oil cake and Sulphate of Ammonia were given.	Ratoon cane.	2	One bag of Sulphate of Ammonia and 8 bags of fish manure were given.	....	..	One acre and 20 gunthas of land was ploughed once, 5 harrowings were given to whole plot.
2	1 0	Black soil, level and well drained.	Ten gunthas under sugarcane and 80 gunthas under <i>bajri</i> .	Three ploughings were given to land under sugarcane. <i>Bajri</i> land received only 3 harrowings; sugarcane received only artificial manures.	Brinjals....	5	One ploughing and three harrowings were given. It was rainfed crop. No manure was given.	A. g. 2 10 <i>Bajri</i> . 2 10 Gram.	2 5	Not manured. After harvesting <i>bajri</i> (plot No. 2) gram was taken in the same year.
	0 30	Do.....	<i>Bajri</i> (dry)	Harrowed thrice and sown. Not manured.	<i>Bhopalu</i>	6	One ploughing and three harrowings were given. It was a rainfed crop.	....	..	....
3	1 0	Black soil; situated on a higher level and hence not under command of canal.	Do.....	Harrowed thrice and sown. No manure was given for the last five years.	<i>Jowar</i>	3	Only two harrowings and no other treatment. It did not receive any manure.	<i>Bajri</i>	3	Harrowed twice and sown. No manure was applied.
	1 20	Plot Nos. 1 and 6 are in one block and are alike.	Do.....	Harrowed twice and sown; not manured.	Do.....	4	Do.	<i>Jowar</i>	4	Ploughing, and harrowed five times. Not manured.
4	2 7	Soil is black and retentive. Well drained and levelled.	Guava	The plantation was more than twenty years old. Regularly manured and watered.	Guava	7	Regularly manured and watered.	Guava	6	Regularly manured and watered.

MANDED (A)

COSTS AND RECEIPTS

An abstract of the expenditure.—In the following statement an abstract of expenditure for the farm is given :—

ABSTRACT OF COSTS

Item of expenditure	Cost of the total cultivated area (viz. 8 acres and 17 gunthas)	
	Rs.	a. p.
I.* Out-of-pocket expenses :		
(a) Manures	371	13 5
(b) Seeds	136	0 0
(c) Outside labour	502	11 0
(d) Depreciation on implements and tools	12	0 0
(e) Charges for bullock labour	11	12 0
(f) Marketing charges	55	11 0
(g) Assessment and L.F.C. on owned land	8	6 3
(h) Wages of <i>saldar</i>	150	0 0
(i) Irrigation charges	171	14 2
(j) Hire of equipment and fuel purchased	66	12 0
(k) Rent of leased land	143	4 7
(l) Miscellaneous expenses	40	0 0
		1,670 4 5
II. Rent of owned land excluding assessment and L.F.C.	88	9 9
		88 9 9
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	83	10 1
(b) Interest on the value of implements and tools	11	6 6
		95 0 7
Total cost of production (excluding wages for family labour).		1,853 14 9

*DETAILS OF OUT-OF-POCKET EXPENSES

1. Manures :

(A) Bulky manures

	Rs.	a. p.
(a) Nineteen cartloads of municipal refuse to plot No. 1 ; 70 per cent of the cost charged to this crop	6	10 5
(b) Twenty-five cartloads of municipal refuse at Rs. 2-2-0 per cart to plot No. 7 ; 70 per cent of the cost is charged to this crop ..	37	3 0
		43 13 5

	Rs. a. p.	Rs. a. p.
1. Manures—contd.		
(B) Concentrated manures		
(a) Thirty cartloads of ash at annas four per cart to plot No. 1	7 8 0	
(b) Two bags of Sulphate of Ammonia at Rs. 17 per bag to plot Nos. 1 and 2	34 0 0	
(c) Two bags of fish manure at Rs. 22-8-0 per bag to plot No. 1—Rs. 45-0-0. Thirty bags of fish powder at Rs. 7-8-0 per bag to plot Nos. 1 and 2—Rs. 225-0-0	270 0 0	
	<hr/>	
	311 8 0	
(C) Residual manure		
(a) Ten carts of municipal refuse to plot No. 2 were given in the year 1927-28. 30 per cent of the cost is charged to this crop ..	5 4 0	
(b) Twenty-five carts of municipal refuse at Rs. 1-8-0 per cart given to plot No. 7 in 1927-28; 30 per cent of the cost is charged to this crop	11 4 0	
	<hr/>	
	16 8 0	
	<hr/>	
		371 13 5
2. Seeds :	Rs. a. p.	
(a) 25,000 sets	100 0 0	
(b) Vegetable seed		
<i>Khira</i>	7 0 0	
<i>Bhendi</i>	3 0 0	
<i>Dodka</i>	3 0 0	
<i>Gavar</i>	0 8 0	
<i>Mula</i>	0 8 0	14 0 0
(c) Brinjal seedlings	13 8 0	
(d) <i>Bhopala</i> and other seeds		
One <i>bhopala</i> for seed	1 0 0	
<i>Bhendi</i>	3 0 0	
Coriander	2 0 0	6 0 0
(e) <i>Jowar</i> , 60 lbs.	2 8 0	
	<hr/>	
		136 0 0
3. Outside Labour :		
(a) Plot No. 1; sugarcane. Labour engaged on daily wages and piece-work, 344 men, 217 women and 208 bullocks	365 1 0	
(b) Plot No. 1; sugarcane; contract labour	14 10 0	
(c) Plot No. 2 (ratoon cane), labour engaged on daily wages and piece-work; 44 men, 78 women and 16 bullocks	52 6 6	
(d) Plot No. 2 contract labour	1 10 0	
(e) Plot No. 5 (brinjal), labour engaged on daily wages and piece-work, 16 men, 121 women and 32 bullocks	50 3 2	
(f) Plot No. 6 (<i>bhopala</i>) labour engaged on daily wages and piece-work, 6 men, 8 women and 18 bullocks	17 0 0	
(g) Plot No. 6, contract labour	1 12 0	
	<hr/>	
		502 11 0
4. Depreciation on implements and tools :		
Opening inventory	94 12 0	
Closing inventory	82 12 0	
	<hr/>	
		12 0 0

5. <i>Charges for bullock labour :</i>			
23.5 bullock units charged at 8 annas per unit ..		Rs. a. p.	Rs. a. p.
		....	11 12 0
6. <i>Marketing charges :</i>			
(a) Plot No. 1	Rs. a. p.		
Adat on bhendi	1 9 3		
Adat on gul	34 14 0		
Dharmadaya	0 7 0		
Batta on gul sale	11 7 0		
		48 5 3	
(b) Plot No. 2			
Adat	4 12 0		
Batta	1 2 6		
Dharmadaya	0 1 0		
		5 15 6	
(c) Plot No. 5, brokerage		1 2 3	
(d) Plot No. 6, batta		0 4 0	
			55 11 0
7. <i>Land assessment and L.F.C. :</i>			
Plot No. 3 area, 1 acre		2 2 2	
Plot No. 7 area, 2 acres and 7 gunthas		6 4 1	
			8 6 3
8. <i>Wages of saldar</i>			150 0 0
9. <i>Irrigation charges :</i>			
Plot No. 1		71 11 6	
Plot No. 2		23 14 6	
Plot No. 7		76 4 2	
			171 14 2
10. <i>Hire of equipment, cost of fuel purchased and other cash gurhal expenses :</i>			
(a) Plot No. 1			
Hire of mill etc.	26 0 0		
Gurhal expenses	13 4 0		
Extra fuel	15 0 0		
		54 4 0	
(b) Plot No. 2			
Hire of mill etc.	4 0 0		
Gurhal expenses	3 8 0		
Extra fuel	5 0 0		
<i>Tot.</i>		12 8 0	66 12 0
<u>Rent of leased land :</u>			
No. 1	73 8 4		
2	35 9 0		
1. <i>Manures :</i> 4	15 0 0		
(A) Bulky manures	15 6 9		
	3 12 6		
(a) Nineteen cartloads of municipal refuse to plot No. 1 ; 70 per cent of the cost charged to this crop	Rs.	143 4 7	
	6 10 5		
(b) Twenty-five cartloads of municipal refuse at Rs. 2-2-0 per cart to plot No. 7 ; 70 per cent of the cost is charged to this crop ..	37 3 0	0 0	
	43 13 5	4 5	

Family Labour Income.—The following table gives the family labour income i.e., the remuneration obtained by the farmer and his wife for the supervision and the little work done by them on the farm. The figures of costs of production have already appeared above. The value of produce is taken from the cost and receipts statements of the various plots (pp. 251 to 272).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production excluding wages for family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	8 17	2,164 13 10	1,670 4 5	95 0 7	88 9 9	1,853 14 9	+310 15 1
Sugarcane	1 20	1,362 4 3	1,126 8 9	64 15 3	..	1,191 8 0	+170 12 3
Batoon cane ..	0 20	167 14 1	232 8 3	11 12 10	..	244 5 1	-76 7 0
Nilua	2 20	34 0 0	31 12 7	3 8 7	7 13 10	43 3 0	-9 3 0
Brinjals	1 0	72 13 6	101 3 1	3 10 6	..	104 13 7	-32 0 1
Bhopala	0 30	17 14 0	44 2 10	2 5 4	..	46 8 2	-28 10 2
Guava	2 7	510 0 0	134 0 11	8 12 1	80 11 11	223 8 11	+286 7 1

Column 4.—Out-of-pocket expenses include costs of manure, seeds, hired labour on daily wages and piece-work, depreciation on deadstock, cost of yearly servant, irrigation charges, marketing expenses, hire of equipment and *puhal* cash expenses, miscellaneous expenses, rent of leased land, assessment and L. F. C. on owned land. *Column 5.*—Interest on working capital, both fixed as well as fixed capital. Fixed capital includes money spent on the current agricultural operations. Fixed capital includes implements. *Column 6* denotes the estimated rent of owned land minus the assessment and L. F. C. *Column 8* shows wages earned by the family.

Gross receipts obtained from the farm amounted to Rs. 2,164-13-10, while the cost of production (excluding wages for family labour) was Rs. 1,853-14-9, thus leaving a labour income of Rs. 310-15-1. The farmer himself did not do any manual work on the farm. His wife contributed only 88 days' work on the year's crops. Had the family worked themselves on the farm they could have saved at least Rs. 150 which they paid to the yearly servant.

Farm Business Income.—In addition to the family labour income shown in table XI, the farmer could save the rent of his owned land and the interest on the working capital which are debited to the costs. The following table gives the farm business income or the aggregate income of the farmer i.e., the value of produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
				Rs. a. p.
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	8 17	2,164 13 10	1,670 4 5	+ 494 9 5
Sugarcane	1 20	1,362 4 3	} 1,670 4 5	+ 494 9 5
Ratoon cane	0 20	167 14 1		
Jowar	2 20	34 0 0		
Brinjals	1 0	72 13 6		
Bhopala	0 30	17 14 0		
Guava	2 7	510 0 0		

The gross receipts obtained were Rs. 2,164-13-10, while the out-of-pocket expenses were Rs. 1,670-4-5, thus leaving Rs. 494-9-5 as a farm business income.

The farm business income, made up of the family labour income, interest on working capital and rent of owned land, as shown below tallies with the figure arrived at in the table above :—

	Rs. a. p.
Family labour income	310 15 1
Interest on working capital	95 0 7
Rent of owned land	88 9 9
	494 9 5

ANALYSIS

The farm family supplied only 88 woman units. The farmer himself behaved as a gentleman farmer and worked only as manager. Taking two woman units equal to one man unit, it may be said, that the farm family supplied only 44 labour units. The farmer had to employ 410 man units, 424 woman units and 274 bullocks units, besides some labour on piece-work which together cost him Rs. 502-11-0.

For the 44 labour units and supervision, the farm family made an income of Rs. 310-15-1. The total farm business income came to Rs. 494-9-5. Comparing the inventory values at the beginning and end of the year, it is found that the farm concern was worth less by Rs. 262. If the farmer and his wife had contributed more labour their income would have been more and they could have paid part of their debts and prevented loss in the inventory. It may further be noted that the farmer maintained two bullocks for only going about which he could ill-afford.

The following table shows the labour units required per acre, yields of main produce obtained and general remarks on the crops and their yields. Labour includes home labour, hired labour and even bullock labour. (Man unit = bullock unit = 2 woman units.)

TABLE XIII—YIELD OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce per acre			Remarks
	Name of produce	Quantity or value	Labour units	
1	Sugarcane (<i>gul</i>)	Lbs. 7,936	543·99	This plot was put under sugarcane for the first time since the advent of canal and hence it gave better yield at low cost of production. <i>Bhend</i> in the crop was not weighed. (Includes 30 units for contract payment.)
2	Ratoon-cane (<i>gul</i>) ..	3,432	261·0	Low yield was due to neglect of the crop caused by farmer's protracted sickness and his subsequent death.
3	<i>Jowar</i>	Rs. a. p. 12 0 0	3·75	Standing crop was sold.
4	Do.	22 0 0	5·0	
5	Brinjals	Lbs. 1,200	133·5	The crop was a failure. The plot was not manured for brinjal nor in the previous year. Rainfall was not favourable.
6	<i>Bhopala</i>	Rs. a. p. 23 13 4	65·66	Crop failed. It was badly attacked by insects. (Includes 5 units for contract payment.)
	Guava	234 7 9	Rented	The plantation was rented to another farmer for a period of two years.

The yields of all the plots except that of plot No. 1 were very poor due to the attack of crop pests and ill-distributed rainfall. Annewari of both the *kharif* and *rabi* crops was 10 annas.

Sugarcane (plot No. 1).—For the first time after the advent of the canal this plot was brought under irrigation. Very small amount of money was spent on manure and yet the yield was very good. The farmer made substantial labour income and farm business income from this plot.

Ratoon (plot No. 2).—This plot did not receive timely operations due to the continuous illness of the farmer. In fact it was neglected. This, coupled with severe cold, reduced the quantity and spoiled the quality of *gul*. The farmer was a loser in this case.

Jowar (plot Nos. 3 and 4).—Two acres and twenty gunthas were under *nilwa jowar* in two blocks. Both the plots were good but they had not received any manure for 15 years in the past. The run down condition of land was responsible for low yields.

Brinjals (plot No. 5).—Brinjal is one of the rotation crops in sugarcane farming at Nanded and Wadgaon. Want of sufficient rains checked the growth of seedlings of brinjals. Hand watering was resorted to, yet the plants remained stunted and the yield was low.

Bhopala (plot No. 6).—*Bhopala* suffered for want of moisture and the crop fell prey to insects.

Guava (plot No. 7).—The established guava plantation gave good income.

STATEMENT No. 45

SUGARCANE—1½ acres in 1928-29

PLOT No. (1)

Previous crop—Bajri (dry)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ^a	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bullocks		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Ploughing and making ridges,	20·0	..	60	80·0	53·33	50 0 0	33 5 4	Three ploughings and ridging. A plough required two men and six bullocks. This was contract work for Rs. 50.
(b) Putting bunds	3	37·0	..	..	40·0	26·67	18 8 0	12 5 4	Men were paid at 8 annas each.
(c) Repairing ridges, beds, digging corners etc.	1	8·0	..	..	9·0	6·0	4 0 0	2 10 8	Men were paid at annas 8 each.
(d) Temporary fencing	18·0	..	..	18·0	8·67	6 8 0	4 5 4	Men were paid at annas 8 each. Fencing material was obtained free from the farm.
2. Manure and manuring												
(a) Manures												
(i) Municipal refuse	6 10 5	4 6 11	Nineteen carts of municipal refuse at annas 8 each; 70 per cent of the cost is charged to this crop.
(ii) Ash manure	7 8 0	5 0 0	Thirty carts of ash at annas 4 per cart.

NANNDED (A)

201

STATEMENT No. 45—contd.

252

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks		Men	Women	Bullocks			For the plot	Per acre	
										Rs. s. p.	Rs. s. p.	
(iii) Fish powder	45 0 0	30 0 0	Two bags of fish powder at Rs. 22 per bag were applied as top dressing. Rs. 1 was paid for cartage.
(ic) Fish sand	180 0 0	120 0 0	Twenty-four bags at Rs. 7-8-0 per bag (including cartage) were applied as top dressing.
(c) Sulphate of Ammonia	17 0 0	11 5 4	One bag of Sulphate of Ammonia was given as top dressing costing Rs. 17 including cartage.
(b) Carting municipal refuse and ash	15.5	..	31	40.5	31.0	23 15 5	15 15 7	Nineteen carts of municipal refuse at Rs. 1-2-0 per cart; 70 per cent of the cost is charged. Cartage for 30 carts of ash was paid at Rs. 1-8-0 for every 5 trips.
(c) Manuring	2	2.0	59	..	33.5	22.38	11 0 5	7 5 7	Men were paid at annas 8 each and women at annas 4 each; 70 per cent of the cost is charged.
3. Seeds and sowing												
(a) Seeds (sets)	100 0 0	60 10 8	Twenty-five thousand sets at Rs. 4 per 1,000.
(b) Planting	2	7.0	12	..	15.0	10.0	6 8 0	4 5 4	Men were paid at annas 8 each and women at annas 4 each.
(c) Vegetable seeds	14 0 0	9 5 4	<i>Khira, bhendi, dodka</i> , mulla seeds (12½ lbs. costing Rs. 14).
(d) Sowing vegetables	11	..	5.5	3.67	2 1 0	1 6 0	Women were paid at annas 8 each.
4. Irrigation												
(a) Canal water charges	71 11 6	47 13 0	Irrigation charges at Rs. 45 per acre and local-fund cess.
(b) Labour	42	..	..	..	42.0	28.0	....	....

FARM STUDIES

5.	After-care and tillage																	
	(a) Weeding			8	..	135	..	70'5	47'0	25 5 0	16 14 0	0	0	0	0	0	0	Three weedings were given. Women were paid at annas 8 each.
	(b) Earthing up			27'0	..	..	..	27'0	18'0	27 0 0	18 0 0	0	0	0	0	0	0	Contract work at Rs. 18 per acre.
	(c) Watching			32'0	..	..	..	32'0	21'33	16 0 0	10 10 8	0	0	0	0	0	0	Paid at Rs. 8 per day.
6.	Harvesting and preparing for market																	
	(a) Vegetable harvesting...	58		..	..	..	..	29'0	19'58	....	....					
	(b) Crushing canes and boiling on ravi system....			156'0	..	104	260'0	173'33	163 10 2	109 1 5	0	0	0	0	0	0	0	Contract work at Rs. 30 per <i>bhargadi</i> . Cash Rs. 97-8-0 and in the shape of cane tops Rs. 66-2-2.
	(c) Extra labour for collecting cane pieces.....	13		13	..	..	..	19'5	13'0	....	....					
	(d) Hire of equipment.....			..	..	..	..	..	..	26 0 0	17 5 4	0	0	0	0	0	0	At Rs. 2 per day for 13 days.
	(e) Petty expenditure, repair of furnace, purchase of flour, oil etc.			9	20'0	..	..	29'0	19'33	13 4 0	8 13 4	0	0	0	0	0	0	The men were paid at annas 8 each. Rs. 3-4-0 were paid for oil and accessories.
	(f) Extra fuel .....			..	..	..	..	..	..	15 0 0	10 0 0	0	0	0	0	0	0	<i>Bajri surmad</i> for fuel.
7.	Marketing																	
	(a) Haulage of <i>gul</i>			6'5	..	13	19'5	13'0	10 9 0	7 0 8	0	0	0	0	0	0	0	Paid at Rs. 1-10-0 per cart (6½ carts).
	(b) Brokerage etc.....			..	..	..	..	..	..	46 12 0	31 2 8	0	0	0	0	0	0	Brokerage Rs. 34-14-0; <i>butta</i> Rs. 11-7-0 and charity annas 7.
	(c) Carting of <i>bhendi</i>.....			..	..	..	..	..	..	14 10 0	9 12 0	0	0	0	0	0	0	This was contract work.
	(d) Brokerage etc.....			..	..	..	..	..	..	1 0 3	1 0 10	0	0	0	0	0	0	
8.	<i>Saldar</i> .....			..	..	..	..	..	..	98 12 1	64 8 1	0	0	0	0	0	0	The annual wage of <i>saldar</i> is distributed over different plots in proportion to the units used on them.

NANDED (A)

263

STATEMENT No. 45—concl'd.

254

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bullocks		Men	Women	Bullocks			For the plot	Per acre	
							Rs. a. p.	Rs. a. p.				
9. Charges for implements and tools.....	..	..	..	..	..	..	..	..	4 2 8	2 12 6	The total annual charges are distributed over different plots according to their area.
Rs. a. p.												
(a) Depreciation..	2 2 2											
(b) Interest ..	2 0 6											
10. Interest on fixed capital (i.e., wages of hired labour and price of seeds and manure) .....	..	..	..	..	..	..	..	..	62 14 9	41 15 2	Charged at 12 per cent per annum.
11. Miscellaneous .....	..	..	..	..	..	..	..	..	30 0 0	20 0 0	
12. Rent of land .....	..	..	..	..	..	..	..	..	73 8 4	49 0 3	The land was taken on rent on cash system. Rent is charged in proportion to the value of yield of crops entering sugar-cane rotation.
Total.....	..	71	..	75	844	217	208	771	518'99	1,191 8 0	794 5 4	

¹Family labour not charged.

²Wages of *saldar* charged under item 8.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1½ acres	Per acre	For 1½ acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Gul 46½ pallas.</i>	11,904	7,936·0	1,162 3 0	774 12 8	Sold at different rates.
Cane tops	38,440	25,626·66	99 3 8	66 2 2	Estimated value.
Vegetables ....	..	..	100 14 0	67 4 0	Sold at different rates.
Total.....	..	..	1,362 4 8	908 2 10	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1½ acres .	1,362 4 3	1,191 8 0	(b)64 15 3	+170 12 3	+235 11 6
Per acre ..	908 2 10	794 5 4	43 4 10	+113 13 6	+157 2 4

HANDED (A)

STATEMENT No. 46

256

SUGARCANE RATOON—20 gunthas in 1928-29

PLOT No. (2)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Suldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bul-locks ²		Men	Women	Bullocks			For the Plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Manure and manuring												
(a) Residual manure	5 4 0	10 8 0	Thirty per cent of the cost of municipal refuse given to the previous crop is charged for the residue.
(b) Sulphate of Ammonia	17 0 0	34 0 0	One bag of Sulphate of Ammonia (Rs. 17 including cartage).
(c) Fish powder	45 0 0	90 0 0	Six bags of fish manure (Rs. 45 including cartage).
(d) Manuring	1·0	4	4	..	7·0	14	3 0 0	6 0 0	Men were paid at annas 8 and women at annas 4 each.
2. Irrigation												
(a) Canal water charges	23 14 0	47 13 0	Irrigation charges at Rs. 45 per acre and local-fund cess.
(b) Labour	12·5	..	..	..	12·5	25	....	....
3. After-care and tillage												
(a) Weeding	1	..	1·0	..	74	..	38·5	77	13 14 0	27 12 0	Three weeding were given. Women were paid at annas 3 each.
(b) Earthing up	11	..	..	11·0	22	11 0 0	22 0 0	Contract work at Rs. 22 per acre,

FARM STUDIES

4. Harvesting and preparing for market															
(a) Harvesting, crushing and boiling.....	..	..	..	..	24	..	16	40.0	80	24 8 6	40 1 0		Contract work at Rs. 30 per <i>bhargadi</i> . Cash Rs. 15 and cane tops Rs. 9-8-6.
(b) Extra labour in <i>gurhal</i> house.....	..	1	..	1.0	..	..	..	1.5	3	....	....		At Rs. 2 per day for two days.
(c) Hire of equipment .....	..	..	..	..	..	..	..	..	..	4 0 0	8 0 0		
(d) Miscellaneous for repairs of furnace, shed, oil, flour etc.....	..	2	..	2.0	5	..	..	8.0	16	3 8 0	7 0 0		Men were paid at annas 8 each. Rs. 1 was paid for oil and other supplies.
(e) Extra fuel .....	..	..	..	..	..	..	..	..	..	5 0 0	10 0 0		<i>Bajri sarmad</i> for fuel worth Rs. 5.
5. Marketing															
(a) Carting charges .....	..	..	..	..	..	..	..	..	..	1 10 0	3 4 0		Rs. 1-10-0 per cart.
(b) Brokerage etc. ....	..	..	..	..	..	..	..	..	..	5 15 6	11 15 0		Brokerage Rs. 4-12-0, <i>butta</i> Rs. 1-2-6, <i>dharmadaya</i> one anna.
6. Removing stubbles	3	..	9	..	..	..	..	12.0	24	....	....		The labour is not charged being got free from a relative.
7. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	..	22 9 4	45 2 8		Wages of <i>saldar</i> are distributed over different plots in proportion to the units used on them.
8. Charges for implements and tools. ....	..	..	..	..	..	..	..	..	..	1 6 3	2 12 6		The total annual charges are distributed over different plots according to their area.
Rs. a. P.															
(a) Depreciation .....	..	..	..	..	..	..	..	..	..	0 11 5	..		
(b) Interest .....	..	..	..	..	..	..	..	..	..	0 10 10	..		
9. Interest on fluid capital (i.e. wages of hired labour and price of manure.....)	..	..	..	..	..	..	..	..	..	11 2 0	22 4 0		Charged at 12 per cent per annum.
10. Miscellaneous .....	..	..	..	..	..	..	..	..	..	10 0 0	20 0 0		
11. Rent of land .....	..	..	..	..	..	..	..	..	..	35 9 0	71 2 0		The land was leased. Rent is charged in proportion to the value of yield of crops entering sugarcane rotation.
Total	3	4	9	17.5	44	78	16	180.5	261	244 5 1	488 10 2				

¹Family labour not charged.

²The nine units, having got free, are not charged.

³Wages of *saldar* charged under item 7.

STATEMENT No. 46—concl'd.

253

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 20 gunthas	Per acre	For 20 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>gul</i>	1,716	3,432	153 9 4	307 2 8	Six <i>pallas</i> and 90 lbs. are sold at Rs. 23 per <i>palla</i> and 90 lbs. of <i>gul</i> kept at home (Rs. 7-8-0).
lane tops ..	2,860	5,720	14 4 9	28 9 6	Valued at Rs. 200 per rupee.
Total ..	.....	.....	167 14 1	335 12 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 20 gunthas	167 14 1	244 5 1	(b) 11 12 10	-76 7 0	-64 10 2
Per acre	335 12 2	488 10 2	23 9 8	-152 14 0	-129 4 4

FARM STUDIES

STATEMENT No. 47

JOWAR (NILWA)—1 acre in 1928-29

PLOT No. (3)

Previous crop—*Bajri* (dry), 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Cost ex- cluding that of family labour	REMARKS
	Men	Women	Bullocks ¹		Men	Women	Bullocks		Per acre.	
									Rs. a. p.	
1. Preparatory tillage										
(a) Harrowing and levelling	2·0	1·0	..	..	..	3·0	....	Two harrowings and a levelling were given.
2. Seeds and sowing										
(a) Seeds	1 0 0	For the plot 24 lbs. of <i>jowar</i> seed.
(b) Sowing and covering	0·5	0·25	..	..	..	0·75	....
3. Harvesting and preparing for market	Standing crop was sold.
4. Saldar	1 9 10	Annual wages of <i>saldar</i> are distributed over different plots in proportion to the units used on them.
5. Charges for bullock labour	1 4 0	Charged at annas eight each.
6. Charges for implements and tools	2 12 5	The total annual charges are distributed over different plots according to their area.
(a) Depreciation	1 6 9	
(b) Interest	1 5 8	
7. Interest on fixed capital (i.e. price of seeds)	0 1 0	Charged at 12 per cent per annum.
8. Rent of land	10 0 0	The land was owned.
Total	2·5	1·25	..	..	..	3·75	16 11 8	

¹Home bullock labour charged under item 5. ²Wages of *saldar* charged under item 4.

NO. OF PAGES 1-178

MANDED (A)

259

STATEMENT No. 47—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value	REMARKS
	Per acre	
	Rs. a. p.	
<i>Nilwa jowar</i>	12 0 0	Standing crop was sold.
Total	12 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	12 0 0	16 11 3	(a) 7 13 0 (b) 1 6 8	-4 11 3	+4 9 3

STATEMENT No. 48

JOWAR (and a small patch of chillies)—1½ acres
in 1928-29

PLOT No. (4)

Previous crop—Bajri (dry), 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost-excluding that of family labour		REMARKS
	Men	Women	Bullocks ¹		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Harrowing	4	2 0	..	..	..	6 0	4	....	....	Four harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing												
(a) Seeds	1 8 0	1 0 0	For the plot 86 lbs. of jowar at 24 lbs. per rupee were required; chillies seedlings were raised.
(b) Sowing and covering	1	0 5	..	..	..	1 5	1	....	....
3. Harvesting and preparing for market	Standing crop of <i>nihau</i> was sold. Chillies were gathered by the <i>saldar</i> in his spare time.

MANDED (A)

261

STATEMENT No. 48—concl'd.

262

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks ¹		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
4. Saldar	3 3 8	2 2 5	Annual wage of <i>saldar</i> is distributed over different plots in proportion to the units used on them.	
5. Charges for bullock labour	2 8 0	1 10 8	Charged at annas eight each.	
6. Charges for implements and tools	4 2 8	2 12 5	The total annual charges are distributed over different plots according to their area.	
Rs. a. p.												
(a) Depreciation .. 2 2 2												
(b) Interest .. 2 0 6												
7. Interest on fluid capital (i.e., price of seeds)	0 1 5	0 1 0	Charged at 12 per cent per annum.	
8. Rent of land	15 0 0	10 0 0	The land was leased on cash system.	
Total	5	2·5	7·5	5	26 7 9	17 10 6	

¹Home bullock labour charged under item 5.²Wage of *saldar* charged under item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1½ acres	Per acre	For 1½ acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar .....	..	..	20 0 0	18 5 4	Standing crop was sold.
Chillies	14	9'38	2 0 0	1 5 4	Sold at 7 lbs. per rupee.
Total ..	..	..	22 0 0	14 10 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 1½ acres	Rs. a. p. 22 0 0	Rs. a. p. 26 7 9	Rs. a. p. (b) 2 1 11	Rs. a. p. -4 7 9	Rs. a. p. -2 5 10
Per acre	14 10 8	17 10 6	1 6 7	-2 15 10	-1 9 3

ANNEXED (A)

4. Harvesting and preparing for market .....	..	10	..	7	..	18	..*	21.0	4 8 0	Women were paid at 4 annas each. Gathered at different times.
5. Marketing										
(a) Carrying to market in small lots .....	..	..	..	..	..	58	..	29.0	10 14 0	Women were paid at annas three each.
(b) Brokerage .....	..	..	..	..	..	..	..	..	1 2 8	
6. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	15 7 10	Annual wage of <i>saldar</i> is distributed, over different plots, in proportion to the units used on them.
7. Charges for bullock labour .....	..	..	..	..	..	..	..	..	4 0 0	Charged at annas eight each.
8. Charges for implements and tools .....	..	..	..	..	..	..	..	..	2 12 5	The total annual charges are distributed over different plots according to their area.
(a) Depreciation										
(b) Interest										
9. Interest on working capital (i.e. wages of hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	2 4 10	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	15 6 9	The land was leased. Rent is distributed in proportion to the value of yield of crops entering the sugarcane rotation.
Total .....	..	10	8	12	16	121	32	198.5	104 13 7	

¹Family labour not charged. ²Home bullock labour charged under item 7. ³Wages of *saldar* charged under item 6.

ANNEX (A)

265

STATEMENT No. 49—concl'd.

266

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	For one acre	Per acre	
	Lbs.	Rs. a. p.	
Brinjals	1,200	72 13 6	Sold at different rates.
Total		72 13 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	72 13 6	104 13 7	(b) 3 10 6	-32 0 1	-28 5 7

FARM STUDIES

STATEMENT No. 50

BHOPALA (with *bhendi* and coriander)—30 gunthas
in 1928-29

PLOT No. (6)

Previous crop—*Bajri* (dry), 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			<i>Saldar</i> ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Ploughing	6	..	18	24·0	32·0	15 0 0	20 0 0	Contract work.
(b) Breaking clods, harrowing and levelling	8	4	..	..	..	12·0	16·0	....	....	Harrowed and levelled several times.
2. Seeds and sowing												
(a) Seeds	6 0 0	8 0 0	<i>Bhopala</i> , <i>bhendi</i> and coriander.
(b) Dibbling	2	..	4	..	4·0	5·38	1 0 0	1 5 4	Women were paid at annas four each.
3. Harvesting and preparing for market	3	..	2	..	4	..	5·5	7·38	1 0 0	1 5 4	Women were paid at annas four each.

MANDED (A)

267

STATEMENT No. 50—concl'd.

268

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
4. Marketing												
(a) Carting .....	..	..	..	..	..	..	..	..	..	1 12 0	2 5 4	Contract work.
(b) Batta .....	..	..	..	..	..	..	..	..	..	0 4 0	0 5 4	
5. Saldar .....	..	..	..	..	..	..	..	..	..	10 5 3	13 12 4	Annual wages of <i>saldar</i> are distributed, over different plots, in proportion to the units used on them.
6. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	4 0 0	5 5 4	Charged at annas eight each.
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	2 1 4	2 12 5	The total annual charges are distributed over different plots according to their area.
Rs. a. p.												
(a) Depreciation	1	1	0									
(b) Interest	1	0	3									
8. Interest on working capital (i.e., wages of hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	1 5 1	1 12 2	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	3 12 6	5 0 8	The land was leased. Rent is distributed in proportion to the value of yield of crops entering the sugarcane rotation.
Total .....	..	3	8	8	6	8	18	45.5	60.66	46 8 2	62 0 3	

¹Family labour not charged. ²Home bullock labour charged under item 6. ³Wages of *saldar* charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 30 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Vegetables in the <i>bhopala</i> plot ...	7 14 0	10 8 0	Sub-crop was very poor. Sold at different rates.
<i>Bhopala</i>	10 0 0	13 5 4	<i>Bhopala</i> crop was a failure. Sold at different rates.
Total	17 14 0	23 13 4	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 30 gunthas.	17 14 0	46 8 2	(b) 2 5 4	-28 10 2	-26 4 10
Per acre	23 13 4	62 0 3	3 1 9	-38 2 11	-35 1 2

NANDED (A)

STATEMENT No. 51

GUAVA—2 acres 7 gunthas in 1928-29

PLOT No. (7)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Capital cost	The garden was 20 years old. The farmer did not remember the capital cost. Moreover, even if such cost was available, it is not desirable to spread it over more than 20 years. Hence capital cost is not charged. The plot was rented to a tenant for Rs. 1,020 for two years. The costs shown in the statement are costs of the operations which were undertaken by the owner. The owner supplied water and manure. The other operations which were performed by the tenant are not detailed as the study is restricted to the man who owns the land.
2. Manure and manuring											
(a) Residual manure	11 4 0	5 2 9	Thirty per cent of the cost of municipal refuse (costing Rs. 37½ applied during the previous year) is charged for the residue.
(b) Municipal refuse	37 3 0	17 1 6	Twenty-five carts of municipal refuse at Rs. 2-2-0 per cart (including cartage and toll) were given; seventy per cent of the cost is charged this year.

3. Irrigation													
(a) Canal water charges ..	..	..	..	..	..	..	..	..	76 4 2	85 1 0	Irrigation charges at Rs. 33 per acre and local fund cess one anna in the rupee.
4. Charges for implements and tools.....	..	..	..	..	..	..	..	..	6 0 0	2 12 6	Annual charges are distributed over different plots according to their area.
Rs. s. p.													
(a) Depreciation 3 1 8													
(b) Interest .. 2 15 1													
5. Interest on fluid capital (i.e. value of manure) ....	..	..	..	..	..	..	..	..	5 13 0	2 10 9	Charged at 12 per cent per annum.
6. Rent of land .....	..	..	..	..	..	..	..	..	87 0 0	40 0 0	The land was owned.
Total .....	..	..	..	..	..	..	..	..	223 8 11	102 12 6	

ANNEXED (A)

STATEMENT No. 51—concl.

272

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 2 acres and 7 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Guava fruit	510 0 0	234 7 9	
Total ..	510 0 0	234 7 9	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 7 gunthas	510 0 0	223 8 11	(a) 80 11 11 (b) 8 12 1	+286 7 1	+375 15 1
Per acre	234 7 9	102 12 6	41 2 4	+131 11 3	+172 13 7

FARM STUDIES

NANDED, PART (B), 1929-30.

General description of the village regarding its climate, rainfall, communication, crops and cropping, distribution of land among people, and under crops have already appeared as introductory remarks to part (A) for the year 1928-29. It is, therefore, not necessary to repeat the same and to give tables I to V. This part dealing with the year 1929-30 is in fact the continuation of the investigation carried in the year 1928-29.

SEASON

There were few ante-monsoon showers amounting to 2·10 inches in the month of April which facilitated preparation for *kharif* crops. Regular monsoon opened weak in the second week of June. The third week of the month passed almost dry, but in the fourth week 4·06 inches of rain was received which greatly helped *kharif* sowing. Sowing operations were finished by the first week of July. The total rainfall during the year was 20·68 inches, or about 1·68 inches short of the average of the place.

The fortnightly distribution of rainfall during the year is given in the following table.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1929
AT POONA (ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First Fortnight						} 20·68
0·0	0·02	0·0	0·97	0·0	0·45	3·47	0·48	0·29	0·0	0·27	0·03	
						Second Fortnight						
0·0	0·0	0·09	1·13	0·0	4·06	0·75	0·67	5·61	2·36	0·0	0·03	

It will be seen from the above table that most of the rain fell in June, July and September, while there was a dry spell from the middle of July to the middle of September. Rain of July enabled the crops to hold on in spite of the poor precipitation in August. All the *kharif* crops were progressing well, but the heavy showers, amounting to 5·61 inches, in the second fortnight of September damaged them to some extent. Some of the harvested crops could not be cured properly, due to continuous rain. The yield of *nilva* was normal but the quality of grain and fodder was poor. These rains were found useful for sowing *rabi* crops. Some farmers sowed *shalu* in the lands fallowed in *kharif* season and some took gram in the *bajri* stubble after *bajri* was harvested. On the whole the season was good. The *annevari* or the crop estimate by the Revenue Department was 7 *annas* for *kharif* and 12 *annas* for *rabi* crops.

THE FARMER

There was no change whatsoever in the acreage of the cultivating holding (page 237). Out of the nine acres of the cultivating holding twenty-three gunthas were under grass as in the previous year. It may be noted that two acres and ten gunthas were double cropped; thus though the net cropped area was 8 acres and 17 gunthas, as in the previous year, the gross cropped area was 10 acres and 27 gunthas.

(a) *Human labour*.—The farmer died early in the year, i.e., in March 1929. Four months after his demise his eldest daughter was married and she went to her husband's house. Thus in the year 1929-30 there were only three members in the family as compared to five in the previous year, with only the farmer's wife to look after the household work. The *saldar* was continued.

Only the house wife put in 18·75 days' work on the farm, and it can, therefore, be said that the family contributed very little work. Due to the death of the farmer, the *saldar* had to look after the supervision work and marketing of farm products, etc. In addition he put in 80·5 days' work on different crops. His wages are therefore allocated on the different crops on the basis of the work he put in on those crops as shown in the following table :—

TABLE IV (a)—DISTRIBUTION OF THE WORK OF THE *Saldar*

Name of crop	Area		No. of days' work put in	Amount charged		
	A.	g.		Rs.	a.	p.
Total	10	27	80·5	150	0	0
Ratoon-cane	1	20	30·0	55	14	5
<i>Bajri</i>	2	10	29·0	54	0	7
<i>Bajri</i>	1	0	4·5	8	6	2
<i>Jowar</i>	1	20	5·0	9	5	1
Gram	2	10	12·0	22	5	9
Guava.....	2	7	0·0	0	0	0

The farmer had not maintained bullocks for farm use. He had two *dhamni*-bullocks for going about. In the year 1929-30 they put in 43 days work. Since cost of the maintenance was not charged against the farm, these units were debited to the farm at current rate (i.e. 8 annas per unit).

The nature of the holding, land and crops, cropping and treatment of different fields held by the farmer in 1929-30 have already been given in the previous year's investigation (page 243).

COSTS AND RECEIPTS

Expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost of the total cultivated area (viz. 10 acres and 27 gunthas)		
	Rs.	a.	p.
I*. Out-of-pocket expenses			
(a) Manure	328	7	7
(b) Seeds	23	0	0
(c) Outside labour	296	7	5
(d) Depreciation on implements and tools	11	8	0
(e) Charges for bullock labour	21	8	0
(f) Marketing charges	31	3	0
(g) Assessment and L. F. C. on owned land	8	6	3
(h) Wages of <i>saldar</i>	150	0	0
(i) Irrigation charges	167	1	8
(j) Hire of equipment and cash expenses over <i>gurhal</i>	28	0	6
(k) Rent of leased land	95	7	6
			1,161 1 11
II. Rent of owned land excluding assessment and L. F. C.	88	9	9
			88 9 9
III. Interest on working capital			
(a) Interest on fluid capital required for current agricultural operations	52	11	0
(b) Interest on the value of implements and tools	10	3	3
			62 14 3
Total cost of production (excluding the wages of family labour)			1,312 9 11

*DETAILS OF OUT-OF-POCKET EXPENSES

I. Manures :			
(A) Bulky manure			
(a) Twenty-five carts of municipal refuse at Rs. 2-2-0 per cart; 70 per cent of the cost is charged (plot No. 6)	Rs.	a.	p.
	37	3	0
(B) Concentrated manure			
(a) Four bags of Sulphate of Ammonia at Rs. 17 per bag (plot No. 1)	Rs.	a.	p.
	70	0	0
(b) Twenty-two and half <i>pallas</i> of safflower cake at Rs. 9 per <i>palla</i> including cartage (plot No. 1)	202	8	0
			272 8 0

	Rs. a. p.	Rs. a. p.	Rs. a. p.
(C) Residual manure			
(a) Plot No. 6; 25 cartloads of municipal refuse at Rs. 2-2-0 per cart (including cartage) in 1928-29; 30 per cent of the cost charged	15 15 0		
(b) Plot No. 1; 19 carts of municipal refuse at 8 annas per cart were given in 1928-29; 30 per cent of the cost is charged to the plot	2 13 7		
		18 12 7	
2. Seeds :			328 7 7
(a) Bajri, 22 lbs.		2 0 0	
(b) Jowari, 40 lbs.		4 0 0	
(c) Gram, 150 lbs.		12 0 0	
(d) Bhenli		4 0 0	
(e) Peas		1 0 0	
			23 0 0
3. Outside labour :			
(a) Plot No. 1; ratoon-cane; day-labour, 157 man units, 141 women and 86 bullocks		204 4 10	
(b) Plot No. 1; labour for carting manures (Rs. 6-6-7 and Rs. 10-12-0)		17 2 7	
(c) Plot No. 2; bajri; day-labour, 22 men, 65 women and 24 bullocks		43 4 0	
(d) Plot No. 2; bajri; piece-work		1 4 0	
(e) Plot No. 3; bajri; day-labour, 4 men and 4 women		3 0 0	
(f) Plot No. 4; Ndva; day-labour, 5 men, 4 women and 9 bullocks		9 8 0	
(g) Plot No. 5; gram; day-labour, 11 men, 16 women and 22 bullocks		18 0 0	
4. Depreciation on implements and tools excluding new purchases :	Rs. a. p.		296 7 5
Opening inventory	82 12 0		
Closing inventory	71 4 0		
			11 8 0
5. Charges for bullock labour :			
Home bullock units required for the crops are charged at current wages at the village (at 8 annas per unit per day for 43 units)			21 8 0
6. Marketing charges :			
Plot No. 1	Rs. a. p.		
Adat	22 13 9		
Batta	5 2 3		
Dharmadaya	0 5 0		
Plot No. 2		28 5 0	
Batta for the sale of bhenli		0 2 3	
Plot No. 5			
Dalali on gram		2 11 9	
			31 3 0

	Rs. a. p.	Rs. a. p.
7. <i>Assessment and L. F. C. :</i>		
Plot No. 3	2 2 2	
Plot No. 6	6 4 1	
		8 6 3
8. <i>Saldar's wages</i>	150 0 0	
		150 0 0
9. <i>Irrigation charges :</i>		
Plot No. 1	71 11 6	
Plot No. 5	19 2 0	
Plot No. 6	76 4 2	
		167 1 8
10. <i>Hire of equipment and cash expenses over gurhal :</i>		
(a) Hire of a mill, etc.....	15 0 0	
(b) <i>Gurhal</i> expenses such as oil, etc. (plot No. 1)....	13 0 6	
		28 0 6
11. <i>Rent of leased land :</i>		
Plot No. 1	37 14 3	
Plot No. 2	33 12 3	
Plot No. 4	15 0 0	
Plot No. 5	8 13 0	
		95 7 6
<i>Total out-of-pocket expenses</i>		1,161 1 11

Family Labour Income.—The following table gives the family labour income, i.e., the remuneration obtained by the farm family for their work on the farm. The details of cost of production have already appeared above. The value of produce is taken from the cost and receipt statements of the various plots (pp. 281 to 296).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production excluding wages of family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	10 27	1,517 6 9	1,161 1 11	62 14 3	88 9 9	1,312 9 11	+204 12 10
<i>Susarcane</i> (ratoon) ..	1 20	702 1 9	720 4 6	42 9 11	0 0 0	762 14 5	-60 12 8
<i>Bajri</i>	3 10	222 2 0	168 15 6	4 11 6	7 13 10	181 8 10	+40 9 2
<i>Nitka</i> (jowar) ..	1 20	31 8 0	42 6 11	2 1 11	0 0 0	44 8 10	13 0 10
<i>Gram</i>	2 10	51 11 0	91 7 4	3 0 8	0 0 0	94 8 0	-42 13 0
<i>Guava</i>	2 7	510 0 0	137 15 8	10 6 3	80 11 11	229 1 10	+280 14 2

Column 4.—Out-of-pocket expenses include cost of manure, seeds, hired labour including labour engaged on piece-work, depreciation on deadstock, wages of *saldar*, irrigation charges, marketing expenses, hire of equipment and *gurhal* cash expenses, rent of leased land and assessment and L. F. C. on owned land. *Column 5.*—Interest on working capital, both fluid as well as fixed capital. Fluid capital includes money spent on the current agricultural operations. Fixed capital includes implements. *Column 6* denotes the estimated rent of owned land minus the assessment and L. F. C. *Column 8* shows wages earned by the family.

Gross receipts obtained from the farm amounted to Rs. 1,517-6-9, while the cost of production (excluding the wages of the family labour) came to Rs. 1,312-9-11 leaving a family labour income of Rs. 204-12-10.

Farm Business Income.—In addition to the family labour income shown in the above table the farmer saved the rent of owned land (excluding assessment and L. F. C.) and interest on the working capital which have been debited as costs.

The following table gives the farm business income or the aggregate income of the farmer, i.e., the value of the produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total	10 27	1,517 6 9	1,161 1 11	+356 4 10
Ratoon-cane	1 20	702 1 9	} 1,161 1 11	} +356 4 10
Bajri	3 10	222 2 0		
Nilwa (jowar)	1 20	31 8 0		
Gram	2 10	81 11 0		
Guava	2 7	510 0 0		

Deducting Rs. 1,161-1-11, the out-of-pocket expenses from Rs. 1,517-6-9 (the gross receipts) the family obtained Rs. 356-4-10 on account of the wages of the labour, the interest on working capital and the rent of owned land as shown below :—

	Rs. a. p.
Family labour income	204 12 10
Interest on working capital	62 14 3
Rent of owned land	88 9 9
	356 4 10

ANALYSIS

As compared to the previous year there was an increase of 2 acres and 10 gunthas in the gross cropped area, as two crops were taken on the plot of 2 acres and 10 gunthas. No new area was put under sugarcane during this year. The old area under sugarcane was ratooned.

The farm family supplied for the crops of the year only 18·75 woman units. Taking two woman units equal to one man unit it may be said that the farm family supplied only about 9·50 labour units. The farmer had to employ besides 211 man units, 238 woman units and 145 bullock units on daily wages and piece-work costing Rs. 296-7-5 over and above the wages of the *saldar*.

For the 9·5 labour units and the general supervision the widow made Rs. 204-12-10, as family labour income. This statement requires some explanation. It will be seen from table XI that *bajri* and guava alone left positive labour incomes; on all other crops labour income was minus. The guava plot which left the highest labour income was not worked by the farm family. They only supplied bulky manure and bore the cost of irrigation and kept an eye on the upkeep of the plantation. Their tenant paid them Rs. 510 as rent. The higher labour income was, therefore, more in the nature of the rent on land and interest on invested capital than return for labour. The family made farm business income of Rs. 356-4-10. In the previous year (1928-29) their farm business income was Rs. 494-9-5.

General remarks about crops.—Peculiarities of the season are already given under table VI. Table XIII shows the yields of main produce and the labour units spent per acre with general remarks on the crops. All labour, including home labour, hired labour and even bullock labour is included to get some idea as to the labour requirements of different crops per acre. (Man unit = bullock unit = 2 woman units.)

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce		No. of work units	Remarks
	Name of produce	Quantity lbs.		
1	Ratoon-cane (<i>gul</i>)	5,298·66	246·5	The yield was normal even though for the first two months the cultivation was neglected due to farmer's death. Two gunthas of cane was eaten away by stray cattle. (Includes 14·33 units for contract payment.)
2	<i>Bajri</i> (grain).....	1,026·66	57·5	High yield was due to the residual manure left by sugarcane. (Includes 1 unit for contract payment.)
3	<i>Bajri</i> (grain).....	264·0	18·0	The yield was too low. The plot was simply harrowed and sown. It had not received any manure for several years.
4	<i>Nilwa</i> (fodder)	900·0	18·33	Yield was normal.
5	Gram (grain)	160 (besides Rs. 12 for gram sold green).	29·77	Some of the gram was sold green in Poona market.

Sugarcane (Ratoon).—One acre and twenty gunthas were under ratoon-cane during the year. The cost of production excluding the unpaid wages of family labour came to Rs. 762-14-5, while the value of the gross produce was Rs. 702-1-9. The farmer thus lost Rs. 60-12-8 over the plot or Rs. 40-8-6 per acre. This loss was due to the heavy cost of manuring and low price of *gul*. Moreover, the crop was cut too late and extraction of juice and quality of *gul* were poor.

Bajri.—There were two plots (Nos. 2 and 3) under *bajri*. Plot No. 2 having sugarcane in the previous year had to be ploughed for *bajri*. The residual manure and the moisture retained increased the yield. Plot No. 3 was under dry crop for many years and had not received any manuring for years. The yield consequently was very low.

Nilva.—The plot was poor and had not received manuring for many years, yet the yield of *kadbi* was satisfactory due to favourable *khariif* season. The quality of fodder was poor as it was caught by the late rains.

Gram.—Gram was taken as a second crop after *bajri*. It was not manured. Part of the crop was sold green.

Special remarks on the economics of the farm.—The farmer, like many other small farmers on the canals, especially in the vicinity of cities, without looking to the size of his business tried to be a gentleman farmer and did not put his hands to actual farm work. Unless such men are prepared to work themselves, economic forces will weed them out. During the two years under study, 1928-29 and 1929-30, the farm family put in only 44 and 9·55 units' work though they had to employ 622 units in 1928-29, and 330 units in 1929-30 in addition to the labour of the *saldar*.

The man had earned some money between 1917 and 1923 on sugarcane even by his slipshod methods and did not realize that the fall in prices of farm produce necessitated change in the organization of his work.

The study has brought out that fruit and vegetables, at any rate near Poona, are more remunerative due to the reliable demand for them. The farmer had a well established guava garden which had been returning him good income for many years.

STATEMENT No. 52

SUGARCANE (RATOON)—1½ acres in 1929-30

PLOT No. (1)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saidar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women ¹	Bullocks		Men	Women	Bullocks			For the plot	Per acre	
1. Manure and manuring												
(a) Residual manure.....	..	..	..	..	..	..	..	..	..	9 4 2	6 2 10	Thirty per cent of the cost of municipal refuse applied to plant cane, is charged for the residue (19 cartloads of municipal refuse at Rs. 1-10-0 per cart including carting were applied to the plant cane).
Manure.....	Rs. a. p.	2 13 7										
Cartage.....	6 6 7											
(b) Manure												
(i) Sulphate of Ammonia.....	..	..	..	..	..	..	..	..	..	70 0 0	46 10 8	For the plot four bags of Sulphate of Ammonia as top dressing at Rs. 17-8-0 per bag.
(ii) Safflower cake.....	..	..	..	..	..	..	..	..	..	202 8 0	135 0 0	22½ pallas of cake at Rs. 9 per palla for top dressing.
(c) Cartage of manure.....	..	..	..	..	..	..	..	..	..	10 12 0	7 2 8	Cartage for Sulphate of Ammonia Rs. 2 and that of safflower cake Rs. 8-12-0.
(d) Manuring.....	..	..	..	..	8	21	..	18·5	12·33	12 12 0	8 8 0	This was contract work.
2. Irrigation												
(a) Canal water charges.....	..	..	..	..	..	..	..	..	..	71 11 6	47 13 0	Irrigation charges at Rs. 45 per acre and local-fund cess one anna in the rupee.
(b) Labour.....	..	..	..	30	..	..	..	30·0	20·0	....	....
3. After-care and tillage												
(a) Weeding.....	..	..	..	..	..	120	..	60·0	40·0	30 0 0	20 0 0	Three weedings were given. First weeding required 40 women, second 52 and the third 28. They were paid at 4 annas each.
(b) Earthing up.....	..	..	..	..	30	..	..	30·0	20·0	80 0 0	20 0 0	Contract work at Rs. 20 per acre.

MANDED (B)

281

STATEMENT No. 52—concl'd.

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women ¹	Bullocks		Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting and preparing for market										Rs. a. p.	Rs. a. p.	
(a) Harvesting, crushing and boiling.....	..	9.5	..	..	114	..	76	194.75	129.84	120 14 10	80 9 11	Contract work at Rs. 30 per <i>bharyadi</i> . Cash Rs. 71-4-0 and in the shape of cane tops Rs. 49-10-10.
(b) Hire of equipment....	15 0 0	10 0 0	At Rs. 1-8-0 per day for 10 days.
(c) Petty <i>gurhal</i> expenses..	18 0 6	8 11 0	For the repair of furnace and cost of <i>gurhal</i> supplies.
5. Marketing												
(a) Carting <i>gul</i>	5	..	10	15.0	10.0	10 10 0	7 1 4	Cartage of 5 carts at Rs. 2-2-0 per cart including octroi and toll.
(b) Brokerage, etc.....	28 5 0	18 14 0	Rs. a. p. Brokerage 22 13 9 <i>Ratta</i> 5 2 3 <i>Dharamadaya</i> 0 5 0 28 5 0
6. Saldar.....	55 14 5	37 4 3	Annual wages of <i>saldar</i> are distributed over different plots in proportion to the units used on them.
7. Charges for implements and tools.....	3 0 9	2 0 6	The total annual charges are distributed over different plots according to their area.
(a) Depreciation... 1 9 10												
(b) Interest..... 1 6 11												
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).....	41 8 0	27 7 4	Charged at 12 per cent per annum.
9. Rent of land.....	37 14 3	25 4 2	The land was rented. Rent is charged in proportion to the value of yield of crops entering sugarcane rotation.
Total.....	..	9.5	..	80	157	141	86	848.25	232.17	702 14 5	508 9 8	

¹Family labour not charged.

²Wages of *saldar* charged under item 6.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1½ acres	Per acre	For 1½ acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wool.....	7,948	5,298·66	895 14 0	423 14 8	Thirty <i>pallas</i> and 54 <i>scors</i> (<i>palla</i> = 256 lbs.) sold at different rates. Value of 160 lbs. of <i>gul</i> kept at home Rs. 10..
Wool tops.....	..	..	66 3 9	44 2 6	Estimated value.
Total ....	..	..	702 1 9	468 1 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1½ acres..	702 1 9	762 14 5	(b) 42 9 11	-60 12 8	-2 15 9
Per acre	468 1 2	508 9 8	28 6 7	-40 8 6	-1 15 10

HANDLED (B)

STATEMENT No. 53

284

BAJRI—2½ acres in 1929-30

PLOT No. (2)

Previous crop—Part under sugarcane and part
under *bhopala* and brinjal, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Wo- men ¹	Bul- locks ²		Men	Women	Bullocks			For the plot		
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing.....	8	..	24	32·0	14·23	20 0 0	8 14 3	One ploughing with two men and six bullocks was given to 1 acre and 20 gunthas. The rate of wage for two men and six bullocks was Rs. 5 per day.
(b) Harrowing.....	6	3	..	..	..	9·0	4·0	....	....	Five harrowings were given.
2. Seeds and sowing												
(a) Seeds.....	6 8 0	2 14 3	For the plot following seeds were required:— Rs. a. p. Bajri 16·5 lbs. 1 8 0 Bhendri 5·0 lbs. 4 0 0 Peas 10·0 lbs. 1 0 0
(b) Sowing and covering....	4	2	..	..	..	6·0	2·66	....	....
After-care and tillage												
(a) Watching.....	20	..	..	..	20·0	8·88	....	....

FARM STUDIES

4. Harvesting, tying bundles, breaking earheads, thrashing and preparing for market.....	..	3.25	8	4	14	65	..	60.12	26.73	23 4 0	10 5 4	Fourteen men on daily wages were paid at 8 annas each and 65 women at 4 annas each.
5. Marketing <i>bhendi</i>												
(a) Labour .....	..	..	..	..	..	..	..	..	..	1 4 0	0 8 10	Piece-labour for sending <i>bhendi</i> to market.
(b) Brokerage, etc.....	..	..	..	..	..	..	..	..	..	0 2 8	0 1 0	At 8 pies per rupee of sale. <i>Bajri</i> was sold on the thrashing floor.
6. <i>Saldar</i>.....	..	..	..	..	..	..	..	..	..	54 0 7	24 0 8	Annual wages of <i>saldar</i> are distributed over different plots in proportion to the units used on them.
7. Charges for bullock labour	..	..	..	..	..	..	..	..	..	9 0 0	4 0 0	Charged at 8 annas each.
8. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	4 9 1	2 0 6	The total annual charges are distributed over different plots according to their area.
(a) Depreciation.. 2 6 10												
(b) Interest..... 2 2 8												
9. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	1 9 6	0 11 4	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	..	33 12 3	15 0 1	The land was taken on lease. This area was cropped twice in the same year. Rent is distributed in proportion to the value of yields of crops entering the sugarcane rotation (see Plot No. 5).
Total.....	..	3.25	18	29	22	65	24	127.12	56.5	154 1 8	68 7 10	

¹Family labour not charged.

²Home bullock labour charged under item 7.

³Wages of *saldar* charged under item 6.

ANNEXED (3)

STATEMENT No. 53—concl'd.

286

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2½ acres	Per acre	For 2½ acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i> (7 <i>pallas</i>)	2,310	1,026·66	161 0 0	71 8 11	Sold at Rs. 23 per <i>palla</i> (of 330 lbs.).
<i>Bhendi</i>.....	..	..	8 14 0	3 15 1	Sold at different rates.
<i>Sarma</i> (1,500 bundles)	3,750	1,066·66	30 0 0	13 5 4	Valued at Rs. 2 per 100 bundles.
<i>Bhoos</i> .....	..	..	1 0 0	0 7 1	Estimated value.
<i>Peas</i>.....	..	..	..	....	Failed.
Total.....	..	..	200 14 0	89 4 5	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2½ acres..	200 14 0	154 1 8	(b) 3 11 9	+46 12 4	+50 8 1
Per acre.....	89 4 5	68 7 10	1 10 7	+20 12 7	+22 7 2

FARM STUDIES

STATEMENT No. 54

BAJRI—1 acre in 1929-30

PLOT No. (3)

Previous crop—Jowar, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men	Wo-men ¹	Bullocks ²		Men	Women	Bullocks		Per acre	
1. Preparatory tillage									Rs. a. p.	
(a) Harrowing and levelling.....	2	1.0	..	..	..	3.0	....	Two harrowings and a levelling were given.
2. Seeds and sowing										
(a) Seeds.....	0 8 0	For the plot 5.5 lbs. of bajri.
(b) Sowing and covering.....	1	0.5	..	..	..	1.5	....
3. Harvesting and preparing for market.....	..	1	4	3.0	4	4	..	13.5	3 0 0	Man and woman units charged at 8 annas and 4 annas respectively.
4. Saldar.....	8 6 2	Annual wage of <i>saldar</i> is distributed over different plots in proportion to the units used on them.
5. Charges for bullock labour.....	8 8 0	Charged at 8 annas each.
6. Charges for implements and tools	2 0 6	The total annual cost is distributed on different plots according to their area.
(a) Depreciation.....									Rs. a. p. 1 1 3	
(b) Interest.....									0 15 3	
7. Interest on fluid capital (i.e., price of seeds).....	0 0 6	Charged at 12 per cent per annum.
8. Rent of land.....	10 0 0	The land was owned.
Total.....	..	1	7	4.5	4	4	..	18.0	27 7 2	

¹Family labour not charged.²Home bullock labour charged under Item 5.³Wages of *saldar* charged under Item 4.

NANDED (B)

287

STATEMENT No. 54—concl'd.

288

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	For 1 acre	Per acre	
	Lbs	Rs. a. p.	
<i>Bajri</i> (2 maunds).....	284	16 0 0	Valued at Rs. 8 per maund of 132 lbs.
<i>Sarmad</i> (250 bundles).	625	5 0 0	Valued at Rs. 2 per 100 bundles.
<i>Bhoos</i>.....	..	0 4 0	Estimated value.
Total....	..	21 4 0	

(c) Summary

1	2	3	4	5 (i.e.col. 2-3)	6 (i.e.col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For one acre..	21 4 0	27 7 2	(a) 7 13 10 (b) 0 15 9	-6 3 2	+2 10 5

FARM STUDIES

JOWAR (NILWA)—1½ acres in 1929-30

Previous crop—Jowar (dry), 1928-29

PLOT No. (4)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Ploughing.....	3	..	9	12·0	8·0	7 8 0	5 0 0	One ploughing was given to one acre. A plough required two men and six bullocks. A team of two men and six bullocks was paid at Rs. 5 per day (for a day and a half).
(b) Harrowing and leveling.....	5	2·5	..	..	..	7·5	5·0	....	....	Five operations were given.
2. Seeds and sowing												
(a) Seeds.....	4 0 0	2 10 8	For the plot 40 lbs. of jowar seed.
(b) Sowing and covering....	1	0·5	..	..	..	1·5	1·0	....	....
3. Harvesting and preparing for market.....	..	1	..	2·0	2	4	..	6·5	4·33	2 0 0	1 5 4	Man and woman units paid at 8 annas and 4 annas respectively. Annual wages of <i>saldar</i> is distributed over different plots in proportion to the units used on them.
4. Saldar.....	9 5 1	6 3 5	Charged at 8 annas per unit.
5. Charges for bullock labour.....	3 0 0	2 0 0	The total annual charges are distributed over different plots according to their area.
6. Charges for implements and tools.....	3 0 9	2 0 6	
										Rs. a. p.		
(a) Depreciation.....										1 9 10		
(b) Interest.....										1 6 11		
7. Interest on fixed capital (i.e., wages of hired labour and cost of seeds).....	0 11 0	0 7 4	Charged at 12 per cent per annum.
8. Rent of land.....	15 0 0	10 0 0	The land was taken on lease.
Total.....	..	1	6	5·0	5	4	9	27·5	18·33	44 8 10	29 11 3	

¹Family labour not charged.

²Home bullock labour charged under item 5.

³Wages of *saldar* charged under item 4.

STATEMENT No. 55—concl.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1½ acres	Per acre	For 1½ acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Kadbi (bundles 450).....	1,350	900	31 8 0	21 0 0	Sold at Rs. 7 per 100 bundles. There was no formation of grains for want of sufficient rains.
Total....	..	..	31 8 0	21 0 0

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1½ acres..	31 8 0	44 8 10	(b) 2 1 11	-13 0 10	-10 14 11
Per acre	21 0 0	29 13 3	1 6 7	-8 11 3	-7 4 8

STATEMENT No. 56

PLOT No. (5)

GRAM—2½ acres in 1929-30

Previous crop—Bajri, 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saidar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing.....	3	..	6	9	4.0	3 0 0	1 5 4	One ploughing was given to 30 gunthas plot. A plough required two men and four bullocks. They were paid at Rs. 2 per day.
(b) Harrowing and leveling.....	8	4	..	..	..	12	5.38	....	....	Three operations were given.
2. Seeds and sowing												
(a) Seeds.....	12 0 0	5 5 4	For the plot 150 lbs. of gram seed at 12.5 lbs. per rupee.
(b) Sowing and covering	2	4	2	..	..	..	7	3.11	....	....
3. Irrigation												
(a) Canal water charges	19 2 0	8 8 0	The plot was not intended for irrigation in the beginning, but as the crop began withering one acre and twenty gunthas were irrigated. Irrigation charges were Rs. 12 per acre and local-fund cess one anna in the rupee.
(b) Watering.....	2	..	..	..	2	0.9	....	....

NANDED (B)

291

STATEMENT No. 56—concl'd.

292

ITEM OF EXPENDITURE	Home Labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ²	Bullocks ³		Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting and preparing for market	2	..	4	..	16	..	13	5·77	4 0 0	1 12 5	Hired women were paid at annas four each.
5. Marketing												
(a) Labour	8	..	10	24	10·08	11 0 0	4 14 2	Cartage for eight carts at Rs. 1-6-0 per cart.
(b) Brokerage, etc.	2 11 9	1 3 5	Brokerage Rs. 2-5-6 and butta Re. 0-6-3.
6. Saldar	22 5 9	9 15 0	Annual wages of <i>saldar</i> are distributed over different plots in proportion to the units used on them.
7. Charges for bullock labour	6 0 0	2 10 8	Charged at annas eight each.
8. Charges for implements and tools	4 9 1	2 0 0	The total annual charges are distributed over different plots according to their area.
Rs. a. p.												
(a) Depreciation .. 2 6 10												
(b) Interest .. 2 2 3												
9. Interest on fluid capital (i.e., wages of hired labour and price of seeds)	0 14 5	0 6 5	Charged at 12 per cent per annum.
10. Rent of land	8 13 0	3 14 8	The land was taken on lease. Rent is distributed in proportion to the value of crop taken on the plot in the same year. Gram followed <i>bajri</i> (plot No. 2).
Total	4	12	12	11	16	22	87	29·77	94 8 0	41 15 11	

¹Family labour not charged.

²Home bullock labour charged under item 7.

³Wages of *saldar* charged under item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity.		Value.				REMARKS
	For 2½ acres	Per acre	For 2½ acres		Per acre		
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Gram (3 maunds).	360	160	24 0 0	10 10 8	Valued at Rs. 8 per maund. (One maund=120 lbs.)		
(Green) gram as vegetable ....	..	..	27 3 0	12 1 4	Sold at different rates.		
Bhoos .....	..	..	0 8 0	0 3 7	Estimated value.		
Total ..	..	..	51 11 0	22 15 7			

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2½ acres.	51 11 0	94 8 0	(b) 3 0 8	-42 13 0	-39 12 4
Per acre	22 15 7	41 15 11	1 5 7	-19 0 4	-17 10 9

TABLED (B)

STATEMENT No. 57

GUAVA—2 acres 7 gunthas in 1929-30

PLOT No. (6)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on dally wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men	Women	Bullocks	Men	Women	Bullocks			For the plot	Per acre	
1. Capital cost	The garden was 20 years old. The farmer did not remember the capital cost. Moreover even if such cost was available it is not desirable to spread it over more than 20 years. Hence capital cost is not charged. The plot was rented to a tenant for Rs. 1,020 for two years. The costs shown in the statement are costs of the operations which were undertaken by the owner. The owner supplied water and manure. The other operations which were performed by the tenant are not detailed here as the study is restricted to the man who owns the land.
2. Manure and manuring											
(a) Residual manure	15 15 0	7 5 8	To the plot 25 carts of municipal refuse were applied in the previous year at Rs. 2-2-0 per cart (including cartage). Thirty per cent of the cost is charged this year for the residue.
(b) Manure	37 3 0	17 1 6	For the plot 25 carts of municipal refuse were given at Rs. 2-2-0 per cart (including cartage) seventy per cent of the cost is charged this year.

3. Irrigation												
(a) Canal water charges ..	..	..	..	..	..	..	..	..	70 4 2	85 1 0	Irrigation charges at Rs. 83 per acre and local fund cess one anna in the rupee.
4. Charges for implements and tools.....	..	..	..	..	..	..	..	..	4 7 1	2 0 8	The total annual charges are distributed over different plots according to their area.
Rs. a. p.												
(a) Depreciation..	2 5 5											
(b) Interest ..	2 1 8											
5. Interest on fixed capital (i.e., cost of manure)....	..	..	..	..	..	..	..	..	8 4 7	8 18 0	Charged at 12 per cent per annum.
6. Rent of land .....	..	..	..	..	..	..	..	..	87 0 0	40 0 0	The land was owned.
Total ..	..	..	..	..	..	..	..	..	229 1 10	105 5 5	

ANNEXED (B)

STATEMENT No. 57—concl'd.

296

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 7 gunthas	Per acre	For 2 acres and 7 gunthas	Per acre	
			Rs. a. p.	Rs. a. p.	
Juava	510 0 0	234 7 9	
Total	510 0 0	234 7 9	

(c) Summary

1	2	3	4	5	6
				i.e. col. 2--3)	(i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 7 gunthas ..	510 0 0	229 1 10	(a) 80 11 11 (b) 10 6 3	+280 14 2	+372 0 4
Per acre	234 7 9	105 5 5	41 14 5	+129 2 4	+171 0 9

FARM STUDIES

NARAYANGAON, PART (A), 1928-29

Narayangaon is one of the big villages, in the Poona District about 46 miles north of Poona. It is situated in the transition tract which is assured of fairly regular monsoon rains.

The climate of Narayangaon is usually dry and bracing. Regular monsoon generally breaks by the middle of June and closes in September. The place gets some advantage of the north-east current which closes in November. The average rainfall of the place is about 28 inches. The place is situated on the bank of a small river the Mina which, by means of a dam, supplies water to about 400 acres of land in the village.

Narayangaon itself is a good market town connected with Junnar (the *taluka* headquarters), Poona and Sangamner by fine roads. The garden produce of Narayangaon finds easy access, by means of motor busses, to Poona and Talegaon from where it goes to Bombay. Fruit and grass business of Bombay City has been captured by people from Junnar *Taluka* of which Narayangaon forms a centre.

TABLE I—LAND AND POPULATION

Area held		Area cultivated in 1928-29		Population according to 1931 census	Cultivated area per capita
A.	g.	A.	g.		A. g.
7,372	34·5	6,372	34·5	3,867	1 25·9

Of the total area of 7,372 acres and 34·5 gunthas held by the village, 1,000 acres are uncultivable. The average cultivated area per capita comes to 1 acre and 25·9 gunthas.

According to last quinquennial cattle census there were about 592 draft cattle which means about 22 acres of cultivated land per pair. Thus the number of work animals, for the cultivated area, especially with some intensive cultivation on irrigation, was not sufficient. The total number of cattle was, 1,202 and of sheep and goat 1,328 which supplied good amount of manure for the *bagayat* lands. The number of cattle include 169 buffaloes and 214 cows which must be giving fair supply of milk according to Indian standard.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held		No. of <i>khatedars</i>	Area per <i>khatedar</i>	
Total area	Cultivated area		Total area	Cultivated area
A.	g.		A.	g.
7,372	34·5	1,023	7 8·28	6 9·18

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated in 1928-29	No. of cultivators	Area per cultivator
A. g.		A. g.
6,372 34·5	715	8 36·52

Since the number of *khatedars* was greater than that of the actual tillers by 43 per cent, the cultivating unit was about 9 acres. Yet the holding of less than 9 acres cannot be said to be a minimum efficient unit for an average family.

TABLE IV—SIZE AND DISTRIBUTION OF THE PROPRIETARY HOLDINGS

Size of proprietary holding Acres	No. of holdings	Per cent
Total.....	1,023	100·00
Below 5.....	612	59·82
5 to 10.....	170	16·62
10 to 20.....	145	14·17
20 to 30.....	64	6·26
30 to 40.....	15	1·47
40 to 50.....	12	1·17
50 to 75.....	4	0·40
75 to 100.....	0	0·0
Above 100.....	1	0·09

TABLE IV (a).—SIZE AND DISTRIBUTION OF CULTIVATING HOLDINGS

Size of holding Acres	No. of holdings	Per cent
Total.....	715	100·00
Below 5.....	408	57·07
5 to 10.....	123	17·20
10 to 20.....	110	15·38
20 to 30.....	50	6·99
30 to 40.....	10	1·40
40 to 50.....	10	1·40
50 to 75.....	4	0·56
75 to 100.....	0	0·0
Above 100.....	0	0·0

Tables IV and IV (a) show that over 57 per cent of the holdings were below 5 acres. The percentage of small holdings, below 10 acres, was over 74. Since however the village has fair amount of irrigation, people grow some irrigated crops and thus secure fair amount of employment on their farms.

There were 315 wells in the village out of which 200 were working. In the year 1928-29, the area under well irrigation was 189 acres and under *bandhara* irrigation about 363 acres.

The holdings being small and scattered agriculture does not provide adequate maintenance and it was estimated that about 136 cultivators supplemented their earnings by plying carts on hire whenever they get off-time from their farm work. There is good demand for carts on hire. A number of people seek work in Bombay. It is estimated that about one thousand persons from Narayangaon and its vicinity have left their home for Bombay, Poona, and other business centres.

The following table gives the acreage and percentages of the important crops of the village in the years 1928-29 and 1929-30.

TABLE V—CROPS OF THE VILLAGE

Crops	1928-29		Crops	1929-30			
	Area			Area			
	A.	g.		Per cent	A.	g.	Per cent
	6,372	34·5	100·00	6,373	0	100·00	
<i>Kharif</i> crops							
<i>Bajri</i> and <i>matki</i> mixture	3,876	19·5	60·83	<i>Bajri</i> and <i>matki</i> mixture	3,630	6	56·96
<i>Jowar</i>	235	10	3·69	<i>Jowar</i> .....	.....	.....	.....
<i>Hulga</i>	425	10	6·67	<i>Hulga</i>	219	30	3·45
Others like ground-nut, potatoes, onions, garlic, chillies, peas, etc.	130	0	2·04	Others like ground-nut, potatoes, onions, garlic, chillies, peas, etc.	30	12	0·48
	4,668	39·5	73·23		3,880	8	60·89
<i>Rabi</i> crops				<i>Rabi</i> crops			
<i>Jowar</i>	620	0	9·73	<i>Jowar</i>	1,274	14	19·99
Wheat	915	0	14·36	Wheat	793	21	12·45
Gram	45	0	0·71	Gram	180	38	2·84
Others	5	35	0·09	Others .....	.....	.....	.....
	1,585	35	24·89	Peas	217	5	3·41
					2,465	38	38·69
Twelve months i.e., perennials				Twelve months i.e., perennials ..	26	34	0·42
Sugarcane	100	0	1·57	Sugarcane ..	.....	.....	.....
Bananas	20	0	0·31	Bananas ..	.....	.....	.....
	120	0	1·88		26	34	0·42

Note.—It may be noted that the acreage under twelve months and perennial crops does not mean the total irrigated area. In addition to this area, some area under *kharif* and *abi* crops is irrigated. As shown before the total irrigated area comes to 552 acres or about 9 per cent.

Roughly speaking about two-thirds of the cultivated area goes under *kharif* and one-third under *rabi* crops. Since people were disappointed in *kharif* harvest in 1928-29, area under *kharif* fell and that of *rabi* increased in 1929-30. Due to the continuous fall in the prices of *gul*, area under sugarcane dwindled down.

Bajri, *rabi jowar* and wheat are the chief crops. *Tur*, *mug*, *udid* and *matki* are taken as mixed crops. Groundnut, potatoes, onion, garlic, chillies, sugarcane and betelvine are taken as irrigated crops. Wheat, *shalu* and gram are taken as dry crops in winter. Most of the land is one-crop *jirayat*, growing *bajri* year after year, with occasional change. When *rabi* rains are favourable gram is taken after *bajri* in the same year. In the irrigated land, irrigated *bajri* may be followed by irrigated peas or chillies.

Jirayat lands are ploughed usually after every two years. Most of the available manure goes to the share of irrigated crops, and hence dry crops are scarcely manured.

THE SEASON, 1928-29

The total amount of rainfall in 1928 was 20·23 inches, that is about 8 inches less than the average. The distribution of rain fall was not satisfactory. There is no raingauge at Narayangaon. The fortnightly distribution of rainfall at *Khed*, about 26 miles to the south of Narayangaon is given in the following table.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL, 1928

(Acre inches)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						
0·0	0·0	0·0	0·0	0·0	1·41	0·51	0·0	5·61	1·34	0·0	0·0	} 20·23
						Second fortnight						
0·0	0·0	0·0	0·0	0·0	0·0	2·91	2·06	4·58	1·81	0·0	0·0	

There were absolutely no rains till the 11th of June. The heavy showers on the 11th and 12th of June supplied 1·41 inches of fall but there was no rain afterwards till the 4th of July, when a little rain was received. Though it was not sufficient for sowing, people sowed their crops which, for want of moisture, suffered. On 18th and 19th of July 2·25 inches rain fell in heavy showers and again there was no rain

till the last week of August. Crops on light soils suffered. The heavy showers of August further spoiled *bajri* which was then flowering. On the 15th of September there occurred about five inches of rainfall. The September rains were found very useful for sowing *rabi* crops which progressed remarkably well till the 3rd week of October. From the 23rd October, however, there was absolutely no rain and *rabi* crops in many fields withered, while those that could hold on gave poor yields. Crop estimate for the year was ten *annas*.

THE FARMER

The farmer owned 26 acres and 1·25 gunthas of land, out of which 1 acre and 19 gunthas were uncultivable waste. The farmer had besides taken on lease 35 gunthas of land on share basis. The holding therefore consisted of 25 acres and 17·25 gunthas of cultivated land and 1 acre and 19 gunthas of uncultivable waste. Since 3 acres and 35·75 gunthas of the land was cropped twice, the gross cropped area came to 29 acres and 13 gunthas.

(a) The farm family consisted of the following members:—

(1) The farmer	40 years.
(2) His wife	32 „
(3) „ first son	18 „
(4) „ second son	13 „
(5) „ third son	6 „
(6) „ first daughter	15 „
(7) „ second daughter	11 „
(8) „ third daughter	9 „
(9) „ fourth daughter	3 „
(10) „ daughter-in-law	14 „
(11) „ mother	60 „

Farmer's eldest son was working in a mill in Bombay. Farmer's mother, an aged woman, was too old for work. His second son was reading in school and was not available for farm work. The eldest daughter, though married, was living in the family and was available for light farm work. Farmer's wife and daughter-in-law put in a good deal of work on the farm.

There were thus only four working adult members in the farm family. The distribution of their time, from February 1928 to January 1929, is given in the subjoined table. This period does not synchronize with the period taken by the crops and hence the labour shown as used on the farm, will not tally with the family labour used on the crops of the year. The table only shows how the family was engaged as regards farm work.

TABLE VII—SPREAD AND UTILISATION OF FAMILY LABOUR

Working members	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Total	Percentage of labour employed to, labour available
(1) Farmer..	11·5	31	15·5	5·25	26	16	31	25·5	24·75	26	12	31	255·5	70·00
	28	31	30	31	30	31	31	30	31	30	31	31	365	
(2) Thre e women.....	11·5	31	11·25	13	49·5	36	18	49	66·25	52	45	90	472·5	43·15
	84	93	90	93	90	93	93	90	93	90	93	93	1,095	

Notes.—The denominator shows available labour units, while the numerator denotes labour units employed.

The table shows that the farmer put in 255·5 days' work during the period of 12 months, which means 70 per cent of the working days were used in actual work on the farm. The female force in the family put in 472·5 days' work or 43·15 per cent of the available working days. It can be said that the family put in sufficient work on the farm. The woman had to cook and look after other household duties.

(b) *Bullock work.*—The farmer possessed, as is shown in the inventory, four bullocks out of which one died in September 1928, when he purchased two new bullocks. Thus though he had four bullocks when the inventory was taken, he had five bullocks from September 1928 to January 1929.

The monthly distribution of bullock work, from February 1928 to January 1929, is summarised in the following table.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK LABOUR.

Bullocks	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Total	Per cent of labour employed to labour available
Four bullocks up to the end of August and then 5 bullocks throughout the year.	36	104	45·5	13	46	42	64	33	29	37	24	48	526·5	32·64
	112	124	120	124	120	124	124	150	155	150	155	155	1,613	

Notes.—Denominators show available bullock units, while the numerators denote the units used.

Since a plough team requires either four or six bullocks the fifth bullock could not be fully utilized from September to January. Only 32·64 per cent of the bullock labour could be used on the farm.

The opening and closing inventories of the farmer's property for the years 1928-29 and 1929-30 are given below.

TABLE IX—INVENTORY OF THE PROPERTY

Item	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
<i>Assets</i>	A. g.	Rs. a. p.		A. g.	Rs. a. p.		A. g.	Rs. a. p.	
1. Real estate									
(A) Land									
(a) Field No. 1 ..	10 29	325 0 0	Light and shallow soil.	10 29	325 0 0	There was no change in the value.	10 29	325 0 0	
(b) Field No. 2 ..	9 19	275 0 0	Medium type of soil having no irrigation facilities.	9 19	275 0 0		9 19	275 0 0	
(c) Field No. 3 ..	1 4	850 0 0		1 4	850 0 0		1 4	850 0 0	
(d) Field No. 4 ..	1 4	800 0 0		1 4	800 0 0		1 4	800 0 0	
(e) Field No. 5 ..	0 11	200 0 0		0 11	200 0 0		0 11	200 0 0	
(f) Field No. 6 ..	0 4	75 0 0		0 4	75 0 0		0 4	75 0 0	
(g) Field No. 7 ..	0 25	500 0 0	This land gets irrigation from <i>bandhara</i> .	0 25	500 0 0		0 25	500 0 0	
(h) Field No. 8 ..	0 14'5	500 0 0		0 14'5	500 0 0		0 14'5	500 0 0	
(i) Field No. 9 ..	0 24	700 0 0	do.	0 24	700 0 0		0 24	700 0 0	
(j) Field No. 10 ..	0 28'75	1,150 0 0	do.	0 28'75	1,150 0 0		0 28'75	1,150 0 0	
(k) Field No. 11 ..	0 4'25	150 0 0	do.	0 4'25	150 0 0		0 4'25	150 0 0	
(l) Field No. 12 ..	0 12'25	200 0 0	Medium type with no irrigation.	0 12'25	200 0 0		0 12'25	200 0 0	
(m) Field No. 13 ..	0 12	200 0 0		0 12	200 0 0		0 12	200 0 0	
(n) Field No. 14 ..	0 9'5	175 0 0		0 9'5	175 0 0		0 9'5	175 0 0	
	26 1'25	6,100 0 0		26 1'25	6,100 0 0		26 1'25	6,100 0 0	

NARAYANGAON (A)

TABLE IX—INVENTORY OF THE PROPERTY—*contd.*

Item	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
<i>Assets—contd.</i>	<i>A. g.</i>	<i>Rs. a. p.</i>		<i>A. g.</i>	<i>Rs. a. p.</i>		<i>A. g.</i>	<i>Rs. a. p.</i>	
1. Real estate— <i>contd.</i>									
(B) Buildings									
(a) Village house	1	1,000 0 0		1	1,000 0 0	The houses were slightly repaired and there was no change in the valuation at the close of the year.	1	1,000 0 0	
(b) Cattle shed	1	750 0 0		1	750 0 0		1	750 0 0	
(c) Farm hut	1	50 0 0		1	50 0 0		1	50 0 0	
Total real estate		7,900 0 0			7,900 0 0			7,900 0 0	
2. Livestock									
(a) Bullocks	4	300 0 0		4	250 0 0	Of the 4 bullocks one was sold for Rs. 75; one buffalo, one cow and three goats were purchased during the year.	4	227 0 0	
(b) Buffaloes	1	50 0 0		2	100 0 0		2	120 0 0	One buffalo was in milk.
(c) Bull calf		.....		1	70 0 0		1	60 0 0	
(d) Cows	1	25 0 0		2	32 0 0		2	40 0 0	One cow was in milk.
(e) Goats	1	6 0 0		4	20 0 0	4	18 0 0		
Total livestock		381 0 0			472 0 0			465 0 0	
3. Implements, tools, etc.									
(a) Ploughs (wooden)	2	5 0 0		2	4 0 0		2	3 5 0	
(b) Seed drills	1	4 0 0		1	3 0 0		1	2 9 6	
(c) Harrows	2	7 0 0		2	5 0 0		2	4 4 9	
(d) Levellers	2	7 0 0		2	5 0 0		2	4 4 9	
(e) Hoes	2	2 0 0		2	2 0 0		2	1 8 0	
(f) Moghad	1	5 0 0		1	3 0 0		1	2 8 0	
(g) Cart	1	30 0 0		1	25 0 0		1	23 0 0	

3. Implements, tools, etc.							
(h) Ropes and other tools		15 0 0	....	7 0 0	....	7 0 0	
(i) Plough (iron)*...		....	1	19 0 0	1	15 0 0	
(j) <i>Mhotes</i> (leather).		....	1	30 0 0	2	15 0 0	
(k) <i>Mhote</i> s-e q u i p-ment .....		....	....	3 8 0	....	3 0 0	
(l) Yokes .....		....	1	8 0 0	1	2 8 0	
(m) <i>Mhote</i> ropes etc.		....	....	21 0 0	....	....
Total equipment and tools....		75 0 0	....	180 8 0		84 8 0	
4. Farm produce and supplies on hand							
(a) <i>Bajri</i>	4,620 lbs.	185 0 0	2,574 lbs.	156 0 0	5,810 lbs.	374 0 0	
(b) Wheat	240 "	10 0 0	360 "	27 0 0	780 "	62 9 9	
(c) Gram	240 "	12 0 0	860 "	24 0 0	525 "	35 0 0	
(d) Peas .....		....	....	....	....	100 0 0	
(e) <i>Jowar</i> .....		....	60 lbs.	3 0 0	....	....
(f) Other grains	120 lbs.	4 0 0	....	6 0 0	....	8 4 0	
(g) <i>Bhoo</i> s		75 0 0	....	18 0 0	....	62 12 6	
(h) Fodder	1,500 bundles	50 0 0	850 bundles	37 0 0	18,990 bundles.	265 7 0	
(i) Manure	16 cartloads	32 0 0	20 cart-loads.	40 0 0	30 cartloads.	60 0 0	
Total farm produce and supplies on hand ..		374 0 0		311 0 0		968 1 3	
5. Cash on hand		237 0 0		120 0 0		65 8 0	
Total cash on hand ..		237 0 0	....	120 0 0	....	65 8 0	
6. Money lent at 12 per cent interest.		400 0 0		....		....
Total amount receivable.		400 0 0	....	....		....
Total Assets		9,367 0 0	....	8,933 8 0		9,482 12 3	

*The plough was purchased during the year in part n e f s h i p with another farmer.

All this equipment was newly purchased.

Money given on loan was received back with interest for one year.

TABLE IX—INVENTORY OF THE PROPERTY—*concl.*

Item	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
<i>Liabilities</i>		Rs. a. p.			Rs. a. p.			Rs. a. p.	
(a) Debt on bond		1,000 0 0	At 8½ per cent per annum.		1,000 0 0	At 8½ per cent per annum.		1,000 0 0	At 8½ per cent per annum.
(b) Accumulated interest on the above debt for one year			82 8 0			....
(c) Miscellaneous amounts owed to others			98 0 0			98 0 0	
(d) Loan on promissory note		200 0 0			....			....
(e) Interest accumulated		288 0 0			....			....
(f) Accumulated interest on the above sum for two years			165 0 0	
<i>Total Liabilities</i> ..		<u>1,488 0 0</u>			<u>1,180 8 0</u>			<u>1,268 0 0</u>	
<i>Net worth of the Farm</i> ..		<u>7,879 0 0</u>			<u>7,753 0 0</u>			<u>8,219 12 3</u>	

	Rs. a. p.	Rs. a. p.
SUMMARY		
Net worth of the farm at the beginning of 1928	7,879 0 0	
" " " " " " " " " " 1929	7,753 0 0	
<i>Loss in net worth in 1928</i>		126 0 0
Net worth of the farm at the beginning of 1929	7,753 0 0	
" " " " " " " " " " 1930	8,219 12 3	
<i>Gain in net worth in 1929</i>		466 12 3
<i>Therefore net gain in two years</i>		<u>340 12 3</u>

Business of the first year.—The inventory shows a fall of Rs. 126 in the net assets of the farm at the close of the first year. There was no change in the value of real estate. The farm buildings did not depreciate in value because of the slight repairs done. The value of live-stock increased from Rs. 381 to Rs. 472 during the year. One of the four bullocks, shown in the opening inventory, died and another was sold. Two new bullocks, one bull calf, one buffalo, one cow and three goats were added during the year and these increased the closing valuation of livestock. The cows, buffaloes and goats were a great help to the family having a number of children. A fairly large equipment was added to the farm during the year and the closing value of equipment increased by Rs. 55-8-0.

The amount of Rs. 400 shown in the opening inventory, as lent to others, was recovered with interest at the close of the year. On the other hand the farmer paid his debt on promissory note (of Rs. 200) with interest (Rs. 48) and also the arrears of interest on the loan of Rs. 1,000.

Business of the second year.—The inventory shows an increase of Rs. 466-12-3 in the net assets of the farm at the close of the year. There was no change in the strength of the livestock but its value fell by Rs. 7. The implements and tools depreciated by Rs. 46-5-0. The value of farm produce and supplies on hand, which was only Rs. 311 at the beginning of the year, rose to Rs. 968-1-3 at the close as more produce was held over.

As regards liabilities, there was no change in the amount, except that one year's interest on the debt (Rs. 1,000) was added to the old debt.

Business of both years.—The net gain in the course of the two years was Rs. 340-12-3. This is quite a substantial gain being a net saving after defraying all charges of the maintenance of the family.

Nature of holding, lands, crops and cropping.—The farmer owned 26 acres and $1\frac{1}{4}$ guntha in 14 fields. Some of these fields were adjacent to one another and the holding, therefore, was not scattered into 14 isolated pieces. Field Nos. 1 and 2 were in one block, about $1\frac{3}{4}$ miles north of the village. Nos. 3, 4, 5, 6 and 7 were in another block. Nos. 8, 9, 10 and 11, measuring 1 acre and 31·5 gunthas, were situated close to the village. The last block received *bandhara* irrigation. Field Nos. 12, 13 and 14 were some distance off. Roughly speaking the land was situated in 9 different blocks separated from one another, the longest distance between any two blocks not being more than a mile.

The farmer had in addition rented 35 gunthas of land. In the case of dry crops the landowner was given half the produce without sharing any costs. In the case of *bagayat* crops, the share of the produce going to the owner was the same but he had to bear half the cost on account of manure, seed and wages for hired labour.

The nature of land, soil, cropping and treatment of the different fields held by the farmer are given in the following table.

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Plot No.	Area	Nature of land	1927-28		1928-29			1929-30		
			Crop	Treatment	Crop	Plot No.	Treatment	Crop	Plot No.	Treatment
1	10 29	Of the area, 1 acre and 19 gunthas were shallow. The field was not level.	A. g.	Not manured nor irrigated.	A. g.	1 21 22 13	All these crops were neither manured nor irrigated.	A. g.	14 1	The crop was neither manured nor irrigated. Unmanured dry crop.
			4 10 under wheat and 5 acres under bajri.		4 10 bajri 1 0 wheat 1 0 jowar 3 0 Gram			6 10 under wheat and 2 20 under bajri		
2	9 19	Light and shallow soil, very uneven; about ½ acre very shallow.	Bajri.....	Do.....	Wheat.....	20	The plot was ploughed harrowed and sown. The crop was neither manured nor irrigated.	Bajri.....	2	The crop was sown after harrowings; received neither manure nor irrigation.
3	1 4	Medium black soil ..	Bajri followed by gram.	Do.....	Bajri (followed by gram).	2 14	Manured before taking bajri. Both the crops were unirrigated.	Bajri (followed by gram).	3 17	The land was ploughed. Bajri received irrigation. The plot was not manured and gram was taken as a dry crop.
4	1 4	Do.....	Do.....	Do.....	Do.....	3 15	Both the crops were neither manured nor irrigated.	Do.....	4 18	Both the crops received neither irrigation nor manure. The field was ploughed before taking bajri.
5	0 11	Do.....	Bajri.....	Do.....	Bajri.....	4	Unmanured dry crop.	Do.....	15 19	Both the crops were unmanured and unirrigated. The field was ploughed before taking bajri.
6	0 4	Do.....	Do.....	Do.....	Do.....	5	Do.....	Do.....	6 20	Do.
7	0 25	Medium black soil, level.	Bajri followed by gram.	Do.....	Bajri (followed by gram).	6 16	The field was manured with F. Y. M. before taking bajri; both irrigated.	Do.....	7 21	Do.

8	0 14	Do.....	<i>Bajri</i> followed by peas.	The field was manured. <i>Bajri</i> was taken as a dry crop while peas were irrigated.	<i>Bajri</i> (followed by peas).	7 18	Both the crops were irrigated but not manured.	<i>Bajri</i> (followed by peas).	8 23	The field was manured before taking <i>bajri</i> . Both the crops were irrigated.
9	0 24	Do.....	Do.....	Do.....	Do.....	8 17	Do.....	Do.....	9 24	Do.
10	0 28	Do.....	Do.....	Do.....	Sugarcane.....	24	The crop was irrigated and received F. Y. M. and oil cake.	Do.....	10 25	Ploughing was given before taking <i>bajri</i> . Both the crops were irrigated but not manured.
11	0 4	Do.....	Do.....	No manure was given. <i>Bajri</i> was taken as a dry crop while peas were irrigated.	<i>Bajri</i> (followed by peas).	9 19	Both the crops were irrigated but not manured.	Do.....	11 20	Do.
12	0 12	Medium black soil not deep.	Wheat.....	Unmanured dry crop.	<i>Bajri</i>	10	Unmanured dry crop	Wheat.....	16	The plot was ploughed. The crop was neither manured nor irrigated.
13	0 12	Do.....	Do.....	Do.....	Do.....	11	Do.....	<i>Bajri</i>	12	Ploughing was given. The crop was unmanured and unirrigated.
14	0 9	Do.....	Do.....	Do.....	Do.....	12	Do.....	Wheat.....	15	Ploughing was done before sowing. The crop was neither manured nor irrigated.
Land taken on lease										
15	0 35	Medium black soil and level.	<i>Bajri</i>	Unirrigated and unmanured crop.	Garlic.....	23	The crop received F. Y. M. and well irrigation.	<i>Bajri</i> (followed by gram).	18 22	The plot was not manured. Ploughing was given before taking <i>bajri</i> .
								Garlic.....	27	Unmanured but irrigated crop. The plot was taken on rent for the latter part of the year.

The following table shows the cropping of the farmer during the years 1928-29 and 1929-30.

TABLE X (a)

Name of crop	1928-29		1929-30	
	Area	Per cent	Area	Per cent
	A. g.		A. g.	
Total....	29 13	100·00	32 6·75	100·00
<i>Bajri</i>	9 14·50	31·93	18 5·50	56·38
Gram.....	5 33·00	19·86	4 3·00	12·67
Peas.....	1 2·75	3·65	1 31·50	5·56
Wheat.....	10 19·00	35·72	7 11·75	22·67
<i>Jowar</i>	1 0·00	3·41	0·0	0·0
Garlic.....	0 35·00	2·98	0 35·00	2·72
Sugarcane.....	0 28·75	2·45	0·0	0·0

The farmer had 23 acres and 17·25 gunthas of land for cultivation. Since there was some double cropping the gross cropped areas in 1928-29 and 1929-30 were 29 acres 13 gunthas and 32 acres 6·75 gunthas respectively. The intensity of cultivation was therefore 115·3 in 1928-29 and 126·5 in 1929-30.

COST AND RECEIPTS

An abstract of the expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost for the total holding (viz. 29 acres 13 gunthas)	
	Rs.	a. p.
*I. Out-of-pocket expenses :		
(a) Manures.....	98	3 2
(b) Seeds.....	74	5 9
(c) Outside labour.....	146	1 2
(d) Depreciation on implements and tools....	21	0 0
(e) Cost of bullock labour (excluding interest on the value of feeds and fodder).....	95	10 0
(f) Assessment and L. F. C. on owned land....	50	5 8
(g) Rent of land taken on lease.....	13	14 0
(h) Miscellaneous expenses.....	37	12 0
		537 3 9

Item of expenditure	Cost for the total holding (viz. 29 acres 13 gunthas)	
	Rs.	a. p.
II. - Rent of owned land (excluding assessment and L. F. C.).....	217	3 4
III. Interest on working capital :		
(a) Interest on working capital required for current agricultural operations.....	20	6 7
(b) Interest on the value of implements and tools.....	9	0 0
(c) Interest on the value of bullocks, feeds and fodder consumed by them.....	55	3 4
		84 9 11
<i>Total cost of production (excluding wages for family labour).....</i>		839 1 0

* DETAILS OF OUT-OF-POCKET EXPENSES

1. Manures :	Rs.	a. p.
(a) Eight cartloads of farmyard manure at Rs. 2 per cart were given to <i>bajri</i> (plot No. 2). 50 per cent of the cost is charged to <i>bajri</i> and 35 per cent to gram (plot No. 14) taken after <i>bajri</i> in the same year.....	13	9 7
(b) Eight cartloads of farmyard manure at Rs. 2 per cart were given to <i>bajri</i> (plot No. 6). 50 per cent of the cost is charged to <i>bajri</i> and 35 per cent to gram (plot No. 16) taken after <i>bajri</i> in the same year.....	13	9 7
(c) Fourteen cartloads of farmyard manure were given to garlic (plot No. 23). Only 50 per cent of the cost is charged to garlic.....	14	0 0
(d) Thirty cartloads of farmyard manure at Rs. 2 per cart were given to sugarcane crop (plot No. 24). 70 per cent of the cost is charged.....	42	0 0
(e) 640 lbs. of safflower cake costing Rs. 15 were given to sugarcane (plot No. 24)...	15	0 0
		98 3 2
2. Seeds :		
(a) Bajri seed (57 lbs.).....	2	13 3
(b) <i>Matki</i> and <i>kulhi</i>	0	3 9
(c) Gram (137 lbs.).....	8	9 6
(d) Peas (93½ lbs.).....	6	3 9
(e) Wheat (170 lbs.).....	8	5 3
(f) <i>Jowar</i> (20 lbs.).....	1	2 3
(g) Garlic (160 lbs.).....	8	0 0
(h) Sugarcane (650 sets).....	39	0 0
		74 5 9

	Rs. a. p.	Rs. a. p.
3. <i>Wages of outside labour :</i>		
(a) <i>Bajri</i> ; (21.5 men, 65.25 women and 7 bullocks).....	30 9 0	
(b) <i>Gram</i> ; (10.1 men and 11.8 bullocks)....	11 1 6	
(c) <i>Wheat</i> ; (8.2 men, 15 women and 7.6 bullocks).....	11 10 0	
(d) <i>Jowar</i> ; (1.7 men and 0.6 bullock units)..	1 2 0	
(e) <i>Garlic</i> ; (18.5 men, 57 women and 31 bullocks).....	39 0 0	
(f) <i>Sugarcane</i> ; (69 men, 31 women and 22 bullocks).....	52 10 8	

 146 1 2
4. *Depreciation on implements and tools :*

	Rs. a. p.	
Opening inventory.....	75 0 0	
Closing do.....	54 0 0	
	<hr style="width: 50%;"/>	21 0 0

5. *Bullock labour cost (excluding interest) :*(a) *Depreciation on the value of one bullock*

	Rs. a. p.	
Opening value of the bullock	90 0 0	
Sale value of the bullock ..	75 0 0	
	<hr style="width: 50%;"/>	15 0 0

(b) *Death-rate allowance*

(i) <i>Death allowance on 3 bullocks at 5 per cent on Rs. 205.....</i>	10 4 0	
(ii) <i>Death allowance on one bullock valued at Rs. 95 in the inventory, died in September (vide page 302)</i>	4 12 0	
(iii) <i>Death-rate allowance on the value (Rs. 80) of the two newly purchased bullocks at 5 per cent for 6 months.....</i>	2 0 0	
	<hr style="width: 50%;"/>	17 0 0

(c) *Charges on account of housing at Rs. 4 per year per bullock for 4½ units.....* 18 0 0(d) *Feeds and fodder*

	Rs. a. p.	
Fodder	117 2 0	
Feeds	18 0 0	
	<hr style="width: 50%;"/>	135 2 0

(e) *Appreciation on the value of two bullocks*

	Rs. a. p.	
Opening value.....	115 0 0	
Closing value.....	170 0 0	
	<hr style="width: 50%;"/>	55 0 0

Against the above costs (a to d) must be set off Rs. 34.8-0, the value of 23 cartloads of manure at Rs. 1.8-0 per cartload, and Rs. 55 the appreciation in the value of two bullocks, therefore.....

 — 89 8 0

95 10 0

Rs. a p.

Rs. a. p.

6. Land assessment and L. F. C. :

Plot No.

	A. g.		
1.....	4 10	5	2 6
2.....	1 4	1	11 4
3.....	1 4	1	10 5
4.....	0 11	0	11 5
5.....	0 4	0	4 10
6.....	0 25	0	15 6
7.....	0 14·5	1	13 10
8.....	0 24	1	13 7
9.....	0 4·25	0	8 7
10.....	0 12·25	0	7 9
11.....	0 12	0	5 10
12.....	0 9·5	0	4 6
13.....	3 0	3	10 3
14.....	1 4	1	8 8
15.....	1 4	1	7 7
16.....	0 25	0	9 0
17.....	0 24	3	7 5
18.....	0 14·5	2	1 11
19.....	0 4·25	0	10 6
20.....	9 19	9	15 4
21.....	1 0	1	3 5
22.....	1 0	1	3 5
24.....	0 28·75	8	10 1

50 5 8

7. Rent of land taken on lease :

Plot No. 23—Area 35 gunthas taken on share rent. Total value of garlic was Rs. 88. Half of this, viz., Rs. 44 was given to the owner of land who paid half the cost of manure, seed and hired labour amounting to Rs. 30-2-0. The net rent of land was therefore Rs. 13-14-0.....

13 14 0

8. Miscellaneous expenses :

Hire of equipment.....	16 8 0
Expenses over <i>gurhal</i> house, etc.....	21 4 0

37 12 0

Total out-of-pocket expenses.....

537 3 9

Family Labour Income.—The following table gives the family labour income, i.e., the remuneration obtained by the farmer and his family for the work done by them on the farm. The figures of cost of production have already appeared above. The value of produce is taken from the cost and receipt statements of the various plots (pp. 318 to 392).

TABLE XI—FAMILY LABOUR INCOME

Crop	Area	Value of produce	Cost of production excluding wages of family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total.....	29 13'00	893 9 4	537 3 9	84 9 11	217 3 4	839 1 0	+54 8 4
<i>Bajri</i>	9 14'50	203 4 0	112 9 2	28 1 8	93 12 4	234 7 2	-31 3 2
<i>Gram</i>	5 33'00	102 0 0	48 4 5	7 1 11	45 10 6	101 0 10	+ 0 16 2
<i>Peas</i>	1 2'75	67 0 0	14 4 7	1 5 7	16 4 3	31 14 5	+35 1 7
<i>Wheat</i>	10 19'00	88 0 0	50 10 6	11 9 11	41 3 3	103 7 8	-15 7 8
<i>Shalu</i>	1 0'00	11 0 0	5 8 5	1 4 3	3 12 7	10 9 3	+ 0 6 9
<i>Garlic</i>	0 35'00	88 0 0	100 0 2	17 0 5	Land taken on lease	117 0 7	-29 0 7
<i>Sugarcane</i>	0 28'75	334 5 4	205 14 6	18 2 2	16 8 5	240 9 1	+93 12 3

Column 4 shows expenses over manure, seed, hired labour, depreciation on implements and tools, cost of upkeep of bullocks, assessment and L.F.C. on owned land, rent of land taken on lease and miscellaneous expenses. Column 5.—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on feeds and fodder for the work animals and on the current agricultural operations. Fixed capital includes implements and work animals. Column 6 shows the estimated rent on owned land minus the assessment and L.F.C. Column 7 shows the wages earned by the farmer and farm family.

The value of the gross produce, obtained from the farm, was Rs. 893-9-4, while the cost of production, excluding the wages of the farm family, was Rs. 839-1-0, thus leaving Rs. 54-8-4 as the family labour income.

Farm Business Income.—In addition to the family labour income shown in table No. XI the farmer could save the rent of owned land and the interest on the working capital which have been debited to the costs.

The following table gives the farm business income or the aggregate income of the farmer, i.e., the value of the gross produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
Total.....	29 13'00	893 9 4	537 3 9	+356 5 7
<i>Bajri</i>	9 14'50	203 4 0	} 537 3 9	} +356 5 7
<i>Gram</i>	5 33'00	102 0 0		
<i>Peas</i>	1 2'75	67 0 0		
<i>Wheat</i>	10 19'00	88 0 0		
<i>Shalu</i>	1 0'00	11 0 0		
<i>Garlic</i>	0 35'00	88 0 0		
<i>Sugarcane</i>	0 28'75	334 5 4		

The gross receipts obtained were Rs. 893-9-4, while the out-of-pocket expenses came to Rs. 537-3-9, thus leaving Rs. 356-5-7 as total income obtained by the farmer and his family on account of wages for the work done by them on the farm, interest on working capital and the return on the owned land as shown below.

Family labour income.....	54	8	4
Interest on working capital	84	9	11
Rent of owned land	217	3	4
	<hr/>		
	356	5	7

Besides this, the farmer received Rs. 15 from the sale of *babul* wood and Rs. 16 as the remuneration of the work done outside by his mother.

ANALYSIS

The farm family put in 294 man units and 458 woman units on the crops grown in 1928-29. Taking two woman units equal to one man unit, they put in 523 units. The farmer had besides to hire 129 man units, 168·25 woman units and 80 bullock units which cost him Rs. 146-1-2. It may therefore be said that over 71 per cent of the work was done by the farm family. Outside labour was engaged when there was pressure of work at the time of weeding, harvesting sugarcane, etc.

For the home manual labour (523 man units) the farmer made Rs. 54-8-4 labour income or about 20 pies wage per working day. His farm business income amounted to Rs. 356-5-7. Looking to the unsatisfactory distribution of rainfall and high wages for hired labour, he did not fare badly.

The following table shows the yields of main produce and the labour units spent per acre. It may be noted that in this table all labour (human labour as well as bullock labour) both home and hired, is included. (Bullock unit=man unit=two woman units.)

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS

Plot No.	Produce per acre		Labour units per acre	Plot No.	Produce per acre		Labour units per acre
	Name of produce	Quantity lbs.			Name of produce	Quantity lbs.	
1	<i>Bajri</i> and mixture.....	59·29	38·90	13	Gram.....	88·00	16·85
2	<i>Bajri</i>	480·00	59·42	14	".....	480·00	21·81
3	".....	480·00	54·66	15	".....	480·00	20·00
4	".....	360·00	48·18	16	".....	422·40	25·60
5	".....	330·00	114·50	17	Peas.....	Sta n d i n g crop sold.	19·16
6	".....	633·60	71·20	18	".....	Do.	17·94
7	".....	728·27	75·18	19	".....	Do.	70·58
8	".....	440·00	79·36	20	Wheat.....	98·68	15·93
9	".....	621·17	97·60	21	".....	137·5	25·00
10	".....	323·30	26·94	22	<i>Shalu</i>	60·00	16·60
11	".....	330·00	40·83	23	Garlic.....	3,017·14	343·43
12	".....	416·84	26·31	24	Sugarcane..	4,507·80	407·30

General remarks about the crops.—The season happened to be bad for the *kharif* and *rabi* crops, and yields obtained were low. Though labour units spent per acre can be considered normal, on the whole, the yield was rather poor. None of the plots except plot Nos. 2, 6, 23 and 24 received manure. The crop estimate (or *annevari*) by the Revenue officers was 10 *annas*.

Bajri.—There were 12 plots of *bajri*. Three of these (i.e., Nos. 7, 8 and 9) measuring one acre and $2\frac{1}{2}$ gunthas were irrigated, while remaining nine (Nos. 1, 2, 3, 4, 5, 6, 10, 11 and 12) measuring together 8 acres and $11\frac{1}{2}$ gunthas did not receive irrigation. The total yield obtained from the irrigated area was 594 lbs. of grain (i.e., 556 lbs. per acre) and 775 lbs. of fodder (i.e. 725 lbs. per acre). The unirrigated area yielded only 2,133 lbs. of grain (i.e., 258 lbs. per acre) and 2,475 lbs. of fodder (i.e., 299 lbs. per acre). Plot No. 1 was the largest of the *bajri* plots measuring 4.25 acres (i.e., more than half the total area under unirrigated *bajri*) and formed part of field No. 1, which, as already mentioned, had poor and shallow soil. The yield from this plot was very low, being only 59 lbs. of grain per acre. The remaining unirrigated plots, together measuring 4 acres and 1.75 gunthas gave 1,881 lbs. of grain or 450 lbs. per acre. Allowing for the poor nature of a very large part of the area under *bajri*, it may be said the yields of *bajri* both from the irrigated and unirrigated plots were not unsatisfactory when the nature of the season is taken into consideration. The crop was sown on insufficient moisture and for over a month after sowing there were no rains. This long break of rains practically withered the crop on lighter soils and it was only on the deeper patches of land that a fair crop could be gathered.

Gram.—The total area under gram was 5 acres and 33 gunthas in four plots (viz., Nos. 13, 14, 15 and 16) and the total yield obtained was 1,584 lbs. or 272 lbs. per acre. Plot No. 13 formed a part of field No. 1 which, as already mentioned, was poor and thin; the yield obtained was only 264 lbs. or 88 lbs. per acre. Gram was second crop in plot Nos. 14, 15 and 16, being sown after the harvest of *bajri*. The total area of these three plots was 2 acres and 33 gunthas and the yield obtained was 1,320 lbs. or 467 lbs. per acre. *Rabi* rains started well with a copious and soaking rainfall in September and *rabi* crops like gram, wheat and *jowar* progressed remarkably well, for about a month after sowing. There were no rains afterwards and the late maturing crops like wheat and *jowar* suffered. Gram being an early crop gave better yield in good lands. Crop on poor soil (in plot No. 13) suffered for want of moisture and gave low yield.

Wheat.—Wheat was a failure because of insufficient late rains. An area of 10 acres and 19 gunthas in two plots (Nos. 20 and 21) gave 1,072·5 lbs. of grain or only 102 lbs. per acre. Plot No. 20 measuring 9 acres and 19 gunthas (Field No. 2) and plot No. 21 (a part of field No. 1), as already mentioned, were poor, shallow and uneven. A large part of both the plots was unsuitable for wheat crop and it could not hold on when the rains stopped by the end of October. Only on the fleshy patches some yield was obtained.

Peas.—There were three plots (Nos. 17, 18 and 19) under peas. In all the cases, it was a second crop in the year after *bajri*. Crops, when ready for gathering green peas, were sold to contractors who gathered and consigned the produce to Bombay. The crop gives good occupation when there is not much demand on farmer's time. All the plots left good income.

Garlic.—Garlic was planted on the 35 guntha plot rented on half share rent. The yield obtained was low being only 3,017 lbs. per acre or worth Rs. 100, while the cost, excluding wages for the family labour, came to as high as Rs. 133-12-1. The crop was irrigated with *mhole* and the lifting of water required large amount of human and bullock labour. Considerable amount of labour had to be hired for planting, weeding, irrigating and harvesting. The cost of bullock labour and wages of hired labour alone came to one-half of the total cost. On account of heavy costs with low yield the cultivation resulted in loss.

Sugarcane.—There was only one plot of sugarcane (*viz.*, No. 24) measuring 28 $\frac{3}{4}$ gunthas. The cultivation on the whole, was very careful and most of the work was done by the farmer and his family. Only for weeding and harvesting additional labour was engaged. The crop left fair amount of labour income for the farm family.

General remarks on the business of the farmer.—The farmer and his family, on the whole, worked hard and judiciously. A large part of the farm work was done by family members and most of the operations were, therefore, done in time. Outside labour was engaged when absolutely necessary. A large part of his holding was poor and the season was besides unsatisfactory. Looking to the amenities of life such as milk-supply from the buffaloes, cows and goats, it can be said that the farmer managed his business well for the year.

The detailed statements of costs and receipts of each of the plots of the farmer are as follows.

STATEMENT No. 58

318

• BAJRI—4 acres 10 gunthas in 1928-29

PLOT No. (1)

Previous crop—Wheat in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	23'0	..	92	..	..	..	115'0	27'0	....	....	Three ploughings were given. A plough required one man and 4 bullocks.
(b) Harrowing	2'5	..	5	..	..	..	7'5	1'78	....	....	Two harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	1 3 9	0 4 8	For the plot 20 lbs. of bajri seed. (Rs. 1) and mixture of jowar, hulga and math (Rs. 0-3-9).
(b) Sowing and covering..	2'0	2	8	2	..	..	13'0	3'06	1 0 0	0 3 8	Two men were paid at 8 annas each.
3. After-care and tillage											
(a) Interculturing	3'0	..	6	3	..	..	12'0	2'83	1 8 0	0 5 9	One hoeing was given. A hoe required 2 men and 2 bullocks. Hired men were paid at 8 annas each.

FARM STUDIES

4. Harvesting, tying, breaking earheads and preparing for market	1'0	30	2	..	..	..	18'0	4'25	....	....
5. Charges for bullock labour .....	..	..	..	..	..	..	..	..	29 6 2	6 14 7	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc..	18 10 1										
(b) Interest on the value of bullocks, feeds and fodder given to them ..	10 12 1										
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	5 13 6	1 6 0	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation ..	4 1 6										
(b) Interest ..	1 12 0										
7. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	0 3 7	0 0 10	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	21 4 0	5 0 0	The land was owned.
Total	31'5	82	11	5	..	..	165'5	38'9	60 7 0	14 3 6	

¹ Family labour not charged. ² Home bullock labour charged under item 5.

STATEMENT No. 58—concl'd.

320

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	2	3	4	5	6
	For 4½ acres	Per acre	For 4½ acres	Per acre						(i.e. col. 2-3)	(i.e. col. 5+4)
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.		Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
Bajri	132	31.06	8 0 0	1 14 2	Valued at 16½ lbs. per rupee.						
Jowar	40	9.41	2 0 0	0 7 6	" 20 " "						
Hulga	40	9.41	2 0 0	0 7 6	" 20 " "						
Math	40	9.41	2 0 0	0 7 6	" 20 " "						
Sarmad(500 bundles)	500	117.65	5 0 0	1 2 10	" Rs. 1 per 100 bundles.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Bhoos ....	..	..	1 0 0	0 3 9	Estimated value.	For 4½ acres	20 0 0	60 7 0	(a) 16 1 6 (b) 12 11 8	-40 7 0	-11 9 10
Total ..	..	..	20 0 0	4 11 3		Per acre	4 11 3	14 3 5	6 12 6	-9 8 3	-2 11 9

FARM STUDIES

STATEMENT No. 59

PLOT No. (2)

BAJRI—1 acre and 4 gunthas in 1928-29

Previous crop—Bajri and gram in 1927-28

(a) Cost of Production

17-36 Q III-OK

ITEM OF EXPENDITURE	Homelabour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing	5·5	..	22	..	..	..	27·5	25·0	....	....	Two ploughings were given. A plough required two men and four bullocks.
(b) Harrowing	1·0	..	2	..	..	..	3·0	2·72	....	....	Two harrowings were given. A harrow required one man and two bullocks.
2. Manure and manuring											
(a) Farmyard manure....	..	..	..	..	..	..	..	..	8 0 0	7 4 5	For the plot 8 carts of farmyard manure at Rs. 2 per cart were given. 50 per cent of the cost is charged to this crop.
(b) Manuring	2·0	1	4	..	..	..	6·5	5·92	....	....
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 6 0	0 5 5	For the plot 7·5 lbs. of <i>bajri</i> seed (annas 6).
(b) Sowing and covering ..	0·5	..	2	0·5	..	..	3·0	2·72	0 4 0	0 3 7	One man for half-a-day was paid annas 4.
4. After-care and tillage											
(a) Weeding .....	..	3	..	..	4·0	..	3·5	3·18	1 0 0	0 14 6	One weeding was given. Hired women were paid at annas 4 each.
5. Harvesting, tying, breaking earheads and preparing for market	5·0	16	2	1·0	8·75	..	20·37	18·52	2 11 0	2 7 1	One man was paid annas 8 and 8·75 women at annas 4 each.
6. Removing <i>bajri</i> stubbles..	..	3	..	..	..	..	1·5	1·36	....	....

NARAYANGAON (A)

321

STATEMENT No. 59—concl'd.

322

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
7. Charges for bullock labour	..	..	..	..	..	..	..	..	8 5 2	7 9 1	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc. ..											
5 4 5											
(b) Interest on the value of bullocks, feeds and fodder given to them ..											
3 0 9											
8. Charges for implements and tools .....	..	..	..	..	..	..	..	..	1 10 7	1 8 7	The total annual charges are distributed over the different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation ..											
1 2 7											
(b) Interest ..											
0 8 0											
9. Interest on fluid capital (i.e., wages of hired labour and cost of manure and seeds) .....	..	..	..	..	..	..	..	..	0 9 3	0 8 5	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	17 8 5	15 15 0	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. <i>Bajri</i> was followed by gram (plot No. 14).
Total	14'0	23	32	1'5	12'75	..	65'87	59'42	40 6 5	86 11 8	

¹Family labour not charged. ²Home bullock labour charged under Item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 4 gunthas	Per acre	For 1 acre and 4 gunthas	Per acre	
<i>Bajri</i>	Lbs. 528	Lbs. 480	Rs. a. p. 32 0 0	Rs. a. p. 29 1 5	Valued at 16.50 lbs. per rupee.
<i>Sarmad</i> (550 bundles).	550	500	5 8 0	5 0 0	Valued at 100 bundles per rupee.
<i>Bhoos</i> ....	..	..	1 0 0	0 14 7	Estimated value.
Total ..	..	..	38 8 0	35 0 0	

(c) Summary

1	2	3	4	5 (i.e., col. 2-3)	6 (i.e., col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 4 gunthas..	38 8 0	40 6 5	(a) 15 13 1 (b) 4 2 0	-1 14 5	+18 0 8
Per acre	35 0 0	36 11 8	18 2 1	-1 11 8	+16 6 5

STATEMENT No. 60

BAJRI—1 acre 4 gunthas in 1928-29

PLOT No. (3)

Previous crop—Bajri in 1927-28

(a) Cost of Production

TERM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	5·5	..	22	2·0	..	4	33·5	30·47	3 0 0	2 11 8	Plough required one man and four bullocks. One day there was a spare man. Number of ploughings were given. Hired men and bullocks were paid annas 8 each.
(b) Harrowing	1·0	..	2	..	..	..	3·0	2·72	....	....	Two harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 6 0	0 5 6	For the plot 7·5 lbs. of <i>bajri</i> seed (annas 6).
(b) Sowing and covering ..	0·5	..	2	0·5	..	..	3·0	2·72	0 4 0	0 3 8	One man was paid annas four for half a day.
3. After-care and tillage											
(a) Weeding .....	..	3·0	..	..	6·0	..	4·5	4·00	1 8 0	1 5 9	One weeding was given. Hired women were paid at annas four each.

4. Harvesting, tying, breaking earheads and preparing for market	4.5	8.5	2	..	7.75	..	13.62	13.3	1 15 0	1 12 2	Hired women were paid at annas four each.
5. Removing bajristubbles ..	..	3.0	..	..	..	..	1.5	1.36	....	....
6. Charges for bullock labour ..	..	..	..	..	..	..	..	..	7 4 6	6 9 11	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation etc.									4 9 10		
(b) Interest on the value of bullocks, feeds and fodder									2 10 8		
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	1 7 3	1 5 2	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation									1 0 3		
(b) Interest									0 7 0		
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) ..	..	..	..	..	..	..	..	..	0 5 0	0 4 6	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	17 6 8	15 13 4	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Bajri was followed by gram (plot No. 15).
Total	11.5	14.5	28	2.5	13.75	4	60.12	54.66	33 8 5	30 7 8	

¹Family labour not charged.

²Home bullock labour charged under item 6.

STATEMENT No. 60—concl'd.

326

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 4 gunthas	Per acre	For 1 acre and 4 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i>	528	480	32 0 0	29 1 5	Valued at 16·50 lbs. per rupee.
<i>Sarmad</i> (500 bundles).	500	454·54	5 0 0	4 8 9	Valued at 100 lbs. per rupee.
<i>Bhoos</i> ....	..	..	1 0 0	0 14 7	Estimated value.
Total ..	..	..	38 0 0	34 8 9	

(c) Summary

1	2	3	4	5 (i.e., col. 2-3)	6 (i.e., col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 4 gunthas.	38 0 0	33 8 5	(a) 15 12 3 (b) 3 6 8	+4 7 7	+23 10 6
Per acre ..	34 8 9	30 7 8	17 7 0	+4 1 1	+21 8 1

FARM STUDIES

STATEMENT No. 61

BAJRI—11 gunthas in 1928-29

PLOT No. (4)

Previous crop—Bajri in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	1·0	..	3·0	..	..	..	4·0	14·54	....	....	One ploughing was given. A plough required two men and six bullocks.
(b) Harrowing	0·25	..	0·5	..	..	..	0·75	2·73	....	....	Two harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 1 6	0 5 5	For the plot 2 lbs. of bajri.
(b) Sowing and covering ..	0·5	..	2·0	..	..	..	2·5	9·1	....	....
3. After-care and tillage											
(a) Weeding .....	..	2	..	..	..	..	1·0	3·64	....	....	One weeding was given.

NARAYANGAON (A)

397

STATEMENT No. 61—concl'd.

328

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting and preparing for market	1·75	4	..	0·5	1·5	..	5·0	18·18	Rs. a. p. 0 10 0	Rs. a. p. 2 4 4	One man was paid at annas 4 for half a day and 1·5 women at annas four each.
5. Charges for bullock labour .....	..	..	..	..	..	..	..	..	1 8 10	5 3 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc.....											
(b) Interest on the value of feeds, fodder, etc.											
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0 4 8	1 1 0	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation											
(b) Interest....											
7. Interest on fluid capital (i.e., on the value of seeds) ..	..	..	..	..	..	..	..	..	0 0 1	0 0 4	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	8 4 0	30 0 0	The land was owned.
Total	3·5	6	5·5	0·5	1·5	..	18·25	48·18	10 11 1	38 14 1	

¹ Family labour not charged. ² Home bullock labour charged under item 5.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 11 gunthas	Per acre	For 11 gunthas	Per acre	
<i>Bajri</i>	Lbs. 99	Lbs. 360	Rs. a. p. 6 0 0	Rs. a. p. 21 13 1	Valued at 16½ lbs. per rupee.
<i>Sarmad</i> (100 bundles) ..	100	363.63	1 0 0	3 10 2	Valued at 100 bundles per rupee.
<i>Bhoos</i> ..	..	..	0 4 0	0 14 6	Estimated value.
Total ..	..	..	7 4 0	26 5 9	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 11 gunthas.	Rs. a. p. 7 4 0	Rs. a. p. 10 11 1	Rs. a. p. (a) 7 8 7 (b) 0 9 10	Rs. a. p. - 3 7 1	Rs. a. p. + 4 11 4
Per acre	26 5 9	38 14 1	29 10 3	- 12 8 4	+ 17 1 11

NARAYANGAON (A)

STATEMENT No. 62

BAJRI—4 gunthas in 1928-29

PLOT No. (5)

Previous crop—Bajri in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	0·33	..	1·0	..	..	..	1·33	13·8	....	....	One ploughing was given. A plough required two men and six bullocks.
(b) Harrowing and leveling	0·25	..	0·5	..	..	..	0·75	7·5	....	....	Two harrowings were given.
2. Temporary fencing	1·0	2·0	..	2·0	..	..	4·0	40·0	1 0 0	10 0 0	Two men were paid at annas 8 each. Babul branches were from the farm.
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 0 9	0 7 6	For the plot 1 lb. of bajri seed.
(b) Sowing and covering ..	0·25	..	0·5	..	..	..	0·75	7·5	....	....
4. After-care and tillage											
(a) Weeding and watching ..	..	1·0	..	..	..	..	0·5	5·0	....	....	One weeding was given.

5. Harvesting and preparing for the market	0.75	3.0	0.5	0.5	1.5	..	4.0	40.0	0 10 0	6 4 0	One man was paid annas 4 for half a day and 1.5 women at annas four each.
6. Removing stubbles of bajri .....	..	0.25	..	..	..	..	0.12	1.2	....	....
7. Charges for bullock labour.	..	..	..	..	..	..	..	..	0 10 5	6 8 2	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc. ..	Rs. a. p.	0 6 7									
(b) Interest on the value of bullocks, feeds and fodder ..	0 3 10										
8. Charges for implements and tools.....	0 2 2	1 5 8		The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation ..	Rs. a. p.	0 1 6									
(b) Interest ..	0 0 8										
9. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) ..	..	..	..	..	..	..	..	..	0 1 0	0 10 0	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	8 0 0	30 0 0	The land was owned.
Total	2.58	6.25	2.5	2.5	1.5	..	11.45	114.5	5 8 4	55 3 4	

¹Family labour not charged. ²Home bullock labour charged under item 7.

STATEMENT No. 62—concl'd.

332

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4 gunthas	Per acre	For 4 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	33	330	2 0 0	20 0 0	Sold at 16½ lbs. per rupee.
Sarmad ..	50	500	0 8 0	5 0 0	Valued at 100 lbs. per rupee.
Bhoos ....	..	..	0 2 0	1 4 0	Estimated value.
Total....	..	..	2 10 0	26 4 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4 gunthas...	2 10 0	5 8 4	(a) 2 11 2 (b) 0 5 6	-2 14 4	+0 2 4
Per acre	26 4 0	55 3 4	30 6 8	-28 15 4	+1 7 4

FARM STUDIES

STATEMENT No. 63

BAJRI—25 gunthas in 1928-29

PLOT No. (6)

Previous crop—Gram in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing	2·0	..	8	1·0	..	3	12·0	19·2	2 0 0	3 3 5	One ploughing was given. A plough required two men and six bullocks. One man and three bullocks were paid Rs. 2.
(b) Harrowing and levelling	1·5	..	3	..	..	..	4·5	7·2	....	....	Three harrowings and a levelling were given.
2. Manure and manuring											
(a) Manure .....	..	..	..	..	..	..	..	..	8 0 0	12 12 9	For the plot 8 carts of farmyard manure at Rs. 2 each were given; 50 per cent of the cost is charged.
(b) Carting and manuring	1·0	1	4	1·0	..	..	6·5	10·4	0 8 0	0 12 9	One man was paid annas 8.
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 4 0	0 6 5	For the whole plot 5 lbs. of bajri seed.
(b) Sowing and covering ..	0·5	..	2	0·5	..	..	3·0	4·8	0 4 0	0 6 5	One man was paid annas four for half a day.
4. After-care and tillage											
(a) Weeding .....	..	2	..	..	4·0	..	3·0	4·8	1 0 0	1 9 6	One weeding was given. It required six women. Four women were paid at annas four each.

NARAYANGAON (A)

333

STATEMENT No. 63—concl'd.

334

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Harvesting and preparing for market	4·75	7	2	0·5	3·5	..	12·5	20·0	Rs. a. p. 1 2 0	Rs. a. p. 1 12 8	One man for half a day was paid annas four and 3·5 women were paid at annas four each.
6. Removing stubbles of bajri .....	..	6	..	..	..	..	3·0	4·8	....	....
7. Charges for bullock labour	4 6 9	7 1 5	The total annual cost on account of draft bullocks is distributed over different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc.....	2 12 10										
(b) Interest on the value of bullocks, feeds and fodder	1 9 11										
8. Charges for implements and tools	0 14 1	1 6 6	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation	0 9 10										
(b) Interest.....	0 4 3										
9. Interest on fixed capital (i.e., wages of hired labour, price of seeds and manure).	0 11 6	1 2 4	Charged at 12 per cent per annum.
10. Rent of land	11 14 11	19 1 5	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. <i>Bajri</i> was followed by gram (plot No. 16). Rent is high as the land is under the command of canal.
Total	9·75	16	17	3	7·5	3	44·5	71·2	31 1 3	49 11 7	

¹Family labour not charged. ²Home bullock labour charged under item 7.

FARM STUDIES

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	2	3	4	5 (i.e.col.2-3)	6 (i.e.col.5+4)
	For 25 gunthas	Per acre	For 25 gunthas	Per acre							
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.		Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
<i>Bajri</i>	396	633.6	24 0 0	38 6 5	Valued at 16½ lbs. per rupee.						
<i>Sarmad</i> ...	475	760.0	4 12 0	7 9 7	Valued at 100 lbs. per rupee.						
<i>Bhoos</i> ....	..	..	1 0 0	1 9 7	Estimated value.						
Total ..	..	..	29 12 0	47 9 7			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
						For 25 gunthas	29 12 0	31 1 3	(a) 10 15 5 (b) 2 9 8	-1 5 3	+12 3 10
						Per acre	47 9 7	49 11 7	21 11 4	-2 2 0	+19 9 4

NARAYANGAON (A)

STATEMENT No. 64

BAJRI—14·5 gunthas in 1928-29

PLOT No. (7)

Previous crop—Peas (irrigated) in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	1·5	..	6·0	..	..	..	7·5	20·69	....	....	Two ploughings were given. A plough required one man and four bullocks.
(b) Harrowing and levelling	0·5	..	2·0	..	..	..	2·5	6·90	....	....	Two harrowings and levelling were given.
2. Temporary fencing	2·0	..	..	..	..	..	2·0	5·52	....	....	Babul branches from the farm trees.
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 1 6	0 4 1	For the whole plot 2 lbs. of <i>bajri</i> seed.
(b) Sowing and covering ..	0·25	..	1·0	0·25	..	..	1·5	4·14	0 2 0	0 5 6	One man was paid annas two for one-fourth of a day.
4. After-care and tillage											
(a) Weeding .....	..	2·0	..	..	2·0	..	2·0	5·51	0 8 0	1 6 1	One weeding was given. Two women were paid at annas four each.

5. Irrigation labour	2.0	1.5	..	..	..	..	2.75	7.59	....	....	Water cess goes with land assessment.
6. Harvesting and preparing for market	1.75	2.5	1.0	0.25	7.5	..	8.0	22.07	2 0 0	5 8 3	One man was paid annas two for quarter of a day; 7.5 women were paid at annas four each.
7. Removing stubbles of <i>bajri</i> .....	..	2.0	..	..	..	..	1.0	2.78	....	....
8. Charges for bullock labour .....	..	..	..	..	..	..	..	..	2 9 8	7 3 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc.	1 10 5										
(b) Interest on the value of bullocks, feeds, fodder, etc.	0 15 3										
9. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0 8 4	1 7 0	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation	0 5 10										
(b) Interest....	0 2 6										
10. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).	..	..	..	..	..	..	..	..	0 0 8	0 1 10	Charged at 12 per cent per annum.
11. Rent of land .....	..	..	..	..	..	..	..	..	5 15 0	16 6 1	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. <i>Bajri</i> was followed by peas (Plot No. 18).
Total	8.0	8.0	10.0	0.5	9.5	..	27.25	75.18	11 13 2	32 9 10	

¹Family labour not charged. ²Home bullock labour charged under item 8.

STATEMENT No. 64—concl'd.

338

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 14·5 gunthas	Per acre	For 14·5 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i>	264	728·27	16 0 0	44 2 2	Sold at 16½ lbs. per rupee.
<i>Sarmad</i> ..	350	965·52	3 8 0	9 10 6	Valued at 100 lbs. per rupee.
<i>Bhoos</i> ....	..	..	0 12 0	2 1 1	Estimated value.
Total ..	..	..	20 4 0	55 13 9	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.). (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 14·5 gunthas..	20 4 0	11 13 2	(a) 4 1 2 (b) 1 2 5	+ 8 6 10	+ 13 10 5
Per acre ..	55 13 9	32 9 10	14 6 7	+ 23 3 11	+ 37 10 6

FARM STUDIES

STATEMENT No. 65

BAJRI—24 gunthas in 1928-29

PLOT No. (8)

Previous crop—Peas (irrigated) in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing	2·0	..	8·0	..	..	..	10·0	16·67	....	....	Two ploughings were given. A plough required one man and four bullocks.
(b) Harrowing	1·5	..	3·0	..	..	..	4·5	7·5	....	....	Four harrowings and two levellings were given.
2. Temporary fencing	2·0	4·0	..	..	..	..	4·0	6·66	....	....
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 3 6	0 5 10	For the whole plot 4·5 lbs. of bajri seed.
(b) Sowing and covering ..	0·5	..	2·0	0·5	..	..	3·0	5·0	0 4 0	0 6 8	One man was paid annas four for half a day.
4. After-care and tillage											
(a) Weeding .....	..	2·0	..	..	4	..	3·0	5·0	1 0 0	1 10 8	One weeding was given. Four women were paid at annas 4 each.
Irrigation labour	2·5	2·0	..	..	..	..	3·5	5·83	....	....	Water cess goes with the land assessment.

NARAYANGAON (A)

339

STATEMENT No. 65—concl'd.

340

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
6. Harvesting, thrashing and preparing for market	5·25	10·75	1·5	8·5	5	..	18·125	30·2	3 0 0	5 0 0	Hired men were paid at annas 8 and women at annas four each.
7. Removing stubbles of <i>bajri</i> .....	..	3·0	..	..	..	..	1·5	2·5	....	....
8. Charges for bullock labour. Rs. a. p.	..	..	..	..	..	..	..	..	3 12 4	6 4 7	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc. .. 2 6 3											
(b) Interest on the value of bullocks, feeds and fodder .. 1 6 1											
9. Charges for implements and tools .. Rs. a. p.	..	..	..	..	..	..	..	..	0 11 11	1 3 10	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation .. 0 8 4											
(b) Interest .. 0 3 7											
10. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) ..	..	..	..	..	..	..	..	..	0 1 5	0 2 4	Charged at 12 per cent per annum.
11. Rent of land ..	..	..	..	..	..	..	..	..	7 4 9	12 2 7	The land was owned. It was under command of canal irrigation. Rent is distributed in proportion to the value of crops taken on the plot in the same year. <i>Bajri</i> was followed by peas (Plot No. 17).
Total ..	13·75	21·75	14·5	4·0	9	..	47·625	79·36	16 5 11	27 4 6	

¹Family labour not charged. ²Home bullock labour charged under item 8.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 24 gunthas	Per acre	For 24 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	264	440.0	16 0 0	26 10 8	Sold at 16.5 lbs. per rupee.
Sarmad (350 bundles).	350	583.33	3 8 0	5 13 4	Valued at 100 bundles per rupee.
Bhoos ....	..	..	0 12 0	1 4 0	Estimated value.
Total ..	..	..	20 4 0	33 12 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 24 gunthas..	20 4 0	16 5 11	(a) 5 7 2 (b) 1 11 1	+ 3 14 1	+ 11 0 4
Per acre ..	33 12 0	27 4 6	11 14 5	+ 6 7 6	+ 18 5 11

NARAYANGAON (A)

STATEMENT No. 66

342

BAJRI—4·25 gunthas in 1928-29

PLOT No. (9)

Previous crop—Peas (irrigated) in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	0·5	..	2·0	..	..	..	2·5	23·52	....	....	Two ploughings were given. A plough required one man and four bullocks.
(b) Harrowing	0·25	..	0·5	..	..	..	0·75	7·06	....	....	Three harrowings and a levelling were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 0 6	0 4 9	For the whole plot half a pound of bajri seed.
(b) Sowing and covering ..	0·25	..	0·5	..	..	..	0·75	7·06	....	....
3. After-care and tillage											
(a) Weeding .....	..	1·0	..	..	..	..	0·5	4·7	....	....	One weeding was given.
4. Irrigation labour	0·5	0·5	..	..	..	..	0·75	7·06	....	....	Irrigation cess goes with land assessment.

FARM STUDIES

5. Harvesting and preparing for the market	1'0	2'5	..	1'5	1'75	..	4'62	43'5	1 3 0	11 2 10	Hired men were paid at annas eight and women at annas four each. It was thrashed with the produce of other small plots.
6. Removing stubbles of bajri .....	..	1'0	..	..	..	..	0'5	4'7	....	....
7. Charges for bullock labour.	..	..	..	..	..	..	..	..	0 12 7	7 6 5	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc.....									0 8 0		
(b) Interest on the value of bullocks, feeds and fodder									0 4 7		
8. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0 2 6	1 7 6	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation									0 1 9		
(b) Interest.....									0 0 9		
9. Interest on fluid capital (i.e. on value of seeds) .....	..	..	..	..	..	..	..	..	Negligible.		
10. Rent of land .....	..	..	..	..	..	..	..	..	1 10 8	15 11 0	The land was owned. It was under command of canal water. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Bajri was followed by peas (Plot No. 18).
Total ..	2'5	5	3	1'5	1'75	..	10'37	97'6	3 13 3	36 0 6	

¹Family labour not charged. ²Home bullock labour charged under Item 7.

STATEMENT No. 66—concl'd.

644

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4·25 gunthas	Per acre	For 4·25 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i>	66	621·17	4 0 0	37 10 3	Sold at 16·5 lbs. per rupee.
<i>Sarmad</i> ..	75	705·88	0 12 0	7 1 0	Valued at 100 lbs. per rupee.
<i>Bhoos</i> ....	..	..	0 2 0	1 2 10	Estimated value.
Total ..	..	..	4 14 0	45 14 1	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.). (b) Interest on working capital	Family labour income	Farm business income
For 4·25 gunthas.	Rs. a. p. 4 14 0	Rs. a. p. 3 13 3	Rs. a. p. (a) 1 2 1 (b) 0 4	Rs. a. p. +1 0 9	Rs. a. p. +2 8 2
Per acre ..	45 14 1	36 0 6	13 12 5	+9 13 7	+23 10 0

FARM STUDIES

STATEMENT No. 67

BAJRI—12·25 gunthas in 1928-29

PLOT No. (10)

Previous crop—Wheat (dry) in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	0·25	..	0·5	..	..	..	0·75	2·45	....	....	Two harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 2 0	0 6 6	For the whole plot 2·5 lbs. of bajri seed.
(b) Sowing and covering ..	0·25	..	1·0	0·25	..	..	1·5	4·9	0 2 0	0 6 6	One man was paid annas two for one-fourth day.
3. After-care and tillage											
(a) Weeding .....	..	..	..	..	3	..	1·5	4·9	0 12 0	2 7 2	One weeding was given. The women were paid at annas our each.
4. Harvesting and preparing for market	1·0	5	0·5	..	..	..	4·0	13·06	....	....	Threshed with other small plots.

NARAYANGAON (A)

345

STATEMENT No. 67—concl'd.

346

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Removing stubbles of <i>bajri</i>.	..	.. 1	..	..	..	..	0.5	1.68	Rs. a. p.	Rs. a. p.	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
6. Charges for bullock labour.	..	..	..	..	..	..	..	..	0 8 3	1 10 11	
	Rs. a. p.										
(a) Feeds, fodder, depreciation, etc.	.. 0 5 3										
(b) Interest on the value of bullocks, feed and fodder	.. 0 3 0										
7. Charges for implements and tools	..	..	..	..	..	..	..	..	0 1 8	0 5 6	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
	Rs. a. p.										
(a) Depreciation	.. 0 1 2										
(b) Interest	.. 0 0 6										
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds)	..	..	..	..	..	..	..	..	0 1 0	0 3 3	Charged at 12 per cent per annum.
9. Rent of land	..	..	..	..	..	..	..	..	6 2 0	20 0 0	The land was owned.
Total ..	1.5	6	-2.0	0.25	3	..	8.25	26.94	7 12 11	25 7 10	

¹Family labour not charged. ²Home bullock labour charged under item 6.

FARM STUDIES

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
	For 12.25 gunthas	Per acre	For 12.25 gunthas	Per acre							
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.		Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income.	Farm business income.
Bajri	99	323.3	6 0 0	19 9 6	Valued at 16.5 lbs. per rupee.						
Sarmad ..	100	326.5	1 0 0	3 4 3	Valued at 100 lbs. per rupee.						
Bhoos ....	..	..	0 4 0	0 13 0	Estimated value.						
Total ..	..	..	7 4 0	23 10 9		For 12.25 gunthas.	Rs. a. p. 7 4 0	Rs. a. p. 7 12 11	Rs. a. p. (a) 5 10 3 (b) 0 4 6	Rs. a. p. -0 8 11	Rs. a. p. +5 14 9
						Per acre ..	23 10 9	25 7 10	19 5 4	-1 13 1	+17 8 3

NARAYANGAON (A)

STATEMENT No. 68

BAJRI—12 gunthas in 1928-29

PLOT No. (11)

Previous crop—Wheat (dry) in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	1·0	..	4·0	..	..	..	5·0	16·67	....	....	One ploughing was given. A plough required one man and four bullocks.
(b) Harrowing and levelling	0·25	..	0·5	..	..	..	0·75	2·5	....	....	Two harrowings and a levelling were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 2 0	0 6 8	For the whole plot 2·5 lbs. of <i>bañri</i> seed.
(b) Sowing and covering ..	0·25	..	0·5	0·25	..	..	1·0	3·33	0 2 0	0 6 8	One man was paid annas two for one-fourth of a day.
3. After-care and tillage											
(a) Weeding .....	..	..	..	..	3	..	1·5	5·0	0 12 0	2 8 0	One weeding was given. Women were paid at annas 4 each.

4. Harvesting and preparing for market	1 0	5	0 5	..	..	..	4 0	13 88	....	....	Threshed with other plots.
5. Charges for bullock labour	..	..	..	..	..	..	..	..	1 6 10	4 12 1	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation etc. ..	0 14 6										
(b) Interest on the value of bullocks, feed and fodder ..	0 8 4										
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	0 4 7	0 15 8	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation ..	0 8 3										
(b) Interest ..	0 1 4										
7. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) ..	..	..	..	..	..	..	..	..	0 1 0	0 3 4	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	4 8 0	15 0 0	The land was owned.
Total	2 5	5	5 5	0 25	8	..	12 25	40 88	7 4 5	24 4 0	

¹Family labour not charged; ²Home bullock labour charged under item 5.

STATEMENT No. 68—concl'd.

350

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	2	3	4	5 (i.e. col. 2—3)	6 (i.e. col. 5+4)
	For 12 gunthas	Per acre	For 12 gunthas	Per acre							
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.		Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
Bajri.....	99	330·0	6 0 0	20 0 0	Valued at 16·5 lbs. per rupee.						
Sarmad....	100	333·33	1 0 0	3 5 4	Valued at one rupee per 100 lbs.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Bhoos.....	..	..	0 4 0	0 13 4	Estimated value.	For 12 gunthas.	7 4 0	7 4 5	(a) 4 2 2 (b) 0 10 8	— 0 0 5	+ 4 12 5
Total ..			7 4 0	24 2 8		Per acre...	24 2 8	24 4 0	16 0 1	— 0 1 4	+15 14 9

FARM STUDIES

STATEMENT No. 69

BAJRI—9·5 gunthas in 1928-29

PLOT No. (12)

Previous crop—Wheat (dry) in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home Labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Harrowing and levelling	0·25	..	0·5	..	..	..	0·75	3·16	....	....	Two harrowings and a levelling were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 1 6	0 6 4	For the plot 2 lbs. of bajri seed.
(b) Sowing and covering ..	0·25	..	0·5	..	..	..	0·75	3·16	....	....
3. After-care and tillage											
(a) Weeding .....	..	..	..	..	2	..	1·0	4·20	0 8 0	2 1 7	One weeding was given. The women were paid at 4 annas each.
4. Harvesting and preparing for the market	1·0	5·0	..	..	..	..	3·5	14·74	....	....	Threshed with other plots.

NARAYANGAON (A)

351

STATEMENT No. 69—concl'd.

352

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Removing stubbles of bajri.....	..	0·5	..	..	..	..	0·25	1·05	....	....
6. Charges for bullock labour. Rs. a. p.	..	..	..	..	..	..	..	..	0 4 1	1 1 3	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the bullock labour used on them.
(a) Feeds, fodder, depreciation etc.....	0 2 7										
(b) Interest on the value of bullocks, feed and fodder	0 1 6										
7. Charges for implements and tools..... Rs. a. p.	..	..	..	..	..	..	..	..	0 0 10	0 3 6	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
(a) Depreciation.....	0 0 7										
(b) Interest.....	0 0 3										
8. Interest on fluid capital (i.e., wages of hired labour and value of seeds).....	..	..	..	..	..	..	..	..	0 0 7	0 2 6	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	4 12 0	20 0 0	The land was owned.
Total	1·5	5·5	1·0	..	2	..	0·25	26·81	5 11 0	23 15 2	

¹Family labour not charged. ²Home bullock labour charged under item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 9.5 gunthas	Per acre	For 9.5 gunthas	Per acre.	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i>	99	416.84	6 0 0	25 4 2	Valued at 16.5 lbs. per rupee.
<i>Sarmad</i> ..	100	421.00	1 0 0	4 3 4	Valued at Re. 1 per 100 bundles.
<i>Bhoos</i> ....	..	..	0 4 0	1 0 10	Estimated value.
Total..	..	..	7 4 0	30 8 4	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 9.5 gunthas.	7 4 0	5 11 0	(a) 4 7 6 (b) 0 2 4	+ 1 9 0	+ 6 2 10
Per acre ..	30 8 4	23 15 2	19 6 10	+ 6 9 2	+ 28 0 0

STATEMENT No. 70

GRAM—3 acres in 1928-29

PLOT No. (13)

Previous crop—Bajri in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage—											
(a) Ploughing	4·2	..	16·8	4·2	..	..	25·2	8·4	2 1 6	0 11 2	One ploughing was given, larger part with two men and four bullocks and some part with one man and two bullocks. Hired man was paid at annas 8 per day.
(b) Harrowing	3·3	..	10·2	..	..	..	18·5	4·5	....	....	First operation with two men and four bullocks. Second with one man and two bullocks. One man worked for two hours as help.
(c) Collecting stubbles ....	..	1·5	..	..	..	..	0·75	0·25	....	....
2. Seeds and sowing—											
(a) Seeds .....	..	..	..	..	..	..	..	..	3 4 0	1 1 4	For the plot 55 lbs. of gram seed.
(b) Sowing and covering ..	1·8	..	3·6	0·0	..	1·8	8·1	2·7	1 8 0	0 8 0	The hired man and bullocks were paid Rs. 1-8-0.

for the market .....	..	8 0	..	..	..	..	3 0	1 0	....	....	Flail was used for threshing.
4. Charges for bullock labour.	..	..	..	..	..	..	..	..	7 15 3	2 10 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc.....	Rs. a. p.	5 0 8									
(b) Interest on the value of bullocks, feeds and fodder		2 14 7									
5. Charges for implements and tools .....	..	..	..	..	..	..	..	..	1 9 4	0 8 5	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation	Rs. a. p.	1 1 9									
(b) Interest.....		0 7 7									
6. Interest on fluid capital (i.e., wages of hired labour and value of seeds) .....	..	..	..	..	..	..	..	..	0 6 7	0 2 3	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	..	15 0 0	5 0 0	The land was owned.
Total		9 3	7 5	30 6	5 1	..	1 8	50 55	16 85	31 12 8	10 9 7

¹Family labour not charged. ²Home bullock labour charged under Item 4.

STATEMENT No. 70—concl'd.

356

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3 acres	Per acre	For 3 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram ..	264	88	16 0 0	5 5 4	Sold at 16.5 lbs. per rupee.
Bhoos ..	..	..	1 0 0	0 5 4	Estimated value.
Total ..			17 0 0	5 10 8	

1	2	3	4	5 (i.e., col.2-3)	6 (i.e., col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3 acres.	17 0 0	31 12 8	(a) 11 5 9 (b) 3 12 9	-14 12 8	+0 5 10
Per acre ..	5 10 8	10 9 7	5 0 10	-4 14 11	+0 1 11

FARM STUDIES

STATEMENT No. 71

GRAM—1 acre 4 gunthas in 1928-29

PLOT No. (14)

*Previous crop—Bajri (dry) in 1928-29**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ^a	Men	Women	Bullocks			For the plot	Per acre	
1. Manure and manuring									Rs. a. p.	Rs. a. p.	
(a) Residual manure .....	..	..	..	..	..	..	..	..	5 9 7	5 1 5	Thirty-five per cent of the cost of farmyard manure applied to the previous crop is charged for the residue.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	2 5 8	2 1 10	For the whole plot 85 lbs. of gram seed at 15 lbs. per rupee.
(b) Sowing after plough ..	2·5	..	5	2·5	..	5	15	13·64	8 12 0	8 6 6	The 2·5 men and 5 bullocks were paid at annas 8 each.
3. Harvesting and preparing for market	2·0	8	2	..	..	..	8	7·27	....	....
4. Removing stubbles .....	..	2	..	..	..	..	1	0·9	....	....

NARAYANGAON (A)

357

STATEMENT No. 71—concl'd.

358

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Charges for bullock labour	..	..	..	..	..	..	..	..	Rs. a. p. 1 18 1	Rs. a. p. 1 10 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc. ..											
1 2 5											
(b) Interest on the value of bullocks, feeds and fodder ..											
0 10 8											
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0 5 9	0 5 8	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation ..											
0 4 0											
(b) Interest ..											
0 1 9											
7. Interest on fluid capital (i.e., wages of hired labour and value of seed and manure) .....	..	..	..	..	..	..	..	..	0 5 10	0 5 4	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	15 7 7	14 1 1	The land was owned. Rent is distributed in proportion to the value of crops taken on the p in the same year. Gram followed bajri (Plot No. 2).
Total	4·5	10	7	2·5	..	5	24	21·81	29 11 1	26 15 10	

¹Family labour not charged. ²Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 4 gunthas	Per acre	For 1 acre and 4 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	528	480	32 0 0	29 1 5	Sold at 16½ lbs. per rupee.
Bhoos ....	..	..	2 0 0	1 13 1	Estimated value.
Total ..	..	..	34 0 0	30 14 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 1 acre and 4 gunthas.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	34 0 0	29 11 1	(a) 13 14 11 (b) 1 2 3	+4 4 11	+19 6 1
Per acre ..	30 14 6	26 15 10	13 11 3	+3 14 8	+17 9 11

NARAYANGAON (A)

539

STATEMENT No. 72

360

GRAM—1 acre 4 gunthas in 1928-29

PLOT No. (15)

Previous crop—Bajri (dry) in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	2 5 3	2 1 10	For the plot 35 lbs. of gram seed at 15 lbs. per rupee.
(b) Sowing (after plough) ..	2·5	..	5	2·5	..	5	15	13·64	3 12 0	3 6 6	The 2·5 men and 5 bullocks were paid at annas 8 each.
2. Harvesting and preparing for the market	1·0	8	2	..	..	..	7	6·36	....	....	Harvesting, trodding under the feet of bullocks.
3. Charges for bullock labour.	..	..	..	..	..	..	..	..	1 13 1	1 10 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.

FARM STUDIES

(a) Feeds, fodder, depreciation, etc.	Rs. a. p.													
	1 2 5													
(b) Interest on the value of bullocks, feeds and fodder	0 10 8													
4. Charges for implements and tools . . . . .	.. ..	..	..	..	..	..	..	..	0 5 9	0 5 3				
(a) Depreciation	Rs. a. p.													
	0 4 0													
(b) Interest	0 1 9													
5. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) . . . . .	.. ..	..	..	..	..	..	..	..	0 5 10	0 5 4				
6. Rent of land . . . . .	.. ..	..	..	..	..	..	..	..	15 9 4	14 2 8				
Total		3*5	8	7	2*5	..	5	22	20*0	24 8 8	22 0 0			

The total annual charges are distributed on different plots in proportion to the bullock labour used on them.

Charged at 12 per cent per annum.

The land was owned. Rent is distributed, in proportion to the value of crops taken on the plot in the same year. Gram followed bajri (Plot No. 3).

NARAYANGAON (A)

561

*Family labour not charged. **Home bullock labour charged under item 3.

STATEMENT No. 72—concl'd.

562

(b) Yield and Value.

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
	For 1 acre and 4 gunthas	Per acre	For 1 acre and 4 gunthas	Per acre							
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.		Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
Gram	528	480	32 0 0	29 1 5	Sold at 16½ lbs. per rupee.						
Bhoos ....	..	..	2 0 0	1 13 1	Estimated value.						
Total ..	..	..	34 0 0	30 14 6			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
						For 1 acre and 4 gunthas.	34 0 0	24 3 3	(a) 14 1 9 (b) 1 2 3	+9 12 9	+25 0 9
						Per acre ..	30 14 6	22 0 0	13 13 10	+8 14 6	+22 12 4

FARM STUDIES

STATEMENT No. 73

GRAM—25 gunthas in 1928-29

PLOT No. (16)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
Preparatory tillage									Rs. s. p.	Rs. s. p.	
(a) Harrowing	1	..	2	..	..	..	3	4'8	....	....	Two harrowings and a levelling were given.
b. Residual manure .....	..	..	..	..	..	..	..	..	5 9 7	8 15 4	Thirty-five per cent of the cost of farm yard manure applied to the previous crop is charged for the residue.
l. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 11 0	1 1 7	For the plot 12 lbs. of gram seed.
(b) Sowing and covering ..	1	..	2	..	..	..	3	4'8	....	....
l. Harvesting, thrashing and preparing for market, etc...	2	12	2	..	..	..	10	16 0	..	....

NARAYANGAON (A)

363

STATEMENT No. 73—concl'd.

364

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Charges for bullock labour.	Rs. a. p. 1 9 2	Rs. a. p. 2 8 3	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc.....									1 0 0		
(b) Interest on the value of bullocks, feeds and fodder									0 9 2		
6. Charges for implements and tools	0 5 0	0 8 0	The total annual charges are distributed over different plots in proportion to the bullock units used on them.
Rs. a. p.											
(a) Depreciation									0 3 6		
(b) Interest....									0 1 6		
7. Interest on fluid capital (i.e., wages of hired labour and cost of seeds)	0 6 0	0 9 7	Charged at 12 per cent per annum.
8. Rent of land	6 13 1	10 14 7	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Gram followed bajri (Plot No. 6).
Total	4	12	6	16	25·6	15 5 10	24 9 4	

¹Family labour not charged. ²Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 25 gunthas	Per acre	For 25 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	264	422.4	16 0 0	25 9 7	Sold at 16½ lbs. per rupee.
Bhoos ....	..	..	1 0 0	1 9 7	Estimated value.
Total ..	..	..	17 0 0	27 3 2	

(c) Summary

1	2	3	4	5 (i.e.col.2-3)	6 (i.e.col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 25 gunthas.	17 0 0	15 5 10	(a) 6 4 1 (b) 1 0 8	+1 10 2	+8 14 11
Per acre ..	27 3 2	24 9 4	11 10 10	+2 9 10	+14 4 8

NARAYANGAON (A)

STATEMENT No. 74

PEAS—24 gunthas in 1928-29

PLOT No. (17)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ²	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											
(a) Harrowing.....	1	..	2	..	..	..	3·0	5·0	....	....	Three harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	3 4 0	5 6 8	For the plot 48·75 lbs. of peas.
(b) Sowing and covering ..	1	..	2	..	..	..	3·0	5·0	....	....
3. After-care and tillage											
(a) Weeding .....	..	3	..	..	..	..	1·5	2·5	....	....	One weeding was given.
4. Irrigation labour	4	..	..	..	..	..	4·0	6·66	....	....	Four waterings were given from canal. Water cess goes with land assessment.

5. Harvesting and preparing for market.....	..	..	..	..	..	..	..	..	....	....	Standing crop was sold.
6. Charges for bullock labour:	..	..	..	..	..	..	..	..	1 0 7	1 11 8	The total annual cost on account of draft bullocks is distributed over different plots in proportion to the units used on them.
(a) Feed, fodder, depreciation ..	0	10	6								
(b) Interest on the value of bullocks, feeds and fodder ..	0	6	1								
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	0 3 4	0 5 7	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation ..	0	2	4								
(b) Interest ..	0	1	0								
8. Interest on fluid capital (i.e., value of seeds) .....	..	..	..	..	..	..	..	..	0 3 1	0 5 1	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	18 11 3	22 13 5	The land was owned. It was under command of canal irrigation. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Peas followed <i>bajri</i> (Plot No. 8).
Total ..	6	8	4	..	..	..	11.5	19.16	18 6 8	30 10 5	

¹Family labour not charged.

²Home bullock labour charged under item 6.

STATEMENT No. 74—concl'd.

368

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Value		REMARKS
	For 24 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Peas.....	38 0 0	63 5 4	Standing crop was sold.
Total ..	38 0 0	63 5 4	

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 24 gunthas.	38 0 0	18 6 3	(a) 10 3 10 (b) 0 10 2	+ 19 9 9	+ 30 7 9
Per acre...	63 5 4	30 10 5	18 2 0	+ 32 10 11	+ 50 12 11

FARM STUDIES

STATEMENT No. 75

PLOT No. (18)

PEAS—14·5 gunthas in 1928-29

Previous crop—Bajri (irrigated) in 1928-29

(a) Cost of Production

22-32 0 H-08

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Harrowing and leveling.....	0·5	..	1	..	..	..	1·5	4·14	....	....	Two harrowings and a levelling were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	2 5 3	6 6 8	For the plot 85 lbs. of peas at 15 lbs. per rupee.
(b) Sowing and covering ..	0·5	..	1	..	..	..	1·5	4·14	....	....
3. After-care and tillage											
(a) Weeding.....	..	3	..	..	..	..	1·5	4·14	....	....	One weeding was given.
4. Irrigation labour.....	2·0	..	..	..	..	..	2·0	5·52	....	....	Water cess goes with land assessment.

NARAYANGAON (A)

369

STATEMENT No. 75—concl'd.

370

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Harvesting and preparing for the market .....	..	..	..	..	..	..	..	..	Rs. a. p.	Rs. a. p.	Standing crop was sold.
2. Charges for bullock labour .....	..	..	..	..	..	..	..	..	0 8 8	1 6 9	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc.....	0	5	3								
(b) Interest on the value of bullocks, feeds and fodder	0	3	0								
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0 1 8	0 4 7	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
(a) Depreciation	0	1	2								
(b) Interest.....	0	0	6								
8. Interest on fluid capital (i.e., value of seeds).....	..	..	..	..	..	..	..	..	0 2 0	0 5 6	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	6 12 0	18 10 0	The land was owned. It was under command of canal irrigation. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Peas followed bajri (Plot No. 7).
Total ..	8·0	8	2	..	..	..	6·5	17·94	9 13 2	27 1 6	

¹Family labour not charged. ²Home bullock labour charged under item 6.

FARM STUDIES

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Value		REMARKS	1	2	3	4	5	6
	For 14.5 gunthas	Per acre						(i.e. col. 2-3)	(i.e. col. 5+4)
	Rs. a. p.	Rs. a. p.		Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
Peas.....	23 0 0	63 7 2	Standing crop was sold.						
Total ..	23 0 0	63 7 2							
					Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 14.5 gunthas.	23 0 0	63 7 2			23 0 0	9 13 2	(a) 4 10 1 (b) 0 5 6	+13 2 10	+18 2 5
Per acre ..		63 7 2			63 7 2	27 1 6	13 11 6	+36 5 8	+50 1 2

NARAYANGAON (A)

STATEMENT No. 76

372

PEAS—4·25 gunthas in 1928-29

PLOT No. (19)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Ra. a. p.	Ra. a. p.	
(a) Harrowing and levelling.....	0·5	..	2	..	..	..	2·5	23·52	....	....	A number of harrowings and a levelling were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 10 6	6 2 10	For the plot 10 lbs. of peas.
(b) Sowing and covering...	0·5	..	1	..	..	..	1·5	14·12	....	....
3. After-care and tillage											
(a) Weeding .....	..	3	..	..	..	..	1·5	14·12	....	....	One weeding was given.

FARM STUDIES

4. Irrigation labour	2'0	..	..	..	..	..	..	2'0	18'62	....	....	Water cess goes with land assessment.
5. Harvesting and preparing for the market. ....	..	..	..	..	..	..	..	..	..	....	....	Standing crop was sold.
6. Charges for bullock labour.												
Rs. a. p.										0 12 7	7 6 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc.....	0 8 0											
(b) Interest on the value of bullocks, feeds and fodder	0 4 7											
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	0 2 6	1 7 6	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation	0 1 9											
(b) Interest ...	0 0 9											

KARAYANGAON (A)

373

STATEMENT No. 76—concl'd.

374

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
8. Interest on fluid capital (i.e., value of seeds) .....	..	..	..	..	..	..	..	..	0 0 7	0 5 6	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	2 0 10	10 5 0	The land was owned. It was under command of canal irrigation. Rent is distributed in proportion to the value of crops taken in the same year. Peas followed <i>bajri</i> (Plot No. 9).
Total	3 0	3	3	..	..	..	7 5	70 58	8 11 0	34 11 3	

¹Family labour not charged. ²Home bullock labour charged under Item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 4.25 gunthas	Per acre	
Peas.....	Rs. a. p. 6 0 0	Rs. a. p. 56 7 6	Standing crop was sold.
Total..	6 0 0	56 7 6	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4.25 gunthas.	6 0 0	3 11 0	(a) 1 6 4 (b) 0 5 11	+2 5 0	+4 1 3
Per acre ..	56 7 6	34 11 3	16 9 10	+21 12 3	+38 6 1

KARAYANKON (A)

STATEMENT No. 77

WHEAT—9 acres 19 gunthas in 1928-29

PLOT No. (20)

Previous crop—Bajri in 1927-1928

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	7·0	..	28	3·0	..	..	33·0	4·01	1 8 0	0 2 6	For four days one man and four bullock team and for six days one man and two bullock team worked on ploughing and larger part of the field ploughed. Hired men were paid at annas 8 each.
(b) Harrowing	7·5	..	25	..	..	..	32·5	3·43	....	....	Three harrowings to the part left unploughed and two to the ploughed portion were given. For the unploughed area 4 bullock team was used. For five days a 2-bullock team and for two days 4-bullock teams were used.
(c) Removing weeds etc.	..	12	..	..	..	..	6·0	0·64	....	....
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	7 0 0	0 11 10	For the whole plot 150 lbs. of wheat seeds.

(b) Sowing and covering ..	3.5	..	7	3.5	..	7	21.0	2.21	5 4 0	0 8 10	Hired men and bullocks were paid at annas 8 each.
3. Harvesting, thrashing and preparing for the market.	9.0	25	23	..	15	..	52.0	5.48	3 12 0	0 6 4	Hired women were paid at annas 4 each.
4. Removing stubbles .....	..	8	..	..	..	..	1.5	0.16	....	....
5. Charges for bullock labour. Rs. a. p.	..	..	..	..	..	..	..	..	21 9 3	2 4 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation etc.	18 10 11										
(b) Interest on the value of bullocks, feeds and fodder	7 14 4										
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	4 4 8	0 7 4	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
(a) Depreciation	3 0 1										
(b) Interest	1 4 7										
7. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	0 11 6	0 1 2	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	47 6 0	5 0 0	The land was owned.
Total	27.0	40	88	6.5	15	7	151.0	15.98	91 7 5	9 10 5	

¹Family labour not charged.

²Home bullock labour charged under item 5.

NARAYANGAON (A)

377

STATEMENT No. 77—concl'd.

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	2	3	4	5 (i.e.col.2-3)	6 (i.e.col.5+4)
	For 9 acres and 19 gunthas	Per acre	For 9 acres and 19 gunthas	Per acre							
Wheat....	Lbs. 935	Lbs. 98·68	Rs. a. p. 68 0 0	Rs. a. p. 7 2 10	Sold at 13½ lbs. per rupee.	Area For 9 acres and 19 gunthas. Per acre ..	Gross income Rs. a. p. 76 8 0	Cost of production excluding wages of family labour Rs. a. p. 91 7 5	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital Rs. a. p. (a) 37 6 8 (b) 9 14 5	Family labour income Rs. a. p. -14 15 5	Farm business income Rs. a. p. +32 5 8
Straw (500 bundles).	..	..	5 0 0	0 8 5	Valued at 100 bundles per rupee.				
Bhoos ....	..	..	3 8 0	0 5 11	Estimated value.				
Total ..			76 8 0	8 1 2							

STATEMENT No. 78

WHEAT—1 acre in 1928-29

PLOT No. (21)

Previous crop—Bajri in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks		Per acre	
1. Preparatory tillage								Rs. a. p.	
(a) Ploughing	1·4	..	5·6	1·4	..	..	8·4	0 10 0	One ploughing was given. A plough required 2 men and 4 bullocks. Hired men were paid annas 10.
(b) Harrowing	1·1	..	3·4	..	..	..	4·4	....	Two harrowings were given, one with one man and 4 bullocks and second with one man and two bullocks.
2. Seeds and sowing									
(a) Seeds .....	..	..	..	..	..	..	..	1 5 3	For the plot 20 lbs. of wheat seed at 15 lbs. per rupee.
(b) Sowing and covering	0·6	..	1·2	0·3	..	0·6	2·7	0 8 0	Hired labour was paid at annas 8.

NARAYANGAON (A)

379

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	Per acre	Per acre	
	Lbs.	Rs. a. p.	
Wheat....	137.5	10 0 0	Valued at 13½ lbs. per rupee.
Straw (100 bundles).	....	1 0 0	Valued at 100 bundles per rupee.
Bhoos.....	....	0 8 0	Estimated value.
Total ..		11 8 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For one acre. ..	Rs. a. p. 11 8 0	Rs. a. p. 12 0 3	Rs. a. p. (a) 3 12 7 (b) 1 11 6	Rs. a. p. -0 8 3	Rs. a. p. +4 15 10

NARAYANGAON (A)

STATEMENT No. 79

382

SHALU—1 acre in 1928-29

PLOT No. (22)

*Previous crop—Bajri in 1927-28**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks		Per acre	
1. Preparatory tillage								Rs. a. p.	
(a) Ploughing	1·4	..	5·6	1·4	..	..	8·4	0 10 0	One ploughing was given. A plough required 2 men and 4 bullocks. Hired labour was paid annas 10.
(b) Harrowing	1·1	..	3·4	..	..	..	4·5	....	Two harrowings were given. One with a four bullock harrow and the other with a two bullock one.
2. Seeds and sowing									
(a) Seeds .....	..	..	..	..	..	..	..	1 2 3	For the plot 20 lbs. of <i>shalu jowar</i> seed at 17·5 lbs. per rupee.
(b) Sowing and covering	0·6	..	1·2	0·8	..	0·6	2·7	0 8 0	Hired labour was paid annas 8.

FARM STUDIES

3. Harvesting and preparing for the market.....	..	2	..	..	..	..	1'0	....
4. Charges for bullock labour .....	..	..	..	..	..	..	..	2 10 6	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc ..								Rs. a. p. 1 10 11	
(b) Interest on the value of bullocks, feed and fodder ..								0 15 7	
5. Charges for implements and tools .....	..	..	..	..	..	..	..	0 8 4	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
(a) Depreciation ..								Rs. a. p. 0 5 10	
(b) Interest ..								0 2 6	
6. Interest on fluid capital (i.e., wages of hired labour and cost of seeds)	..	..	..	..	..	..	..	0 2 2	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	5 0 0	The land was owned.
Total	3'1	2	10'2	1'7	..	0'6	16'6	10 9 8	

¹Family labour not charged. ²Home bullock labour charged under item 4.

STATEMENT No. 79—concl'd.

384

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	Per acre	Per acre	
	Lbs.	Rs. a. p.	
<i>Shalu</i> (grains)	60	3 0 0	Valued at 20 lbs. per rupee.
<i>Kadbi</i> (200 bundles) ..	400	4 0 0	Valued at Rs. 2 per 100 bundles.
<i>Bhoos</i> .....	....	4 0 0	Estimated value.
Total ..	....	11 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For one acre ..	11 0 0	10 9 3	(a) 3 12 7 (b) 1 4 3	+0 6 9	+5 7 7

FARM STUDIES

STATEMENT No. 80

PLOT No. (23)

GARLIC—35 gunthas in 1928-29

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	2·0	..	4	..	..	2	8·0	9·14	1 0 0	1 2 3	One ploughing was given. A plough required 2 men and 6 bullocks. Hired bullocks were paid annas 8 each.
(b) Harrowing	1·5	..	3	0·5	..	3	8·0	9·14	1 12 0	2 0 0	Two harrowings were given. One with a four-bullock harrow and the other with a two-bullock harrow. Hired men and bullocks were paid annas 8 each.
2. Manure and manuring											
(a) Manure .....	..	..	..	..	..	..	..	..	14 0 0	16 0 0	For the plot 14 carts of farmyard manure at Rs. 2 per cart were given; 50 per cent of the cost is charged to this crop.
(b) Carting and spreading	1·0	4	2	1·0	4	2	10·0	11·43	2 8 0	2 13 9	Hired men and bullocks were paid annas 8 and women at annas four each.

NARAYANGAON (A)

385

STATEMENT No. 80—contd.

336

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
3. Seeds and sowing—											
(a) Seeds .....	..	..	..	..	..	..	..	..	8 0 0	9 2 3	For the plot 160 lbs. of garlic bulbs at 20 lbs. per rupee.
(b) Sowing (dibbling) .....	..	21	..	..	35	..	28·0	32·00	8 12 0	10 0 0	Hired women were paid at annas four each.
4. After-care and tillage											
(a) Weeding .....	..	20	..	..	16	..	18·0	20·57	4 0 0	4 9 2	Three weeding were given. They required 24, 10 and 2 women respectively. Hired labour was paid at annas 4 each.
5. Irrigation labour	38·0	20	116	3·0	2	24	190·0	217·15	14 0 0	16 0 0	On well irrigation; 13 waterings were given. A <i>mhote</i> required 1 man and 4 bullocks. 4 men and 22 women for watering the crop. Some days there was not full time work for bullocks. Hired men and bullocks paid annas 8 and women at four annas each.
6. Harvesting and preparing for the market.....	14·0	21	..	14·0	..	..	38·5	44·0	7 0 0	8 0 0	Hired men were paid at annas 8 each.
7. Charges for bullock labour	..	..	..	..	..	..	..	..	32 8 1	37 2 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
	Rs. a. p.										
(a) Feeds, fodder, depreciation, etc. ..	20 9 9										
(b) Interest on the value of bullocks, feeds, and fodder ..	11 14 4										

FARM STUDIES

8. Charges for implement and tools.....	..	..	..	..	..	..	..	..	6 7 4	7 6 1	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.																		
(a) Depreciation ..	4	8	5															
(b) Interest ..	1	14	11															
9. Interest on fluid capital (i.e., wages of hired labour and value of seeds and manure).....	..	..	..	..	..	..	..	..	3 3 2	3 10 6	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	13 14 0	15 13 8	The land was taken on lease on share system. The owner of the land to receive half the produce and share half the current expenses. The value of half the produce came to Rs. 44 and half the cost came to Rs. 30-2-0. Hence the net amount paid as rent was Rs. 13-14-0 (Rs. 44-0-0 - Rs. 30-2-0).
Total	54	5	86	125	18	5	57	31	300	5	343	48	117	0	7	138	12	1

¹Family labour not charged.²Home bullock labour charged under item 7.

STATEMENT No. 80—concl'd.

388

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 35 gunthas	Per acre	For 35 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Garlic (11 <i>pallas</i>) ..	2,640	3,017.14	88 0 0	100 9 2	Sold at Rs. 8 per <i>palla</i> of 240 lbs.
Total ..	..	..	88 0 0	100 9 2	

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 35 gunthas.	88 0 0	117 0 7	(b) 17 0 5	-29 0 7	-12 0 2
Per acre ..	100 9 2	133 12 1	19 7 4	-33 2 11	-13 11 7

FARM STUDIES

STATEMENT No. 81

SUGARCANE—28·75 gunthas in 1928-29

PLOT No. (24)

Previous crop—Peas (irrigated) in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ²	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	5·0	..	16	..	..	..	21·0	29·19	....	....	Three ploughings were given. A plough required 1 man, and 4 bullocks. One extra man was required during the third ploughing to drive the bullocks.
(b) Harrowing	0·5	..	2	..	..	..	2·5	3·49	....	....	Two harrowings were given. A harrow required one man and four bullocks.
(c) Ridging	2·0	5·5	..	..	..	..	4·75	6·6	....	....
2. Manure and manuring											
(a) Manure											
(i) Farmyard manure.	..	..	..	..	..	..	..	..	42 0 0	58 7 0	For the whole plot 30 carts of farmyard manure at Rs. 2 per cart were given; 70 per cent of the cost is charged to this crop.
(ii) Oil cake .....	..	..	..	..	..	..	..	..	15 0 0	20 14 0	For the whole plot 640 lbs. of safflower cake was given as top dressing.
(b) Carting and manuring	3·0	12·0	6	..	..	..	15·00	20·87	....	....

NARAYANGAON (A)

389

STATEMENT No. 81—contd.

390

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
3. Seeds and sowing											
(a) Seeds (sets) .....	..	..	..	..	..	..	..	39 0 0	54 4 3	For the whole plot 6,500 sets at Rs. 6 per 1,000 sets.	
(b) Planting	3·0	1·0	..	..	..	..	3·5	4·87	....	
4. After-care and tillage											
(a) Weeding	12·0	70·5	..	3	16	..	58·25	81·05	5 8 0	7 10 0	Six weedings were given. Hired men and women were paid annas 8 and 4 each respectively.
(b) Earthing up	4·0	..	..	3	..	..	7·0	9·74	1 8 0	2 1 5	Hired men were paid at annas 8 each.
5. Irrigation labour	23·0	..	8	7	..	..	38·0	52·87	3 8 0	4 14 0	Well and canal irrigation combined; 24 canal waterings and one well watering; water cess goes with land assessment. One man and two bullocks 4 days for irrigation. 26 men for managing canal and well waterings. Hired men were paid at annas 8 each.
6. Harvesting and preparing for the market											
(a) Labour	18·0	25·5	22	56	15	22	138·25	192·35	42 2 8	58 10 8	For repairing furnace and building <i>gurhal</i> house 10·5 men and 10·5 women, remaining on <i>gurhal</i> work. The total cost on account of hired human and bullock labour (including the value of <i>gul</i> given) came to Rs. 42-2-8.

FARM STUDIES

(b) Hire of equipment....	..	..	..	..	..	..	..	..	16 8 0	22 15 4	
(c) Miscellaneous .....	..	..	..	..	..	..	..	..	21 4 0	29 9 0	
7. Removing stubbles of sugarcane .....	..	9 0	..	..	..	..	4 5	6 27	....	....
8. Charges for bullock labour	..	..	..	..	..	..	..	..	14 0 11	19 9 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Re. a. p.											
(a) Feeds, fodder, depreciation, etc ..	8 14 6										
(b) Interest on the value of bullocks, feeds and fodder ..	5 2 5										
9. Charges for implements and tools.....	..	..	..	..	..	..	..	..	2 12 7	8 14 1	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Re. a. p.											
(a) Depreciation.....	1 15 3										
(b) Interest..	0 13 4										
10. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure).	..	..	..	..	..	..	..	..	12 2 5	16 14 6	Charged at 12 per cent per annum.
11. Rent of land .....	..	..	..	..	..	..	..	..	25 2 6	35 0 0	The land was owned. It was under command of canal irrigation.
Total	70 5	123 5	54	69	81	22	202 75	407 30	240 9 1	334 11 3	

¹Family labour not charged. ²Home bullock labour charged under item 8.

STATEMENT No. 81—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 28.75 gunthas	Per acre	For 28.75 gunthas	Per acre	
<i>Gul</i> 13.5	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	Wholesale.
<i>pallas</i> ..	3,240	4507.8	300 0 0	417 6 3	
Trash.....	..	..	4 0 0	5 9 0.5	Estimated value.
Sets.....	..	..	4 0 0	5 9 0.5	Sold.
Tops	5,266	7326.6	26 5 4	36 10 2	Estimated value.
Total ..	..	..	334 5 4	465 2 6	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 28.75 gunthas.	334 5 4	240 9 1	(a) 16 8 5 (b) 18 2 2	+93 12 3	+128 6 10
Per acre ..	465 2 6	334 11 3	48 3 7	+130 7 3	+178 10 10

NARAYANGAON, PART (B), 1929-30

General information about the village, distribution of land, crops and cropping have already been given under Narayangaon part (A) for 1928-29 and therefore tables I to V are not repeated.

THE SEASON, 1929-30

The total amount of rainfall in 1929-30 was only 17·35 inches or about 40 per cent below the average. The fortnightly distribution of rainfall in the year is given in the following table.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1929
(Acre Inches)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
						First fortnight						} 17·35
0·0	0·0	0·0	0·30	0·0	0·0	1·98	0·0	0·0	1·80	0·0	0·0	
						Second fortnight						
0·0	0·0	0·0	3·40	0·0	5·04	0·32	0·0	4·51	0·0	0·0	0·0	

Ante-monsoon showers amounting to 3·7 inches of fall, in the course of three days in April, were a great help to prepare lands. The regular monsoon started by the middle of June and sowing of *kharif* crops was over by the end of the first week of July. Thenceforward there were occasional showers till the 21st of July, and in the early stages crops looked promising. Due to the long break in rains, lasting from 21st July to 17th of September, crops on thin soils withered. Crops on better soils, however, kept growing. The heavy showers, in the latter part of September, damaged *bajri* crop which was then almost ready for harvest.

The rainfall of the latter part of September and in the first week of October enabled the farmers to sow their *rabi* crops. *Rabi* crops germinated very well but the complete cessation of rains, from October 4th onwards, caused withering of the young plants. The *rabi* season of the year was almost a failure, in the greater part of the Central and Eastern Deccan.

THE FARMER

The cultivating holding of the farmer in the previous year was 25 acres and 17·25 gunthas. In the year 1929-30 the farmer had taken on lease 35 gunthas of land more. Thus the total cultivated area with the farmer was 26 acres and 12·25 gunthas. Out of this area, 5 acres and 34·5 gunthas were cropped twice. The gross cropped area was, therefore, 32 acres and 6·75 gunthas.

(A) *Human labour*.—The second son of the farmer, having left school, had become a working unit of the family from April, thus the working strength of the family consisted of the farmer, his son and three female members.

The distribution and the use of family labour, given in the subjoined table, is for 12 months, from February 1929 to January 1930. As in similar cases, the table shows, how the family was employed as regards farm work, during the period dealt with, whether on the crops of 1928-29 or 1929-30.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Total	Percentage of labour employed to labour available
(1) Farmer	21	31	21	19	25	23	23	19	23	30	29	18	282	77.26
	28	31	30	31	30	31	31	30	31	30	31	31	365	
(2) Farmer's son	..	..	7	18	16	19	23	23	17	24	27	12	191	62.41
			30	31	30	31	31	30	31	30	31	31	306	
(3) Three Female members	53	63	2	28	26	24	75	69	47	64	77	32	560	51.14
	84	93	90	93	90	93	93	90	93	90	93	93	1095	

Note.—The denominators show available labour units, while the numerators denote units employed.

The utilization of family labour was fairly good and even, throughout the year.

(B) *Bullock work.*—During the year 1929-30 the farmer had four bullocks with him. Monthly distribution of work, from February 1929 to January 1930, is given in the following table No. VIII.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Total	Percentage of labour employed to labour available
4 Bullocks	61	22	26	98	105	88	39	36	59	105	89	26	754	51.64
	112	124	120	124	120	124	124	120	124	120	124	124	1460	

Note.—The denominators show available labour units, while the numerators denote units employed.

In the months of June and July, during sowing season, bullocks were fully busy. In the months of October, November and December, they were employed in preparing lands, sowing *rabi* crops and lifting water for peas and garlic. In February and May a good bit of ploughing was done. The period, dealt with in the table, does not synchronize with the period taken by the year's crops and hence the units shown as used in the table, will not tally with the total labour spent on the year's crops. It can be said that the bullocks, on the whole, were well employed.

The inventory of the property and remarks on the nature of land, crops and cropping etc., are given under first year's study in part (A).

COSTS AND RECEIPTS

Expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost for the total holding (viz. 32 acres and 6½ gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses :		
(a) Manures	63 4 10	
(b) Seeds	72 5 0	
(c) Outside labour	58 2 0	
(d) Depreciation on implements and tools	46 5 0	
(e) Cost of bullock labour (excluding interest on the value of feeds and fodder)	147 11 6	
(f) Assessment and L. F. C. on owned land	50 5 8	
(g) Rent of leased land	110 10 0	
		548 12 0
II. Rent of owned land (excluding assessment and L. F. C.)	217 3 4	217 3 4
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	10 0 8	
(b) Interest on the value of implements and tools ..	15 10 6	
(c) Interest on value of bullocks, feeds and fodder given to them	47 13 9	
		73 8 11
Total cost of production (excluding wages for family labour)		839 8 3

*DETAILS OF OUT-OF-POCKET EXPENSES

I. Manure :	Rs. a. p.	Rs. a. p.
(a) Eight cartloads of F. Y. M. at Rs. 2 per cart were given to <i>bajri</i> crop (plot No. 8); 50 per cent of the cost is charged to this plot and 35 per cent to peas (plot No. 23) taken after <i>bajri</i> in the same year. Therefore Rs. 8-0-0 plus Rs. 5-9-7	13 9 7	
(b) Nine cartloads of F. Y. M. at Rs. 2 per cart were given to <i>bajri</i> crop (plot No. 9) 50 per cent of the cost is charged to the plot and 35 per cent to plot No. 24 of peas taken after <i>bajri</i> in the same year. Therefore Rs. 9-0-0 plus Rs. 6-4-10	15 4 10	
(c) In 1928-29 eight cartloads of manure at Rs. 2 per cart were given to plot (No. 3); 15 per cent of the cost is charged to this plot	2 6 5	
(d) In the year 1928-29, 30 cartloads of manure at Rs. 2 each were given to plot No. 10; 30 per cent of the total cost is charged to this plot ..	18 0 0	
(e) In 1928-29, 14 cartloads of manure at Rs. 2 per cart were given to plot No. 13; 35 per cent of the total cost is charged to this plot and 15 per cent to plot No. 22 of gram taken after <i>bajri</i> in the same year; therefore Rs. 9-12-9 plus Rs. 4-3-3	14 0 0	
		63 4 10

	Rs. a. p.	Rs. a. p.
2. Seeds :		
(a) Bajri (105.25 lbs.).....	10 7 0	
(b) Mixture (20 lbs.)—bajri, Jowar, hulga, math and mug	1 0 0	
(c) Gram (190 lbs.)	19 0 0	
(d) Wheat (135 lbs.).....	13 6 0	
(e) Peas (185 lbs.).....	18 8 0	
(f) Garlic (160 lbs.)	10 0 0	
	<hr/>	72 5 0
3. Wages of hired labour :		
(a) Bajri ; (22.5 man units, 183 woman units and 22 bullock units).....	46 6 0	
(b) Wheat ; (1.5 man units)	0 12 0	
(c) Gram ; (21 woman units)	5 4 0	
(d) Peas ; (4 man units)	2 0 0	
(e) Garlic ; (15 woman units)	3 12 0	
	<hr/>	58 2 0
4. Depreciation on implements and tools, etc. :		
Opening inventory	130 8 0	
Closing inventory	84 3 0	
	<hr/>	46 5 0
5. Bullock labour cost (excluding interest) :		
(a) Depreciation on the value of five bullocks and bull calf		
	Rs. a. p.	
Opening inventory	320 0 0	
Closing inventory	287 0 0	
	<hr/>	33 0 0
(b) Death-rate allowance on 5 bullocks at 5 per cent (on Rs. 320)	16 0 0	
(c) Charges on account of housing at Rs. 4 per year per bullock for 5 units	20 0 0	
	<hr/>	
	Rs. a. p.	
(d) Feeds and fodder		
Fodder	85 5 6	
Grazing charges for 3 months.....	13 0 0	
Feeds	17 14 0	
	<hr/>	116 3 6
Against the above costs (a to d) must be set off Rs. 37-8-0, the value of 25 cartloads of manure (at Rs. 1-8-0 per cart) obtained from the bullocks during the year, therefore	<hr/>	-37 8 0
		<hr/>
		147 11 6

6. Land assessment and L. F. C. :

Plot No.	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	2 20	1 15 0		
2	9 19	9 15 4		
3	1 4	2 14 7		
4	1 4	2 12 4		
5	0 11	0 9 10		
6	0 4	0 3 8		
7	0 25	1 6 0		
8	0 14.5	2 3 4		
9	0 24	2 14 2		
10	0 28.75	5 5 0		
11	0 4.25	0 9 9		
12	0 12	0 5 10		
14	6 30	9 4 7		
15	0 9.5	0 4 6		
16	0 12.25	0 7 9		
17	1 4	0 5 5		
18	1 4	0 5 8		
19	0 11	0 1 7		
20	0 4	0 1 2		
21	0 25	0 2 6		
23	0 14.5	1 12 5		
24	0 24	2 6 10		
25	0 28.75	3 5 1		
26	0 4.25	0 9 4		
				50 5 8

Rent of land taken on lease :

- (a) Field No. 15 (the 35 gunthas of land was taken on lease). In this field two crops were taken during the year, viz. *bajri* (plot No. 13) and gram (plot No. 22). Receipts of *bajri* Rs. 94-12-0 and of gram Rs. 9-4-0; total receipts Rs. 104. Half of the receipts were given as rent. The owner of the land did not share in the cost of production 52 0 0
- (b) Field No. 16 or plot No. 27 (garlic) area 35 gunthas; receipts Rs. 131-0-0; half of this, viz. Rs. 65-8-0 is share of the land owner. According to the terms of agreement the owner had to share in the cost of seed and planting. The owner's share of half the cost came to Rs. 6-14-0. The net rent therefore came to Rs. 65-8-0 minus Rs. 6-14-0 58 10 0

110 10 0

Total out-of-pocket expenses

548 12 0

Family Labour Income.—The following table gives the family labour income i.e., the remuneration earned by the farmer and his family for the work done by them on the farm. The figures of cost of production have already appeared above. The value of produce is taken from the cost and receipt statement of various plots (pp. 401 to 472).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production excluding wages of family labour				Family Labour Income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
Total ..	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	32 6'75	1,091 7 0	548 12 0	73 8 11	217 3 4	839 8 3	+251 14 9
<i>Bajri</i> ..	18 5'50	687 8 6	292 1 5	40 6 11	154 2 4	486 10 8	+200 13 10
Wheat ..	7 11'75	68 7 10	61 9 10	13 1 6	34 9 2	109 4 6	-40 12 8
Gram ..	4 3'00	44 6 8	39 13 7	3 6 8	9 13 10	53 2 1	-8 11 5
Peas ..	1 31'50	160 0 0	44 4 0	3 2 6	18 10 0	66 0 6	+93 15 6
Garlic ..	0 35'00	131 0 0	110 15 2	13 7 4	The land was taken on lease.	124 6 6	+6 9 6

Column 4 shows expenses over manure, seeds, hired labour, depreciation on implements and tools, cost of upkeep of bullocks, assessment and L. F. C. on owned land, rent of land taken on lease. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fixed capital includes money spent on feed and fodder for the work animals and also money spent on the current agricultural operations. Fixed capital includes implements and work animals. *Column 6* shows the estimated rent on owned land minus the assessment and L. F. C. *Column 7* shows the wages earned by the farmer and his family.

The value of the gross produce obtained from the farm was Rs. 1,091-7-0, while the cost of production, excluding the wages of the farmer and his family, was Rs. 839-8-3, thus leaving Rs. 251-14-9 as the family labour income.

Farm Business Income.—In addition to the family labour income, shown in table XI, the farmer saved the rent of owned land (excluding assessment and L. F. C.) and the interest on working capital which have been debited to the costs.

The following table gives the farm business income or the aggregate income from the farm.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area		Value of produce		Out-of-pocket expenses		Farm business income	
	A.	g.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.
Total ..	32	6·75	1,091	7 0	548	12 0	+542	11 0
<i>Bajri</i>	18	5·50	687	8 6	548	12 0	+542	11 0
Wheat	7	11·75	68	7 10				
Gram	4	3·00	44	6 8				
Peas	1	31·50	160	0 0				
Garlic	0	35·00	131	0 0				

The gross receipts obtained were Rs. 1,091-7-0, while the out-of-pocket expenses came to Rs. 548-12-0, thus leaving Rs. 542-11-0 as the total income obtained by the farmer and his family on account of their wages for the work done by them on their farm, interest on working capital and the return on the land owned, as shown below.

	Rs.	a.	p.
Family labour income ..	251	14	9
Interest on working capital ..	73	8	11
Rent of owned land ..	217	3	4
	542	11	0

ANALYSIS

The farm family put in 359·5 man units and 387 woman units on the crops grown in 1929-30. Taking two woman units equal to one man unit, they put in 553 total units. The farmer had to hire 28 man units, 219 woman units and 22 bullock units. It may therefore be said that 80·7 per cent of the work was done by the farm family. Outside labour was employed only when there was pressure of work.

For the home labour of 553 units, the farmer made Rs. 251-14-9 labour income or about 7 annas and 3·4 pies daily wage per man. This is not a bad wage for working days. In the previous year the farmer could get only 20 pies per day. His farm business income amounted to Rs. 542-11-0.

GENERAL REMARKS ABOUT THE CROPS GROWN BY THE FARMER
DURING THE YEAR UNDER STUDY

The noticeable feature of the year's cropping was the large area put under *kharif* crops. Taking note of the last year's bad *rabi* season, the farmer put in larger area, including most of his best lands under *bajri* and this foresight paid him well. Thus out of 25 acres and 17·25 gunthas of land, available for cultivation he put 18 acres and 5·50 gunthas or 71·3 per cent under *bajri*. All his irrigated fields were cropped twice. From the cropping of plot Nos. 3*, 4, 5, 6 and 7 it will be seen that

* It may be noted that this plot (field No. 3) had no irrigation facilities. During the year under report, however, the farmer irrigated the plot once by drawing water from a neighbour's well.

some of the good *jirayat* land also was double cropped. The farmer during the year tried his best to take full advantage of his resources and made better income than in the previous year.

Bajri.—As mentioned above, 18 acres and 5·5 gunthas were under *bajri* in 13 plots. Six of these plots (Nos. 3, 8, 9, 10, 11 and 13), measuring three acres and 30·5 gunthas which received irrigation, yielded 3,930 lbs. of grain (or 1,048 lbs. per acre) and 12,680 lbs. of fodder (or 3,390 lbs. per acre). The remaining 7 of the 13 plots measuring 14 acres and 15 gunthas yielded 2,265 lbs. of grain (or 157 lbs. per acre) and 5,810 lbs. of fodder (or 404 lbs. per acre). The yield of *jirayat bajri* in 1928-29 was 258 lbs. per acre. The cause of the lower average in the year lies in the larger proportion of poor land under dry *bajri*. Out of the 14 acres and 15 gunthas under dry *bajri*, 11 acres and 39 gunthas (plots Nos. 1 and 2) were very poor. This poor area yielded only 64 lbs. per acre. The better portion of the area under *jirayat bajri* measuring two acres and sixteen gunthas (plots Nos. 4, 5, 6, 7 and 12) yielded 625 lbs. per acre.

Wheat.—The *rabi* season of the year was practically a failure in many parts of the Central and Eastern Deccan. At the place under study there was no rainfall after *rabi* crops were sown. An area of 7 acres and 11·75 gunthas (in three plot Nos. 14, 15 and 16) under wheat produced only 780 lbs. of grain or 107 lbs. per acre. Plot No. 14 which was poor and thin gave only 98 lbs. per acre. Plot Nos. 15 and 16 having deep soil yielded 168 and 261 lbs. per acre respectively.

Gram.—There were 6 plots under gram, together measuring 4 acres and 3 gunthas. In all cases gram was the second crop in the year. The yield obtained from the area was 585 lbs. or 143·5 lbs. per acre as against 272 lbs. per acre obtained in the previous year. Considering that there were no rains after sowing, the yield obtained was not very bad.

Peas.—All the four fields, under the command of *bandhara* irrigation, were put under peas after harvesting *bajri*. Standing crop in all the plots when mature, was sold for Rs. 160. The price obtained was lower than in the previous year and the farmer could make only Rs. 93-15-6, as his labour income from all the four plots measuring together, 1 acre and 31·5 gunthas.

Garlic.—The 35-guntha plot taken on lease in the *rabi* season was put under garlic. The yield obtained was low being only 2,395 lbs. per acre. The price obtained was however better (i.e., 16 lbs. per rupee as against 30 lbs. per rupee in 1928-29) and the farmer could make a small amount of Rs. 7-8-7 per acre as his labour income. The owner of the land paid half the cost of seed (viz. Rs. 5) and half the cost of hired labour (viz. Rs. 1-14-0) and received half of the receipts (Rs. 65-8-0). The rent of land was, therefore, too heavy, and debiting other costs, the plot left only Rs. 6-9-6, as wages for the 65 man units and 38 woman units spent by the farmer and his family over the crop.

The detailed statements of costs and receipts of each of the plots of the farm are as follows,

STATEMENT No. 82

BAJRI—2 acres 20 gunthas in 1929-30

PLOT No. (1)

Previous crop—Wheat, jowar and gram in 1928-29(a) *Cost of Production*

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing	1 5	..	8	0·5	..	..	10·0	4·0	0 4 0	0 1 7	One ploughing to a part was given. A plough required one man and four bullocks. The hired man for half the day was paid annas 4.
(b) Harrowing and levelling	3·0	..	6	..	..	..	9·0	3·6	---	---	Four harrowings and a levelling were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	1 7 0	0 9 3	For the plot following seeds were required:— <i>Bajri</i> 12·5 lbs. .. Re. 1-4-0 <i>Jowar</i> 1·25 „ .. „ 0-1-0 <i>Hulga</i> 1·25 „ .. „ 0-1-0 <i>Math</i> 1·25 „ .. „ 0-1-0 .. 1-7-0
(b) Sowing and covering ..	2·0	..	4	..	..	..	6·0	2·4	---	---	

NARAYANGAON (B)

401

STATEMENT No. 82—concl'd.

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
3. After-care and tillage									Rs. a. p.	Rs. a. p.	
(a) Interculturing	2·0	..	2	..	..	..	4·0	1·6	---	---	One hoeing was given. Set of hoes required two men and two bullocks.
4. Harvesting and preparing for the market	2·0	9	7	..	12	..	19·5	7·8	3 0 0	1 3 2	Woman day-labour was paid at annas 4 each.
5. Charges for bullock-labour .	..	..	..	..	..	..	..	..	7 13 6	3 2 3	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc. ..											
(b) Interest on the value of bullocks, feeds, fodder ..											
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	2 7 8	0 15 10	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation ..											
(b) Interest ..											
7. Interest on fixed capital (i.e., wages of hired labour and cost of seeds) ..	..	..	..	..	..	..	..	..	0 1 8	0 0 8	Calculated at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	12 8 0	5 0 0	The land was owned.
Total	10·5	9	27	0·5	12	..	48·5	19·4	27 9 10	11 0 9	

¹Family labour not charged. ²Home bullock labour charged under item 5.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2½ acres	Per acre	For 2½ acres	Per acre	
Bajri	Lbs. 60	Lbs. 24	Rs. a. p. 4 0 0	Rs. a. p. 1 9 7	Land was poor and moisture was not sufficient. Hence the yield was poor. Sold at 15 lbs. per rupee. Valued at 20 lbs. per rupee. Valued at 20 lbs. per rupee. Valued at 20 lbs. per rupee. Valued at 100 bundles per rupee.
Jowar	10	4	0 8 0	0 3 3	
Hulga	5	2	0 4 0	0 1 7	
Math	5	2	0 4 0	0 1 7	
Straw and bhoos. ..	500 bundles.	200 bundles.	5 0 0	2 0 0	
Total	10 0 0	4 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2.5 acres. . .	10 0 0	27 9 10	(a) 10 9 0 (b) 2 10 5	-17 9 10	-4 6 5
Per acre ..	4 0 0	11 0 9	5 4 7	-7 0 9	-1 12 2

STATEMENT No. 83

BAJRI—9 acres 19 gunthas in 1929-30

PLOT No. (2)

Previous crop—Wheat (dry) in 1928-29

(a) Cost of Production

404

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	7	..	14	..	..	..	21·0	2·2	....	....	Two harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	5 13 0	0 9 9	For the plot following seeds were required:— Bajri 50 lbs. .. Rs. 5-0-0 Jowar 5 " .. " 0-4-0 Makh 5 " .. " 0-4-0 Hulga 5 " .. " 0-4-0 Mug 1·25 " .. " 0-1-0
(b) Sowing and covering ..	5	..	10	..	..	..	15·0	1·5	....	....	" 5-13-0
3. After-care and tillage											
(a) Interculturing	6	..	6	..	..	..	12·0	1·3	....	....	One hoeing was given. A set of hoes required two men and two bullocks.

FARM STUDIES

4. Harvesting and preparing for market	6	38	17	..	36	..	57.5	6.1	9 0 0	0 15 2	Hired women were paid at annas 4 each.
5. Charges for bullock-labour.	..	..	..	..	..	..	..	..	13 10 8	1 7 1	The total annual cost on account of draft bullock is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc. ..10 4 10											
(b) Interest on the value of bullocks, feed and fodder .. 3 5 5											
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	4 5 2	0 7 4	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation 3 3 8											
(b) Interest .. 1 1 6											
7. Interest on fluid capital (i.e., cost of seeds).....	..	..	..	..	..	..	..	..	0 5 6	0 0 7	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	47 6 0	5 0 0	The land was owned.
Total	24	38	47	..	36	..	106.5	11.1	80 7 11	8 7 11	

¹Family labour not charged.

²Home bullock labour charged under item 5.

STATEMENT No. 83—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 9 acres and 19 gunthas	Per acre	For 9 acres and 19 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	540	57·0	36 0 0	3 12 10	Valued at 15 lbs. per rupee.
Jowar	90	9·5	4 8 0	0 7 7	Valued at 20 lbs. per rupee.
Math	25	2·6	1 4 0	0 2 1	Valued at 20 lbs. per rupee.
Hulga	25	2·6	1 4 0	0 2 1	Valued at 20 lbs. per rupee.
Mug.....	5	0·5	0 4 0	0 0 5	Valued at 20 lbs. per rupee.
Straw	3,500 bundles.	369·4 bundles.	35 0 0	3 11 2	Valued at 100 bundles per rupee.
Bhoos ....	....	....	1 4 0	0 2 1	Estimated value.
Total ..	..	..	79 8 0	8 6 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 9 acres and 19 gunthas.	79 8 0	80 7 11	(a) 37 6 8 (b) 4 12 5	-0 15 11	+41 3 2
Per acre ..	8 6 3	8 7 11	4 7 3	-0 1 8	+ 4 5 7

STATEMENT No. 84

BAJRI—1 acre 4 gunthas in 1929-30

PLOT No. (3)

Previous crop—Gram (dry) in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot		
									Rs. s. p.	Rs. s. p.	
1. Preparatory tillage											
(a) Ploughing	10	--	20	--	--	--	30.0	27.27	....	....	Four close ploughings were given. A plough required one man and two bullocks.
(b) Harrowing	3	2	6	--	--	--	10.0	9.10	....	....	Six harrowings were given. A harrow required one man and two bullocks. Women were required for collecting weeds, etc.
2. Manure and manuring											
(a) Residual manure	--	--	--	--	--	--	--	--	2 6 5	2 8 0	Eight cartloads of farmyard manure at Rs. 2 were given to the first crop in the previous year. 15 per cent of the cost is charged to this crop for the residue.
3. Seeds and sowing											
(a) Seeds	--	--	--	--	--	--	--	--	0 12 0	0 10 10	For the plot 7.5 lbs. of bajri seed at 10 lbs. per rupee.
(b) Sowing and covering ..	1	2	2	--	--	--	4.0	3.63	---	---	
(c) Making beds, etc.	--	4	--	8	12	--	16.0	14.52	7 0 0	6 5 10	Hired men and women were paid at annas 8 and 4 each respectively.
4. After-care and tillage											
(a) Weeding	--	3	--	--	8	--	5.5	5.00	1 8 0	1 5 9	One weeding was given. Hired women were paid at annas 3 each. One hoeing was given. A hoe required two men and two bullocks.
(b) Interculturing	1	--	1	--	--	--	2.0	1.82	....	....

NARAYANRAO (B)

STATEMENT No. 84—concl'd.

403

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Watering	8	8	8	..	..	8	28·0	25·48	Rs. a. p. 4 0 0	Rs. a. p. 8 10 2	One watering was given. Hired bullocks were paid at annas 8 each.
2. Harvesting, tying bundles, breaking earheads and preparing for the market..	5	23	7	..	9	..	28·0	25·45	2 4 0	2 0 9	Hired women were paid at annas 4 each.
Charges for bullock labour. Rs. a. p.	..	..	..	..	..	..	..	..	12 12 3	11 9 8	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
(a) Feed, fodder, depreciation etc. .. 9 10 3											
(b) Interest on the value of bullocks, feed and fodder .. 3 2 0											
3. Charges for implements and tools .....	..	..	..	..	..	..	..	..	4 0 9	3 10 11	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
(a) Depreciation. 3 0 5											
(b) Interest .. 1 0 4											
4. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manures)	..	..	..	..	..	..	..	..	0 15 9	0 14 4	Charged at 12 per cent per annum.
5. Rent of land .....	..	..	..	..	..	..	..	..	29 9 0	26 14 0	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Bajra was followed by gram (Plot No. 17).
Total	28	42	44	8	29	8	128·5	112·27	65 4 2	59 5 3	

¹Family labour not charged. ²Home bullock labour charged under item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 4 gunthas	Per acre	For 1 acre and 4 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	1,080	981.82	72 0 0	65 7 3	Valued at 15 lbs. per rupee.
Sarmad ..	850 bundles.	772.72 bundles.	34 0 0	30 14 6	Valued at Rs. 4 per 100 bundles.
Bhoos ....	..	..	10 0 0	9 7 6	Estimated value.
Total ..	..	..	116 0 0	105 7 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 4 gunthas.	116 0 0	65 4 2	(a) 26 10 5 (b) 5 2 1	+50 11 10	+82 8 4
Per acre ..	105 7 3	59 5 3	28 14 3	+46 2 0	+75 0 3

KARAYANGAON (B)

409

STATEMENT No. 85

BAJRI—1 acre 4 gunthas in 1929-30

PLOT No. (4)

Previous crop—Gram (dry) in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	10	..	20	..	..	..	30·0	27·27	....	---	Four close ploughings were given. A plough required one man and 2 bullocks.
(b) Harrowing and leveling	8	2·0	6	..	..	..	10·0	9·10	....	---	Six harrowings were given. A harrow required one man and two bullocks. Women were required for collecting weeds, etc.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 12 0	0 10 11	For the plot 7·5 lbs. of bajri seed at 10 lbs. per rupee.
(b) Sowing and covering ..	1	2·0	2	..	..	..	4·0	3·68	....	---
3. After-care and tillage											
(a) Weeding .....	..	8·0	..	..	8	..	5·5	5·0	1 8 0	1 5 9	One weeding was given. Hired women were paid at annas three each.
(b) Interculturing	1	..	1	..	..	..	2·0	1·81	....	---	One hoeing was given. A set of hoes required two men and two bullocks.

4. Harvesting, thrashing and preparing for the market....	4	22·5	7	..	9	..	26·75	24·32	2 4 0	2 0 9	Hired women were paid at annas four each.
5. Charges for bullock labour.	..	..	..	..	..	..	..	..	10 7 2	9 8 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation ..		7 14 8									
(b) Interest on the value of bullocks, feed and fodder		2 8 11									
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	3 5 0	8 0 2	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation		2 7 7									
(b) Interest		0 13 5									
7. Interest on fluid capital (i.e. wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	0 2 2	0 2 0	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	29 4 4	26 9 9	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Bajri was followed by gram (plot No. 18).
Total ..	19	29·5	86	..	17	..	78·25	71·13	47 10 8	43 5 4	

¹ Family labour not charged. ² Home bullock labour charged under item 5.

NARAYANGAON (B)

411

STATEMENT No. 85—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 4 gunthas	Per acre	For 1 acre and 4 gunthas	Per acre	
			Rs. a. p.	Rs. a. p.	
Bajri	960 lbs.	872.72 lbs.	64 0 0	58 2 11	Valued at 15 lbs. per rupee. Valued at Rs. 4 per 100 bundles. Estimated value.
Sarmad ..	800 bundles.	727.3 bundles.	32 0 0	29 1 5	
Bhoos ....	..	..	10 0 0	9 1 6
Total ..	..	..	106 0 0	96 5 10

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding that of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 4 gunthas.	106 0 0	47 10 8	(a) 26 8 0 (b) 3 8 6	+58 5 4	+88 5 10
Per acre ..	96 5 10	43 5 4	27 4 10	+53 0 6	+80 5 4

STATEMENT No. 86

BAJRI—11 gunthas in 1929-30

PLOT No. (5)

*Previous crop—Bajri in 1928-29**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ²	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	1·5	..	4·0	..	..	..	5·5	20·00	....	....	Two ploughings were given. One required two men and four bullocks and the second, one and four bullocks.
(b) Harrowing and leveling	1·5	1·0	4·0	..	..	..	6·0	21·82	....	....
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 8 0	0 10 11	For the plot, 2 lbs. of <i>bajri</i> seed annas three.
(b) Sowing and covering ..	0·5	..	1·0	..	..	..	1·5	5·46	....	....
3. After-care and tillage											
(a) Weeding .....	..	0·5	..	..	2	..	1·25	4·54	0 8 0	1 13 1	One weeding was given. Hired women were paid at annas four each.
(b) Interculturing	0·5	..	0·5	..	..	..	1·0	3·63	....	....	One hoeing was given. A hoe required two men and two bullocks.

NARAYANGAON (B)

413

STATEMENT No. 86—concl'd.

414

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting, thrashing and preparing for market	0·5	6·5	1·0	--	2	--	5·75	20·91	Rs. s. p. 0 8 0	Rs. s. p. 1 18 1	Hired women were paid at annas four each.
5. Charges for bullock labour .	--	--	--	--	--	--	--	--	3 0 10	11 1 7	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
Rs. s. p.											
(a) Feed, fodder, depreciation, etc. 2 4 10											
(b) Interest on the value of bullocks, feed and fodder 0 12 0											
6. Charges for implements and tools	--	--	--	--	--	--	--	--	0 15 5	3 8 0	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. s. p.											
(a) Depreciation 0 11 6											
(b) Interest..... 0 3 11											
7. Interest on fixed capital (i.e., wages of hired labour and cost of seeds)	--	--	--	--	--	--	--	--	0 0 8	0 2 5	Charged at 12 per cent per annum.
8. Rent of land	--	--	--	--	--	--	--	--	7 2 6	26 0 5	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. <i>Bajri</i> was followed by gram (Plot No. 19).
Total	4·5	8·0	10·5	--	4	--	21·0	76·86	12 6 5	45 1 6	

¹Family labour not charged. ²Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 11 gunthas	Per acre	For 11 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i>	120	436.36	8 0 0	29 1 5	Valued at 15 lbs. per rupee.
<i>Bajri</i> straw and <i>bhoos</i> ..	..	..	7 4 0	26 5 10	Estimated value.
Total ..	..	..	15 4 0	55 7 5	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 11 gunthas. ..	15 4 0	12 6 5	(a) 6 8 8 (b) 1 0 7	+2 13 7	+10 6 10
Per acre ..	55 7 3	45 1 6	27 8 11	+10 5 9	+37 14 8

NARAYANGAON (B)

STATEMENT No. 87

BAJRI—4 gunthas in 1929-30

PLOT No. (6)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing	1·5	..	4·0	..	..	..	5·5	55·00	....	....	Four ploughings were given. Plough required one man and four bullocks. Half a day there were two men.
(b) Harrowing and levelling	1·5	1·0	3·0	..	..	..	5·0	50·00	....	....	A number of harrowings and a levelling were given. A harrow required one man and two bullocks. One woman was required for collecting <i>kunda</i> weeds, etc.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 1 6	0 15 0	For the plot one pound of <i>bajri</i> seed.
(b) Sowing and covering ..	0·5	..	1·0	..	..	..	1·5	15·00	....	....
3. After-care and tillage											
(a) Weeding .....	..	1·5	..	..	2	..	1·75	17·5	0 8 0	5 0 0	One weeding was given. Hired women were paid at annas four each.
(b) Interculturing	0·5	..	0·5	..	..	..	1·0	10·00	....	....

4. Harvesting, thrashing and preparing for the market	0.25	4.75	0.5	--	2	--	4.125	41.25	0 8 0	5 0 0	Hired women were paid at annas four each.
5. Charges for bullock labour.	--	--	--	--	--	--	--	--	2 9 10	26 2 4	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc.			1 15 7								
(b) Interest on the value of bullocks, feed and fodder.....			0 10 8								
6. Charges for implements and tools	--	--	--	--	--	--	--	--	0 13 2	8 3 8	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation..			0 9 10								
(b) Interest.....			0 3 4								
7. Interest on fluid capital (i.e., wages of hired labour and cost of seeds)	--	--	--	--	--	--	--	--	0 0 7	0 5 10	Charged at 12 per cent per annum.
8. Rent of land	--	--	--	--	--	--	--	--	2 4 2	22 9 8	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Bajri was followed by gram (Plot No. 20).
Total	4.25	7.25	9.0	--	4	--	18.875	188.75	6 13 3	68 4 6	

¹Family labour not charged.

²Home bullock labour charged under item 5.

STATEMENT No. 87—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4 gunthas	Per acre	For 4 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	30	300	2 0 0	20 0 0	Valued at 15 lbs. per rupee.
Sarmad and bhoos .....	..	..	1 8 7	15 5 10	Estimated value.
Total ..	..	..	3 8 7	35 5 10	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4 gunthas ..	3 8 7	6 13 3	(a) 2 0 6 (b) 0 14 2	-3 4 8	-0 6 0
Per acre ..	35 5 10	68 4 6	29 2 8	-32 14 8	-3 12 0

STATEMENT No. 88

BAJRI—25 gunthas in 1929-30

PLOT No. (7)

Previous crop—Gram in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	4·0	..	8·0	..	..	..	12·0	19·2	....	....	Two ploughings were given. A plough required two men and four bullocks.
(b) Harrowing and levelling	1·5	1·0	3·0	..	..	..	5·0	8·0	....	....	Six operations were given. Team required one man and two bullocks. The woman was required for collecting <i>kunda</i> and <i>hariāi</i> weeds, etc.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 6 0	0 9 7	For the plot 4 lbs. of <i>bajri</i> seed at Re. 0-1-6 per lb.
(b) Sowing and covering ..	0·5	..	1·0	..	..	..	1·5	2·4	....	....
3. After-care and tillage											
(a) Weeding .....	..	3·0	..	..	4	..	3·5	5·6	0 12 0	1 3 3	One weeding was given. Hired women were paid at annas three each.
(b) Interculturing	0·5	..	0·5	..	..	..	1·0	1·6	....	....	A hoe required two men and two bullocks.

NARAYANGAON (B)

419

STATEMENT No. 88—concl'd.

420

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting, tying, breaking earheads and preparing for the market.	1·5	10·5	2·0	--	6	--	11·75	18·8	Rs. a. p. 1 8 0	Rs. a. p. 2 6 5	Hired women were paid at annas four each. The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them. The total annual charges are distributed on different plots, in proportion to the bullock units used on them. Charged at 12 per cent per annum. The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. <i>Bajri</i> was followed by gram (Plot No. 21).
5. Charges for bullock labour	--	--	--	--	--	--	--	--	4 8 4	6 11 8	
Rs. a. p.											
(a) Feed, fodder, depreciation, etc.											
(b) Interest on the value of bullocks, feed and fodder											
6. Charges for implements and tools	--	--	--	--	--	--	--	--	1 5 5	2 2 8	
Rs. a. p.											
(a) Depreciation											
(b) Interest											
7. Interest on fixed capital (i.e., wages of hired labour and cost of seeds) ..	--	--	--	--	--	--	--	--	0 1 1	0 1 9	
8. Rent of land	--	--	--	--	--	--	--	--	16 13 10	26 15 9	
Total ..	8·0	14·5	14·6	--	10	--	84·75	55·80	25 1 8	40 2 8	

¹Family labour not charged.²Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 25 gunthas	Per acre	For 25 gunthas	Per acre	
	Lbs.	Lbs.	Rs. s. p.	Rs. a. p.	
<i>Bajri</i>	360	576	24 0 0	38 6 5	Valued at 15 lbs. per rupee.
<i>Sarmad</i> ..	350 bundles.	560 bundles.	14 0 0	22 6 5	Valued at Rs. 4 per 100 bundles.
<i>Bhoos</i> ....	..	..	3 12 0	6 0 0	Estimated value.
Total ..	..	..	41 12 0	66 12 10	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 25 gunthas ..	Rs. a. p. 41 12 0	Rs. a. p. 25 1 8	Rs. a. p. (a) 15 7 10 (b) 1 7 0	Rs. a. p. +16 10 4	Rs. a. p. +33 9 2
Per acre ..	66 12 10	40 2 8	27 1- 4	+26 10 2	+53 11 6

NARAYANGAON (B)

STATEMENT No. 89

BAJRI—14·5 gunthas in 1929-30

PLOT No. (8)

Previous crop—Peas (irrigated) in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing	3·0	..	8·0	..	..	..	11·0	30·34	....	....	Two ploughings were given. A plough required two men and four bullocks for one ploughing and one man and four bullocks for the second. The woman was required for collecting weeds, etc.
(b) Harrowing and levelling	1·5	1·0	8·0	..	..	..	5·0	13·79	....	....
2. Manure and manuring											
(a) Manures .....	..	..	..	..	..	..	..	..	8 0 0	22 1 2	For the plot 8 carts of F. Y. M. at Rs. 2 per cart were given 50 per cent of the total cost is charged to this crop.
(b) Carting and spreading manure	2·0	8·0	8·0	..	..	..	18·0	35·86	....	....
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 8 0	0 8 3	For the whole plot 2 lbs. of bajri seed at Re. 0-1-8 per lb.
(b) Sowing and covering ..	0·5	1·0	1·0	..	..	..	2·0	5·62	....	....
4. After-care and tillage											
(a) Weeding .....	..	1·5	..	..	4	..	2·75	7·59	0 12 0	2 1 0	One weeding was given. Hired women were paid at annas three each.
(b) Interculturing	0·5	..	0·5	..	..	..	1·0	2·76	....	....

5. Watering	0.5	--	--	--	--	--	0.5	1.38	---	---	Water cess goes with land assessment.
6. Harvesting, tying, breaking sarheads and preparing for the market	1.5	12.5	2.0	--	4	--	11.75	32.41	1 0 0	2 12 2	Hired women at annas four each.
7. Charges for bullock labour	--	--	--	--	--	--	--	--	6 8 6	18 0 3	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc.	4 14 11										
(b) Interest on the value of bullocks, feed and fodder	1 9 7										
8. Charges for implements and tools	--	--	--	--	--	--	--	--	2 1 1	5 11 3	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation	1 8 8										
(b) Interest....	0 8 5										
9. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure)	--	--	--	--	--	--	--	--	0 8 7	1 7 8	Charged at 12 per cent per annum.
10. Rent of land	--	--	--	--	--	--	--	--	7 0 6	19 6 5	The land was owned. It was under command of canal. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Bajri was followed by peas (Plot No. 23).
Total	9.5	22.0	22.5	--	8	--	47.0	129.65	26 1 8	72 0 2	

¹Family labour not charged;

²Home bullock labour charged under item 7.

STATEMENT No. 89—concl.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 14.5 gunthas	Per acre	For 14.5 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	360	993.1	24 0 0	66 3 4	Valued at 15 lbs. per rupee.
Sarmad ..	300 bundles.	827.5 bundles.	12 0 0	33 1 8	
Bhoos ....	..	..	3 12 0	10 5 6	Valued at Rs. 4 per 100 bundles. Estimated value.
Total ..	..	..	39 12 0	109 10 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 14.5 gunthas.	39 12 0	26 1 8	(a) 4 13 2 (b) 2 10 7	+13 10 4	+21 2 1
Per acre ..	109 10 6	72 0 2	20 10 4	+37 10 4	+58 4 8

STATEMENT No. 90

BAJRI—24 gunthas in 1929-30

PLOT No. (9)

Previous crop—Peas (irrigated) in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	10·0	--	20·0	--	--	--	30·0	50·0	---	---	Four ploughings were given. A plough required two men and four bullocks.
(b) Harrowing	1·5	--	3·0	--	1	--	5·0	8·83	0 4 0	0 6 8	Six harrowings were given. A harrow required one man and two bullocks. Woman was paid four annas.
2. Manure and manuring											
(a) Manure	--	--	--	--	--	--	--	--	9 0 0	15 0 0	For the plot 9 carts of F. Y. M. at Rs. 2 per cart were given. 50 per cent of the cost is charged to this crop.
(b) Carting and spreading manure	4·0	6·0	8·0	--	--	--	15·0	25·0	---	---	
3. Seeds and sowing											
(a) Seeds	--	--	--	--	--	--	--	--	0 6 0	0 10 0	For the plot 4 lbs. of bajri seed.
(b) Sowing and covering ..	0·5	1·0	1·0	--	--	--	2·0	3·38	---	---	
4. After-care and tillage											
(a) Weeding	--	1·5	--	--	4	--	2·75	4·59	1 0 0	1 10 8	One weeding was given. Hired women were paid annas four each.
(b) Interculturing	0·5	--	0·5	--	--	--	1·0	1·66	---	---	One hoeing was given. A hoe required two men and two bullocks.
5. Watering	1·0	--	--	--	--	--	1 0	1·66	---	---	Water cess goes with land assessment.

NARAYANGAON (B)

425

STATEMENT No. 90—concl'd.

426

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
6. Harvesting, tying bundles, breaking earheads and preparing for the market.	2·5	18·0	4·0	..	6	..	18·5	30·84	Rs. a. p. 1 8 0	Rs. a. p. 2 8 0	Hired women were paid at four annas each. The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them. The total annual charges are distributed on different plots in proportion to the bullock labour used on them. Charged at 12 per cent per annum. The land was owned. It was under command of canal. Rent is distributed in proportion to the value of crops taken on the plot in the same year. <i>Bajri</i> was followed by peas (Plot No. 24).
7. Charges for bullock labour	..	..	..	..	..	..	..	..	10 9 5	17 10 4
Rs. a. p.											
(a) Feed, fodder, depreciation, etc. .. 8 0 0											
(b) Interest on the value of bullocks, feed and fodder .. 2 9 5											
8. Charges for implements and tools	..	..	..	..	..	..	..	..	3 5 9	5 9 7
Rs. a. p.											
(a) Depreciation. 2 8 2											
(b) Interest .. 0 13 7											
9. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure) .. .. .	..	..	..	..	..	..	..	..	0 10 8	1 1 1
10. Rent of land .. .. .	..	..	..	..	..	..	..	..	11 0 6	19 0 2
Total ..	20·0	26·5	36·5	..	11	..	75·25	126·41	38 1 11	63 8 6	

¹Family labour not charged.²Home bullock labour charged under item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 24 gunthas	Per acre	For 24 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri ...	600	1,000	40 0 0	66 10 8	Valued at 15 lbs. per rupee.
Sarmad ...	450 bundles.	750 bundles.	18 0 0	30 0 0	Valued at Rs. 4 per 100 bundles.
Bhoos ....	..	..	6 4 0	10 6 8	Estimated value.
Total ...	..	..	64 4 0	107 1 4	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 4+5)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 24 gunthas.	64 4 0	38 1 11	(a) 8 8 4 (b) 4 1 3	+26 2 1	+38 11 8
Per acre ..	107 1 4	63 8 6	21 0 0	+43 8 10	+64 8 10

NAHAYANGAON (B)

STATEMENT No. 91

PLOT No. (10)

BAJRI—28.75 gunthas in 1929-30

Previous crop—Sugarcane in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing and drawing earth from higher to lower part of the field	16	9.0	32	--	--	--	52.5	78.04	---	---	A number of ploughings were given before drawing soil.
(b) Harrowing and levelling	8	--	6	--	2	--	10.0	13.91	0 8 0	0 11 2	Three harrowings were given. A harrow required two men and four bullocks. Woman labour charged at 4 annas each.
2. Manure and manuring											
(a) Residual manure	--	--	--	--	--	--	--	--	18 0 0	25 0 8	Thirty per cent of the cost of farm-yard manure applied to the previous crop is charged for the residue.
3. Seeds and sowing											
(a) Seeds	--	--	--	--	--	--	--	--	0 8 0	0 11 0	For the plot 5 lbs. of bajri seed at 10 lbs. per rupee.
(b) Sowing and covering	1	2.0	2	--	--	--	4.0	5.56	---	---	
4. After-care and tillage											
(a) Weeding	--	2.5	--	--	6	--	4.25	5.92	1 2 0	1 9 0	One weeding was given. Hired women were paid at annas three each.
(b) Interplanting	1	--	1	--	--	--	2.0	2.78	---	---	One hoeing was given. Hoe required two men and two bullocks.

5. Watering.....	2	--	--	--	--	2.0	2.78	....	....	Water cess goes with land assessment.
6. Harvesting, tying bundles, breaking earheads and preparing for the market	3	31.0	10	..	6	31.5	48.83	1 8 0	2 1 8	Hired women were paid at four annas each.
7. Charges for bullock labour.	--	--	--	--	--	--	--	14 12 9	20 9 4	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Ra. a. p.										
(a) Feed, fodder, depreciation, etc.....										
11. 2 10										
(b) Interest on the value of bullocks, feed and fodder ..										
3 9 11										
8. Charges for implements and tools.....	--	--	--	--	--	--	--	4 11 0	6 8 4	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Ra. a. p.										
(a) Depreciation										
3 8 0										
(b) Interest										
1 3 0										
9. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure).....	--	--	--	--	--	--	--	1 8 3	1 10 9	Charged at 12 per cent per annum.
10. Rent of land.....	--	--	--	--	--	--	--	15 7 8	21 8 5	The land was owned. It was under command of canal. Rent is distributed in proportion to the value of crops, taken in the same year. <i>Bajri</i> was followed by peas (Plot No. 25).
Total ..	26	44.5	51	--	14	--	106.25	147.82	57 12 8	80 6 6

¹Family labour not charged.

²Home bullock labour charged under item 7.

STATEMENT No. 91—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 28.75 gunthas	Per acre	For 28.75 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri.....	960	1,335.65	64 0 0	89 0 9	Valued at 15 lbs. per rupee.
Sarmad....	750 bundles.	1,043.5 bundles.	30 0 0	41 11 9	Valued at Rs. 4 per 100 bundles.
Bhoos.....	.. *	..	10 0 0	13 14 7	Estimated value.
Total ..	..	..	104 0 0	144 11 1	

(c) Summary

1	2	3	4	5 6 (i.e. col. 2-3) (i.e. col. 5+4)	
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 28.75 gunthas.	104 0 0	57 12 8	(a) 10 2 8 (b) 6 0 2	+46 3 4	+62 6 2
Per acre ..	144 11 1	80 6 6	22 8 1	+64 4 7	+86 12 8

STATEMENT No. 92

BAJRI—4·25 gunthas in 1929-30

PLOT No. (11)

Previous crop—Peas (irrigated) in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
Preparatory tillage											
Ploughing and filling land.....	3·0	..	7·0	..	1	..	10·5	98·81	0 4 0	2 5 8	The hired woman was paid annas four. She was required for collecting rhizomes of weeds, etc.
Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 1 6	0 14 1	For the plot one pound of bajri seed.
(b) Sowing and covering ..	0·5	..	1·0	..	..	..	1·5	14·12	....	....
After-care and tillage											
(a) Weeding .....	..	0·5	..	..	2	..	1·25	11·78	0 8 0	4 11 4	One weeding was given. Hired women were paid at annas four each.
(b) Interculturing	0·5	..	0·5	..	..	..	1·0	9·42	....	....
Watering	0·5	..	..	..	..	..	0·5	4·70	....	....	Water cess goes with the land assessment.

NARAYANGAON (B)

431

STATEMENT No 92—concl'd.

432

ITEM OF EXPENDITURE	Home labour.			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre		
5. Harvesting, thrashing and preparing for the market..	0·5	5·5	1·0	4·25	40·00	Rs. a. p. ---	Rs. a. p. ---	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
6. Charges for bullock labour .	..	..	..	..	..	..	..	..	2 12 2	25 15 8
Rs. a. p.												
(a) Feed, fodder, depreciation etc.												
(b) Interest on the value of bullocks, feed and fodder												
7. Charges for implements and tools.....	0 14 0	8 8 9		The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation												
(b) Interest.....												
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds)..	0 0 9	0 7 1		Charged at 12 per cent per annum.
9. Rent of land	1 14 8	18 0 7	The land was owned. It was under command of canal. Rent is distributed in proportion to the value of crops taken on the plot, in the same year. <i>Bajri</i> was followed by peas (Plot No. 28).	
Total ..	5·0	6·0	9·5	..	8	..	19·0	178·88	6 7 1	60 10 2		

¹Family labour not charged. ²Home bullock labour charged under item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4.25 gunthas	Per acre	For 4.25 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i>	90	847.06	6 0 0	56 7 6	Valued at 15 lbs. per rupee.
<i>Sarmad</i> (70 bundles) and <i>bhoos</i> ..	..	..	3 8 8	33 6 2	Estimated value.
Total ..	..	..	9 8 8	89 13 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4.25 gunthas.	9 8 8	6 7 1	(a) 1 4 11 (b) 0 15 1	+ 3 1 7	+ 5 5 7
Per acre ..	89 13 8	60 10 2	21 2 10	+29 3 6	+50 6 4

STATEMENT No. 93

434

BAJRI—12 gunthas in 1929-30

PLOT No. (12)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	1'0	..	2'0	..	..	..	8'0	10'00	....	....
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 4 0	0 13 4	For the plot 2'5 lbs. of bajri seed.
(b) Harrowing, sowing and covering	1'0	..	2'0	..	..	..	8'0	10'00	....	....
3. Harvesting and preparing for the market etc.....	0'25	4'75	0'5	..	..	..	8'125	10'42	....	....

FARM STUDIES

4. Charges for bullock labour	..	..	..	..	..	..	..	..	1 4 11	4 5 9	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation etc.	0 15 9										
(b) Interest on the value of bullocks, feed and fodder	0 5 2										
5. Charges for implements and tools	--	--	--	--	--	--	--	--	0 6 7	1 5 11	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation	0 4 11										
(b) Interest	0 1 8										
6. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).	--	--	--	--	--	--	--	--	0 0 3	0 0 10	Charged at 12 per cent per annum.
7. Rent of land	--	--	--	--	--	--	--	--	4 8 0	15 0 0	The land was owned.
Total	2*25	4*75	4*5	--	--	--	9*125	30*42	6 7 9	21 9 10	

¹Family labour not charged.

²Home bullock labour charged under item 4.

STATEMENT No. 93—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 12 gunthas	Per acre	For 12 gunthas	Per acre	
<i>Bajri</i>	Lbs. 30	Lbs. 100	Rs. a. p. 2 0 0	Rs. a. p. 6 10 8	Valued at 15 lbs. per rupee. Value estimated by allocation as produce of small plots was pooled for thrashing.
<i>Sarmad and bhoos</i> ..	..	..	1 3 3	4 0 2
Total ..	..	..	3 3 3	10 10 10

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
For 12 gunthas ..	Rs. a. p. 3 3 3	Rs. a. p. 6 7 9	Rs. a. p. (a) 4 2 2 (b) 0 7 1	Rs. a. p. -3 4 6	Rs. a. p. +1 4 9
Per acre ..	10 10 10	21 9 10	15 4 2	-10 15 0	+4 5 2

STATEMENT No. 94

BAJRI—35 gunthas in 1929-30

PLOT No. (13)

Previous crop—Garlic (irrigated) in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Labour on dally wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bul-locks ²	Men ¹	Wo-men ¹	Bul-locks ²	Men	Women	Bullocks			For the plot	Per acre	
												Rs. s. p.	Rs. s. p.	
1. Preparatory tillage														
(a) Ploughing	6	--	16	--	--	--	--	--	--	22'00	25'14	----	----	Two ploughings were given. First ploughing required two men and four bullocks and second, one man and four bullocks.
(b) Harrowing and leveling	3	2	6	--	--	--	--	--	--	10'00	11'48	----	----	Three harrowings were given. A harrow required two men and four bullocks. Women collected deep rooted weeds.
2. Manure and manuring														
(a) Residual manure ----	--	--	--	--	--	--	--	--	--	--	--	9 12 9	11 8 2	Thirty-five per cent of the cost of F. Y. M. applied to the previous crop, is charged for the residue.
3. Seeds and sowing														
(a) Seeds	--	--	--	--	--	--	--	--	--	--	--	0 10 0	0 11 5	For the plot 6'25 lbs. bajri seed.
(b) Sowing and covering ..	1	--	2	--	--	--	--	--	--	3'00	3'43	----	----	
4. After-care and tillage														
(a) Weeding	1	5	--	--	--	--	--	8	--	7'5	8'6	1 8 0	1 11 5	One weeding was given. Hired women were paid at annas 3 each.
(b) Interculturing	1	--	1	--	--	--	--	--	--	2'0	2'28	----	----	One hoeing was given. A hoe required two men and two bullocks.

NARAYANGAON (B)

437

STATEMENT No. 94—concl'd.

438

ITEM OF EXPENDITURE.	Home labour			Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Watering	14	21	16	14	21	14	..	..	..	79·0	90·28	---	---	This was well irrigation.
6. Harvesting, tying bundles, breaking earheads and preparing for market	6	27	10	..	..	..	..	6	..	32·5	37·14	1 8 0	1 11 5	Hired women were paid at annas 4 each.
7. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	..	18 13 10	21 8 11	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.														
(a) Feed, fodder, depreciation, etc.	14	3	11											
(b) Interest on the value of bullocks, feed and fodder....	4	9	11											
8. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	..	5 15 7	6 13 3	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.														
(a) Depreciation	4	7	5											
(b) Interest	1	8	2											
9. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).....	..	..	..	..	..	..	..	..	..	..	..	0 11 6	0 13 2	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	47 6 0	54 2 3	The land was taken on lease on share system. Half the gross produce was paid as rent. Bajri was followed by gram (Plot No. 22).
Total.....	32	55	51	14	21	14	..	14	..	166·0	178·3	86 5 8	98 11 0	

¹Family and exchange labour not charged.²Home bullock and exchange labour charged under item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 35 gunthas	Per acre	For 35 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	840	960	56 0 0	64 0 0	Valued at 15 lbs. per rupee.
Sarmad ..	750 bundles.	857 bundles.	30 0 0	34 4 7	Valued at Rs. 4 per 100 bundles.
Bhoos ....	..	..	8 12 0	10 0 0	Estimated value.
Total....	..	..	94 12 0	108 4 7	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 35 gunthas.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	94 12 0	86 5 8	(b) 6 13 7	+8 6 4	+15 3 11
Per acre ..	108 4 7	98 11 0	7 13 3	+9 9 7	+17 6 10

NARAYANGAON (B)

WHEAT—6 acres 30 gunthas in 1929-30

Previous crop—Bajri and tur, and gram in rabi, 1928-29

STATEMENT No. 95

PLOT No. (14)

(a) Cost of Production

440

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	8·5	..	40	1·5	..	..	50	7·41	0 12 0	0 1 9	One ploughing was given. A plough required one man and four bullocks. Hired men were paid at annas 8 each.
(b) Harrowing and leveling	14·0	..	40	..	..	..	54	8·00	....	....	Sometimes four-bullock and sometimes two-bullock teams worked. Five operations were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	12 0 0	1 12 5	For the plot 120 lbs. of wheat seed at 10 lbs.
(b) Sowing and covering ..	7·0	..	14	..	..	..	21	3·11	....	....
3. Harvesting and preparing for the market	14 0	14	19	..	..	..	40	5·92	....	....

FARM STUDIES

4. Charges for bullock-labour	--	--	--	--	--	--	--	32 12 8	4 13 9	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.		
Rs. a. p.												
(a) Feed, fodder, depreciation etc.	24	12	4									
(b) Interest on the value of bullocks, feed and fodder	8	0	4									
5. Charges for implements and tools	--	--	--	--	--	--	--	10 6 2	1 8 7	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.		
Rs. a. p.												
(a) Depreciation ..	7	12	2									
(b) Interest	2	10	0									
6. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) ..	--	--	--	--	--	--	--	0 12 3	0 1 10	Charged at 12 per cent per annum.		
7. Rent of land	--	--	--	--	--	--	--	33 12 0	5 0 0	The land was owned.		
Total	43	5	14	113	1	5	--	165	24	44	90 7 1	13 6 4

¹Family labour not charged.

²Home bullock labour charged under item 4.

NARAYANGAON (B)

STATEMENT No. 95—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 6.75 acres	Per acre	For 6.75 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat	660	97.77	52 12 9	7 13 2	Sold at 12.5 lbs. per rupee.
Straw and chaff ..	..	..	5 0 0	0 11 10	Estimated value.
Total ..	..	..	57 12 9	8 9 0	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 6 acres and 30 gunthas ..	57 12 9	90 7 1	(a) 24 7 5 (b) 11 6 7	- 32 10 4	+ 3 3 8
Per acre	8 9 0	13 6 4	5 5 0	- 4 13 4	+ 0 7 8

STATEMENT No. 96

WHEAT—9·5 gunthas in 1929-30

PLOT No. (15)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men ¹	Women ¹	Bul- locks ²			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	1·5	..	4·0	..	..	..	5·5	23·16	....	....	Two ploughings were given. First ploughing required 2 men and 4 bullocks and the second, one man and four bullocks.
(b) Harrowing and leveling.....	0·5	1	1·0	..	..	..	2·0	8·42	....	....	Two harrowings were given. A harrow required one man and two bullocks. The woman was required to collect weed-rhizomes, etc.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 9 0	2 5 11	For the plot 6 lbs. of wheat seed.
(b) Sowing and covering ..	1·0	..	2·0	..	..	..	3·0	12·63	....	....
3. Harvesting and preparing for the market	1·0	1	2·5	..	..	..	4·0	16·84	---	---	

NAHAYANGAON (B)

113

STATEMENT No. 96—concl'd.

444

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²			For the plot	Per acre	
4. Charges for bullock labour	--	--	--	--	--	--	--	--	Rs. a. p. 2 12 2	Rs. a. p. 11 9 11	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc.....											
(b) Interest on the value of bullocks, feed and fodder.....											
5. Charges for implements and tools.....	--	--	--	--	--	--	--	--	0 14 0	3 10 11	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation.....											
(b) Interest.....											
6. Interest on fluid capital (i.e., cost of seed).....	--	--	--	--	--	--	--	--	0 0 6	0 2 2	Charged at 12 per cent per annum.
7. Rent of land.....	--	--	--	--	--	--	--	--	4 12 0	20 0 0	The land was owned.
Total.....	4 0	2	9 5	--	--	--	14 5	61 05	8 15 8	37 12 11	

¹Family labour not charged. ²Home bullock labour charged under item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 9.5 gunthas	Per acre	For 9.5 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat ..	40	168.42	3 3 3	13 7 10	Sold at 12.5 lbs. per rupee.
Straw and chaff ..	..	..	0 5 4	1 6 5	Estimated value.
Total..	..	..	3 8 7	14 14 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 9.5 gunthas.	3 8 7	8.15 8	(a) 4 7 6 (b) 0 14 0	-5 7 1	-0 0 9
Per acre ..	14 14 3	37 12 11	22 11 6	-22 14 8	-0 3 2

NARAYANGAON (1)

STATEMENT No. 96—concl'd.

444

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²			For the plot	Per acre	
4. Charges for bullock labour	--	--	--	--	--	--	--	--	Rs. a. p. 2 12 2	Rs. a. p. 11 9 11	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc.....											
(b) Interest on the value of bullocks, feed and fodder.....											
5. Charges for implements and tools.....	--	--	--	--	--	--	--	--	0 14 0	3 10 11	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation.....											
(b) Interest.....											
6. Interest on fixed capital (i.e., cost of seed).....	--	--	--	--	--	--	--	--	0 0 6	0 2 2	Charged at 12 per cent per annum.
7. Rent of land.....	--	--	--	--	--	--	--	--	4 12 0	20 0 0	The land was owned.
Total.....	4·0	2	9·5	--	--	--	14·5	61·05	8 15 8	37 12 11	

¹Family labour not charged. ²Home bullock labour charged under Item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 9.5 gunthas	Per acre	For 9.5 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat ..	40	168.42	3 3 3	13 7 10	Sold at 12.5 lbs. per rupee.
Straw and chaff ..	..	..	0 5 4	1 6 5	Estimated value.
Total..	..	..	3 8 7	14 14 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 9.5 gunthas.	3 8 7	8 15 8	(a) 4 7 6 (b) 0 14 0	-5 7 1	-0 0 9
Per acre ..	14 14 3	37 12 11	22 11 6	-22 14 8	-0 3 2

NARAYANGAON (11)

STATEMENT No. 97

WHEAT—12·25 gunthas in 1929-30

PLOT No. (16)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bul- locks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	1·0	..	2·0	..	..	..	3·0	9·79	....	....	One ploughing was given. A plough required two men and four bullocks.
(b) Harrowing	0·5	2	1·0	..	..	..	2·5	8·17	....	....	Four harrowings were given. A harrow required one man and two bullocks. The women were required for collecting weeds, etc.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 18 0	2 10 5	For the plot 9 lbs. of wheat seed.
(b) Sowing and covering ..	1·0	..	2·0	..	..	..	3·0	7·79	....	....
3. Harvesting and preparing for the market	1·0	1	2·5	..	..	..	4·0	13·06	....	....

4. Charges for bullock labour .. .. .	..	..	..	..	..	..	..	..	2 2 11	7 2 0	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc. .. 1 10 4											
(b) Interest on the value of bullocks, feed and fodder .. 0 8 7											
5. Charges for implements and tools .. .. .	..	..	..	..	..	..	..	..	0 11 1	2 4 3	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation 0 8 4											
(b) Interest .. 0 2 9											
6. Interest on fluid capital (i.e., cost of seeds) .. .. .	..	..	..	..	..	..	..	..	0 0 9	0 2 5	Charged at 12 per cent per annum.
7. Rent of land .. .. .	..	..	..	..	..	..	..	..	6 2 0	20 0 0	The land was owned.
Total	3·5	3	7·5	..	..	..	12·5	40·81	9 13 9	32 3 1	

¹Family labour not charged.

²Home bullock labour charged under item 4.

STATEMENT No. 97—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 12·25 gunthas	Per acre	For 12·25 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat....	80	261·22	6 6 6	20 14 8	Sold at 12½ lbs. per rupee.
Straw and chaff ..			0 12 0	2 7 2	Estimated value.
Total ...			7 2 6	23 5 10	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income.	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 12·25 gunthas.	7 2 6	9 13 9	(a) 5 10 3 (b) 0 12 1	-2 11 3	+3 11 1
Per acre...	23 5 10	32 3 1	20 14 2	-8 13 3	+12 0 11

STATEMENT No. 98

GRAM—1 acre 4 gunthas in 1929-30

PLOT No. (17)

Previous crop—Bajri in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparing land, seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	4 0 0	3 10 3	For the plot 40 lbs. of gram seed at 10 lbs. per rupee.
(b) Harrowing, sowing and covering.....	2'0	..	4	..	..	..	6'0	5'45	..	..
2. After-care and tillage											
(a) Weeding	1'0	2	..	..	3	..	3'5	3'19	0 12 0	0 10 10	One weeding was given. Hired women were paid at annas four each.
3. Harvesting and preparing for the market.....	4'5	6	..	..	4	..	9'5	8'63	1 0 0	0 14 7	Hired women were paid at annas four each.
4. Charges for bullock labour.	..	..	..	..	..	..	..	..	1 2 6	1 0 10	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc. .. 0 14 0											
(b) Interest on the value of bullocks, feed and fodder .. 0 4 6											

STATEMENT No. 98—concl'd.

450

ITEM OF EXPENDITURE.	Home labour.			Labour on daily wages.			Total units.	Units per acre.	Cost excluding that of family labour.		REMARKS.
	Men ¹	Women ¹	Bullocks	Men.	Women.	Bullocks.			For the plot.	Per acre.	
5. Charges for implements and tools.....	..	..	..	..	..	..	..	..	Rs. a. p. 0 5 11	Rs. a. p. 0 5 4	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation.. 0 4 5											
(b) Interest 0 1 6											
6. Interest on fixed capital (i.e., wages of hired labour and value of seeds).....	..	..	..	..	..	..	..	..	0 4 6	0 4 1	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	..	3 7 0	3 2 0	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Gram followed <i>bajri</i> (Plot No. 3).
Total.....	7.5	8	4	..	7	..	19.0	17.27	10 15 11	9 15 11	

¹Family labour not charged. *Home bullock labour charged under item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 4 gunthas	Per acre	For 1 acre and 4 gunthas	Per acre	
Gram	Lbs. 180	Lbs. 163.63	Rs. a. p. 12 0 0	Rs. a. p. 10 14 7	Valued at 15 lbs. per rupee. Estimated value.
Bhoos			1 8 0	1 5 9	
Total ..	..	..	13 8 0	12 4 4

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 4 gunthas.	13 8 0	10 15 11	(a) 3 1 7 (b) 0 10 6	+2 8 1	+6 4 2
Per acre ..	12 4 4	9 15 11	3 6 7	+2 4 5	+5 11 0

STATEMENT No. 99

PLOT No. (18)

GRAM—1 acre 4 gunthas in 1929-30

Previous crop—Bajri in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparing land, seeds and sowing											
(a) Seeds.....	..	..	..	..	..	..	..	..	5 0 0	4 8 9	For the whole plot 50 lbs. of gram seed at 10 lbs.
(b) Harrowing, sowing and covering.....	3·0	..	6	..	..	..	9·0	8·18	....	....
2. After-care and tillage											
(a) Weeding.....	1·0	2	..	..	3	..	3·5	3·13	0 12 0	0 10 10	One weeding was given. Hired women were paid at annas four each.
3. Harvesting and preparing for the market.....	5·5	6	..	..	6	..	11·5	10·45	1 8 0	1 5 9	Hired women were paid at annas four each.

4. Charges for bullock labour	--	--	--	--	--	--	--	1 11 9	1 9 8	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
Rs. a. p.										
(a) Feed, fodder, depreciation, etc. ..								1 5 0		
(b) Interest on the value of bullocks, feed and fodder ..								0 6 9		
5. Charges for implements and tools	--	--	--	--	--	--	--	0 8 10	0 8 1	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.										
(a) Depreciation								0 6 7		
(b) Interest ..								0 2 3		
6. Interest on fluid capital (i.e., wages of hired labour and value of seeds)	--	--	--	--	--	--	--	0 5 6	0 5 0	Charged at 12 per cent per annum.
7. Rent of land	--	--	--	--	--	--	--	8 11 8	3 6 3	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Gram followed <i>bajri</i> (Plot No. 4).
Total ..	9·5	8	6	--	9	--	24·0	21·81	13 9 9	12 5 11

¹Family labour not charged. ²Home bullock labour charged under item 4.

STATEMENT No. 99—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 4 gunthas	Per acre	For 1 acre and 4 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	180	163.63	12 0 0	10 14 7	Valued at 15 lbs. per rupee. Estimated value.
Bhoos ....	..	..	1 8 0	1 5 9	
Total ..	..	..	13 8 0	12 4 4	

(c) Summary

1	2	3	4 .	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assesment and L. F. C.), (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 4 gunthas.	13 8 0	13 9 9	(a) 3 6 0 (b) 0 14 6	-0 1 9	+4 2 9
Per acre ..	12 4 4	12 5 11	3 14 3	-0 1 7	+3 12 8

STATEMENT No. 100

GRAM—11 gunthas in 1929-30

PLOT No. (19)

Previous crop—Bajri in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparing land, seeds and sowing											
(a) Seeds	0 12 0	2 11 7	For the plot 7.5 lbs. of gram seed at 10 lbs. per rupee.
(b) Harrowing, sowing and covering	0 5	..	1	..	..	..	1.5	5.45	....	....
2. Harvesting and preparing for the market.....	3 0	3.0	10.91	
3. Charges for bullock labour	0 4 7	1 0 8	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation etc. .. 0 3 6											
(b) Interest on the value of bullocks, feed and fodder .. 0 1 1											

NARAYANGAON (B)

455

STATEMENT No. 100—concl'd.

456

ITEM OF EXPENDITURE.	Home labour.			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bul- locks			For the plot	Per acre	
4. Charges for implements and tools	--	--	--	--	--	--	--	--	0 1 5	0 5 2	The total annual charges are dis- tributed on different plots in proportion to the bullock labour used on them.
Rs. s. p.											
(a) Depreciation, 0 1 1											
(b) Interest .. 0 0 4											
5. Interest on fluid capital (i.e., cost of seeds)	--	--	--	--	--	--	--	--	0 0 9	0 2 9	Charged at 12 per cent per annum.
6. Rent of land	--	--	--	--	--	--	--	--	1 1 6	3 15 8	The land was owned. Rent is dis- tributed in proportion to the value of crops taken on the plot in the same year. Gram followed <i>bajri</i> (Plot No. 5).
Total.....	3 5	--	1	--	--	--	4 5	16 86	2 4 3	8 3 10	

¹Family labour not charged. ²Home bullock labour charged under item 3.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 11 gunthas	Per acre	For 11 gunthas	Per acre	
Gram	Lbs. 30	Lbs. 109.09	Rs. a. p. 2 0 0	Rs. a. p. 7 4 4	Valued at 15 lbs. per rupee. Estimated value.
Bhoos.....	..	..	0 5 4	1 3 5
Total ..			2 5 4	8 7 9	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 11 gunthas.	2 5 4	2 4 3	(a) 0 15 11 (b) 0 2 2	+ 0 1 1	+ 1 3 2
Per acre ..	8 7 9	8 3 10	4 1 9	+ 0 3 11	+ 4 5 8

NARAYANGAON (B)

STATEMENT No. 101

458

GRAM—4 gunthas in 1929-30

PLOT No. (20)

Previous crop—Bajri in 1929-30(a) *Cost of Production*

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparing land, seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 4 0	2 8 0	For the plot 2.5 lbs. of gram seed at 10 lbs. per rupee.
(b) Harrowing, sowing and covering	0.5	..	1	..	..	..	1.5	15.0	....	....
2. After-care and tillage											
(a) Weeding .....	..	1	..	..	..	..	0.5	5.0	....	....	One weeding was given.
3. Harvesting and preparing for the market	1.5	1	..	..	..	..	2.0	20.0	....	....
4. Charges for bullock labour..	..	..	..	..	..	..	..	..	0 4 7	2 13 10	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.

FARM STUDIES

STATEMENT No. 101—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4 gunthas	Per acre	For 4 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	15	150	1 0 0	10 0 0	Valued at 15 lbs. per rupee. Estimated value.
Bhoos .....	....	....	0 2 8	1 10 8
Total ..	..	..	1 2 8	11 10 8

(c) Summary

1	2	3	4	5 (i.e.col. 2-3)	6 (i.e.col. 5+4)
			.		
Area	Gross income	Cost of production excluding that of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4 gunthas ..	1 2 8	1 6 1	(a) 0 10 8 (b) 0 1 8	-0 3 5	+0 8 11
Per acre ..	11 10 8	13 12 10	7 11 4	-2 2 2	+5 9 2

STATEMENT No. 102

GRAM—25 gunthas in 1929-30

PLOT No. (21)

Previous crop—Bajri in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparing land and sowing											
(a) Harrowing and leveling	1'0	..	2	..	..	..	3'0	4'8	....	....
(b) Seeds .....	..	..	..	..	..	..	..	..	3 0 0	4 12 10	For the plot 30 lbs. of gram seed at 10 lbs. per rupee.
(c) Sowing and covering ..	1'0	..	2	..	..	..	3'0	4'8	....	....
2. After-care and tillage											
(a) Weeding	1'0	1	..	..	2	..	2'5	4'0	0 8 0	0 12 10	One weeding was given. Hired women were paid at annas four each.
3. Harvesting and preparing for the market.....	3'5	1	..	..	..	..	4'0	6'4	....	....

NARAYANGAON (B)

461

STATEMENT No. 102—concl'd.

462

ITEM OF EXPENDITURE.	Home labour.			Labour on daily wages			Total units.	Units per acre	Cost excluding that of family labour.		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Charges for bullock labour ..	..	..	..	..	..	..	..	..	Rs. s. p. 1 2 6	Rs. s. p. 1 13 7	The total annual cost* on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. s. p. (a) Feed, fodder, depreciation etc. .. 0 14 0											
(b) Interest on the value of bullocks, feed and fodder .. 0 4 6											
5. Charges for implements and tools ..	..	..	..	..	..	..	..	..	0 5 11	0 9 6	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. s. p. (a) Depreciation. 0 4 5 (b) Interest .. 0 1 6											
8. Interest on fixed capital (i.e., wages of hired labour and cost of seeds) ..	..	..	..	..	..	..	..	..	0 3 4	0 5 4	Charged at 12 per cent per annum.
7. Rent of land ..	..	..	..	..	..	..	..	..	1 14 2	3 0 4	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Gram followed <i>dhani</i> (Plot No. 7).
Total.....	6·5	2	4	..	2	..	12·5	20·0	7 1 11	11 6 5	

¹Family labour not charged. ²Home bullock labour charged under item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 25 gunthas	Per acre	For 25 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	60	96	4 0 0	6 6 5	Valued at 15 lbs. per rupee.
Bhoos ....	..	..	0 10 8	1 1 1	Estimated value.
Total..	..	..	4 10 8	7 7 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 25 gunthas.	4 10 8	7 1 11	(a) 1 11 8 (b) 0 9 4	- 2 7 3	- 0 2 3
Per acre ..	7 7 6	11 6 5	3 11 2	- 3 14 11	- 0 3 9

NARAYANGAON (B)

STATEMENT No. 103

464

GRAM—35 gunthas in 1929-30

PLOT No. (22)

Previous crop—Bajri in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Manure and manuring											
(a) Residual manure .....	..	..	..	..	..	..	..	..	4 3 8	4 12 10	Fourteen carts of farm yard manure at Rs. 2 per cart were given to the plot; 15 per cent of the cost is charged to this crop for the residue.
2. Preparing land											
(a) Harrowing and leveling	1	..	2	..	..	..	8'0	8'48	....	....
(b) Seeds .....	..	..	..	..	..	..	..	..	6 0 0	6 18 9	For the plot 60 lbs. of gram seed at 10 lbs. per rupee.
(c) Sowing and covering ..	1	..	2	..	..	..	8'0	8'48	....	....
3. After-care and tillage											
(a) Weeding	1	2	..	..	3	..	3'5	4'0	0 12 0	0 18 8	One weeding was given. Hired women were paid at annas four each.
4. Harvesting and preparing for the market	4	6	..	..	..	..	7'0	8'0	....	....

FARM STUDIES

MO-1 Q 84-30

5. Charges for bullock labour	--	--	--	--	--	--	--	1 2 6	1 5 2	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.										
(a) Feed, fodder, depreciation, etc. .. 0 14 0										
(b) Interest on the value of bullocks, feed and fodder .. 0 4 6										
6. Charges for implements and tools	--	--	--	--	--	--	--	0 5 11	0 6 9	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.										
(a) Depreciation 0 4 5										
(b) Interest]] .. 0 1 0										
7. Interest on fluid capital (i.e., wages of hired labour and cost of seeds and manure)	--	--	--	--	--	--	--	0 10 6	0 12 0	Charged at 12 per cent per annum.
8. Rent of land	--	--	--	--	--	--	--	4 10 0	5 4 7	The land was taken on lease on share system. Half the gross produce was paid as rent. Gram followed <i>bajri</i> (Plot No. 13).
Total	7	8	4	--	3	--	16.5	18.86	17 12 2	20 4 9

¹Family labour not charged. ²Home bullock labour charged under item 5.

NARAYANGAON (B)

465

STATEMENT No. 103—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 35 gunthas	Per acre	For 35 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	120	137·14	8 0 0	9 2 4	Valued at 15 lbs. per rupee. Estimated value.
Bhoos ....	..	..	1 4 0	1 6 10	
Total ..	..	..	9 4 0	10 9 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. (a. p.)	Rs. a. p.	Rs. a. p.
For 35 gunthas	9 4 0	17 12 0	(b) 1 0 6	-8 8 2	-7 7 8
Per acre	10 9 2	20 4 9	1 2 10	-9 11 7	-8 8 9

STATEMENT No. 104

PEAS—14·5 gunthas in 1929-30

PLOT No. (23)

Previous crop—*Bajri* in 1929-30(a) *Cost of Production*

No. 104 D 84-304

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Manure and manuring									Rs. a. p.	Rs. a. p.	
(a) Residual manure .....	..	..	..	..	..	..	..	..	5 9 7	15 7 1	Eight carts of farmyard manure at Rs. 2 per cart were given to the previous crop; 35 per cent of the cost is charged to this crop for the residue.
2. Preparing land, seeds and sowing											
(a) Harrowing and leveling	0·5	..	1	..	..	..	1·5	4·11	....	....
(b) Seeds .....	..	..	..	..	..	..	..	..	4 4 0	11 11 7	For the plot 42·5 lbs. of peas at 10 lbs. per rupee.
(c) Sowing and covering ..	1·0	..	2	..	..	..	3·0	8·28	....	....
3. Watering	2·0	..	..	1	..	..	3·0	8·28	0 8 0	1 6 1	Hired man was paid annas 8. Water cess goes with land assessment.

NARAYANGAON (B)

467

STATEMENT No. 104—concl'd.

408

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Charges for bullock labour.	--	--	--	--	--	--	--	--	Rs. a. p. 0 13 11	Rs. a. p. 2 6 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p. (a) Feed, fodder, depreciation, etc. .. 0 10 6 (b) Interest on the value of bullock, feed and fodder .. 0 3 5											
5. Charges for implements and tools	--	--	--	--	--	--	--	--	0 4 5	0 12 2	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p. (a) Depreciation .. 0 3 4 (b) Interest .. 0 1 1											
6. Interest on fluid capital (i.e., value of seeds and manure)	--	--	--	--	--	--	--	--	0 10 0	1 11 7	Charged at 12 per cent per annum.
7. Rent of land	--	--	--	--	--	--	--	--	5 10 6	15 9 8	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Peas followed <i>bajri</i> (Plot No. 8).
Total	3 5	--	3	1	--	--	7 5	20 67	17 12 5	49 0 7	

¹Family labour not charged. ²Home bullock labour charged under Item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 14.5 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Peas	32 0 0	88 4 4	Standing crop was sold.
Total ..	32 0 0	88 4 4	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 14.5 gunthas.	32 0 0	17 12 5	(a) 3 14 1 (b) 0 14 6	+ 14 3 7	+ 19 0 2
Per acre	88 4 4	49 0 7	13 3 3	+ 39 3 9	+ 52 7 0

NARAYANGAON (B)

STATEMENT No. 105

PEAS—24 gunthas in 1929-30

PLOT No. (24)

Previous crop—Bajri in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Manure and manuring											
(a) Residual manure ....	..	..	..	..	..	..	..	..	6 4 10	10 8 1	Nine carts of F. Y. M. at Rs. 2 per cart were given to the previous crop. 35 per cent of the cost is charged to this crop for the residue.
2. Preparing land, seeds and sowing											
(a) Harrowing and leveling	0·5	..	1	..	..	..	1·5	2·5	....	....
(b) Seeds .....	..	..	..	..	..	..	..	..	4 8 0	7 8 0	For the plot 45 lbs. of peas seed at 10 lbs. per rupee.
(c) Sowing and covering ..	1·0	..	2	..	..	..	3·0	5·0	....	....
3. Watering	2·0	..	..	1	..	..	3·0	5·0	0 8 0	0 13 4	Hired man was paid annas 8. Water cess goes with land assessment.

4. Charges for bullock labour .	..	..	..	..	..	..	..	0 13 11	1 7 2	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feed, fodder, depreciation etc. ..	0	10	6									
(b) Interest on the value of bullocks, feed and fodder ..	0	8	5									
5. Charges for implements and tools ..	..	..	..	..	..	..	..	0 4 5	0 7 4	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation ..	0	3	4									
(b) Interest ..	0	1	1									
6. Interest on fluid capital (i.e., value of seeds and manure) ..	..	..	..	..	..	..	..	0 10 9	1 1 11	Charged at 12 per cent per annum.
7. Rent of land ..	..	..	..	..	..	..	..	9 9 6	15 15 10	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Peas followed <i>bajri</i> (Plot No 9).
Total	3	5	3	1	7	5	12	5	22 11 5	37 13 8

¹Family labour not charged. ²Home bullock labour charged under item 4.

STATEMENT No. 105—concl.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 24 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Peas	54 0 0	90 0 0	Standing crop was sold.
Total.....	54 0 0	90 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 24 gunthas ...	54 0 0	22 11 5	(a) 7 2 8 (b) 0 15 3	+31 4 7	+39 6 6
Per acre	90 0 0	37 13 8	13 8 6	+52 2 4	+65 10 10

STATEMENT No. 106

PEAS—28·75 gunthas in 1929-30

PLOT No. (25)

Previous crop—Bajri in 1929-30

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparing land and sowing											
(a) Harrowing and leveling	1	..	2	..	..	..	3·0	4·17	....	....
(b) Seeds .....	..	..	..	..	..	..	..	..	8 12 0	12 2 9	For the plot 87·5 lbs. of peas seed at 10 lbs. per rupee.
(c) Sowing and covering ..	2	..	4	..	..	..	6·0	8·35	....	....
2. Watering	3	..	..	2	..	..	5·0	6·95	1 0 0	1 6 5	Hired men were paid at annas 8 each. Water cess goes with land assessment.
3. Charges for bullock labour	..	..	..	..	..	..	..	..	1 11 9	2 6 7	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc. .. 1 5 0											
(b) Interest on the value of bullocks, feed, and fodder .. 0 6 9											

KARAYANGAON (B)

STATEMENT No. 106—concl'd.

474

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0 8 11	0 12 5	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation 0 6 9											
(b) Interest .. 0 2 8											
5. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) .....	..	..	..	..	..	..	..	..	0 9 4	0 12 11	Charged at 12 per cent per annum.
6. Rent of land .....	..	..	..	..	..	..	..	..	9 10 10	18 7 4	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Peas followed bajra (Plot No.10).
Total ..	6	..	6	2	..	..	14·0	19·47	22 4 10	31 0 5	

¹Family labour not charged. ²Home bullock labour charged under item 3.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 28.35 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Peas	65 0 0	90 7 0	Standing crop was sold.
Total ..	65 0 0	90 7 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 28.75 gunthas	65 0 0	22 4 10	(a) 6 5 9 (b) 1 2 9	+42 11 2	+50 3 3
Per acre	90 7 2	31 0 5	10 7 1	+59 6 9	+69 13 10

NARAYANGAON (B)

STATEMENT No. 107

PEAS—4·25 gunthas in 1929-30

PLOT No. (26)

Previous crop—Bajri in 1929-30

(a) Cost of Production

476

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ²	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparing land and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	1 0 0	9 6 8	For the plot 10 lbs. of peas.
(b) Harrowing, sowing and covering	0·5	..	1	..	..	..	1·5	14·12	....	
2. Watering	1·0	..	..	..	..	..	1·0	9·41	....	Water cess goes with land assessment.
3. Charges for bullock labour	..	..	..	..	..	..	..	0 4 7	2 11 1	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feed, fodder, depreciation, etc. .. 0 3 6											
(b) Interest on the value of bullocks, feed and fodder .. 0 1 1											

FARM STUDIES

4. Charges for implements and tools	--	--	--	--	--	--	--	0 1 5	0 13 4	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.										
(a) Depreciation 0 1 1										
(b) Interest .. 0 0 4										
5. Interest on fluid capital (i.e., value of seeds)	--	--	--	--	--	--	--	0 1 0	0 9 5	Charged at 12 per cent per annum.
6. Rent of land	--	--	--	--	--	--	--	1 12 10	16 15 4	The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Peas followed bajra (plot No. 11).
Total	1 5	--	1	--	--	--	2 5	23 53	30 7 10	

¹Family labour not charged. ²Home bullock labour charged under item 3.

NARAYANGAON (B)

STATEMENT No. 107—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value		Remarks
	For 4·5 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Peas	9 0 0	84 11 3	Standing crop was sold.
Total	9 0 0	84 11 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4·25 gunthas	9 0 0	3 3 10	(a) 1 3 6 (b) 0 2 5	+5 12 2	+ 7 2 1
Per acre	84 11 3	30 7 10	12 2 10	+54 3 5	+66 6 3

STATEMENT No. 108

GARLIC—35 gunthas in 1929-30

PLOT No. (27)

Previous crop—Gram in 1928-29*(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	2	..	8	..	..	..	10·0	11·43	....	....	Two ploughings and one levelling were given. A plough required one man and four bullocks.
(b) Crushing clods, harrowing, levelling, making furrows and repairing ridges	6	2	6	..	..	..	13·0	14·86	....	....
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	10 0 0	11 6 10	For the plot 160 lbs. of garlic at 16 lbs. per rupee. Hired women were paid at annas 4 each.
(b) Dibbling .....	..	9	..	..	15	..	12·0	13·71	3 12 0	4 4 6	
3. Watering	51	9	120	..	..	..	175·5	200·57	....	....	Ten waterings were given.
4. After-care and tillage											
(a) Weeding	6	18	..	..	..	..	15·0	17·14	....	....	Two weedings were given. First weeding required six men and nine women and second nine women.

NARAYANGAON (B)

479

STATEMENT No. 108—concl'd.

480

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Harvesting and preparing for market.....	--	--	--	--	--	--	--	--	Rs. a. p.	Rs. a. p.	Standing crop was sold.
6. Charges for bullock labour . Rs. a. p.	--	--	--	--	--	--	--	--	38 14 2	44 7 1	
(a) Feed, fodder, depreciation, etc. .. 29 5 11											The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(b) Interest on the value of bullocks, feed and fodder .. 9 8 3											
7. Charges for implements and tools	--	--	--	--	--	--	--	--	12 5 1	14 1 3	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation .. 9 3 3											
(b) Interest .. 3 1 10											
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds)...	--	--	--	--	--	--	--	--	0 13 3	0 15 2	Charged at 12 per cent per annum.
9. Rent of land	--	--	--	--	--	--	--	--	58 10 0	67 0 0	The land was taken on lease on share system. Half the gross produce was paid as rent. The owner paid half the expenses over seeds and sowing. The net rent therefore comes to Rs. 58-10-0.
Total	65	38	138	--	15	--	225·5	257·71	124 6 6	142 2 10	

¹Family labour not charged. ²Home bullock labour charged under Item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 35 gunthas	Per acre	For 35 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Garlic	2,096	2,395.41	131 0 0	149 11 5	Sold at 16 lbs. per rupee.
Total ..	..	..	131 0 0	149 11 5	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 35 gunthas.	131 0 0	124 6 6	(b) 13 7 4	+6 9 6	+20 0 10
Per acre ..	149 11 5	142 2 10	15 6 1	+7 8 7	+22 14 8

NARAYANGAON (B)

DHURKHEDA, 1928-29

Dhurkheda is a small village about three miles to the west of Shahada, the headquarters of the Shahada *Taluka* in the West Khandesh District. There is a good road between Shahada and Dhurkheda. The village receives about 24 inches of rainfall, main part of it falling in July, August and September.

It is situated in one of the rich plains of the Tapy valley. Most of the soil of the village is heavy deep black, except on the banks of the river Gomi, which runs by the side of the village, where it changes into light alluvium.

The cultivators of the village are almost all *Gujar kumbis* who are more of managers than actual tillers, the actual farm work being done mostly by their *bhil* servants. Scarcity of labour is usually felt at the time of harvesting wheat when regular gangs of seasonal labourers from Dhulia, Chalisgaon and Malegaon *talukas* visit Shahada tract. Such seasonal labour is usually paid in kind at about one *maund* of wheat for reaping, binding and stacking one *partan* (i.e., three acres).

Following tables I, II, III, IV and V are worked out from village records and personal enquiry :—

TABLE I—LAND AND POPULATION

Area held	Cultivated area	Population of the village according to 1931 census	Cultivated area per capita
A. g.	A. g.		A. g.
2,112 2	1,870 7	723	2 23·4

Out of the total area held, 241 acres and 35 gunthas were uncultivable waste. All the arable land was under cultivation. There was no more land which could be brought under cultivation.

According to 1930 cattle census there were 170 draft bullocks. Cultivated area per pair, therefore, comes to about 22 acres. The total number of cattle was 371 and that of goat and sheep 129. The supply of manure cannot be said to be sufficient for the area under cultivation. The number of cattle include 75 milch buffaloes and 25 cows, not a bad number for the population.

TABLE II—AVERAGE PROPRIETARY HOLDING, 1928-29

Area held	Area cropped	No. of <i>khatedars</i>	Total area per <i>khatedar</i>	Cultivated land per <i>khatedar</i>
A. g.	A. g.		A. g.	A. g.
2,112 2	1,870 7	95	22 9·28	19 27·44

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated	No. of cultivators	Average area per cultivator
A. 1,870 G. 7	90	A. 20 G. 31·18

Though the per capita area was small, the average cultivating holding was fairly large. It may, however, be noted that though the average cultivating holding was about the size of an economic holding, all cultivators did not cultivate equal areas. Majority of them cultivated less than 20 acres. Similarly though the average proprietary holding was 22 acres and 9·28 gunthas, a fairly large number of land-holders held less than 10 acres each. The following table gives the range of areas owned by the proprietors.

TABLE IV—SIZE AND DISTRIBUTION OF THE PROPRIETARY HOLDINGS

Size of holding Acres	No. of holdings	Per cent
Total	95	100·00
Below 5	22	23·16
5 to 10	12	12·63
10 to 20	24	25·26
20 to 30	17	17·90
30 to 40	10	10·52
40 to 50	4	4·21
50 to 75	4	4·21
75 to 100	2	2·11
Above 100	0	0·0

Thus 58 out of the 95 proprietary holdings (or 61 per cent of them) were smaller than 20 acres, while there were only ten holdings with an area of over 40 acres each. The largest proprietary holding was of 96 acres and 18 gunthas held by a non-agriculturist, while the smallest was only 16 gunthas. Table No. IV (a) gives the size and distribution of the cultivating holdings.

TABLE IV (a)—SIZE AND DISTRIBUTION OF CULTIVATING HOLDINGS

Size of holding Acres	No. of holdings	Per cent
Total	90	100·00
Below 5	20	22·22
5 to 10	11	12·22
10 to 20	24	26·67
20 to 30	13	14·44
30 to 40	9	10·00
40 to 50	8	8·89
50 to 75	5	5·56
Above 75	0	0·0

Comparison of tables IV and IV (a) shows that there is not much difference in the sizes of the proprietary and the cultivating holdings. There were two proprietors, having more than 75 acres each, parts of whose land were cultivated by others.

The following table gives the areas and percentages of the important crops of the village in the year 1928-29.

TABLE V—CROPS OF THE VILLAGE

Crops	Area 1928		Per cent	
	A. g.	A. g.		
Total	1,870	7 1,870	7	100·00 100·00
<i>Kharif</i> crops		920	16	49·20
Cotton	769	36		41·16
<i>Bajri</i>	39	22		2·12
Groundnut	65	31		3·62
Others	45	7		2·40
<i>Rabi</i> crops		949	31	50·80
Wheat	623	35		33·37
<i>Jowar</i>	275	11		14·71
Gram	40	25		2·19
Others	10	0		0·53

The distribution shows that the *kharif* and the *rabi* crops claim about equal areas. The even distribution of the summer and winter crops enables the farmers to spread their labour over a longer period of the year. The chief crops are cotton and wheat which together usually occupy over 74 per cent of the total cropped area. Cotton and *rabi jowar* are taken on medium as well as heavy lands, while wheat occupies only the heavy soils. Cotton is usually followed by wheat or *rabi jowar*.

The soil sets very hard in the hot months, rendering ploughing difficult in summer. The lands are, therefore, usually ploughed for *rabi* crops, immediately after the rainy season or during the breaks of rains. Sometimes cotton stalks are removed by ploughing after rains have soaked such heavy lands.

Manuring is done usually for cotton at the rate of about 20 to 25 cart-loads of farmyard manure per acre, every three to six years. The other crops are not usually given any manure.

The number of wells in the village is very small, there being only 10 wells. Of these only two were worked for irrigating crops in 1928-29.

Climate.—The climate of the place is comparatively cold in winter and very hot in summer, the temperature many times going as high as 110°F. in April or May. In the months of December and January temperature sometimes goes down to 48°F. The average rainfall of the place is about 5 inches and is usually certain. The rains start from the middle of June and end in October; July is usually the month of heavy rainfall.

THE SEASON, 1928-29

In the absence of a rain-gauge in the village it was not possible to get rainfall figures of the place under study. Rainfall figures at Bahada which is only three miles from the village are given instead. There cannot be much difference in the rainfall of the two places. At Bahada the rainfall recorded in 1928-29 was 26.52 inches or about 2 inches above the average. The rains started as usual by the middle of June, and sowing could be completed by the end of the month. The fortnightly distribution of rainfall, from January to December 1928, is given in table VI.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL
IN 1928 (ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
					First fortnight							
0.0	0.0	0.0	0.0	0.0	2.35	5.40	1.64	0.48	0.37	0.12	2.29	} 26.52
					Second fortnight							
0.0	0.0	0.0	0.0	0.0	0.97	4.74	4.62	3.29	0.25	0.0	0.0	

Over 38 per cent of the total annual rain fell in July. As at Asoda, in East Khandesh, the December rainfall was accompanied by hailstorm. The damage caused, however, was not as serious as at Asoda. In the last week of February temperature went down very low and there was severe cold. The cold had very bad effect on the grain outturn of wheat and *war* which were just forming grains.

THE FARMER

The farmer owned 49 acres and 9 gunthas of land. The whole area was put under crops. No area was double cropped.

(a) *Human labour*.—The farm family consisted of five members as given below :—

(1) The farmer	35 years.
(2) The farmer's wife.....	32 „
(3) Their eldest daughter	6 „
(4) „, second daughter	3 „
(5) „, son.....	1 year.

None of the family did any actual field work. What work the farmer did was of miscellaneous character such as organizing labour, supervising work, weighing cotton, filling bags, marketing farm produce etc. Farmer's wife did only the household work, while the children were too young to be of any use on the farm. The farmer had engaged two *saldars*, who were together paid Rs. 215 a year. Besides one boy was engaged for three months for grazing farm animals at Rs. 3 per month. The distribution of the work of the two adult members in the family (the farmer and his wife) and the two *saldars*, from July 1928 to April 1929, is given below. The table of distribution shows how much of the labour and in what manner it was utilized on the farm. The total shown in the last but one column will not tally with the total labour supplied by the family as given in the analysis of the crops grown in 1928-29 as the period given in table VII does not synchronise with the crop production. Moreover, miscellaneous work which cannot be debited to any crop is included in the table.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total	Percentage of labour employed to labour available
						The farmer and his wife.					
4	0	0	0	0	0	0	0	2	9	15	2.47
62	62	60	62	60	62	62	56	62	60	608	
						Two <i>saldars</i> .					
59	62	56	62	60	46	56	56	20	60	537	88.32
62	62	60	62	60	62	62	56	62	60	608	

Note.—The denominator shows available labour, while the numerator shows labour used.

The table shows that the farm family did very little farm work. *Saldar's* services were however fully utilized. Farmer's father and brothers were farming in the same village and they freely exchanged labour and helped

each other. Thus the farmer under study could obtain 214 man units and 152 bullock units from his father and brothers, while he supplied 256 man units and 228 bullock units to them in return.

(b) *Bullock labour.*—As shown in the inventory, the farmer had four bullocks till 23rd July 1928 when one of the bullocks was given out free when it became unfit for any work. The farmer thus had only three bullocks from 23rd July to 22nd December 1928, when one of the remaining three was sold. On 13th January 1929, however, he purchased a pair for Rs. 100.

The monthly distribution of the bullock work, from July 1928 to April 1929, is given in table No. VIII. For the reasons given above and under other studies, the total bullock work shown in the last but one column will not tally with the total home bullock work utilized on the crops grown in 1928-29.

TABLE VIII—SREAD AND UTILIZATION OF BULLOCK WORK

Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total.	Percentage of labour employed to total labour available
86	56	47	60	32	28	88	103	20	20	545	53·43
115	93	90	93	90	83	100	112	124	120	1,020	

Note.—The denominators show available units, while the numerators show the units actually utilized. The farmer had four bullocks till 23rd July 1928, three till 22nd December 1928, two till 13th January 1929 and four till 30th April 1929.

If the farmer had four bullocks throughout, very little bullock work would have been required from outside. As it was, the farmer had only three bullocks for a fairly long time, and to make up two teams he had to borrow bullocks from his father and brothers. In all he got 152 bullock units from his father and brothers.

The opening and closing inventories of the property of the farmer for the year 1928-29 are given in table IX.

At the end of the year the net worth of the farm rose by Rs. 433, inspite of the depreciation in the value of buildings and implements., The farmer cleared up his debt of Rs. 500. If these factors are taken into consideration, it may be said that he made a good and satisfactory business during the year under consideration.

Nature of holding, lands, crops and cropping.—The nature of land, crops and cropping and the treatment of the different fields held by the farmer during the previous year (1927-28) and in 1928-29 are given in table X.

TABLE IX—INVENTORY OF THE PROPERTY

1928				1929				
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		Remarks
	A. g.	Rs. a. p.	Ra. a. p.		A. g.	Rs. a. p.	Ra. a. p.	
Assets				Assets				
1. Real estate				1. Real estate				
(A) Land				(A) Land				
(a) Field No. 1...	5 21	1,000 0 0		(a) Field No. 1...	5 21	1,000 0 0		There was no change in the value of land.
(b) Field No. 2...	13 86	4,500 0 0		(b) Field No. 2...	13 86	4,500 0 0		
(c) Field No. 3...	10 10	3,200 0 0		(c) Field No. 3...	10 10	3,200 0 0		
(d) Field No. 4...	19 22	6,500 0 0		(d) Field No. 4...	19 22	6,500 0 0		
	49 9	15,200 0 0			49 9	15,200 0 0		
(B) Buildings.....	3	3,000 0 0		(B) Buildings.....	3	2,750 0 0		The houses required repairs badly.
Total, real estate...			18,200 0 0	Total, real estate.....			17,950 0 0	
2. Livestock				2. Livestock				
(a) Bullocks.....	4	260 0 0		(a) Bullock.....	4	245 0 0		One bullock valued at Ra. 75 in the beginning was given out. Another one valued at Ra. 85 in the beginning was sold for Ra. 15 and a new pair was purchased for Ra. 100.
(b) Cow.....	1	25 0 0		(b) Cow.....	1	20 0 0		
(c) Buffaloes.....	2	80 0 0		(c) Buffaloes.....	2	70 0 0		
(d) Bull calves.....	2	35 0 0		(d) Bull calves.....	2	70 0 0		
(e) Buffalo calf.....	1	15 0 0		(e) Buffalo calf.....	1	25 0 0		
Total, livestock.....			415 0 0	Total, livestock.....			450 0 0	

8. Implements, tools, etc.		
(a) Small wooden ploughs.....	2	10 0 0
(b) Harrows.....	2	10 0 0
(c) Hoes	4	20 0 0
(d) Seed-drills	2	20 0 0
(e) <i>Dankya</i> harrow..	1	5 0 0
(f) Cotton stalk rake	1	5 0 0
(g) Farm carts.....	2	175 0 0
(h) Other tools, ropes, etc.....	..	50 0 0
Total, implements and tools.....		295 0 0
4. Farm produce and supplies on hand		
(a) Wheat.....	3,810 lbs.	252 0 0
(b) <i>Jowar</i>	1½ <i>maps</i> .	42 0 0
(c) Groundnut ....	....	6 0 0
(d) Wheat chaff....	36 cartloads.	216 0 0
(e) Cotton seed	1,920 lbs.	60 0 0
(f) <i>Kulthi</i>	2 <i>maps</i> .	60 0 0
(g) Farm yard manure.....	30 cartloads.	30 0 0
Total, farm produce and supplies on hand.....		666 0 0

3. Implements, tools, etc.		
(a) Small wooden ploughs.....	2	8 0 0
(b) Harrow ;.....	2	8 0 0
(c) Hoes	4	16 0 0
(d) Seed drills	2	16 0 0
(e) <i>Dankya</i> harrow..	1	4 0 0
(f) Cotton stalk rake	1	4 0 0
(g) Farm carts	2	140 0 0
(h) Other tools, ropes, etc.....	....	40 0 0
Total, implements and tools.....		236 0 0
4. Farm produce and supplies on hand		
(a) Wheat	8,880 lbs.	672 0 0
(b) <i>Jowar</i>	924 "	87 0 0
(c) Wheat chaff....	25,200 "	432 0 0
(d) Cotton seed....	2,240 "	70 0 0
(e) Farm yard manure.....	24 cartloads,	24 0 0
(f) <i>Jowar</i> fodder ...	1,800 lbs.	18 0 0
Total, farm produce and supplies on hand.....		1,303 0 0

TABLE IX—INVENTORY OF THE PROPERTY—*concl'd.*

1928				1929				
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		Remarks
	A. g.	Rs. a. p.	Rs. a. p.		A. g.	Rs. a. p.	Rs. a. p.	
<i>Assets—contd.</i>				<i>Assets—contd.</i>				
5. Accounts receivable from outside advance given to two annual servants (<i>saldars</i>)	215 0 0	215 0 0	5. Cash on hand .....	....	80 0 0	80 0 0	
Cash on hand	125 0 0	125 0 0					
<i>Total, Assets</i>			19,916 0 0	<i>Total, Assets</i>			19,999 0 0	
<i>Liabilities</i>				<i>Liabilities</i>				
1. Debt Rs. 2,500 at 6 per cent. per annum	2,500 0 0		1. Debt Rs. 2,500 with interest for one year not yet paid at 6 per cent. ....	....	2,850 0 0		
2. Miscellaneous amounts owed to others	500 0 0						
<i>Total, Liabilities</i>			3,000 0 0	<i>Total, Liabilities</i>			2,850 0 0	The miscellaneous amounts owed to others were all paid off during the course of the year.
<i>Net worth of the Farm</i>			16,916 0 0	<i>Net worth of the Farm</i>			17,349 0 0	

SUMMARY

Net worth of the farm at the beginning of 1928 ..	Rs. 16,916
Do. do. 1929 ..	„ 17,349
<i>Gain in net worth</i> ..	„ 433

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Field No.	Area	Nature of land	Previous crop (i.e., 1927-28)		Year under study (i.e., 1928-29)		
			Name of crop	Treatment	Name of crop	Plot No.	Treatment
1	A. g. 5 21	Deep black soil; undulating.	Groundnut and jowar.	Crop was sown after harrowing. No manuring was done.	A. g.	1 2	} The crops were sown after harrowing the land. Manure was not given.
					4 21 under cotton. 1 0 under groundnut.		
2	13 36	Deep and heavy black soil perfectly level.	Cotton	Cotton sown after harrowing. Manure was not given.	8 36 Wheat	5 3 4	} The land was ploughed once and harrowed four times. No manure was given.
					4 0 Jowar		
					1 0 Gram		
3	10 10	Do.....	Cotton	Do.....	Wheat	5	Do.
4	19 22	Do.....	Wheat	The land was ploughed once and harrowed five times before sowing. Manure was not given.	Cotton	1	Three harrowings were given before sowing. Four acres were manured with sheep-folding and two acres were given 40 cartloads of F. Y. M.
	49 9						

DHURKHEDA

The farmer owned 49 acres and 9 gunthas of land. Field Nos. 2 and 3 were in one block, while Nos. 1 and 4 were near each other. The distance between the two blocks was less than half a mile.

The acreage and percentages of the different crops grown by the farmer in 1928-29 were as follows :—

TABLE X (a)

Name of crop	Area		Per cent	
	A. g.	A. g.		
Total.....	49	9	100·00	
<i>Kharif</i> crops.....		25 3		50·96
Cotton.....	24	3	48·93	
Groundnut.....	1	0	2·03	
<i>Rabi</i> crops.....		24 6		49·04
Wheat.....	19	6	38·89	
Jowar.....	4	0	8·12	
Gram.....	1	0	2·03	

Thus the crops grown by the farmer were practically equally distributed between the *kharif* and *rabi* seasons. In the *kharif* crops there was less diversification.

COSTS AND RECEIPTS

Abstract of expenditure.—In the following statement an abstract of expenditure for the farm is given :—

ABSTRACT OF COSTS

Item of expenditure	Cost for the total holding (viz., 49 acres and 9 gunthas)	
	Rs. a. p.	Rs. a. p.
* I. Out-of-pocket expenses :		
(a) Manure.....	32	8 0
(b) Seed.....	131	10 0
(c) Outside labour (including <i>saldar</i>).....	330	0 0
(d) Depreciation on implements and tools.....	59	0 0
(e) Cost of bullock labour (excluding interest)	272	12 0
(f) Land assessment and L. F. C.....	206	5 0
(g) Ginning and marketing charges for cotton	38	0 0
		1,070 3 0

Item of expenditure	Cost for the total holding (viz., 49 acres and 9 gunthas)	
	Rs.	a. p.
II. Rent of land (excluding assessment and L. F. C.).....	756	1 5
		756 1 5
III. Interest on working capital :		
(a) Interest on the money required for current agricultural operations.....	11	11 4
(b) Interest on the value of implements and tools.....	35	6 5
(c) Interest on the value of bullocks, feeds and fodder consumed by them.....	57	8 8
		104 10 5
<i>Total cost of production (excluding wages of family labour).....</i>		1,930 14 10

*DETAILS OF OUT-OF-POCKET EXPENSES

	Rs.	a. p.	Rs.	a. p.
1. <i>Manure :</i>				
(a) <i>Farmyard Manure</i>				
Forty cartloads of F. Y. M. at Rs. 1 per cart were given to 2 acres of plot No. 1. Only 50 per cent of the cost is charged.....	20	0 0		
(b) <i>Sheep-folding</i>				
Four acres of plot No. 1 were manured by folding sheep (Rs. 25). Only 50 per cent of this cost is charged.....	12	8 0		
			32	8 0
2. <i>Seeds :</i>				
(a) Cotton seed (330 lbs.).....	16	8 0		
(b) Groundnut (30 lbs.).....	6	0 0		
(c) <i>Jowar</i> (45 lbs.).....	2	10 0		
(d) Gram (35 lbs.).....	2	8 0		
(e) Wheat (1,560 lbs.).....	104	0 0		
			131	10 0
3. <i>Wages of outside labour :</i>				
(a) Two <i>saldars</i>	215	0 0		
(b) Cotton; (5 men and 13½ women).....	32	8 0		
(c) Cotton; (cotton picking piece-work).....	20	0 0		
(d) Groundnut; (1 woman).....	0	4 0		
(e) <i>Jowar</i> ; (19 men paid in kind).....	11	4 0		
(f) Gram; (8 men contract work).....	2	0 0		
(g) Wheat; (2 men).....	1	0 0		
(h) Wheat; (thrashing).....	48	0 0		
			330	0 0
4. <i>Depreciation of implements and tools :</i>				
	Rs.			
Opening inventory.....	295			
Closing inventory.....	236			
		59	0 0	
			59	0 0

5. *Bullock labour cost excluding interest :*

	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.
(a) Depreciation of				
(i) two bullocks				
Opening inventory value	150			
Closing inventory value	145			
	—	5 0 0		
(ii) one bullock				
Opening inventory value....	25			
Sale value	5			
	—	20 0 0		
(iii) one bullock				
Opening inventory value Rs. 75.				
It was given out free but as				
death rate is charged, one-third				
value is taken as depreciation....		25 0 0		
(iv) The pair purchased at the end				
of the year did not depreciate.		—	50 0 0	
(b) Death allowance at 5 per cent of Rs. 260.....			13 0 0	
(c) Housing charges at Rs. 4 per bullock			16 0 0	
(d) Feed and fodder				
	Rs. a. p.			
(i) Fodder.....	132 0 0			
(ii) Cotton seed.....	60 0 0			
(iii) Wheat	10 0 0			
(iv) Sundry	3 12 0			
	—		205 12 0	
(e) Against the above (a) to (d) must be set off				
the value of 12 cartloads of F Y. M.,				
therefore.....			—12 0 0	
			—	272 12 0

6. *Land assessment and L. F. C. :*

	A. g.	Rs. a. p.
Field No. 1—Area 5 21.....		10 3 0
" " 2 " 13 36.....		60 15 6
" " 3 " 10 10.....		45 0 9
" " 4 " 10 12.....		90 1 9
		—
		206 5 0

7. <i>Ginning and marketing charges for cotton</i>	38 0 0	
	—	38 0 0

Total out-of-pocket expenses..... 1,070 3 0

Family Labour Income.—Table No. XI gives the family labour income or the remuneration for the labour and supervision by the farm family. The figures of cost of production have already appeared above.

The value of produce is taken from the cost and receipt statements of various plots (pp. 498 to 513).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production (excluding wages for family labour)				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total....	49 9	1,850 0 0	1,070 3 0	104 10 5	756 1 5	1,930 14 10	-80 14 10
Cotton.....	24 3	488 0 0	446 0 4	35 12 1	364 15 3	846 11 8	-358 11 8
Groundnut..	1 0	25 0 0	27 2 10	1 14 9	14 3 4	43 4 11	-18 4 11
Wheat.....	19 6	1,104 0 0	477 14 4	50 15 11	298 14 1	827 12 4	+276 3 8
Jowar.....	4 0	210 0 0	88 7 6	11 11 2	62 7 0	162 9 8	+47 6 4
Gram.....	1 0	23 0 0	30 10 0	4 4 6	15 9 9	50 8 3	-27 8 3

Column 4.—Out-of-pocket expenses include costs of manure, seed, wages of *saldar* and hired labour, depreciation on dead-stock and work animals, feed and fodder consumed by work animals, rent of leased land and assessment, plus L. F. C. on owned land, the death allowance of bullocks and the cost of their housing. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on feed and fodder for work animals and money spent on the current agricultural operations. Fixed capital includes implements and work animals. *Column 6* shows the estimated rent of owned land. *Column 8* shows the wages earned by the family.

The gross receipts obtained from the farm were Rs. 1,850-0-0, while the cost of production, excluding wages for family labour, came to Rs. 1,930-14-10. The farm family could not make any labour income; on the contrary they suffered a loss of Rs. 80-14-10. It may be remembered that the farmer and his wife did not do any field work themselves. If they had themselves taken up the field work seriously they could certainly have made plus-labour income. They could easily have dispensed with at least one of the *saldars* and saved his wages.

Farm Business Income.—Table XI is likely to raise doubts in one's mind as to how the farmer maintained himself and his family with minus-labour income. It is, however, to be remembered that in the costs of production are included the rent of owned land and the interest on the working capital. These two items, viz. rent and interest, though debited to costs, are saved by the farmer. Table No. XII gives the farm business income or the aggregate income of the farmer, i.e., the value of the gross produce obtained minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total.....	49 9	1,850 0 0	1,070 3 0	+779 13 0
Cotton.....	24 3	488 0 0	} 1,070 3 0	+779 13 0
Groundnut	1 0	25 0 0		
Wheat	19 6	1,104 0 0		
Jowar	4 0	210 0 0		
Gram	1 0	23 0 0		

Value of the gross produce obtained from the farm was Rs. 1,850-0-0 while the out-of-pocket expenses came to Rs. 1,070-3-0, thus leaving Rs. 779-13-0 as farm business income. The farm business income, made up of the family labour income, interest on working capital and rent of owned land as shown below tallies with the figures arrived at in table No. XII.

	Rs. a. p.
Family labour income	— 80 14 10
Interest on working capital.....	104 10 5
Rent of owned land.....	756 1 5
	+ 779 13 0

ANALYSIS

The farm family did very little or no work on the farm. The farmer had two *saldars* besides one boy for three months. He got 214 man units and 152 bullock units by way of exchange. He, however, returned larger number, i.e. 256 man units and 226 bullock units. He had to employ 34 man units and 134 woman units at a cost of Rs. 47 and besides pay Rs. 68 for piece-work. His family labour was minus Rs. 80-14-0. Had the farmer and his wife taken up farm work seriously they could have made some family labour income. At any rate they could easily have dispensed with one of the two *saldars*.

All the same, the farmer made Rs. 779-13-0 as farm business income, as a result of which there was a substantial rise in the value of the inventory.

General remarks about crops.—Table No. XIII shows yields and labour units (including bullock units) required per acre and general remarks on crop production. Man unit = bullock unit = two woman units.

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot	Produce per acre		Labour units per acre	Remarks
	Name of produce	Quantity		
1	Cotton (lint).....	Lbs. 50·20	17·73	This was a large plot of 24 acres and 3 gunthas; moreover crop was poor, hence less labour was required. Only 6 acres of the plot received manure. Yield was less than half the normal. Includes 1·6 units for contract payment.
	Seed.....	93·05		
2	Groundnut (pods).	360·00	47·50	67·39 per cent of the total labour units were required for harvesting. The plot was not manured. Yield was one-third the normal.
3	<i>Jowar</i> (<i>dadar</i>) grain	462·00	28·37	The plot was not manured. Crop was good though damaged by severe cold.
	Fodder	900·00		
4	Gram.....	280·00	46·00	Yield was poor due to February frost.
5	Wheat	463·70	33·41	The plot was not manured. Includes 5 units for contract payment.

The table is worked out from the information abstracted from the statements of costs and receipts.

Cotton.—The yield was only 143 lbs. of seed cotton per acre which is not even half of the average yield. About $4\frac{1}{2}$ acres of the area under cotton were very uneven and patchy. The heavy rainfall of September caused shedding of bolls, while December rainfall damaged the third picking.

Groundnut.—Groundnut yielded only 360 lbs. of pods per acre. The field was very uneven. The seed rate (viz., 30 lbs. per acre) was very low and consequently there was less number of plants.

Jowar.—All the *rabi* crops, viz. *jowar*, gram and wheat suffered from the severe cold that occurred in February 1929. The yield of *jowar* crop was only 462 lbs. of grain per acre. Want of interculture and the severe cold in the month of February reduced the yield.

Gram.—Gram gave a poor yield of 280 lbs. per acre, which is about half the average yield of the tract. The February cold reduced the yield.

Wheat.—464 lbs. of wheat grains per acre could be obtained from the 19 acres and 6 gunthas wheat plot. Due to the severe cold the percentage of the shrivelled grains was higher.

Annewari of *kharif* and *rabi* crops of the village for the year was 7 and 9 *annas* respectively.

The following are the statements showing costs and receipts of individual plots comprising the farm.

STATEMENT No. 109

COTTON—24 acres 3 gunthas in 1928-29

PLOT No. (1)

Previous Crop—Wheat and Jowar, 1927-28

(a) Cost of Production

498

ITEM OF EXPENDITURE	Home labour			Saidars ³	Ex- change labour	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²		Men ¹	Men	Women	Bullocks			For the plot	Per acre	
											Rs. a. p.	Rs. a. p.	
1. Preparatory tillage													
(a) Harrowing.....	60	30	..	..	..	90'0	3'73	....	....		Three harrowings were given to the whole plot. A harrow required one man and two bullocks.
2. Manures and manuring													
(a) Farmyard manure..	20 0 0	0 13 3		Two acres of this plot received 40 cartloads of farmyard manure at Re. 1 per cart: 50 per cent of this cost is charged.
(b) Carting farmyard manure and spreading manure.....	20	20	..	..	..	40'0	1'67	....	....		Ten men and twenty bullocks were required for carting manure and ten men for spreading the same.
(c) Sheep-folding.....	12 8 0	0 8 4		One thousand and five hundred sheep for four days on four acres (Rs. 25). Only 50 per cent of this cost is charged to cotton. Rest of the area not manured

FARM STUDIES

b2-18 C III-OK

3. Seeds and sowing																							
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	16	8	0	0	10	11						For the plot 830 lbs. of cotton-seed at 20 lbs. per rupee.
(b) Sowing and covering ..	..	..	26	17	..	5	13	..	54.5	2.26	..	4	8	0	0	3	0						Five men and thirteen women were paid at annas 4 each.
4. After-care and tillage																							
(a) Weeding .....	..	..	..	..	..	..	104	..	52.0	2.16	..	26	0	0	1	1	3						One hundred and four women were paid at annas 4 each. Only one weeding was given.
(b) Interculturing .....	..	..	36	36	..	..	..	..	72.0	2.99	..	..	..	..	..	..	..						Four hoeings were given. A set of hoes required two men and two bullocks.
5. Picking cotton .....	..	..	..	4	8	..	..	..	12.0	0.50	..	20	0	0	0	13	3						Eight man units got in exchange are considered as home labour. Picking done on contract for Rs. 20.
6. Marketing																							
(a) Carting .....	..	..	6	3	..	..	..	..	9.0	0.37	..	..	..	..	..	..	..
(b) Ginning charges and commission, etc .....	..	..	..	..	..	..	..	..	..	..	..	38	0	0	1	9	4						
7. Removing cotton stubbles .....	..	..	32	19	..	..	16	..	59.0	2.45	..	2	0	0	0	1	4						Sixteen women paid at annas two each.
8. Saldar .....	..	..	..	..	..	..	..	..	..	..	..	97	7	10	4	0	9						Annual wage of <i>saldar</i> is distributed in proportion to the units used on different plots.

DHURHEDA

STATEMENT No. 109—concl.

500

ITEM OF EXPENDITURE	Home labour			Saldar ³	Ex- change labour	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²		Men ¹	Men	Women	Bullocks			For the plot	Per acre	
											Rs. a. p.	Rs. a. p.	
9. Charges for bullock labour	Rs. a. p.	Rs. a. p.	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											110 1 7	4 9 2	
(a) Feed, fodder, depreciation, etc.											90 14 8		
(b) Interest on the value of bullocks, feed and fodder											19 2 11		
10. Charges for implements and tools	31 7 6	1 4 11	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them.
Rs. a. p.													
(a) Depreciation											8 13 9		
(b) Interest											11 12 10		
11. Interest on fluid capital (i.e., wages for hired labour, price of seeds and manure)	4 12 4	0 3 2	Charged at 12 per cent per annum.
12. Rent of land	463 6 5	19 4 0	The land was owned.
Total	180	129	8	5	133	..	388 5	16 13	846 11 8	35 2 8	

FARM STUDIES

¹Family and human exchange labour not charged. ²Home bullock labour charged under item 9. ³Wages of *saldar* charged under item 8.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 24 acres and 3 gunthas	Per acre	For 24 acres and 3 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Lint (5 <i>pallas</i> and 3.5 lbs.).....	1,208.5	50.20	418 0 0	17 5 8	Sold at Rs. 83 per <i>palla</i> of 240 lbs.
Cotton-seed (3.5 <i>khandis</i>).....	2,240.0	93.05	70 0 0	2 14 6	Valued at Rs. 20 per <i>khandi</i> of 640 lbs.
Total ..	..	..	488 0 0	20 4 2	

(c) Summary

1	2	3	4	5 (i.e., col.2-3)	6 (i.e., col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 24 acres and 3 gunthas	488 0 0	846 11 8	(a) 364 15 3 (b) 35 12 1	-358 11 8	+41 15 8
Per acre.	20 4 2	35 2 8	16 10 4	-14 14 6	+1 11 10

DHURKEDA

STATEMENT No. 110

502

GROUNDNUT—1 acre in 1928-29

PLOT No. (2)

Previous crop—Jowar, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ^s	Ex- change labour on co-opera- tion	Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bul- locks ²			Men ¹	Men	Women		Bullocks		Per acre
										Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	4	2	..	..	..	..	6'0	....	Three harrowings were given. A harrow required one man and two bullocks.
Seeds and sowing											
(a) Seeds	6 0 0	Thirty lbs. of seeds at 5 lbs. per rupee.
(b) Sowing and covering	2	1	..	..	1	..	3'5	0 4 0	One woman paid at annas four.
3. After-care and tillage											
(a) Interculturing	3	3	..	..	..	..	6'0	....	Two hoeings were given. A set of hoes required two men and two bullocks.
4. Harvesting and preparing for market	12	20	..	..	..	32'0	....	Lifting crops and gathering pods.

FARM STUDIES

5. <i>Saldar</i> .. .. .	..	..	..	..	..	..	..	..	..	13 9 8	Yearly wage is distributed in proportion to the units used on different plots.
6. Charges for bullock labour.....	..	..	..	..	..	..	..	..	..	5 8 1	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc... Rs. a. p.	4	8	9								
(b) Interest on the value of bullocks, feeds and fodder ..	0	15	4								
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	1 9 2	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation	0	15	9								
(b) Interest....	0	9	5								
8. Interest on fluid capital (i.e., wages of hired labour and price of seeds).	..	..	..	..	..	..	..	..	..	0 6 0	Charged at 12 per cent per annum.
9. Rent of land.....	..	..	..	..	..	..	..	..	..	16 0 0	The land was owned.
Total.....	..	..	9	18	20	..	1	..	47*5	43 4 11	

¹Family labour and exchange man labour not charged.

²Home bullock labour charged under item 6.

³Wages of *saldar* charged under item 5.

DHURKEDIA

803

STATEMENT No. 110—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	For 1 acre	For 1 acre	
	Lbs.	Rs. a. p.	
Groundnut (pods).....	360	} 20 0 0	At 24 lbs. per rupee.
• Gleaning (pods).....	120		
Vines.....		5 0 0	Estimated value.
Total.....	....	25 0 0	

(c) Summary

1	2	3	4	5 (i.e., col.2-3)	6 (i.e., col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For one acre.....	25 0 0	43 4 11	(a) 14 3 4 (b) 1 14 9	-18 4 11	-2 2 10

STATEMENT No. 111

JOWAR (DADAR)—4 acres in 1928-29

PLOT No. (3)

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Sal-dar ³	Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Bullocks	Men	Women	Bullocks			For the plot	Per acre	
												Rs. a. p.	Rs. a. p.	
1. Preparatory tillage														
(a) Ploughing	16	8	..	..	..	..	24.0	6.0	....	....		One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	5	3	2.5	6	..	..	16.5	4.12	....	....		Four harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing														
(a) Seeds	2 10 0	0 10 6		For the plot, 45 lbs. of jowar seed.
(b) Sowing and covering	6	4	4.0	2	..	..	16.0	4.0	....	....
3. Harvesting, tying, breaking earheads and preparing for market	12	6	..	20	19	..	57.0	14.25	11 4 0	2 13 0		Nineteen men paid in kind produce worth Rs. 11-4-0 (15 <i>payalis</i>).
4. <i>Sal-dar</i>	15 13 11	3 15 6		Yearly wage is distributed in proportion to the units used on different plots.

DHURKEDA

505

STATEMENT No. 111—concl'd.

506

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Bul- locks ²		Men	Bullocks	Men	Women	Bullocks			For the plot	Per acre		
5. Charges for bullock labour	Rs. a. p. 40 15 8	Rs. a. p. 10 3 11	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
Rs. a. p.															
(a) Feeds, fodder, depre- ciation etc.....															
33 13 6															
(b) Interest on the value of bullocks, feeds and fodder....															
7 2 2															
6. Charges for Imple- ments and tools.....	11 11 4	2 14 10	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them.	
Rs. a. p.															
(a) Depre- ciation....															
7 5 1															
(b) Inte- rest.....															
4 8 3															
7. Interest on fluid capital (i.e., wages for hired labour and price of seeds)	0 2 9	0 0 8	Charged at 12 per cent per annum. The land was owned.	
8. Rent of land	80 0 0	20 0 0		
Total	39	21	6·5	28	19	..	..	113·5	28·37	162 9 8	40 10 5		

¹Family and exchange human labour not charged.²Home and exchange bullock labour charged under item 5.³Wages of *saddar* charged under item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4 acres	Per acre	For 4 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowari ...	1,848	462	174 0 0	43 8 0	Valued at about 10.6 lbs. per rupee, includes the value of produce paid in kind for labour engaged in harvesting.
Kadbi (450 bundles)	3,600	900	36 0 0	9 0 0		Valued at Rs. 8 per 100 bundles.
Total ..	..	..	210 0 0	52 8 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4 acres	210 0 0	162 9 8	(a) 62 7 0 (b) 11 11 2	+47 6 4	+121 8 6
Per acre ..	52 8 0	40 10 5	18 8 6	+11 13 7	+30 6 1

DHURHEDA

STATEMENT No. 112

GRAM—1 acre in 1928-29

PLOT No. (4)

*Previous crop—Cotton, 1927-28**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Saldar ²	Exchange labour on co-operation		Labour on contract			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ³		Men	Bullocks	Men	Women	Bullocks		Per acre	
											Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing	4'0	2'00	..	..	..	..	..	6'0	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	1'5	0'75	0'75	1'5	..	..	..	4'5	....	Four harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing												
(a) Seeds	2 8 0	For one acre, 35 lbs. of gram.
(b) Sowing and covering	1'0	0'50	..	..	..	..	..	1'5	....
3. Harvesting and preparing for market.....	12'0	6'00	4'00	4'0	8	..	..	34'0	2 0 0	Eight men from outside were paid Rs. 2 on contract.

STATEMENT No. 112—concl'd.

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity	Value	REMARKS	1	2	3	4	5	6
	For 1 acre	For 1 acre		Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	(i.e. col.2-3)	(i.e. col.5+4)
	Lbs.	Rs. a. p.						Family labour income	Farm business income
Gram	280	20 0 0	Valued at 14 lbs. per rupee.						
Bhoos .....	..	3 0 0	Estimated value.						
Total ..	..	23 0 0							
					Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
				For 1 acre ..	23 0 0	50 8 3	(a) 15 9 9 (b) 1 9 2	-27 8 3	-7 10 0

STATEMENT No. 113

WHEAT—19 acres 6 gunthas in 1928-29

PLOT No. (5)

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Sal- dar ³	Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²		Men	Bul- locks	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												Rs. a. p.	Rs. a. p.	
(a) Ploughing	76·0	38·0	..	..	..	..	..	114	5·96	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing and levelling.....	29·5	18·25	20·75	48·5	..	..	..	117	6·11	....	....
2. Seeds and sowing														
(a) Seeds	104 0 0	5 6 11	For the plot, 1,560 lbs. of wheat seed at 15 lbs. per rupee.
(b) Sowing and covering.....	4·0	4·0	20·0	20·0	..	..	..	48	2·50	....	....
3. Harvesting, thrashing and preparing for market.....	32·0	47·0	134·0	50·0	2·0	..	..	265	13·84	49 0 0	2 8 11	Harvesting was done by contract, and produce worth Rs. 48 was paid. Two men for thrashing paid at 8 annas each. Contract labour is not included in the units shown.
4. Saldar	81 0 9	4 3 8	Yearly wage is distributed in proportion to the units used on different plots.

DHURKHEDA

511

STATEMENT No. 113—concl'd.

512

ITEM OF EXPENDITURE	Home labour			Saldar ²	Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Bullocks ²		Men	Bullocks	Men	Women	Bullocks			For the plot	Per acre		
5. Charges for bullock labour.....	Rs. a. p. 159 0 6	Rs. a. p. 8 4 11	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
Rs. a. p.															
(a) Feeds, fodder, depreciation etc....															
(b) Interest on the value of bullocks, feeds and fodder....															
6. Charges for implements and tools....	45 7 3	2 6 0	The total annual charges are distributed over different plots, in proportion to the bullock labour used on the plots.	
Rs. a. p.															
(a) Depreciation.....															
(b) Interest.....															
7. Interest on fluid capital (i.e., cost of seeds).....	6 3 10	0 5 2	Charged at 12 per cent per annum. The land was owned.	
8. Rent of land	383 0 0	20 0 0		
Total	141·5	107·25	174·75	118·5	2·0	..	..	544	28·41	827 12 4	43 3 7		

¹Family and exchange human labour not charged. ²Home and exchange bullock labour charged under item 5. ³Wages of *saldar* charged under item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 19 acres and 6 gunthas	Per acre	For 19 acres and 6 gunthas	Per acre	
Wheat (14 maps)...	Lbs. 8,880	Lbs. 463.7	Rs. a. p. 672 0 0	Rs. a. p. 35 1 5	At Rs. 48 per map.
Straw and bhooos (36 cartloads)....	....	....	432 0 0	22 8 11	Estimated value.
Total ..	....	....	1,104 0 0	57 10 4	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 19 acres and 6 gunthas ..	1,104 0 0	827 12 4	(a) 298 14 1 (b) 50 15 11	+276 3 8	+626 1 8
Per acre.	57 10 4	43 3 7	18 4 4	+14 6 9	+32 11 1

ASODA, PART (A), 1928-29

The village of Asoda is situated 3 miles to the north-east of Jalgaon, the headquarters of the East Khandesh District, with which it is connected by a *kachha* road. It receives about 27 inches of rainfall, major part of which falls from the middle of June to the end of September. Rainfall is generally sure and well distributed. From April to July the climate is hot and the combination of moisture and heat in the *khari* season forces the summer crops. Cold in the winter helps *rabi* crops like wheat. Most of the lands are deep and level. Depth varies from 2 to 5 feet and the lands are fit to grow excellent crops of cotton, groundnut and wheat.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Area held in 1928-29	Area cultivated in 1928-29	Population according to 1931 Census	Cultivated area per capita
A. g. 7,072 19	A. g. 6,970 25	6,282	A. g. 1 4·38

Of the total area held, 101 acres and 34 gunthas were not cultivated. The proportion of cultivated area per head of population comes to one acre and 4·38 gunthas only, which is comparatively insufficient.

There were 864 plough bullocks, which means one pair for about 16 acres of cultivated land. In addition to the important *jirayat* crops like cotton, *jowar*, groundnut and wheat there were about 80 acres of irrigated crops. It may be said that the incidence of cultivated area per pair was large. It is interesting to note that in another part of Khandesh (at Dhurkheda) where there is no irrigation this incidence rises to 22 acres per pair. The total number of cattle and horses, etc., was 1,931, and of sheep and goat 468. The supply of manure for the tract cannot be said to be bad. However in this particular village there is more irrigation and hence more manure is required.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held	No. of land-holders	Average area per land-holder
A. g. 7,072 19	1,037	A. g. 6 32·8

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated	No. of cultivators	Average area per cultivator
A. g. 6,970 25	938	A. g. 7 17·25

It will be seen from the tables above that both the proprietary and cultivating holdings are rather small. There is not much difference between the proprietary and cultivating holdings which shows that there is not much tenancy in the village.

TABLE IV—SIZE AND DISTRIBUTION OF CULTIVATING HOLDINGS

Size of holding Acres	No. of holdings	Per cent
Total	938	100·00
Below 5	493	52·56
5 to 10	222	23·67
10 to 20	158	16·84
20 to 30	42	4·47
30 to 40	13	1·39
40 to 50	2	0·21
50 to 75	8	0·86
Above 75	0	0·0

Most of the land is of good quality having deep black soil varying from 2 to 5 feet in depth. Before some years there was more *bagayat* cultivation and a number of wells were working. Out of the total number of 185 wells only 55 were working in 1928-29. Of these 55, only 22 could be worked over a greater part of the year. About 100 cultivators supplement their agricultural earnings by plying carts for hire. About 150 persons seek employment outside at Jalgaon, Bombay or other places.

Table V gives the area and percentage of the important crops of the village in the years under study. Cotton as main crop contains *tur* and *ambadi*, and *jowar* as main crop contains *udid*, *mug* and *chavali*.

TABLE V—CROPS OF THE VILLAGE

Crops	1928-29				Crops	1929-30											
	Area		Per cent			Area		Per cent									
	A.	g.	A.	g.		A.	g.	A.	g.								
Total ..	6,970	25	6,970	25	100·00	100·00	Total ..	4,676	2	4,676	2	100·00	100·00				
<i>Khari</i> f crops ..	4,432 21				63·60				<i>Khari</i> f crops ..	4,366 36				93·38			
Cotton ...	1,844	38			26·47		Cotton ...	1,700	15			36·36					
<i>Jowar</i> ...	1,440	37			20·68		<i>Jowar</i> ...	1,025	15			21·93					
Groundnut ...	1,005	10			14·42		Groundnut ...	1,010	10			21·60					
Others ...	141	16			2·03		Others ...	630	36			13·49					
<i>Rabi</i> crops ..	2,452 0				35·17				<i>Rabi</i> crops ..	231 33				4·96			
Coriander ..	2,071	12			29·71		Coriander ..	105	00			2·25					
Wheat ...	275	10			3·95		Wheat ...	125	15			2·68					
Others ...	105	18			1·51		Others ...	1	18			0·03					
Perennial crops ..	86 4				1·23				Perennial crops ..	77 13				1·66			
Banana ..	51	0			0·73		Banana ..	52	37			1·14					
Sugarcane ..	20	20			0·29		Sugarcane ..	10	00			0·22					
Other fruits	14	24			0·21		Other fruits	14	16			0·30					

Larger portion of the area is occupied by *kharif* crops. In the year 1926-27 price of coriander was high, and, so in 1927-28 the area under that crop increased. Over 97 per cent of the total cropped area is *jirayat* (rainfed). Only about 3 per cent is *bagayat* (or irrigated) out of which 1.2 per cent is under fruit and sugarcane. The village was once well known for its *bagayat* cultivation. At present out of the 185 wells only 22 are working. Banana occupies fairly large area (over 50 acres).

The chief crops are cotton, *jowar*, groundnut, wheat and coriander. Groundnut (Spanish Peanuts) is a recent introduction of 1913-14. Groundnut makes a good rotation crop and there is a good market for it. Area under coriander fluctuates. It is a risky crop. If it comes well, it leaves more profit than most other crops; if it fails, it produces very little or nothing. Rotation of crops is not very definite. In the lighter and medium types of soil cotton is taken generally every third or fourth year, *jowar* or groundnut being the two crops for the intervening years. In heavier soils cotton is usually followed in the next year by a *rabi* crop like wheat, gram or coriander though it is not unusual to take cotton for two years. Because of better prices obtained for groundnut during the past few years many farmers follow a two-year rotation of cotton and groundnut in medium types of soil. Lighter types of soil are ploughed generally every year, while heavier soils which freely crack in summer may receive ploughing every third or fourth year. In most cases ploughing is given for groundnut. Manuring is done usually for cotton at the rate of 12 to 15 cartloads of farmyard manure per acre.

The climate of Asoda is comparatively cold in winter and very hot in summer, temperature sometimes going as high as 114°F. in June. Average (of 14 years from 1914-15 to 1928-29) rainfall of the place is 27.6 inches, most of the rain falling from the middle of June to the end of September. Table VI (a) gives the average distribution of rainfall.

TABLE VI (a)—THE AVERAGE FORTNIGHTLY DISTRIBUTION OF RAINFALL AT JALGAON 1914 TO 1928 (ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
0.485	0.211	0.253	0.018	0.096	1.344	4.452	2.323	2.316	1.290	0.481	0.411	} 27.697
0.078	0.182	0.031	0.006	0.031	3.112	4.498	2.514	2.737	0.394	0.351	0.083	

The distribution of rainfall and the nature of soil permit both *kharif* and *rabi* cropping. It may however be noted that though the rain of May facilitates preparing lands for *kharif* crops, deficiency of rainfall in October for maturing *rabi* crops sown after *kharif* harvest does not permit sowing of *rabi* crops after harvesting *kharif* crops, and hence double cropping is not possible.

THE SEASON, 1928-29

The season on the whole was not very satisfactory. Though rains started by about the middle of June, yet the sowing operations could not be started till the end of the month. The total rainfall was 28 inches which was just about the normal. The distribution of the rains was satisfactory. The fortnightly distribution of rainfall in 1928 is given in table VI (b).

TABLE VI (b)—FORTNIGHTLY DISTRIBUTION OF RAINFALL AT JALGAON IN 1928 (ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
0.0	0.0	0.0	0.0	0.0	0.58	3.90	1.03	0.38	2.95	0.0	3.60	} 28.01
0.0	0.0	0.0	0.0	0.0	2.28	4.36	2.95	5.09	0.89	0.0	0.00	

Thus, more than one-fourth of the total rain fell in July. The December rainfall was accompanied by a terrific hail-storm and in two days the place got three inches of precipitation. The hail-storm caused very serious damage not only to the annual crops standing but also to fruit trees. Two and half acres of coriander belonging to the farmer under study was completely ruined by the hail-storm. Some of the fruit gardens were actually littered with dead birds which took shelter in the gardens. Two human lives were lost in the village.

The *annevari* of the *kharif* as well as *rabi* crops of 1928-29 was 8 *annas*.

THE FARMER

The farmer owned 23 acres and 35 gunthas of land out of which 18 gunthas were uncultivable. The cultivated area in 1928-29 was therefore 23 acres and 17 gunthas. The five fields which made up the holding were situated in three adjacent villages: field Nos. 2, 4 and 5 at Asoda were close to each other, field No. 1 was at Manirkhed, while field No. 3 at Mumarabad. The distance between field Nos. 1 and 3 was about 5 miles, the remaining fields being situated just about midway.

In the year 1929-30 the farmer along with two of his neighbours rented a block of 12 acres adjacent to his field Nos. 2 and 4 at Rs. 174-8-0 per annum. The farmer under study had to contribute one-third of the costs and labour for the third share (i.e., 4 acres) in the leased land.

The acreage and percentages of the different crops grown by the farmer in 1928-29 and 1929-30 were as follows :—

1928-29			1929-30			REMARKS
Name of the crop	Area	Per cent	Name of the crop	Area	Per cent	
	A. g.			A. g.		
Total ..	28 17	100		27 17	100·00	
Cotton	9 18	40·00	Cotton	14 26	53·42	
Jowar	8 19	36·00	Jowar	6 35	25·07	
Wheat	3 10	14·00	Bajri	2 0	7·29	
Groundnut	1 20	6·06	Groundnut	3 36	14·22	
Gram	0 30	3·4		..	..

(a) *Human labour*.—The farmer had nine members in the family including himself. He had besides one *saldar* who was paid at Rs. 200 per annum with a small room as a lodging-place.

The ages of the farmer and the members of the family are given below :—

(1) Farmer.....	50 years.
(2) Farmer's first wife	42 ,,
(3) ,, second wife	32 ,,
(4) ,, first daughter	15 ,,
(5) ,, first son	11 ,,
(6) ,, second daughter.....	8 ,,
(7) ,, second son	6 ,,
(8) ,, third son	4 ,,
(9) ,, third daughter	6 months.

The farmer himself did not do any manual work on the farm. His work was of a miscellaneous character like general supervision, organizing labour, marketing farm produce and doing odd jobs. The eldest daughter was married and was at her husband's place for the greater part of the year. The first two sons and the second daughter were attending school. As is usual with the Maratha families of Asoda, the female folks in the family did no work on the farm.

The adult members in the family were thus only three, the farmer and his two wives.

The monthly distribution of the labour of the family including the *saldar*, from June 1928 to May 1929, is given in table VII. It may be noted that all the labour was used not necessarily on the farm nor for the crops of 1928-29 only. In this table a woman is considered as a unit like a man.

The table shows that the man and his wives did very little farm work. Besides the *saldar*, the farmer had to engage hired labour on daily wages and on piece-work especially at the time of weeding, interculturing and harvesting the crops. He had to spend Rs. 154-2-0 on day-labour, i.e., 52 men, 377 women and 20 bullocks.

Major part of the labour of the *saldar* was used on the crops grown, though a small part was utilized on miscellaneous work like fencing and other odd jobs. Table VII (a) gives the distribution of the labour supplied by the *saldar* and the allocation of his wages on different crops.

TABLE VII (a)—ALLOCATION OF THE WORK AND WAGES OF SALDAR

Name of crop	Area	No. of days' work put in	Amount charged
	A. g.		Rs. a. p.
Total ..	23 17	184·00	200 0 0
Cotton	9 18	68·50	74 7 4
Groundnut	1 20	12·75	13 13 9
<i>Jowar</i>	8 19	59·50	64 10 9
Wheat	3 10	35·50	38 9 5
Gram	0 30	7·75	8 6 9

Yearly wage of the *saldar* is distributed on crops in proportion to the number of work-days spent on them.

(b) *Bullock work*.—The farmer had two bullocks. Monthly distribution of their work, from June 1928 to May 1929, is given in table VIII.

The two bullocks were found sufficient for the farm except at the time of ploughing when the farmer had to hire a pair for ten days. On the whole it can be said that the bullocks were used intensively as 61 per cent of the available bullock labour could be made use of.

The opening and closing inventories of the farmer's property for the years 1928-29 and 1929-30 are given in table IX. The inventory fell at the end of the first year by Rs. 105, while at the end of second year there was a rise of Rs. 236 over the initial inventory. Though debt increased by Rs. 560 there is no reason to be anxious as there is a net rise in the inventory value.

Nature of holding, lands, crops and cropping.—The nature of land, cropping and treatment of the different fields during 1927-28, 1928-29 and 1929-30 are given in table X. The cropping and treatment in 1927-28 are given to show the previous treatment of the land.

TABLE VII—SPREAD AND UTILIZATION OF THE FAMILY AND ONE SALDAR

Working members	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Per cent of the labour employed to the labour available
Farmer, his two wives and one <i>saldar</i>	$\frac{29}{120}$	$\frac{31}{124}$	$\frac{31}{124}$	$\frac{30}{120}$	$\frac{38}{124}$	$\frac{30}{120}$	$\frac{31}{124}$	$\frac{31}{124}$	$\frac{26}{112}$	$\frac{31}{124}$	$\frac{30}{120}$	$\frac{29}{124}$	$\frac{367}{1460}$	25·13

Note.—The denominators show the available labour units, while the numerators show labour units employed for work.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullock	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Per cent of the units employed to the units available
Two bullocks	$\frac{44}{60}$	$\frac{34}{62}$	$\frac{40}{62}$	$\frac{14}{60}$	$\frac{24}{62}$	$\frac{26}{60}$	$\frac{40}{62}$	$\frac{60}{62}$	$\frac{36}{56}$	$\frac{31}{62}$	$\frac{52}{60}$	$\frac{42}{62}$	$\frac{443}{730}$	60·68

Note.—The denominators show the available labour units, while the numerators show labour units employed for work.

TABLE IX—INVENTORY OF THE PROPERTY

Item	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
<i>Assets</i>	A. g.	Rs. a. p.		A. g.	Rs. a. p.		A. g.	Rs. a. p.	
1. Real estate									
(A) Land									
(a) Field No. 1 ..	7 14	8,000 0 0		7 14	8,000 0 0		7 14	8,000 0 0	
(b) Field No. 2 ..	8 39	8,000 0 0		8 39	8,000 0 0		8 39	8,000 0 0	
(c) Field No. 3 ..	4 0	8,500 0 0		4 0	8,500 0 0		4 0	8,500 0 0	
(d) Field No. 4 ..	2 1	600 0 0		2 1	600 0 0		2 1	600 0 0	
(e) Field No. 5 ..	1 21	400 0 0		1 21	400 0 0		1 21	400 0 0	
	23 35	10,500 0 0		23 35	10,500 0 0		23 35	10,500 0 0	
(B) Buildings									
(a) House	1	2,600 0 0		1	2,600 0 0	There was no change in the value.	1	2,550 0 0	Slight depreciation.
(b) Farm store ..	1	1,400 0 0		1	1,400 0 0		1	1,400 0 0	Slight repairs were done during the year.
(c) Extra house...	1	1,000 0 0		1	1,000 0 0		1	1,000 0 0	There was no change in value.
		5,000 0 0			5,000 0 0			4,950 0 0	
Total real estate ...		15,500 0 0			15,500 0 0			15,450 0 0	

ASODA (A)

TABLE IX—INVENTORY OF THE PROPERTY—*contd.*

Item	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
	A. g.	Rs. a. p.		A. g.	Rs. a. p.		A. g.	Rs. a. p.	
2. Livestock—									
(a) Bullocks	2	150 0 0		2	140 0 0	Bullocks depreciated in value. Last year's calf appreciated in value. The cow gave one calf and was valued at Rs 10. The cow was dry.	2	120 0 0	
(b) Calf	1	25 0 0		2	45 0 0		1	12 0 0	
(c) Cow	1	50 0 0		1	30 0 0		1	35 0 0	
(d) Young bullock .....	....	....		....	....		1	50 0 0	
Total Livestock		225 0 0			215 0 0			217 0 0	
3. Implements and tools—									
(a) Plough	1	8 0 0		1	7 0 0	There was no depreciation in seed-drills because of repairs. Do.	1	6 0 0	Seed-drills were slightly repaired.
(b) Seed-drills	3	9 0 0		3	9 0 0		3	9 0 0	
(c) Harrow	1	3 0 0		1	3 0 0		1	2 0 0	Slight repairs were done.
(d) Hoes	6	15 0 0		6	12 0 0		6	12 0 0	
(e) Yokes	4	5 0 0		4	4 0 0		4	3 0 0	
(f) Cart	1	60 0 0		1	55 0 0		1	54 0 0	Newly purchased.
(g) Ropes, tools etc. ....	....	20 0 0		....	18 0 0		....	15 0 0	
(h) Riding carts .....	....	....		....	....		2	180 0 0	
(i) Wheat seed drill .....	....	....		....	....		1	3 0 0	
(j) Jowar seed drill .....	....	....		....	....		1	3 0 0	Implements newly purchased during the year.
(k) Harrow (big) .....	....	....		....	....	1	4 0 0		
Total Implements and tools		120 0 0			108 0 0			241 0 0	

4. Farm produce and supplies on hand						
(a) Grain	Not measured	90 0 0	700 bundles	56 0 0	9,800 lbs.	74 0 0
(b) Kadbi	1,000 bundles	50 0 0			8,900 lbs.	45 0 0
(c) Grass	500 "	10 0 0	400 lbs.	10 0 0	16 cartloads.	48 0 0
(d) Bhoos	....	3 0 0	15 cartloads.	45 0 0	1,344 lbs.	72 0 0
(e) Manure (F. Y. M.)	12 cartloads.	36 0 0	2,016 lbs.	108 0 0	884 "	30 0 0
(f) Jowar	....	....	640 "	40 0 0	82 "	2 0 0
(g) Udid	....	....	18 "	1 0 0	64 lbs.	4 0 0
(h) Mug	....	....	170 "	10 0 0	2 cartloads.	20 0 0
(i) Gram	....	....	90 "	6 0 0	40 lbs.	5 0 0
(j) Tur	....	....	800 "	10 0 0	720 "	42 0 0
(k) Grou n d n u t fodder	....	....	....	....	....	....
(l) Vari	....	....	....	....	....	....
(m) Bajri	....	....	....	....	....	....
Total farm produce and supplies on hand.	....	189 0 0	....	286 0 0	....	342 0 0
5. Cash on hand	....	....	....	295 0 0	....	355 0 0
6. Shares in co-operative bank and in a mill	....	....	....	110 0 0	....	110 0 0
7. Deposits in co-operative society.	....	....	....	230 0 0	....	280 0 0
8. Money given to others	....	....	....	50 0 0	....	....
Total Assets	....	16,084 0 0	....	16,794 0 0	....	16,995 0 0
Liabilities—						
(a) Debt at 12 per cent per annum taken from <i>savkar</i>	....	2,000 0 0	....	....	....	....
(b) Debt from co-operative society	....	....	....	550 0 0	....	550 0 0
(c) <i>Savkar's</i> debt	....	....	....	310 0 0	....	310 0 0

TABLE IX—INVENTORY OF THE PROPERTY—*concl.*

Item	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
<i>Liabilities—contd.</i>	A. g.	Rs. a. p.		A. g.	Rs. a. p.		A. g.	Rs. a. p.	
(d) Miscellaneous amounts owed to others	105 0 0		....	165 0 0	
(e) Debt from Central Co-operative Bank	1,900 0 0		....	1,700 0 0	
<i>Total Liabilities</i>	2,000 0 0		....	2,865 0 0		....	2,725 0 0	
<i>Net worth of the Farm</i>	14,034 0 0		....	13,929 0 0		....	14,270 0 0	

SUMMARY

	Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928	14,034 0 0	
Net worth of the farm at the beginning of 1929	13,929 0 0	
<i>Loss in net worth in 1928</i>		105 0 0
Net worth of the farm at the beginning of 1929	13,929 0 0	
Net worth of the farm at the beginning of 1930	14,270 0 0	
<i>Gain in net worth in 1929</i>		341 0 0
<i>Therefore net gain in two years</i>		236 0 0

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Field No.	Area	Nature of land	1927-28		1928-29			1929-30		
			Crop	Treatment	Crop	Plot No.	Treatment	Crop	Plot No.	Treatment
1	A. g. 7 14	Six gunthas of this field was uncultivable waste; soil of medium depth with small stones scattered all over. The land had not received any manure for the last five years.	Jowar ..	Not manured ..	Cotton ..	1	Not manured	A. g.	9	Not manured.
								2 0 Bajri ..			7	Do.
2	8 39	It is high lying land of medium depth merging into a heavier type towards the eastern side.	A. g.	Do.	A. g.	2	Manured with 12 cartloads of F. Y. M.	Cotton ..	1	Do.
			2 10 Ground-nut.		1 20 Ground-nut.						3	Not manured.
			6 29 Cotton.		5 9 Jowar.	4	" "			
3	4 0	The soil is deep black and perfectly level.	Cotton ..	Manured with 40 cartloads of F. Y. M.	3 10 Wheat. 0 30 Gram.	7 and 8 9	It may be noted that 1 acre and 30 gunthas from wheat plot and 30 gunthas gram plot were first put under coriander which failed and so wheat and gram were grown.	Do. ..	2	Manured with 15 cartloads of F. Y. M.
4	2 1	Soil is of medium type. The field is sloping and had not received any manure for the last six years.	Do. ...	Not manured.	Jowar.	6	Not manured.	Ground-nut.	6	Not manured.

ASODA (A)

B25

TABLE X—CROPS, CROPPING AND THEIR TREATMENT—*concl.*

Field No.	Area	Nature of land	1927-28		1928-29			1929-30		
			Crop	Treatment	Crop	Plot No.	Treatment	Crop	Plot No.	Treatment
5	A. g. 1 21	Twelve gunthas of this field was uncultivable waste. The soil is light and shallow with <i>murum</i> below. The field is very uneven and has not received any manure for the last five years.	Cotton ..	Not manured ..	<i>Jowar</i> .	5	Not manured.	A. g. Ground-nut.	4	Not manured.
6	4 0	Medium black soil ..	....	....	A. g. 1 27 Ground-nut. 1 27 Coriander 0 26 <i>Jowar</i>	Do. Do. Do.	<i>Jowar</i> .. Cotton .. Ground-nut.	8 3 5	Do.	
	27 35									

COSTS AND RECEIPTS

Abstract of expenditure.—In the following statement an abstract of expenditure on the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost for the cultivated area (viz., 23 acres and 17 gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-Pocket expenses :		
(a) Manures	60 0 0	
(b) Seeds.....	67 7 0	
(c) Outside labour (including the <i>saldar</i>)	354 2 0	
(d) Depreciation on implements and tools	12 0 0	
(e) Cost of bullock labour (excluding interest)..	145 3 5	
(f) Land assessment and L. F. C. on owned land.	54 13 6	
		693 9 11
II. Rent of owned land excluding assessment and L. F. C.	370 2 6	370 2 6
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	13 8 2	
(b) Interest on the value of implements and tools	14 6 6	
(c) Interest on the value of bullocks and of the feed and fodder consumed by bullocks	34 14 3	
		62 12 11
<i>Total cost of production (excluding wages of family labour)</i>		1,126 9 4

* DETAILS OF OUT-OF-POCKET EXPENSES

1. <i>Manures :</i>			Rs. a. p.	Rs. a. p.
(a) Twelve cart-loads of farmyard manure at Rs. 3 per cart given to plot No. 2 ; only 50 per cent of the cost is charged..			18 0 0	
(b) Charges on account of residual manure.— During the previous year field No. 3 (4 acres) was given 40 cart-loads of farmyard manure at Rs. 3 per cart ; 35 per cent of this manure cost is charged to crops taken in 1928-29. Total cost of 40 carts was Rs. 120. 35 per cent of this (or Rs. 42) is charged as under.				
Plot No.	Crop	Amount charged		
	A. g.	Rs. a. p.		
7	1 20	Wheat .....15 12 0		
8	1 30	Wheat .....18 6 0		
9	0 30	Gram 7 14 0		
	4 0	42 0 0	42 0 0	60 0 0

	Rs. a. p.	Rs. a. p.
2. <i>Seeds :</i>		
(a) Cotton seed 140 lbs.	8 12 0	
(b) Mixture in cotton crop :		
	Rs. a. p.	
<i>Tur</i> (16 lbs.)	1 0 0	
<i>Udid</i> (84 lbs.)	5 4 0	
<i>Mug</i> (2 lbs.)	0 2 0	
<i>Til</i>	0 0 3	
<i>Ambadi</i>	0 0 9	
	<hr/>	
	6 7 0	
(c) Groundnut (112 lbs.)	16 0 0	
(d) <i>Jowar</i> (42 lbs.)	2 4 0	
(e) Coriander (48 lbs.)	12 8 0	
(f) Wheat (128 lbs.)	19 0 0	
(g) Gram (32 lbs.)	2 8 9	
	<hr/>	
		67 7 0
3. <i>Wages of outside labour :</i>		
(a) <i>Saldar</i>	200 0 0	
(b) Cotton; (21 men, 205 women and 20 bullocks)	76 1 0	
(c) <i>Jowar</i> ; (25½ men, 103 women)	37 11 0	
(d) Groundnut; (1½ men, 47 women)	33 4 0	
(e) Wheat; (3½ men, 16 women)	5 10 0	
(f) Gram; (½ man, 2 women)	0 14 0	
(g) Coriander; (4 women)	0 10 0	
	<hr/>	
		354 2 0
4. <i>Depreciation on implements and tools :</i>		
Opening inventory	120 0 0	
Closing inventory	108 0 0	
	<hr/>	
		12 0 0
5. <i>Bullock labour cost (excluding interest) :</i>	Rs.	
(a) Depreciation on bullocks		
Opening inventory	150	
Closing inventory	140	
	<hr/>	
	10 0 0	
(b) Death allowance on two bullocks at 5 per cent on Rs. 150	7 8 0	
(c) Charges on account of housing at Rs. 4 per bullock	8 0 0	
(d) Feed and fodder		
	Rs. a. p.	
Fodder	97 11 5	
Cotton seed	30 0 0	
<i>Udid</i>	13 0 0	
	<hr/>	
	140 11 5	
(e) Against the above costs (a) to (d) must be set off the value of 7 cart-loads of farmyard manure obtained from the bullocks during the year, therefore ..	-21 0 0	
	<hr/>	
		145 3 5
6. <i>Land assessment and L. F. C. :</i>		
	A. g.	
Field No. 1	7 14	10 3 0
Field No. 2	8 39	20 2 8
Field No. 3	4 0	18 13 10
Field No. 4	2 1	3 2 3
Field No. 5	1 21	2 7 9
	<hr/>	
	28-35	54 13 6
<i>Total out-of-pocket expenses</i>		<hr/>
		693 9 11

Family Labour Income.—Table XI gives the family labour income i.e., the remuneration for the labour and supervision of the farmer and his family on the farm. The figures of cost of production have already appeared above. The value of the produce is taken from the cost and receipt statement of the various plots (pp. 533 to 559).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production (excluding wages of family labour)				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total	23 17	1,087 7 6	693 9 11	62 12 11	370 2 6	1,126 9 4	-39 1 10
Cotton	9 18	403 1 6	262 4 10	23 14 9	141 0 4	432 3 11	-29 2 5
Groundnut	1 20	210 2 0	76 10 4	5 3 6	17 7 6	99 5 4	+110 12 8
Jowar	8 19	312 0 0	172 1 2	16 3 2	130 8 6	318 12 10	-6 12 10
Wheat	3 10	144 4 0	139 12 9	10 3 3	65 14 9	215 14 9	-71 10 9
Gram	0 30	18 0 0	29 10 10	2 4 3	15 3 5	47 2 6	-29 2 6
Coriander	*(2 20)	Crop failed	13 2 0	..	..	13 2 0	-13 2 0

* Not included in the total as when coriander failed the land was put to other rabi crops.

Column 4.—Out-of-pocket expenses include costs of manure, seed, wages of *saidar* and of hired labour, depreciation on deadstock and work animals and cost of feed and fodder consumed by work animals, the cost of their housing and their death allowance. *Column 5.*—Interest on working capital, both fluid as well as fixed capital. Fluid capital includes money spent on feeds, fodder for the work animals, money spent on the current agricultural operations; fixed capital includes value of implements and work animals. *Column 6.*—Estimated rent of owned land minus the assessment and local-fund cess. *Column 8.*—Wages earned by the family.

Gross receipts obtained from the farm amounted to Rs. 1,087-7-6 while the cost of production, excluding wages for family labour, came to Rs. 1,126-9-4. The family contributed only 23 man units and 10 woman units, for which labour income works to minus Rs. 39-1-10. The farmer and his two wives did very little or practically no farm work themselves and naturally the wage bill for hired labour was as high as Rs. 354-2-0. Had the family worked themselves on the farm, they could have saved about Rs. 250 and in that case, would have made about Rs. 211 as their labour wage instead of suffering a loss of Rs. 39-1-10.

Farm Business Income.—Cursory perusal of table XI is likely to raise doubts in one's mind as to how the family maintained itself when it did not get any labour income. It is to be remembered that in the costs of production are included not only the out-of-pocket expenses but also the interest on the working capital and rent of owned land, which, though debited to costs, are saved. Table XII gives the farm business income or the aggregate income of the farmer.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income	Remarks
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Total ..	23 17	1,087 7 6	693 9 11	393 13 7	
Cotton	9 18	403 1 6	693 9 11	+393 13 7	Plot Nos. 8 and 9 were put under coriander but as the crop failed, wheat and gram were taken in these plots. The expenses over coriander came to Rs. 13-2-0.
Groundnut	1 20	210 2 0			
Jowar	8 19	312 0 0			
Wheat	3 10	144 4 0			
Gram	0 30	18 0 0			
Coriander	(2 20)	Crop failed .			

In table XI the farmer is shown to have made a loss of Rs. 39-1-10. He, however, made Rs. 62-12-11 on account of interest and Rs. 370-2-6 on account of rent. These savings when added to the family labour income (— Rs. 39-1-10) leave the farmer Rs. 393-13-7.

ANALYSIS

The farmer contributed only 26 man units (of which three were got in exchange) and 10 woman units for which he could not make any wage ; on the other hand he lost Rs. 39-1-10. Deducting only the out-of-pocket expenses from the gross produce (see table XII) he made Rs. 393-13-7 as his farm business income.

The extra house, which is shown in the inventory, was given on hire for the use of the village school for which the farmer got Rs. 78 as rent. The total income of the farmer, therefore, came to Rs. 471-13-7. During the year under study the farmer took a loan of Rs. 1,900 from the Central Co-operative Bank and Rs. 550 from the village co-operative society. These loans were utilized in paying off the old debt with interest as shown in the inventory already given. He besides owed Rs. 280 to others. Taking into account the household and farm business, he was short by Rs. 105 in his inventory.

Table XIII shows the yields of the main produce and the labour units required per acre and the general remarks on crop conditions. All labour, including home labour, hired labour and even bullock labour, is included to get some idea of the returns for the human and bullock labour spent. One man unit = one bullock unit = two woman units,

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce per acre			Remarks
	Name of produce	Quantity	Labour units	
1	Cotton, <i>til</i> and <i>tur</i> ..	Lbs. 261·16	Per acre 34·13	Plot No. 1 was inferior to plot No. 2; while the latter was manured the former was not. <i>Kharif</i> crops were caught by hail storm.
2	Do.	450·66	36·66	
3	Groundnut	2,080	42·82	Yield was very good.
4	<i>Jowar</i> , <i>udid</i> and <i>mug</i> .	505·26	20·38	<i>Jowar</i> stubbles were not removed from the plot and therefore labour requirements are less.
5	<i>Jowar</i> and <i>udid</i>	352·64	40·20	The area being small as compared with other plots the labour requirements per acre increased. <i>Udid</i> crop was thin and it required comparatively more labour for harvesting.
6	<i>Jowar</i> and <i>udid</i>	320·00	29·27	The plot had to be resown and the yield was low.
7	Wheat	896·00	33·16	High yield of the plot was due to the residual manure given to the plot in 1927-28. The high yield proportionately increased labour units.
8	Do.	201·14	23·43	After grubbing up coriander, this plot was put under wheat and naturally sowing was late.
9	Gram	340·00	26·66	Low yield due to late sowing.
10	Coriander	0·0	2·0	Crop failed.

The table is worked out from the information abstracted from the statement of costs and receipts. The yields of all the plots except plot Nos. 2, 3 and 7 were very poor. Remarks about the yields of individual crops are given separately.

General remarks about the crops and the plots.—Yields except those of groundnut and one of the wheat plots were not satisfactory. Only one plot of cotton had received manure. Hail storm caused much damage to *kharif* crops. The groundnut crop left the highest income. For some years the area under groundnut has been increasing in the tract. Cotton and *jowar* are competitive crops in Khandesh. Part of the area under *jowar* was required to be resown and the stand of the crop was not satisfactory; consequently the yield obtained was much below

average. Gram and one of the wheat plots had to be sown very late after grubbing coriander which was completely destroyed by the occurrence of hail storm in the *kharif* season and of frost in the *rabi* season.

Cotton.—There were only two plots of cotton. Though the amount and distribution of the rainfall was not bad, the hail storm of December spoiled the third picking of cotton and damaged the inter-crop of *tur*. The soil in plot No. 1 was light, poor and shallow and had not received any manure for four or five years. Consequently the yield obtained (viz., 244·72 lbs. of seed cotton per acre) was very low. Plot No. 2, on the other hand, was of better quality and was manured during the year; the yield obtained from this plot was naturally better (427·55 lbs. of seed-cotton per acre) which compares favourably with the average yield at the Jalgaon farm.

Groundnut.—The plot of groundnut measuring one acre and twenty gunthas gave a bumper yield of 2,080 lbs. of pods per acre which is far in excess of the average yield (of 1,315 lbs. at the Jalgaon Farm from 1915-16 to 1925-26). The soil of the plot was best suited for groundnut being of medium black type; moreover, being an early variety the crop could be harvested much before December 6th when the hail storm occurred.

Jowar.—There were three plots of *jowar* measuring 8 acres and 19 gunthas. None of them was manured during recent years. The yield obtained from these plots was 3,720 lbs. of grain (or 439 lbs. per acre) and 6,000 lbs. of fodder (or 708 lbs. per acre). The grain yield was very low, being less than half the average yield at Jalgaon farm the average of which from 1913 to 1924, was 883 lbs. Plot No. 4 which gave a yield of 505·26 lbs. of grain per acre was of medium type, while plot No. 6 similar in kind was sloping and gave only 320 lbs. yield. The first sowing in this plot was spoiled and it had to be resown. There was rain after the plot was resown and it could not attain good stand. As a result the out-turn was less (i.e., 320 lbs. per acre). The third plot (No. 5) was poor and shallow and could produce only 352·64 lbs. of grain per acre.

Wheat.—There were two plots (Nos. 7 and 8) of wheat. Plot No. 7, measuring one and half acres, gave a good yield of 896 lbs. of wheat per acre as against the average of 678 lbs. at Jalgaon Farm for 1913 to 1924. The other plot, measuring 1·75 acres, however, gave a poor yield of 201 lbs. per acre. These plots were alike, having deep retentive soils; in fact they formed parts of one survey number. Plot No. 7 was, however, sown in time (on 18th October 1928), while plot No. 8 was first put under coriander which had to be grubbed up; the same was resown with wheat late, and its yield was poor.

Gram.—There was only one plot of gram (plot No. 9 measuring 30 gunthas). It gave a poor yield of 340 lbs. per acre. Like plot No. 8 this plot was also sown with coriander and resown with gram on 24th December. Sowing being very late, the yield was low.

Statements showing the costs and receipts of these different plots are as follows:—

STATEMENT No. 114

COTTON—7 acres and 8 gunthas in 1928-29

PLOT No. (1)

Previous crop—Jowar, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bul-locks ²		Men ¹	Wo-men ¹	Bul-locks	Men	Wo-men	Bul-locks			Rs. a. p.	Rs. a. p.	
1. Preparatory tillage															
(a) Ploughing .....	..	..	20	10	..	..	..	10	..	20	60	8'83	20 0 0	2 12 5	One ploughing was given. A plough required 1 man and 2 bullocks. Outside labour charged at Rs. 2 for one man and two bullocks. Two harrowings were given.
(b) Harrowing .....	..	..	8	4	..	..	..	..	..	..	12	1'66	....	....
2. Seeds and sowing															
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	..	7 1 0	0 15 8	For the plot 100 lbs. of cotton seed (Ba. 6-4-0), <i>M</i> and <i>W</i> mixture (Rs. 0-13-0).
(b) Sowing and covering	2	..	4	2	..	..	..	..	6	..	11	1'55	1 8 0	0 3 4	Six women charged at annas four each.
3. After-care and tillage															
(a) Weeding .....	..	..	..	3	..	..	..	..	90	..	48	6'66	20 6 0	2 13 8	Three weedings were given:— Men Women 1st weeding 1 40 2nd " 2 34 3rd " 0 16
(b) Interculturing .....	..	..	16	8	..	..	..	5	..	..	29	4'03	2 8 0	0 5 6	Fifty-six women paid at annas 4 and thirty-four women at annas 3 each per day. Four hoeings were given. For some operations there were two men to the team and for some one man to the team. Five men paid at annas eight each.
(c) Collecting grass from bunds and carting.	..	..	4	5	3	..	..	..	..	..	12	1'66	....	....

ASODA (A)

533

STATEMENT No. 114—concl'd.

534

ITEM OF EXPENDITURE	Home labour			Saldar ²	Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Picking, collecting and carting cotton to the village, also harvesting sub-crops	7	..	4	4	..	..	..	..	46	..	88	5·28	Rs. a. p. 13 9 3	Rs. a. p. 1 14 2	1st picking 21 women, 2nd picking 25 women. (Contract labour). Stalks were uprooted and collected with harrows. Some labour was required for collecting stalks. Six women paid at 3 annas each.
5. Removing cotton stalks ..	..	..	26	14	..	..	..	..	6	..	43	5·96	1 2 0	0 2 7	
6. Saldar .....	..	..	..	..	..	..	..	..	..	..	..	..	54 5 7	7 8 10	Annual cost, on account of <i>saldar</i> , is distributed in proportion to the units used on different plots. The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
7. Charges for bullock labour ..	..	..	..	..	..	..	..	..	..	..	..	..	57 14 8	8 0 9	
Rs. a. p. (a) Feeds, fodder, depreciation, etc. .. 46 11 2 (b) Interest on the value of bullocks, feeds and fodder .. 11 3 6															
8. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	..	..	8 7 11	1 2 10	The total annual charges are distributed over different plots in proportion to the units used on them.
Rs. a. p. (a) Depreciation 3 13 9 (b) Interest ... 4 10 2															
9. Interest on fluid capital (i.e., wages of hired labour and cost of seeds)...	..	..	..	..	..	..	..	..	..	..	..	..	4 0 4	0 8 11	Charged at 12 per cent per annum. The land was owned.
10. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	..	125 0 0	17 5 9	
Total	9	..	82	50	3	..	..	15	148	20	258	85·13	815 14 9	43 14 0	

¹Family and exchange human labour not charged.

²Home bullock labour charged under item 7.

³Wages of *saldar* charged under item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 7 acres and 8 gunthas	Per acre	For 7 acres and 8 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Seed-cotton	1,762	244.72	246 0 3	34 2 9	Sold on the spot at Rs. 13-6-6 per maund.
Til	14	1.94	2 0 0	0 4 5	Valued at 7 lbs. per rupee.
Tur	105	14.5	7 0 0	0 15 6	Valued at 15 lbs. per rupee.
Bhoos .....	....	....	0 8 0	0 1 1	Estimated value.
Green grass (450 bundles).....	....	....	9 0 0	1 4 0	Valued at Rs. 2 per 100 bundles.
Total ..	....	....	264 8 3	36 11 9	

(c) Summary

1	2	3	4	5 (i.e., col. 2-3)	6 (i.e., col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 7 acres and 8 gunthas.	264 8 3	315 14 9	(a) 114 13 0 (b) 19 14 0	-51 6 6	+83 4 6
Per acre ..	36 11 9	43 14 0	18 11 5	-7 2 3	+11 9 2

ASODA (A)

STATEMENT No. 115

COTTON—2 acres 10 gunthas in 1928-29

PLOT No. (2)

Previous crop—Groundnut, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saddar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Harrowing	7'0	3'5	..	..	..	10'5	4'66	....	....	Four harrowings were given.
2. Manure and manuring												
(a) Farmyard manure	18 0 0	8 0 0	For the plot 12 carts of farmyard manure were given at Rs. 3 per cart; 50 per cent of the cost is charged to this crop.
(b) Manuring	1'0	..	..	..	1'0	0'45	....	....
3. Seeds and sowing												
(a) Seeds	2 12 0	1 3 8	For the plot 40 lbs. of cotton seed (Rs. 2-8-0) and <i>il</i> and <i>tur</i> mixture (annas four).
(b) Sowing and covering	2'0	1'0	..	3	..	4'5	2'00	0 12 0	0 5 4	Three women paid at four annas each.
4. After-care and tillage												
(a) Weeding	1'0	..	20	..	15'5	6'89	7 4 0	3 3 7	Two weedings were given. Women were paid at annas four each. 1st weeding required 20 women, and 2nd, 9 women. The <i>saddar</i> removed weeds.

(b) Interculturing	--	--	10'0	5'0	8	--	--	18'0	8'0	1 8 0	0 10 8	Four hoeings were given. A set of hoes required 2 men and 2 bullocks in 8 cases and 1 man and 2 bullocks in one case. Hired men paid at annas 8 each.	
5. Picking, collecting and carting cotton and harvesting and thrashing sub-crops etc.	8	--	2'5	3'0	--	25	--	21'0	9'33	7 7 9	3 5 2	First picking required 13 women and second 12 women. (Contract work.)	
6. Removing cotton stalks	--	--	8'0	4'0	--	--	--	12'0	5'33	....	....	A harrow required one man and 2 bullocks.
7. <i>Saldar</i>	--	--	--	--	--	--	--	--	--	20 1 9	8 15 0	The total annual cost, on account of yearly servant, is distributed in proportion to the labour units required for this crop.	
8. Charges for bullock labour	--	--	--	--	--	--	--	--	--	20 13 4	9 4 2	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
Rs. a. p.													
(a) Feeds, fodder, depreciation, etc.			16	12	9								
(b) Interest on the value of bullocks, feeds and fodder			4	0	7								
9. Charges for implements and tools	--	--	--	--	--	--	--	--	--	3 0 10	1 5 8	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.	
Rs. a. p.													
(a) Depreciation			1	6	2								
(b) Interest			1	10	8								
10. Interest on fluid capital (i.e., wages of hired labour, price of seeds and manure)	--	--	--	--	--	--	--	--	--	3 5 6	1 7 10	Charged at 12 per cent per annum.	
11. Rent of land	--	--	--	--	--	--	--	--	--	31 4 0	13 14 2	The land was owned.	
Total	8	--	29'5	18'5	3	57	...	82'5	36'66	116 5 2	51 11 3		

¹Family labour not charged.

²Home bullock labour charged under item 8.

³Wages of *saldar* charged under item 7.

ASODA (A)

537

STATEMENT No. 115—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 10 gunthas	Per acre	For 2 acres and 10 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Seed-cotton	962	427.55	134 5 3	59 11 3	Sold on the spot at Rs. 13-6-6 per maund of 96 lbs.
Til	7	3.11	1 0 0	0 7 1	Valued at 7 lbs. per rupee.
Tur	45	20.0	3 0 0	1 5 4	Valued at 15 lbs. per rupee.
Bhoos of tur	....	....	0 4 0	0 1 9	Estimated value.
Total..	....	....	138 9 3	61 9 5	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e.col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 2 acres and 10 gunthas	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	61 9 5	51 11 3	15 10 8	+ 9 14 2	+ 25 8 10

STATEMENT No. 116

GROUNDNUT—1 acre 20 gunthas in 1928-29

PLOT No. (3)

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
Harrowing	--	--	1.5	0.75	--	--	--	2.25	1.5	---	---	One harrowing was given. The plot had already received one harrowing when cotton stalks of the previous crop were removed.
2. Seeds and sowing												
(a) Seeds	--	--	--	--	--	--	--	--	--	16 0 0	10 10 8	For the plot 112 lbs. of groundnut seed.
(b) Sowing and covering ..	1	10	4.0	2.00	--	3	--	13.5	9.0	0 12 0	0 8 0	Three women paid at annas four each.
3. After-care and tillage												
(a) Weeding	--	--	--	0.5	--	7	--	4.0	2.66	1 12 0	1 2 8	One weeding was given. 7 women paid at annas four each.
(b) Interculturing	--	--	3.0	1.5	1.5	--	--	6.0	4.0	0 12 0	0 8 0	Two hoeings were given. A set of hoes required two men and two bullocks. 1.5 men paid at annas eight each.

ASODA (A)

539

STATEMENT No. 116—concl'd.

640

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting and preparing for the market	4	--	8·0	8·0	--	37	--	38·5	25·66	Rs. a. p. 30 0 0	Rs. a. p. 20 0 0	Thirty-seven women were paid Rs. 30 on piece-work basis. The total annual cost, on account of <i>saldar</i> , is charged in proportion to the labour units required for this crop. The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
5. <i>Saldar</i>	--	--	--	--	--	--	--	--	--	13 13 9	9 3 10	
6. Charges for bullock labour.	--	--	--	--	--	--	--	--	--	11 10 5	7 12 3	
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc. 9 6 4												
(b) Interest on the value of bullocks, feeds and fodder .. 2 4 1												
7. Charges for implements and tools	--	--	--	--	--	--	--	--	--	1 11 4	1 2 3	
Rs. a. p.												
(a) Depreciation 0 12 5												
(b) Interest .. 0 14 11												
8. Interest on fluid capital (i.e., wages for hired labour and price of seeds)...	--	--	--	--	--	--	--	--	--	2 0 6	1 5 8	
9. Rent of land	--	--	--	--	--	--	--	--	--	20 13 4	13 14 3	
Total	5	10	16·5	12·75	1·5	47	--	64·25	42·82	99 5 4	66 3 7	

¹Family labour not charged.²Home bullock labour charged under item 6.³Wages of *saldar* charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 20 gunthas	Per acre	For 1 acre and 20 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Groundnut pods....	3,120	2,080	190 2 0	126 12 0	Sold at Rs. 14-10-0 per <i>palla</i> of 240 lbs.
Vines	1,600	1,067	20 0 0	13 5 4	Valued at about 80 lbs. per rupee.
Total..	....	....	210 2 0	140 1 4	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 20 gunthas.	210 2 0	99 5 4	(a) 17 7 6 (b) 5 3 6	+ 110 12 8	+ 133. 7 8
Per acre ..	140 1 4	66 3 7	15 2 0	+ 73 13 9	+ 88 15 9

ASODA (A)

541

STATEMENT No. 117

JOWAR—5 acres 9 gunthas in 1928-29

PLOT No. 4

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Saidar ³					For the plot	Per acre	
				Men	Women	Bullocks						Rs. a. p.	Rs. a. p.
1. Preparatory tillage											
(a) Harrowing .....	..	..	7.5	3.75	..	..	11.25	2.15	....	....	Two harrowings were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	3 9 0	0 10 10	For the plot 17.5 lbs. of <i>jowar</i> (Rs. 0-15-0) and 40 lbs. of <i>udid</i> and 2 lbs. of <i>mug</i> (Rs. 2-10-0).
(b) Sowing and covering ..	2	..	4.0	2.0	..	2	9.0	1.72	0 8 0	0 1 6	Two women paid at annas 4 each.
3. After-care and tillage											
(a) Weeding .....	..	..	..	1.25	..	20	11.25	2.15	5 0 0	0 15 4	One weeding was given. It required 20 women and 1.25 men. 20 women paid at annas 4 each.
(b) Interculturing .....	..	..	9.0	4.5	4.5	..	18.0	3.45	2 4 0	0 6 11	Hired men paid at annas 8 each.
4. Harvesting, tying bundles, breaking earheads, thrashing and preparing for market	2	..	8.0	12.0	14.0	42	57.0	10.91	18 12 0	3 9 5	For <i>udid</i> harvest 29 women, for <i>mug</i> harvest one woman. The remaining were required for <i>jowar</i> harvesting. 29 women paid in kind (<i>udid</i> worth Rs. 9), 13 women at annas 4 each, 4 men at annas 6 and 10 men at annas 8 each.

STATEMENT No. 117—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 5 acres and 9 gunthas	Per acre	For 5 acres and 9 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	2,016	385·83	108 0 0	20 10 9	Valued at Rs. 36 per <i>map</i> of 672 lbs.
Udid	576	110·24	36 0 0	6 14 3	Valued at 16 lbs. per rupee.
Mug.....	48	9·19	3 0 0	0 9 2	Valued at 16 lbs. per rupee.
Kadbi (500 bundles).	3,000	574·16	40 0 0	7 10 6	Estimated value.
Bhoos ....	....	....	12 8 0	2 6 3	Estimated value.
Total..	....	....	199 8 0	38 2 11	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assesment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 5 acres and 9 gunthas	199 8 0	152 15 6	(a) 61 2 6 (b) 6 14 1	+46 8 6	+114 9 1
Per acre ..	38 2 11	29 4 4	13 0 3	+8 14 7	+ 21 14 10

STATEMENT No. 118

JOWAR—1 acre 9₂ gunthas in 1928-29

PLOT No. (5)

Previous crop—Cotton, 1927-28

(a) Cost of Production

MO-1 BK Q 84-35

ITEM OF EXPENDITURE	Home labour			Saldar ^s	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing	4	2'0	..	..	..	6'0	4'80	..	..	Four harrowings were given.
2. Seeds and sowing												
(a) Seeds	1 5 0	1 1 2	For the plot 10 lbs. of <i>jowar</i> seed and 12 lbs. of <i>udid</i> seed.
(b) Sowing and covering	2	1'0	..	1	..	3'5	2'85	0 4 0	0 8 8	One woman was paid annas 4.
3. After-care and tillage												
(a) Interculturing	4	2'0	2	..	..	8'0	6'58	1 0 0	0 13 1	Two hoeings were given. A set of hoes required two men and two bullocks. Two men paid at annas 8 each.
4. Harvesting, tying, breaking earheads, thrashing and preparing for market	7	7'75	1	26	..	28'75	23'47	4 6 0	3 9 2	Twenty-four women for <i>udid</i> harvesting, rest of the labour for harvesting, thrashing and carting <i>jowar</i> and <i>udid</i> . Women were paid in kind produce worth Rs. 4. The man was paid annas 6.

ASODA (A)

545

STATEMENT No. 118—concl'd.

546

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ³		Men	Women	Bullocks			For the plot	Per acre	
5. Removing <i>jowar</i> stubbles	--	--	--	1.5	--	3	--	3.0	2.45	Rs. a. p. 0 9 0	Rs. a. p. 0 7 4	Three women were paid at annas 8 each. The annual wage of <i>saldar</i> is charged in proportion to the labour required for different plots. The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them. The total annual charges are distributed over different plots, in proportion to the bullock labour used on the plots. Charged at 12 per cent per annum. The land was owned.
6. <i>Saldar</i>	--	--	--	--	--	--	--	--	--	15 7 10	12 10 4	
7. Charges for bullock labour	--	--	--	--	--	--	--	--	--	12 0 3	9 12 11	
Rs. a. p.												
(a) Feeds, fodder, depreciation etc.										9 11 0		
(b) Interest on the value of bullocks, feeds and fodder										2 5 3		
8. Charges for implements and tools	--	--	--	--	--	--	--	--	--	1 12 2	1 7 0	
Rs. a. p.												
(a) Depreciation										0 12 10		
(b) Interest										0 15 4		
9. Interest on fluid capital (i.e., wages for hired labour and price of seeds)	--	--	--	--	--	--	--	--	--	0 6 3	0 5 1	
10. Rent of land.....	--	--	--	--	--	--	--	--	--	30 0 0	24 7 10	
Total.....	--	--	17	14.25	8	30	--	49.25	40.20	67 2 6	54 13 2	

¹Family labour not charged.²Home bullock labour charged under item 7.³Wages of *saldar* charged under item 6.

FARM STUDIES

(b) Yield and Value.

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 9 gunthas	Per acre	For 1 acre and 9 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	336	274.28	18 0 0	14 11 1	Valued at Rs. 36 per map of 672 lbs.
Udid	96	78.36	6 0 0	4 14 4	Valued at 16 lbs. per rupee.
Kadbi (150 bundles).	900	734.69	12 0 0	9 12 9	Valued at Rs. 8 per 100 bundles.
Bhoos F.....	..	..	3 12 0	3 1 0	Estimated value.
Total..	..	..	39 12 0	32 7 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 9 gunthas.	39 12 0	67 2 6	(a) 27 8 3 (b) 3 10 10	- 27 6 6	+ 3 12 7
Per acre ..	32 7 2	54 13 2	25 7 5	- 22 6 0	+ 3 1 5

STATEMENT No. 119

JOWAR—2 acres 1 guntha in 1928-29

PLOT No. (6)

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldars	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing	4	2·0	..	..	..	6·0	2·97	---	---	Three harrowings were given.
2. Seeds and sowing												
(a) Seeds	2 12 0	1 5 9	For the plot 14 lbs. of <i>jowar</i> (Rs. 0-12-0) and 52 lbs. of <i>uadi</i> (Rs. 2-0-0). This plot was sown twice as first sowing failed.
(b) Sowing and covering	4	2·0	..	2	..	7·0	3·45	0 8 0	0 3 11	Two women paid at annas four each.
3. After-care and tillage												
(a) Interculturing	4	2·0	2	..	..	8·0	3·95	1 0 0	0 7 11	Two hoeings were given. A set of hoes required two men and two bullocks. Two men paid at eight annas each.

4. Harvesting, tying, breaking earheads, thrashing and preparing for market	2	--	7	11.25	2	3	--	23.75	11.74	2 12 0	1 5 9	One man and three women were paid in kind (value Rs:2-2-0). The other man was paid annas ten.	
5. Removing <i>jowar</i> stubbles ..	--	--	8	4.5	--	4	--	14.5	7.16	0 12 0	0 5 11	Four women paid annas three each.	
6. <i>Saldar</i>	--	--	--	--	--	--	--	--	--	23 10 3	11 10 8	Annual wage of <i>sataar</i> is charged in proportion to the labour required for this crop.	
7. Charges for bullock labour	--	--	--	--	--	--	--	--	--	19 1 2	9 6 9	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
Rs. s. p.													
(a) Feeds fodder, depreciation, etc. ....15 6 0													
(b) Interest on the value of bullocks, feeds and fodder 3 11 2													
8. Charges for implements and tools	--	--	--	--	--	--	--	--	--	2 12 9	1 6 1	The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots.	
Rs. s. p.													
(a) Depreciation 1 4 4													
(b) Interest ... 1 8 5													
9. Interest on fluid capital (i.e., wages of hired labour and price of seeds)	--	--	--	--	--	--	--	--	--	0 6 8	0 3 4	Charged at 12 per cent per annum.	
10. Rent of land	--	--	--	--	--	--	--	--	--	45 0 0	22 3 7	The land was owned.	
Total	2	--	27	21.75	4	9	--	59.25	29.27	98 10 10	48 11 8		

¹Family labour not charged.

²Home bullock labour charged under item 7.

³Wages of *saldar* charged under item 6.

STATEMENT No. 119—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 1 guntha	Per acre	For 2 acres and 1 guntha	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	504	248.89	27 0 0	13 5 4	Valued at Rs. 36 per map of 672 lbs.
Udid	144	71.11	9 0 0	4 7 2	Valued at 16 lbs. per rupee.
Kadbi (350 bundles)	2,100	1,037.03	28 0 0	13 13 3	Valued at Rs. 8 per 100 bundles.
Bhoos ....	..	..	8 12 0	4 5 1	Estimated value.
Total ..	..	..	72 12 0	35 14 10	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 1 guntha..	72 12 0	98 10 10	(a) 41 13 9 (b) 5 10 3	-25 14 10	+21 9 2
Per acre ..	35 14 10	48 11 8	23 7 4	-12 12 10	+10 10 6

STATEMENT No. 120

WHEAT—1 acre 20 gunthas in 1928-29

, PLOT No. (7)

*Previous crop—Cotton, 1927-28**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Saldar ^s	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ^s		Men	Women	Bullocks			For the plot	Per acre	
										Rs. s. p.	Rs. s. p.	
1. Preparatory tillage												
(a) Harrowing, levelling	12·5	6·25	..	..	..	18·75	12·5	...	...	Ten operations were given.
2. Manure and manuring	15 12 0	10 8 0	During the previous year 15 cart-loads of farmyard manure at Rs. 8 each were given to this area; 85 per cent of this is charged.
3. Seeds and sowing												
(a) Seeds	10 0 0	6 10 8	For the plot 128 lbs. of wheat seed.
(b) Sowing and covering	2·0	1·0	..	..	..	3·0	2·0	...	...
4. Harvesting, thrashing and preparing for market	7·0	18·0	1	8	..	28·0	18·66	2 8 0	1 10 8	One man was paid annas eight. Eight women paid at annas four each.

ASODA (A)

551

STATEMENT No. 120—concl'd.

552

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
5. Saldar	Rs. a. p. 25 4 4	Rs. a. p. 16 13 7	Annual wage of <i>saldar</i> is charged in proportion to the units used on the crop. The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
6. Charges for bullock labour	15 2 11	10 1 11	
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.										12 3 11		
(b) Interest on the value of bullocks, feeds and fodder....										2 15 0		
7. Charges for implements and tools	2 3 7	1 7 9	The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots.
Rs. a. p.												
(a) Depreciation ..										1 0 2		
(b) Interest ..										1 3 5		
8. Interest on fixed capital (i.e., wages for hired labour and price of seeds and manure)	0 14 3	0 9 6	Charged at 12 per cent per annum. The land was owned.
9. Rent of land	37 8 0	25 0 0	
Total	21.5	23.25	1	8	..	49.75	33.16	109 5 1	72 14 1	

¹Family labour not charged.

²Home bullock labour charged under item 6.

³Wages of *saldar* charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 20 gunthas	Per acre	For 1 acre and 20 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat ..	1,344	896	94 8 0	63 0 0	Sold at Rs. 54 per <i>map</i> of 768 lbs.
Straw and <i>bhoos</i> ..	1,000	666·66	20 0 0	13 5 4	Valued at 50 lbs. per rupee.
Total ..	..	..	114 8 0	76 5 4	

(c) Summary

1	2	3	4	5 (i.e.col. 2-3)	6 (i.e.col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1·5 acres ..	114 8 0	109 5 1	(a) 30 6 10 (b) 5 0 8	+5 2 11	+40 10 5
Per acre ..	76 5 4	72 14 1	23 10 4	+3 7 3	+27 1 7

ASODA (A)

553

STATEMENT No. 121

WHEAT—1 acre 30 gunthas in 1928-29

PLOT No. (8)

*Previous crop—Cotton, 1927-28**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Saldars	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing	18·0	9·0	..	..	..	27	15·48	....	....	Several harrowings were given.
2. Manure and manuring	18 6 0	10 8 0	During the previous year 17·5 cart-loads of farmyard manure at Rs. 3 per cart were given; 35 per cent of the cost is charged.
3. Seeds and sowing												
(a) Seeds	9 0 0	5 2 3	For the plot 96 lbs. of wheat seed.
(b) Sowing and covering	2·5	1·25	1·25	..	..	5	2·86	0 10 0	0 5 0	1·25 men paid at annas eight each.
4. Harvesting, thrashing and preparing for market	2·0	2·0	1·0	8·0	..	9	5·14	2 8 0	1 6 10	One man was paid at 8 annas and 8 women at annas four each.

5. <i>Saldar</i> .. .. .	..	..	..	..	..	..	..	..	..	13 5 1	7 9 9	The wages of <i>saldar</i> are distributed in proportion to the labour units required for this crop.
6. Charges for bullock labour .. .	..	..	..	..	..	..	..	..	..	15 14 8	9 1 8	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
	Rs. a. p.											
(a) Feeds, fodder, depreciation, etc. .. 12 13 0												
(b) Interest on the value of bullocks, feeds and fodder .. 8 1 8												
7. Charges for implements and tools .. .	..	..	..	..	..	..	..	..	..	2 5 4	1 5 4	The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots.
	Rs. a. p.											
(a) Depreciation 1 1 0												
(b) Interest .. 1 4 4												
8. Interest on fixed capital (i.e., wages for hired labour and price of seeds and manure) .. .	..	..	..	..	..	..	..	..	..	0 18 0	0 7 6	Charged at 12 per cent per annum.
9. Rent of land .. .	..	..	..	..	..	..	..	..	..	43 12 0	25 0 0	The land was owned.
Total .. .	..	..	22 5	12 25	2 25	8 0	..	41	23 43	106 9 8	60 14 8	

¹Family labour not charged.

²Home bullock labour charged under item 6.

³Wages of *saldar* charged under item 5.

ASODA (A)

555

STATEMENT No. 121—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 30 gunthas	Per acre	For 1 acre and 30 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat ..	352	201.14	24 12 0	14 2 3	Sold at Rs. 54 per <i>map</i> of 768 lbs.
Straw and <i>bhoos</i> ..	250	142.86	5 0 0	2 13 9	Valued at 50 lbs. per rupee.
Total..	..	..	29 12 0	17 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 1.75 acres ..	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
..	29 12 0	106 9 8	(a) 35 7 11 (b) 7 2 7	-76 13 8	-36 3 2
Per acre ..	17 0 0	60 14 8	23 3 9	-43 14 8	-20 10 11

STATEMENT No. 122

GRAM—30 gunthas in 1928-29

PLOT No. (9)

*Previous crop—Cotton, 1927-28**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Saldars ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing	8·0	4·00	..	..	..	12	16·0	....	....	Several harrowings were given.
2. Manure and manuring	7 14 0	10 8 0	During the previous year 7·5 cart-loads of farmyard manure at Rs. 3 per cart were given to the plot; 86 per cent of this manure cost is charged to this plot.
3. Seeds and sowing												
(a) Seeds	2 8 0	3 5 4	For the plot 32 lbs. of gram seed.
(b) Sowing and covering	1·5	0·75	0·75	..	..	3	4·0	0 6 0	0 8 0	Man unit paid at annas eight.
4. Harvesting and preparing for market.	1·0	3·0	..	2	..	5	6·66	0 8 0	0 10 8	Two women paid at annas four each.

ASODA (A)

557

STATEMENT No. 122—concl.

558

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
5. Saldar	--	--	8 6 9	11 8 8	Annual wages of <i>saldar</i> are distributed in proportion to labour units used on the plots. The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
6. Charges for bullock labour ..	--	--	--	7 6 8	9 14 2		
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc. ..			5 15 7									
(b) Interest on the value of bullocks, feeds and fodder ..			1 7 1									
7. Charges for implements and tools	--	--	1 1 5	1 7 8		The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots.
Rs. a. p.												
(a) Depreciation ..			0 7 11									
(b) Interest ..			0 9 6									
8. Interest on fixed capital (i.e., wages of hired labour, price of seeds and manure) ..	--	--	0 3 8	0 4 11	Charged at 12 per cent per annum.	
9. Rent of land	--	--	18 12 0	25 0 0	The land was owned.	
Total	--	--	10·5	7·75	0·75	2	..	20	26·68	47 2 0	62 14 0	

¹Family labour not charged. ²Home bullock labour charged under item 6. ³Wages of *saldar* charged under item 5.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 30 gunthas	Per acre	For 30 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	255	340	15 0 0	20 0 0	Valued at 17 lbs. per rupee.
Bhoos ....	..	..	3 0 0	4 0 0	Estimated value.
Total..	..	..	18 0 0	24 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 30 gunthas	18 0 0	47 2 6	(a) 15 3 5 (b) 2 4 3	-29 2 6	-11 10 10
Per acre.....	24 0 0	62 14 0	23 4 11	-38 14 0	-15 9 1

ASODA (A)

ASODA (PART B), 1929-30

General information about the village, distribution of land, crops and cropping have already been given in part (A) and, therefore, table Nos. I to V are not repeated. In fact this study was the continuation of the investigation started in 1928-29.

THE SEASON, 1929-30

The season was very unfavourable, especially for *rabi* crops. *Kharif* rains started in time early in June but they were not sufficient for sowing. The heavy showers in the second fortnight of June, however, were very helpful for sowing. The total rainfall during the year was only 18·96 inches or about one-third less than the average of the place. Rains for *rabi* sowing were insufficient and the area set apart for *rabi* crops remained fallow as will be seen from table V part (A). Fortnightly distribution of rainfall during the year (1929) is given in table No. VI.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL
IN 1929 (ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
						First fortnight						
0·0	0·0	0·0	0·0	0·0	0·90	4·62	0·73	0·36	0·86	0·0	0·0	} 18·96
					Second fortnight							
0·0	0·0	0·0	0·41	0·0	8·68	0·74	0·45	1·21	0·0	0·0	0·0	

The table shows that about half the rainfall was received in the second fortnight of June alone. The period of the rainy season was unusually short, most of the rain falling within a month, i.e., the second fortnight of June and the first fortnight of July. *Kharif* crops in the heavy soils could hold on, but those of lighter class of soils suffered for want of moisture.

The crop estimate of the *kharif* and *rabi* crops of Asoda by the Revenue Department for the year was 8 and 6 *annas* respectively.

In addition to 23 acres and 35 *gunthas* of his own land, the farmer had leased 4 acres of land in the year. The opening and closing inventories of the property are given on page 521.

THE FARMER

(a) *Human labour*.—As in the previous year, the farmer had nine members in the family. The services of the *saldar* were retained. The adult workers were four—the farmer, his two wives and the *saldar*.

The monthly distribution of the available and the utilized labour of these four persons, from June 1929 to February 1930, is given in table No. VII.

TABLE VII—SPREAD AND UTILIZATION OF LABOUR

Working members and <i>saldar</i>	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Total	Percentage of the labour employed to the labour available
Four persons.....	$\frac{24}{120}$	$\frac{26}{124}$	$\frac{25}{124}$	$\frac{18}{120}$	$\frac{26}{124}$	$\frac{30}{120}$	$\frac{26}{124}$	$\frac{28}{124}$	$\frac{23}{112}$	$\frac{226}{1,092}$	20·7

Note.—The denominators show the available labour, while the numerators show labour employed for farm work.

Neither the farmer nor his two wives did much manual labour on the farm. Household work and supervision are not shown in the distribution of labour in the above table.

The *saldar* got Rs. 220 a year. Besides, the farmer had also to engage labour on daily wages and on piece-work at the time of weeding, inter-culturing and harvesting. Twenty-seven man units and 233 woman units were employed on daily wages, costing Rs. 74-11-0. In addition, Rs. 91-14-0 were spent on contract labour. Thus the total cost to the farm on account of hired labour was Rs. 386-9-0.

(b) *Bullock labour.*—The farmer had two bullocks. Monthly distribution of their work, from June 1929 to February 1930, is given in table No. VIII.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Total	Percentage of the labour employed to the labour available
Two bullocks....	$\frac{44}{60}$	$\frac{32}{62}$	$\frac{22}{62}$	$\frac{10}{60}$	$\frac{16}{62}$	$\frac{18}{60}$	$\frac{52}{62}$	$\frac{48}{62}$	$\frac{40}{56}$	$\frac{282}{546}$	51·65

Note.—The denominators show the available labour units, while the numerators show labour units employed for farm work.

Bullock labour was well employed in June, July and December, January and February. The area of 27·5 acres was too much for one pair but rather insufficient for two pairs. If the farmer was a worker himself he could have managed much larger area than he did with his two bullocks. Farm organization, therefore, cannot be said to be efficient and economical.

COSTS AND RECEIPTS

Expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost for the total cultivated area (viz., 27 acres and 17 gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses :		
(a) Manure	75 9 7	
(b) Seed	56 0 3	
(c) Outside labour including <i>saldar</i>	386 9 0	
(d) Depreciation on implements and tools ..	7 0 0	
(e) Cost of bullock labour (excluding interest).	112 8 0	
(f) Rent of land taken on lease	58 2 8	
(g) Assessment and local-fund cess on owned land	54 13 6	750 11 0
II. Rent of owned land excluding assessment and local-fund cess	370 2 6	370 2 6
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	17 7 0	
(b) Interest on the value of implements, tools etc.	12 15 4	
(c) Interest on the value of bullocks and of feed and fodder consumed by them	28 10 0	59 0 4
<i>Total cost of production (excluding wages for the family labour)</i>		1,179 13 10

*DETAILS OF OUT-OF-POCKET EXPENSES

1. Manure :	Rs. a. p.	Rs. a. p.
(a) Manure given during the year. Thirty cart-loads of farmyard manure at Rs. 3 per cart given to plot No. 2; only 50 per cent of the cost is charged	45 0 0	
(b) Charges on account of residual manure (i) Plot No. 1 in 1928-29 received 12 cart-loads of farmyard manure at Rs. 3 each; 35 per cent of this manure cost is charged to cotton	12 9 7	
(c) Plot No. 2 in 1927-28 received 40 cart-loads of farmyard manure at Rs. 3 each; 15 per cent of this cost is charged to cotton taken in 1929-30	18 0 0	75 9 7

	Rs. a. p.	Rs. a. p.
2. Seeds :		
(a) Cotton seed (266 lbs.).....	16 10 0	
(b) Groundnut seed (192 lbs.)	28 8 0	
(c) Jowar (25½ lbs.)	1 9 3	
(d) Bajri (19½ lbs.)	2 2 0	
(e) Mixtures :		
	Rs. a. p.	
Tur, 9½ lbs.	1 3 6	
Jowar, 1 lb.	0 1 0	
Udid, 41 lbs.	5 2 0	
Mug, 2½ lbs.	0 4 6	
Malki, 3½ lbs.	0 7 6	
Vari.....	0 0 6	
	7 3 0	
		56 0 3
3. Wages of outside labour :		
(a) Saldar	220 0 0	
(b) Cotton ; (16 men and 148 women)	43 2 9	
(c) Groundnut ; (1½ men and 37 women)	12 9 9	
(d) Jowar ; (6½ men, 48 women).....	14 6 6	
(e) Bajri ; (3 men)	1 8 0	
(f) Cotton ; (contract labour)	40 10 6	
(g) Groundnut ; (contract labour)	25 2 6	
(h) Jowar ; (contract labour)	19 1 0	
(i) Bajri ; (contract labour)	7 0 0	
(j) Watching charges (plot Nos. 2 and 7)	3 0 0	
	386 9 0	
4. Depreciation on implements and tools :		
Opening inventory	108 0 0	
Closing inventory	101 0 0	
	7 0 0	
5. Bullock labour cost (excluding interest) :		
	Rs. a. p.	
(a) Depreciation on two bullocks :		
Opening inventory	140 0 0	
Closing inventory	120 0 0	
	20 0 0	
(b) Death allowance on Rs. 140 (the value of two bullocks) at 5 per cent	7 0 0	
(c) Charges on account of housing at Rs. 4 per bullock per year	8 0 0	
	Rs. a. p.	
(d) Feed and fodder :		
Fodder	50 8 0	
Feeds	48 0 0	
	98 8 0	
From the above costs (a) to (d) Rs. 21 have to be deducted for 7 cart-loads of farm-yard manure	21 0 0	
	112 8 0	
6. Rent of leased land :		
Rent of 4 acres of land taken on lease	58 2 8	
	58 2 8	

7. *Assessment and local-fund cess on owned land :*

	A. g.	Rs. a. p.	Rs. a. p.
Field No. 1	7 14	10 3 0	
Field No. 2	8 39	20 2 8	
Field No. 3	4 0	18 13 10	
Field No. 4	2 1	3 2 3	
Field No. 5	1 21	2 7 9	
	23 35		54 13 6
<i>Total out-of-pocket expenses</i>			750 11 0

Family Labour Income.—Table No. XI gives the family labour income earned by the farm family, excluding the permanent servant. The figures of cost of production have already appeared above. The value of produce is taken from the cost and receipt statements of the various plots (pp. 567 to 594).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production (excluding wages for family labour)				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total	27 17	1,062 2 8	750 11 0	59 0 4	370 2 6	1,179 13 10	-117 11 2
Cotton	14 26	530 6 8	461 3 6	42 10 10	185 15 6	689 13 10	-159 7 2
Jowar	6 35	192 4 0	119 0 1	6 4 8	84 3 8	209 8 5	-17 4 5
Bajri	2 0	108 0 0	38 12 4	2 7 8	30 9 4	71 13 4	+36 2 8
Groundnut	3 26	231 8 0	131 11 1	7 9 2	69 6 0	208 10 3	+22 13 9

Column 4.—Out-of-pocket expenses include cost of manure, seed, hired labour, depreciation on dead-stock and work animals, cost of feed and fodder consumed by work animals, the cost of their housing and death allowance, rent of owned land and local-fund cess. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on feed, fodder for the work animals and also money spent on the current agricultural operations. Fixed capital includes value of implements and work animals. *Column 6* shows the estimated value of owned land minus the assessment and local-fund cess. *Column 8* shows the remuneration earned by the farmer for his supervision work.

The value of the gross produce obtained from the farm was Rs. 1,062-2-8, while the cost of production excluding the remuneration of the farmer for the general supervision came to Rs. 1,179-13-10. The farm family thus suffered a loss of Rs. 117-11-2. As in the previous

year the farmer and his two wives did not do any field work themselves and a comparatively larger sum of Rs. 386-9-0 had to be expended on outside labour. Had the family worked more on the farm they could have saved a greater part of this cost. They could easily have dispensed with the services of the *saldar* and saved Rs. 220. The farm family in that case could have made some labour income.

Farm Business Income.—The rent of owned land and the interest on working capital, which are charged as costs in the above table were, however, saved to the farmer. Table No. XII gives the farm business income i.e., the value of the produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area		Value of produce		Out-of-pocket expenses		Farm business income	
	A.	g.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.
Total	27	17	1,062	2 8	750	11 0	+311	7 8
Cotton	14	26	530	6 8	750	11 0	+311	7 8
Jowar	6	35	192	4 0				
Bajri	2	0	108	0 0				
Groundnut	3	36	231	8 0				

Thus the total out-of-pocket expenses were Rs. 750-11-0, while the value of the gross produce was Rs. 1,062-2-8. The farm business income or the aggregate income of the farmer was therefore Rs. 311-7-8.

The spare house of the farmer shown in the inventory brought him in the course of the year a sum of Rs. 78 as rent. The total income of the farmer was therefore Rs. 389-7-8.

ANALYSIS

The farmer and his wife did not contribute much labour. Naturally they could not make any labour income or profit. On the other hand they lost Rs. 117-11-2. Deducting only the out-of-pocket expenses from the gross produce they, however, made Rs. 311-7-8 as farm business income.

Table No. XIII shows the yields of the main produce and the labour units required per acre and the general remarks on crop condition. All labour, including home labour is included in the units shown in the table (one man unit=one bullock unit=two woman units).

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of produce	Quantity lbs.		
1	Cotton, <i>jowar</i> and <i>tur</i>	270.08	32.63	Of the three plots only the second plot was manured and it gave good yield. Plot No. 1 moreover had cotton after cotton while plot No. 3 had coriander before cotton. Plot Nos. 1, 2 and 3 include 4, 9.5 and 5.4 units respectively for contract payment. Of the three plots No. 5 which was taken on lease was long neglected and its yield was poor. Plot No. 4 received manure and ploughing and it gave better yield than plot No. 6. Ploughing of plot No. 4 increased labour. Plot Nos. 4, 5 and 6 include 23.6, 9.2 and 10.5 units respectively for contract payment. Yield of both the plots was low. Plot No. 8 like plot No. 5 was leased. It was neglected by its owner. Plot Nos. 7 and 8 include 6 and 3.7 units respectively for contract payment. Outturn was good as the plot had received good cultivation in previous years. Includes 7 units for contract payment.
2	Seed cotton	550.00	37.87	
3	Do.	286.56	35.84	
4	Groundnut	1,959.18	59.11	
5	Do.	553.84	33.04	
6	Do.	1,007.4	25.19	
7	<i>Jowar</i> and <i>udid</i>	275.38	18.6	
8	<i>Jowar</i> , <i>udid</i> and <i>mug</i>	195.8	22.8	
9	<i>Bajri</i> and <i>vari</i>	560.0	24.25	

GENERAL REMARKS ABOUT THE CROPS AND THE PLOTS

Crops.—Plot No. 2 under cotton, plot No. 4 under groundnut and No. 9 under *bajri* gave good outturns and yielded net returns for family labour. The groundnut crop left the highest income as in the previous year. *Jowar* crop gave a poor yield chiefly because of the insufficiency of rainfall at the time of maturing.

Cotton.—There were three plots of cotton and the average yield obtained was about 343 lbs. per acre. The soil of plot Nos. 1 and 3 was of medium quality but the crop did not receive manure during the year. Only a part ($2\frac{1}{4}$ acres of plot No. 1) was manured with farmyard manure in 1928-29. The crop in the manured portion was decidedly better. Plot No. 2 was more fertile, and, moreover, received manure in 1927-28 and again in 1929-30. The crop was naturally better and gave good yield of 550 lbs. of seed cotton per acre.

Groundnut.—There were three groundnut plots; all of them left good income to the farmer. It may be noted that plot No. 4 which received manure gave heavy outturn. During the two years of the study it was found that groundnut crop usually left better income and the cultivators were not slow to appreciate the fact, as is revealed by the increased area under the crop.

Jowar.—*Jowar* gave a very poor yield due to the insufficiency of rainfall in the month of August. There were two plots under *jowar*. One of them gave 275 lbs. of grains per acre, while the other yielded only 195 lbs. per acre which yield was much below the average obtained in the Jalgaon tract. The leased plot (No. 8) was neglected by its owner for many years.

Bajri.—There was only one plot and the yield of 560 lbs. per acre was not bad when the nature of season is taken into account.

Statements showing the costs and receipts of these different plots are as follows.

STATEMENT No. 123

COTTON—8 acres 39 gunthas in 1929-30
Previous crop—Groundnut in 1928-29

PLOT No. (1)
 (a) *Cost of Production*

ITEM OF EXPENDITURE	Homelabour			Saldar ^s	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage										Rs. a. p.	Rs. a. p.	
(a) Ploughing	42	21·0	..	..	..	68·0	7·02	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	40	20·0	..	..	..	60·0	6·69	....	....	Five harrowings were given. A harrow required one man and two bullocks.
(c) Removing stubbles, etc.	3·0	..	6	..	6·0	0·66	1 2 0	0 2 0	Outside woman labour paid at 8 annas each.
2. Manure and manuring												
(a) Charges for residual manure	12 9 7	1 6 6	In the year 1928-29, 12 carts of farmyard manure at Rs. 8 each were given to this plot; 85 per cent of the cost is charged to this crop on account of the residue.
3. Seeds and sowing												
(a) Seeds	10 13 0	1 3 7	For the whole plot 160 lbs. of cotton seed (Rs. 10), 6 lbs. of tur (Rs. 0·12·0) and 1 lb. of <i>javara</i> seed (Rs. 0·1·0).
(b) Sowing and covering	4	2·0	..	6	..	9·0	1·00	1 8 0	0 2 8	Six women paid at 4 annas each.
4. After-care and tillage												
(a) Weeding	2·0	..	95	..	49·5	5·52	23 4 0	2 9 6	1st and 2nd weedings required 41 and 22 women respectively; they were paid at 4 annas each. For the 3rd weeding 23 women were required and they were paid Rs. 5-8-0. For the 4th weeding nine women were paid Rs. 2 only.
(b) Interculturing	8	4·0	4	..	..	16·0	1·78	2 0 0	0 3 6	Only one interculturing was given. A set of hoes required 2 men and 2 bullocks. Man labour on daily wage paid at 8 annas.

ASODA (B)

567

STATEMENT No. 123—concl'd.

568

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family-labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
5. Harvesting and preparing for the market												
(a) For cotton .....	..	..	..	..	..	..	..	..	..	18 1 9	2 0 0	Cotton picking was done by contract. First picking gave 1,089 lbs. (wages Rs. 8-0-6), second picking 820 lbs. (Rs. 6-6-0), third picking 385 lbs. (wages Rs. 3-11-3). Man on daily wages was paid at 8 annas.
(b) For mixed crops .....	..	..	..	1.5	1	..	2.5	0.28	0 8 0	0 0 11		
6. Removing cotton stubbles	..	..	34	17.0	..	..	51.0	5.68	..	..	..	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
7. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	81 11 10	9 1 8		
8. Charges for bullock labour	..	..	..	..	..	..	..	..	..	58 7 5	6 8 3	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.	46 9 8											The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots.
(b) Interest on the value of bullocks and of feeds, fodder	11 13 9											
9. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	8 4 4	0 14 9	The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots.
Rs. a. p.												
(a) Depreciation	2 14 5											Charged at 12 per cent per annum. The land was owned.
(b) Interest	5 5 11											
10. Interest on fluid capital (i.e., wages for hired labour and price of seeds and manure) .....	..	..	..	..	..	..	..	..	..	4 9 0	0 8 1	
11. Rent of land .....	..	..	..	..	..	..	..	..	..	125 0 0	13 14 10	
Total .....	..	..	128	70.5	5	107	..	257.0	28.63	347 14 11	38 12 3	

¹Family labour not charged.²Home bullock labour charged under item 8.³*Saldar* charged under item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 8 acres and 39 gunthas	Per acre	For 8 acres and 39 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Seed-cotton	2,304	256.71	240 0 0	26 11 10	Sold at Rs. 10 per maund of 96 lbs. Valued at 18½ lbs. per rupee. Valued at 15 lbs. per rupee. Valued at village rates. Valued at Rs. 6 per 100 bundles.
Jowar	56	6.24	3 0 0	0 5 5	
Tur	64	7.13	4 8 0	0 8 0	
Chaff .....	..	....	2 4 0	0 4 0
Jowar fodder (kadbi) 25 bundles ..	200	22.28	1 8 0	0 2 9	
Total	251 4 0	28 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 8 acres and 39 gunthas.	251 4 0	347 14 11	(a) 104 13 4 (b) 21 12 8	-96 10 11	+29 15 1
Per acre ..	28 0 0	38 12 3	14 1 8	-10 12 3	+3 5 5

ASODA (B)

STATEMENT No. 124

COTTON—4 acres in 1929-30

PLOT No. (2)

Previous crop—Wheat and Gram in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ^a	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing	12	6	..	..	..	18·0	4·5	....	....	Three harrowings were given. A harrow required 1 man and 2 bullocks.
2. Manure												
(a) Farmyard manure	45 0 0	11 4 0	Thirty carts of farmyard manure at Rs. 3 each were given to the plot; only 50 per cent of the cost is charged to this crop.
(b) Carrying manure and spreading	8	5	..	..	..	18·0	3·25	....	....	In 1927-28, forty carts of farmyard manure at Rs. 3 each were given to this plot; 15 per cent of the cost is charged to this crop.
(c) Charges for residual manure	18 0 0	4 8 0	
3. Seeds and sowing												
(a) Seeds	5 6 0	1 5 6	For the plot 80 lbs. of cotton seed (Rs. 5) and 3 lbs. of tur seed (6 annas).
(b) Sowing and covering	2	1	3	..	..	6·0	1·5	1 8 0	0 6 0	Outside man labour is charged at 8 annas per man.

4. After-care and tillage												
(a) Weeding	--	--	--	--	--	19	--	9.5	2.87	4 4 0	1 1 0	Two weedings were given. 1st weeding required 9 women charged at 4 annas each and 2nd weeding required 10 women who were paid Rs. 2.
(b) Interculturing	--	--	14	7	8	--	--	24.0	6.0	1 8 0	6 6 0	Outside man labour is charged at 8 annas. Five interculturings were given. Three were given with a set of two hoes which required 2 men and 2 bullocks. The remaining two were given with one hoe which required 1 man and two bullocks.
(c) Watching	--	--	--	--	--	--	--	--	--	1 8 0	0 6 0	A man was watching a number of fields including this plot. The farmer paid him Rs. 1-8-0 for watching this field.
5. Harvesting and preparing for the market												
	--	--	--	8	1	--	--	4.0	1.0	18 0 9	4 8 2	Man on daily wage at 8 annas. The <i>saldar</i> helped in carrying cotton which was picked by contract labour. 1st picking gave 1,070 lbs. of cotton (cost of picking Rs. 8-8-9). 2nd picking gave 788 lbs. (cost Rs. 5-12-0). 3rd picking gave 867 lbs. (cost Rs. 8-9-0).
6. Removing stubbles												
	--	--	26	18	--	--	--	89.0	9.75	.....	.....
7. Marketing costs												
	--	--	--	--	--	--	--	--	--	.....	.....	The produce was sold locally.
8. <i>Saldar</i>												
	--	--	--	--	--	--	--	--	--	40 9 4	10 2 4	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.

ASODA (B)

571

STATEMENT No. 124—concl'd.

572

ITEM OF EXPENDITURE.	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
9. Charges for bullock labour	--	--	--	--	--	--	--	--	28 5 1	7 1 3	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
(a) Feeds, fodder, depreciation, etc.												
(b) Interest on the value of bullocks and of feeds, fodder ..												
10. Charges for implements tools, etc.	--	--	--	--	--	--	--	--	4 0 0	1 0 0	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.	
(a) Depreciation ..												
(b) Interest ..												
11. Interest on fixed capital (i.e., wages for hired labour and price of manure)	--	--	--	--	--	--	--	--	8 12 2	2 3 1	Charged at 12 per cent per annum.	
12. Rent of land	--	--	--	--	--	--	--	--	100 0 0	25 0 0	The land was owned.	
Total.....	--	--	62	35	7	19	..	118·5	28·87	276 13 4	69 3 4	

¹Family labour not charged.²Home bullock labour charged under item 9.³Saldar charged under item 8.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4 acres	Per acre	For 4 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Seed-cotton	2,200	550	229 2 8	57 4 8	Sold at Rs. 10 per maund of 96 lbs.
Tur .....	..	..	..	..	Sprinkling of tur failed.
Total..	..	..	229 2 8	57 4 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4 acres	229 2 8	276 13 4	(a) 81 2 2 (b) 17 1 8	-47 10 8	+50 9 2
Per acre ..	57 4 8	69 3 4	24 8 11	-11 14 8	+12 10 3

ASODA (B)

573

STATEMENT No. 125

COTTON—1 acre 27 gunthas in 1929-30

PLOT No. (3)

Previous crop—Coriander in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saidar ^s	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Harrowing	7	3.5	..	..	10.5	6.27	....	....	Three harrowings were given. A harrow required one man and two bullocks.	
(b) Removing stubbles etc.	1	0.5	0.3	0 4 9	0 2 11	The woman was paid 4½ annas.	
2. Seeds and sowing												
(a) Seeds	1 11 6	1 0 5	For the whole plot 28 lbs. of cotton seed (Rs. 1-10-0) and ½ lbs. of tur seed (Rs. 0-1-6) were required.	
(b) Sowing and covering	1	0.5	..	1	2.0	1.19	0 4 0	0 2 5	The woman was paid 4 annas.	
3. After-care and tillage												
(a) Weeding	20	10.0	5.97	5 0 0	2 15 10	Only one weeding was given.	
(b) Interculturing	8	4.0	4	..	16.0	9.55	2 0 0	1 8 2	Man labour on daily wage paid at 8 annas per day. Four interculturings were given.	

4. Harvesting and preparing for market .. .. .	..	..	..	..	..	..	..	..	..	4 8 0	2 11 0	The cotton was picked by contract labour.
5. Removing cotton stubbles .. .. .	..	..	8	4·0	..	..	..	12·0	7·16	....	....
6. <i>Saldar</i> .. .. .	..	..	..	..	..	..	..	..	..	13 14 6	8 4 10	Payment of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
Charges for bullock labour .. .. .	..	..	..	..	..	..	..	..	..	10 15 5	6 8 9	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
<i>Rs. s. p.</i>												
(a) Feeds, fodder, depreciation etc.										8 11 10		
(b) Interest on the value of bullocks, feeds and fodder										2 3 7		
8. Charges for implements and tools .. .. .	..	..	..	..	..	..	..	..	..	1 8 11	0 14 11	The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots.
<i>Rs. s. p.</i>												
(a) Depreciation										0 8 10		
(b) Interest										1 0 1		
9. Interest on fluid capital (i.e., for hired labour and price of seeds) .. .. .	..	..	..	..	..	..	..	..	..	0 8 10	0 5 4	Charged at 12 per cent per annum.
10. Rent of land .. .. .	..	..	..	..	..	..	..	..	..	24 5 8	14 8 8	The land was taken on lease.
Total .. .. .	..	..	24	12·0	4	22	..	51·0	30·44	65 1 7	38 13 10	

¹Family labour not charged.

²Home bullock labour charged under item 7.

³*Saldar* charged under item 6.

ASODA (B)

575

STATEMENT No. 125—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 27 gunthas	Per acre	For 1 acre and 27 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Seed-cotton	480	236.56	50 0 0	29 13 7	Sold locally at Rs. 10 per maund of 96 lbs.
<i>Tur</i> .....	..	..	..	..	Sprinkling of <i>tur</i> failed.
Total....	..	..	50 0 0	29 13 7	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e.col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 27 gunthas.	50 0 0	65 1 7	(b) 3 12 6	-15 1 7	-11 5 1
Per acre ..	29 13 7	38 13 10	2 4 2	-9 0 3	-6 12 1

STATEMENT No. 126

GROUNDNUT—1 acre and 9 gunthas in 1929-30

PLOT No. (4)

Previous crop.—Jowar in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ^s	Labour on daily wages.			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot Per acre.		
										Rs. a. p.	Rs. a. p.	
Preparatory tillage												
(a) Ploughing	7	3.5	..	..	..	10.5	8.59	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	6	3.0	..	..	..	9.0	7.34	....	....	Three harrowings were given. A harrow required one man and two bullocks.
(c) Removing weeds etc.	1.5	..	3	..	3.0	2.45	0 9 0	0 7 5	Woman labour paid at 8 annas each.
Seeds and sowing												
(a) Seeds	12 6 0	10 1 8	For the plot 72 lbs. of groundnut seed.
(b) Sowing and covering	4	2.0	..	2	..	7.0	5.71	0 8 0	0 6 7	Woman labour paid at 4 annas each. The field was not in a workable condition at sowing time and hence more labour was required.
After-care and tillage												
(a) Weeding	12	..	6.0	4.9	3 0 0	2 7 3	Only one weeding was given. Woman labour was paid at 4 annas each.
(b) Interculturing	2	1.0	1	..	..	4.0	3.28	0 8 0	0 6 7	A set of hoes required two men and two bullocks. One interculturing was given. Man labour on daily wage paid at 8 annas.

ASODA (B)

577

STATEMENT No. 126—concl'd.

578

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
4. Harvesting and preparing for the market	4·0	..	..	..	4·0	3·20	14 12 6	12 1 1	The crop was harvested by contract labour.
5. Saldar	17 6 3	14 3 2		Annual payment of saldar is distributed on different plots in proportion to the units used on them.
6. Charges for bullock labour	8 10 10	7 0 10	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation etc. .. 6 14 8												
(b) Interest on the value of bullocks, feeds and fodder given to them. 1 12 2												
7. Charges for implements and tools	1 3 7	1 0 0	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.
(a) Depreciation . 0 6 10												
(b) Interest on value .. 0 12 9												
8. Interest on fluid capital (i.e., wages for hired labour and price of seeds)	1 0 4	0 13 5	Charged at 12 per cent ^{per annum.}
9. Rent of land	30 0 0	24 7 11	The land was owned.
Total	19	15·0	1	17	..	43·5	35·51	90 0 6	73 7 11	

¹Family labour not charged.

²Home bullock labour charged under item 6.

³Saldar charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value *		REMARKS
	For 1 acre and 9 gunthas	Per acre	For 1 acre and 9 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Groundnuts (wet).	2,400	1,959.18	92 8 0	75 8 2	Sold at Rs. 9-4-0 per <i>pulla</i> of 240 lbs.
Fodder, two carts ..	..	..	20 0 0	16 5 2	Valued at Rs. 10 per cart.
Total ..	..	..	112 8 0	91 13 4	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 9 gunthas	112 8 0	90 0 6	(a) 27 8 3 (b) 3 9 3	+22 7 6	+53 9 0
Per acre ..	91 13 4	73 7 11	25 6 2	+18 5 5	+43 11 7

STATEMENT No. 127

GROUNDNUT—26 gunthas in 1929-30

PLOT No. (5)

*Previous crop—Jowar in 1928-29**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Saklar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												
(a) Harrowing	3	1.5	..	..	..	4.5	6.93	....	....	Three harrowings were given. A harrow required one man and two bullocks.
(b) Removing stubbles, etc.	1	..	0.5	0.77	0 4 9	0 7 3	
2. Seeds and sowing												
(a) Seeds	4 2 0	6 5 6	For the whole plot 24 lbs. of groundnut seed.
(b) Sowing and covering	2	1.0	..	1	..	3.5	5.38	0 4 0	0 6 2	Woman was paid 4 annas.
3. After-care and tillage												
(a) Weeding	10	..	5.0	7.69	2 8 0	3 13 6	One weeding required 10 women; paid at 4 annas each.
4. Harvesting and preparing for the market	2.0	..	..	..	2.0	3.07	3 0 0	4 9 10	The crop was harvested by contract labour.

5. Saldar .....	..	..	..	..	..	..	..	..	..	5 8 6	8 0 5	Annual cost of <i>saldar</i> is distributed over different plots in proportion to the units used on them.
6. Charges for bullock labour ..	..	..	..	..	..	..	..	..	..	2 4 6	3 8 2	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc. ....	..	..	..	..	..	..	..	..	..	1 13 1		
(b) Interest on the value of bullocks, feeds and fodder given to them .....	..	..	..	..	..	..	..	..	..	0 7 5		
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	0 5 2	0 7 11	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.
(a) Depreciation ..	..	..	..	..	..	..	..	..	..	0 1 10		
(b) Interest on the value ..	..	..	..	..	..	..	..	..	..	0 3 4		
8. Interest on fluid capital (i.e. wages for hired labour and price of seeds).....	..	..	..	..	..	..	..	..	..	0 6 8	0 10 3	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	9 7 4	14 8 9	The land was taken on lease.
Total .....	..	..	5	4.5	..	12	..	15.5	23.84	27 13 11	42 13 9	

¹Family labour not charged.

²Home bullock labour charged under item 6.

³*Saldar* charged under item 5.

ASODA (B)

581

STATEMENT No. 127

GROUNDNUT—26 gunthas in 1929-30

PLOT No. (5)

Previous crop—Jowar in 1928-29

(a) Cost of Production

580

FARM STUDIES

ITEM OF EXPENDITURE	Home labour			Saddars ³	Labour on dally wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Harrowing	3	1.5	..	..	..	4.5	6.93	....	....	Three harrowings were given. A harrow required one man and two bullocks.
(b) Removing stubbles, etc.	1	..	0.5	0.77	0 4 9	0 7 3	
2. Seeds and sowing												
(a) Seeds	4 2 0	6 5 6	For the whole plot 24 lbs. of groundnut seed.
(b) Sowing and covering	2	1.0	..	1	..	3.5	5.38	0 4 0	0 6 2	Woman was paid 4 annas.
3. After-care and tillage												
(a) Weeding	10	..	5.0	7.69	2 8 0	3 13 6	One weeding required 10 women; paid at 4 annas each.
4. Harvesting and preparing for the market	2.0	..	..	..	2.0	3.07	3 0 0	4 9 10	The crop was harvested by contract labour.

5. Saldar .....	..	..	..	..	..	..	..	..	..	5 3 6	8 0 5	Annual cost of <i>saldar</i> is distributed over different plots in proportion to the units used on them.
6. Charges for bullock labour ..	..	..	..	..	..	..	..	..	..	2 4 6	3 8 2	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.	1	13	1									
(b) Interest on the value of bullocks, feeds and fodder given to them	0	7	5									
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	0 5 2	0 7 11	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.
Rs. a. p.												
(a) Depreciation ..	0	1	10									
(b) Interest on the value ..	0	3	4									
8. Interest on fluid capital (i.e. wages for hired labour and price of seeds).....	..	..	..	..	..	..	..	..	..	0 6 8	0 10 3	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	9 7 4	14 8 9	The land was taken on lease.
Total .....	..	..	5	4.5	..	12	..	15.5	23.84	27 13 11	42 13 9	

¹Family labour not charged.

²Home bullock labour charged under item 6,

³*Saldar* charged under item 5.

ASODA (B)

581

STATEMENT No. 127—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 26 gunthas	Per acre	For 26 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Groundnut pods ..	360	553.84	22 8 0	34 9 10	Sold at Rs. 15 per <i>palla</i> of a b o u t 280 lbs.
Fodder one cart ..	..	..	10 0 0	15 6 2	Valued at Rs. 10 per cart.
Total ..	..	..	32 8 0	50 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 26 gunthas ..	32 8 0	27 13 11	(b) 1 1 5	+4 10 1	+5 11 6
Per acre ..	50 0 0	42 13 9	1 10 9	+7 2 3	+8 13 0

STATEMENT No. 128

GROUNDNUT—2 acres 1 guntha in 1929-30

PLOT No. (6)

Previous crop—Jowar in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage										Rs. a. p.	Rs. a. p.	
(a) Ploughing	--	--	0	4.5	--	--	--	13.5	6.66	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	--	--	4	2.0	--	--	--	6.0	2.97	....	....	Two harrowings were given. A harrow required one man and two bullocks.
(c) Collecting stubbles	--	--	--	0.5	--	4	--	2.5	1.23	0 12 0	0 5 11	Woman labour paid at 3 annas each.
2. Seeds and sowing												
(a) Seeds	--	--	--	--	--	--	--	--	--	12 0 0	5 14 10	For the plot 96 lbs. of groundnut seed.
(b) Sowing and covering	--	--	--	0.75	--	4	--	2.75	1.36	1 0 0	0 7 11	Woman labour paid at 4 annas each.
3. After-care and tillage												
(a) Weeding	--	--	--	1.0	--	--	--	1.0	0.49	3 0 0	1 7 9	The work of weeding the plot once was given on contract.
(b) Interculturing	--	--	1	0.5	0.5	--	--	2.0	0.99	0 4 0	0 2 0	Outside man labour paid at 8 annas. One interculturing was given.

ASODA (B)

533

STATEMENT No. 128—concl'd.

584

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ³		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
4. Harvesting and preparing for market	2·0	..	..	..	2·0	0·99	7 0 0	3 10 3	The crop was harvested by contract labour. Annual cost of <i>saldar</i> is distributed over different plots in proportion to the units used on them.
5. <i>Saldar</i>	13 0 8	6 7 0	
6. Charges for bullock labour	6 6 4	3 2 6	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p. (a) Feeds, fodder, depreciation, etc. 5 1 7 (b) Interest on the value of bullocks, feeds and fodder given to them 1 4 9												
7. Charges for implements and tools	0 14 6	0 7 2	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.
Rs. a. p. (a) Depreciation 0 5 1 (b) Interest on the value .. 0 9 5												
8. Interest on fluid capital (i.e., wages for hired labour and price of seeds)	1 0 4	0 8 0	Charged at 12 per cent per annum. The land was owned.
9. Rent of land	45 0 0	22 3 7	
Total	14	11·25	0·5	8	..	29·75	14·69	90 11 10	44 12 11	

¹Family labour not charged.

²Home bullock labour charged under item 6.

³*Saldar* charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 1 gunthas	Per acre	For 2 acres and 1 guntha	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Groundnut pods (wet)	2,040	1,007.4	76 8 0	37 12 5	Sold in the village at Rs. 9 per <i>palla</i> of 240 lbs.
Fodder (one cart-load).	..	..	10 0 0	4 15 0	Estimated value.
Total ..	..	..	86 8 0	42 11 5	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 1 guntha.	86 8 0	90 11 10	(a) 41 13 9 (b) 2 14 6	-4 3 10	+40 8 5
Per acre ..	42 11 5	44 12 11	22 1 8	-2 1 6	+20 0 2

ASODA (B)

STATEMENT No. 128—concl'd.

584

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting and preparing for market	2·0	..	..	..	2·0	0·99	7 0 0	3 10 3	The crop was harvested by contract labour. Annual cost of <i>saldar</i> is distributed over different plots in proportion to the units used on them.
5. <i>Saldar</i>	13 0 8	6 7 0	
6. Charges for bullock labour Rs. a. p. (a) Feeds, fodder, depreciation, etc. 5 1 7 (b) Interest on the value of bullocks, feeds and fodder given to them 1 4 9	6 6 4	3 2 6		The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
7. Charges for implements and tools	0 14 6	0 7 2	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.
Rs. a. p. (a) Depreciation 0 5 1 (b) Interest on the value .. 0 9 5	1 0 4	0 8 0	
8. Interest on fluid capital (i.e., wages for hired labour and price of seeds)	45 0 0	22 3 7	Charged at 12 per cent per annum.
9. Rent of land	45 0 0	22 3 7	The land was owned.
Total ----	14	11·25	0·5	8	..	29·75	14·69	90 11 10	44 12 11	

¹Family labour not charged.

²Home bullock labour charged under item 6.

³*Saldar* charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 1 gunthas	Per acre	For 2 acres and 1 guntha	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Groundnut pods (wet)	2,040	1,007.4	76 8 0	37 12 5	Sold in the village at Rs. 9 per <i>palla</i> of 240 lbs.
Fodder (one cart-load).	..	..	10 0 0	4 15 0	Estimated value.
Total ..	..	..	86 8 0	42 11 5	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 1 guntha.	86 8 0	90 11 10	(a) 41 13 9 (b) 2 14 6	-4 3 10	+40 8 5
Per acre ..	42 11 5	44 12 11	22 1 8	-2 1 6	+20 0 2

ASODA (B)

STATEMENT No. 129

JOWAR—5 acres 8 gunthas in 1929-30

PLOT No. (7)

Previous crop—Cotton in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Saldar ³	Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Harrowing	13	6.5	..	..	..	10.5	3.75	....	....	Two harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing												
(a) Seeds	4 12 6	0 14 0	For the plot 18 lbs. of <i>jowar</i> seed (Rs. 1-2-0) and 29.25 lbs. of <i>udid</i> seed (Rs. 3-10-6).
(b) Sowing and covering	4	2.0	..	2	..	7.0	1.35	0 8 0	0 1 6	Woman labour paid at 4 annas each.
3. After-care and tiling												
(a) Weeding	2.0	..	10	..	7.0	1.34	2 8 0	0 7 8	One weeding was given. Woman labour paid at 4 annas each.
(b) Interculturing	10	5.0	3.5	..	..	18.5	3.56	1 12 0	0 5 5	Three interculturings were given. Man labour on daily wage paid at 8 annas.
(c) Watching	1 8 0	0 4 6	A man was watching a number of fields including this plot, (Rs. 1-8-0 for this plot).
4. Harvesting and preparing for market												
(a) For <i>jowar</i>	13 6 0	2 9 0	The work of harvesting <i>jowar</i> and preparing grains was given on contract.

(b) For <i>udid</i> .....	..	--	..	8.0	..	21	..	13.5	2.6	5 4 0	1 0 1	Woman labour charged at 4 annas each.
(c) Cutting grass from bunds .....	..	..	..	..	..	..	..	..	..	2 8 0	0 7 8	The work of cutting grass from the bunds was given on contract.
5. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	..	21 7 3	4 2 0	Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
6. Charges for bullock labour	..	..	..	..	..	..	..	..	..	12 5 3	2 6 1	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feeds, fodder, depreciation etc.	9	13	3									
(b) Interest on the value of bullocks, feeds and fodder given to them	2	8	0									
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	1 11 10	0 5 4	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.
Rs. a. p.												
(a) Depreciation	0	9	9									
(b) Interest on the value	1	2	1									
8. Interest on fluid capital (i.e., wages for hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	0 10 9	0 2 1	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	90 4 6	17 6 0	The land was owned.
Total	--	..	27	18.5	3.5	33	..	65.5	12.6	158 10 1	30 8 1	

¹Family labour not charged.

²Home bullock labour charged under item 6.

³*Saldar* charged under item 5.

ASODA (B)

587

STATEMENT No. 129—concl'd.

588

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 5 acres and 8 gunthas	Per acre	For 5 acres and 8 gunthas	Per acre	
Jowar	Lbs. 1,176	Lbs. 226·15	Rs. a. p. 63 0 0	Rs. a. p. 12 1 10	Valued at Rs. 36 per map of 672 lbs.
Udid	256	49·23	20 0 0	3 13 6	Valued at Rs. 1·4·0 for 16 lbs.
Grass (1,000 bundles) ..	2,000	384·61	10 0 0	1 14 10	Valued at Re. 1 for 100 bundles.
Kadbi (1,000 bundles) ..	8,000	1,538·44	60 0 0	11 8 8	Valued at Rs. 6 per 100 bundles.
Jowar bhoos ..	500	96·15	2 8 0	0 7 8	Valued at Re. 1 per 200 lbs.
Udid bhoos ..	200	38·46	2 8 0	0 7 8	Valued at 80 lbs. per rupee.
Total	..	..	158 0 0	30 6 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 5 acres and 8 gunthas	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	158 0 0	158 10 1	(a) 84 3 8 (b) 4 4 10	-0 10 1	+87 14 5
Per acre ..	30 6 2	30 8 1	17 0 5	-0 1 11	+16 14 6

FARM STUDIES

STATEMENT No. 130

JOWAR—1 acre 27 gunthas in 1929-30

PLOT No. (8)

Previous crop—Groundnut in 1928-29

(a) Cost of Production.

ITEM OF EXPENDITURE	Home labour			Saldar ⁸	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the whole plot	Per acre	
1. Preparatory tillage												
(a) Harrowing	6	3·0	..	..	..	9·0	5·38	....	....	Three harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing												
(a) Seeds	2 1 3	1 3 11	For the plot 7·25 lbs. of <i>jowar</i> seed (Rs. 0-7-8), 11·75 lbs. of <i>udid</i> seed (Rs. 1-7-6) and 1·25 lbs. of <i>mug</i> seed (Rs. 0-2-6). The woman was paid at 4 annas.
(b) Sowing and covering	1	0·5	..	..	..	2·0	1·19	0 4 0	0 2 6	
3. After-care and tillage												
(a) Interculturing	6	3·0	3	..	..	12·0	7·16	1 8 0	0 14 4	Man on daily wages paid at 8 annas per day. Three interculturings were given.
4. Harvesting and preparing for the market												
(a) For <i>jowar</i>	1·0	..	..	..	1·0	0·59	3 3 0	1 14 3	<i>Jowar</i> harvesting and preparing grains was done by contract.
(b) For <i>udid</i>	1·0	..	13	..	7·5	4·48	2 8 0	1 7 11	Thirteen women were paid Rs. 2-8-0.
(c) For <i>mug</i>	1	..	0·5	0·3	0 2 6	0 1 7	

ASODA (B)

589

STATEMENT No. 130—concl'd.

590

ITEM OF EXPENDITURE	Home labour			Saldar ²	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the whole plot	Per acre	
5. Saldar	9 13 8	5 14 2	Annual cost of <i>saldar</i> is distributed on different plots in proportion to the units used on them.	
6. Charges for bullock labour	5 15 0	3 8 9	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.												
(b) Interest on the value of bullocks, feeds and fodder given to them												
7. Charges for implements and tools	0 13 5	0 8 1	The total annual charges are distributed on different plots in proportion to the bullock labour used on the plots.	
Rs. a. p.												
(a) Depreciation ..												
(b) Interest on the value ..												
8. Interest on fluid capital (i.e., wages for hired labour and price of seeds)...	0 3 10	0 2 4	Charged at 12 per cent per annum.	
9. Rent of land	24 5 8	14 8 4	The land was taken on lease.	
Total.....	13	8.5	8	16	..	32.0	19.1	50 14 4	30 6 2	

¹Family labour not charged.²Home bullock labour charged under item 6.³Saldar charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 27 gunthas	Per acre	For 1 acre and 27 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	168	100.3	9 0 0	5 6 0	Valued at 18½ lbs. per rupee.
Udid	128	76.4	10 0 0	5 15 5	Valued at Rs. 1-4-0 per 16 lbs.
Mug.....	32	19.1	2 0 0	1 3 2	Valued at 16 lbs. per rupee.
Kadbi (200 bundles).	1,600	955.2	12 0 0	7 2 7	Valued at Rs. 6 per 100 bundles.
Bhoos	160	95.5	1 4 0	0 11 11	Valued at village rates.
Total....	..	..	34 4 0	20 7 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 27 gunthas	34 4 0	50 14 4	(b) 1 15 10	-16 10 4	-14 10 6
Per acre ..	20 7 2	30 6 2	1 3 0	-9 15 0	- 8 12 0

STATEMENT No. 131

BAJRI—2 acres in 1929-30

PLOT No. (9)

Previous crop—Cotton in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Saldar ³	Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Harrowing	7	3.5	..	..	..	10.5	5.25	....	....	Three harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing												
(a) Seeds	2 12 0	1 6 0	For the plot 19.50 lbs. of bajri seed (Rs. 2-2-0), 3.75 lbs. maki seed (Rs. 0-7-8), 1 lb. of mug seed (two annas) and half an anna for vari.
(b) Sowing and covering	4	1.0	1	..	..	6.0	3.0	0 8 0	0 4 0	Man on daily wage paid at 8 annas.
3. After-care and tillage												
(a) Interculturing	6	3.0	..	..	..	9.0	4.5	....	....	Three interculturings were given.

85-18 0 II-OR

4. Harvesting and preparing for market																									
(a) <i>Bajri</i> .....	..	..	..	6.0	2	..	..	8.0	4.0	8 0 0	4 0 0														The work of harvesting <i>bajri</i> and preparing grains was given on contract for which Rs. 7 were paid. Man on daily wage was paid at 8 annas.
(b) <i>Vari</i> .....	..	..	..	1.0	..	..	..	1.0	0.5	....	---													
5. <i>Saldar</i> .....	..	..	..	..	..	..	..	..	..	16 18 0	8 6 6														Annual wage of <i>saldar</i> is distributed on different plots in proportion to the units used on them.
6. Charges for bullock labour	7 12 2	3 14 1														
Rs. a. p.																									
(a) Feeds, fodder, depreciation, etc.				6 3 0																					
(b) Interest on the value of bullocks, feeds, fodder, given to them ..				1 0 2																					
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	1 1 7	0 8 9.5														The total annual charges are distributed on different plots, in proportion to the bullock labour used on the plots.
Rs. a. p.																									
(a) Depreciation ..				0 6 2																					
(b) Interest on the value ..				0 11 5																					
8. Interest on fixed capital (i.e., wages for hired labour and price of seeds) ..	..	..	..	..	..	..	..	..	..	0 3 1	0 1 6.5														Charged at 12 per cent per annum.
9. Rent of land	34 11 6	17 5 9														
Total....	..	..	17	14.5	3	..	..	34.5	17.25	71 18 4	85 14 8														

¹Family labour not charged. ²Home bullock labour charged under item 6. ³*Saldar* charged under item 5.

ASODA (B)

803

STATEMENT No. 131—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres	Per acre	For 2 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	1,080	540	63 0 0	31 8 0	Valued at Rs. 42 per <i>map</i> of 720 lbs.
Vari.....	40	20	5 0 0	2 8 0	
Chaff (<i>bhoos</i>) 40 <i>maunds</i> .	3,200	1,600	40 0 0	20 0 0	Valued at Re. 1 per <i>maund</i> . Sprinkling of <i>mug</i> and <i>matki</i> failed.
Total....	....	....	108 0 0	54 0 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres	108 0 0	71 13 4	(a) 30 9 4 (b) 2 7 8	+36 2 8	+69 3 8
Per acre ..	54 0 0	35 14 8	16 8 6	+18 1 4	+34 9 10

KAVTHI (A), 1928-29

The village of Kavthi is about 12 miles to the west of Dhulia, the headquarters of the West Khandesh District. Dhulia is the chief market-place for the village with which the town is connected by a good metalled road. Climate of the place is healthy. The maximum temperature goes to about 105° F. in April and May, and the minimum to about 50° F. in the month of December. The average annual rainfall is about 24 inches. Most of the rain is recorded from the south-west monsoon which begins in June and ends in October. The village, thus, is a *kharif* village.

The chief crops of the village are cotton and *bajri*. Among the oil-seeds groundnut occupies the most important position in Khandesh and the area of groundnut has extended considerably in recent years. As regards rotation no definite system is generally followed. Cotton is the favourite crop and occupies the lands with occasional change. In lighter class of soils, *bajri*, *jowar* and *kulthi* and also cotton are taken. Light soils are generally ploughed every year, while the heavier soils may receive ploughing every two years. Farmyard manure, when available, is usually given to cotton crop at the rate of 12 to 20 cart-loads per acre.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Area held in 1928-29		Area cultivated in 1928-29		Population according to 1921 census	Cultivated area per capita	
A.	g.	A.	g.		A.	g.
6,876	6	6,151	23	514	11	38·72

Cultivated area per capita looks large because 2,210 acres and 24 gunthas of the private area of the village people and a large part of the Government land (of 1,650 acres) included in the total cultivated area are cultivated by farmers from Kusumba and Navalemorane.

There were 23 buffaloes and 126 cows, not a bad number of milch animals for 514 people. The total number of cattle was 574 and of goats 118.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held	No. of <i>khatedars</i>	Average area per <i>khatedar</i>
Of the total area of 6,876 acres and 6 gunthas 1,650 acres and 7 gunthas was Government land and 2,210 acres and 24 gunthas were held by <i>khatedars</i> living in adjoining villages. The area held by the <i>khatedars</i> in the village was therefore 3,015 acres and 15 gunthas	272	A. g. 11 3·4

CULTIVATING HOLDING

The private land (3,015 acres and 15 gunthas) and part of the Government land (as it was worked by annual tenants from the three villages) was worked by 254 cultivators. Average cultivating holding for the village, therefore, cannot be worked.

There were 30 wells in the village out of which only a few were working. In the year 1928-29, about twenty-one acres were put under well irrigation. Eight cultivators supplemented their agricultural earnings by plying carts for hire.

Table V gives the areas and percentages of the important crops of the village. *Bajri* as main crop contains *mug*, *udid* and *matki*; while cotton as main crop contains *til* and *ambadi*.

TABLE V—CROPS OF THE VILLAGE

Crops	1928-29				Per cent	Crops	1929-30				Per cent		
	Area		Per cent				Area		Per cent				
	A.	g.	A.	g.			A.	g.	A.	g.			
Total	6,151	23	6,151	23	100·00	100·00	6,260	2	6,260	2	100·00	100·00	
<i>Kharif</i> crops	6,143		34	99·874		<i>Kharif</i> crops	6,260		23	99·18			
<i>Bajri</i>	2,655	29	43·172		<i>Bajri</i>	2,759	34	44·09					
<i>Hulga</i>	138	30	2·265		<i>Hulga</i>	171	06	2·74					
<i>Jowar</i>	176	32	2·874		<i>Jowar</i>	220	13	3·52					
Cotton	2,730	37	44·394		Cotton	2,824	32	45·12					
Groundnut	135	12	2·199		Groundnut	70	24	1·13					
Others	306	14	4·980		Others	161	34	2·58					
<i>Rabi</i> crops	0	3	0·001		<i>Rabi</i> crops		45	38	0·73				
Gram	0	3	0·001		Wheat	29	5	0·46					
					Castor	15	14	0·24					
					Others	1	14	0·03					
Twelve months perennial crop	7	26	7	26	0·125	0·125	Twelve months perennial crop	5	26	5	26	0·09	0·09

The distribution of crops shows that the *kharif* crops occupy over 99 per cent of the area. The area under *rabi* and perennial crops is very small. The area under vegetables and perennial crops is small. The chief crops are cotton and *bajri*. Groundnut comes next in importance. Both cotton and groundnut are money crops of the tract.

There is no system of fixed rotation; cropping plans are changed to suit the vagaries of rainfall. In the heavier class of soils, cotton is rotated with *bajri* and groundnut. It is not unusual to take cotton for two years successively and then *bajri* or groundnut in the third year. In the lighter soil *bajri* is rotated with *hulga*. When there is sufficient early rainfall, area under cotton increases. Lands receive ploughing and

manuring only when they are to go under cotton. Light soils therefore do not receive much manuring.

THE SEASON, 1928-29

In the year 1928 the place got 24·15 inches of rainfall which was just about the normal. The distribution of rainfall, however, was not satisfactory.

The fortnightly distribution of rainfall at Kusumba, a village close-by, in 1928 is given in table VI.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1928
(ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						
0·0	0·0	0·0	0·0	0·0	1·75	3·93	0·24	0·04	1·25	0·0	0·50	} 24·15
						Second fortnight						
0·0	0·0	0·0	0·0	0·0	4·60	1·25	2·43	7·58	0·05	0·53	0·0	

There was continuous rain from the second week of June till the end of the third week of July. Rains commenced in the second week of June and there were heavy showers in the last week of the month, which enabled the farmers to sow their *kharif* crops in the first week of July. Rain in the third week of September was very heavy, being 7·52 inches or about one-fourth of the total rainfall of the year, the highest amount of rainfall recorded in one day was 3·55 inches on the 29th June. Though the total rainfall was normal its distribution was very unsatisfactory. The heavy showers of September and the rains in October did some damage to the standing crops especially cotton and *bajri*. The long break in the rains, from the third week of July to the fourth week of August, was very trying for the *kharif* crops and consequently the yields were poor.

THE FARMER

The farmer owned 35 acres and 21 gunthas of land and had taken on lease 13 acres and 18 gunthas for which he had to pay Rs. 30 rent, thus his cultivating holding came to 48 acres and 39 gunthas.

(a) *Human labour*.—The farm family consisted of the following:—

(1) Farmer	52 years.
(2) His eldest son	25 "
(3) Second son	23 "
(4) Wife of the eldest son	20 "
(5) " " second son	18 "

There were thus five adult members in the family. Monthly distribution of the available and the utilized labour, from June 1928 to May 1929, is given in table VII. This period however does not synchronize with the time taken by the crops of the year. The table only shows how the family was generally engaged as regards farm work.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Percentage of the labour employed to labour available
Three men and two women.....	110	123	115	108	103	83	109	92	64	55	88	47	1097	60·1
	150	155	155	150	155	150	155	155	140	155	150	155	1825	

Note.—The denominator shows available labour, while the numerator shows labour utilized.

The distribution of home labour was not bad, though in November and from January to May there was not sufficient work. About 60 per cent of the available home labour was utilized.

(b) *Bullock work.*—The farmer had four bullocks. The monthly distribution of their work, from June 1928 to May 1929, is summarised in table VIII.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Percentage of units employed to units available
Four bullocks	116	96	14	44	28	38	54	58	20	14	68	80	630	43·15
	120	124	124	120	124	120	124	124	112	124	120	124	1,460	

Note.—Denominators show available bullock units, while the numerators show the units used.

Only in June and part of July bullock labour was fully utilized. There was considerable wastage of bullock labour from August to March. Since ploughing in this tract is done with a two-bullock plough, the farmer could have managed the farm with only one pair if he could have secured a little help for sowing by way of borrowing from or pooling bullock labour with a neighbour.

The opening and closing inventories of the property are given in table No. IX.

TABLE IX—INVENTORY OF THE PROPERTY

1928				1929			
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value	
		Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.
<i>Assets</i>	A. G.	Rs. a. p.	Rs. a. p.	<i>Assets</i>	A. G.	Rs. a. p.	Rs. a. p.
1. Real estate				1. Real estate			
(A) Land				(A) Land			
(a) Field No. 1	14 1	1,425 0 0		(a) Field No. 1	14 1	1,425 0 0	
(b) Field No. 2	14 2	950 0 0		(b) Field No. 2	14 2	950 0 0	
(c) Field No. 3	2 12	175 0 0		(c) Field No. 3	2 12	175 0 0	
(d) Field No. 4	5 6	450 0 0		(d) Field No. 4	5 6	450 0 0	
	35 21	3,000 0 0			35 21	3,000 0 0	
(B) Buildings				(B) Buildings			
(a) House	1	600 0 0		(a) House	1	600 0 0	
(b) Cattle shed	1	300 0 0		(b) Cattle shed	1	300 0 0	
(c) Parts of other houses		600 0 0		(c) Parts of other houses		600 0 0	
		1,500 0 0				1,500 0 0	
Total, real estate			4,500 0 0	Total, real estate			4,500 0 0
2. Livestock				2. Livestock			
(a) Bullocks	4	400 0 0		(a) Bullocks	4	350 0 0	
(b) Cows	2	80 0 0		(b) Cow	1	30 0 0	
			480 0 0				380 0 0
Total, livestock			480 0 0	Total, livestock			380 0 0

KAVITHI (A)

599

TABLE IX—INVENTORY OF THE PROPERTY—*concl'd.*

1928			1929				
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value	
		Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.
3. Implements, tools etc.				3. Implements, tools etc.			
(a) Plough (wooden).....	1	7	8 0	(a) Plough (wooden).....	1	7	0 0
(b) Seed-drill.....	1	12	8 0	(b) Seed-drill.....	1	11	0 0
(c) Harrows.....	2	8	0 0	(c) Harrows.....	2	7	0 0
(d) Hoes.....	4	10	0 0	(d) Hoes.....	4	9	0 0
(e) Yokes.....	3	4	8 0	(e) Yokes.....	3	4	0 0
(f) Farm cart.....	1	75	0 0	(f) Farm cart.....	1	60	0 0
(g) Other tools, ropes etc.		7	8 0	(g) Other tools, ropes etc.		2	0 0
Total implements and tools.....			125 0 0	Total implements and tools.....			100 0 0
Total Assets.....			5,105 0 0	Total Assets.....			4,980 0 0
Liabilities				Liabilities			
(a) Debt on the mortgage of field No. 1 at 24 per cent per annum ..		500	0 0	(a) Debt on the mortgage of field No. 1 at 24 per cent per annum ..		500	0 0
(b) Miscellaneous debt Rs. 300 at 24 per cent per annum ..		300	0 0	(b) Miscellaneous debt Rs. 300 at 24 per cent per annum ..		300	0 0
(c) Goods bought on credit		15	0 0				
Total Liabilities.....			815 0 0	Total Liabilities.....			800 0 0
Net worth of the Farm.....			4,290 0 0	Net worth of the Farm.....			4,180 0 0

SUMMARY

	Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928.....	4,290 0 0	
Net worth of the farm at the beginning of 1929.....	4,180 0 0	
Loss in net worth		110 0 0

The farmer had two grownup sons. At the end of the year one of the boys claimed his share of the property and lived separately. Since the estate was divided immediately after the close of the season, and since there were occasional quarrels in the family it was not found possible to get information regarding the farm produce on hand; and hence supplies on hand at the beginning, though available, are not included in the inventory to make comparison possible.

Nature of holding, lands, crops and cropping.—The owned land, measuring 35 acres and 21 gunthas, was situated in four different places; the rented area of 13 acres and 18 gunthas of land was adjacent to field No. 2 of the owned land. The total area of the holding was thus 48 acres and 39 gunthas.

The nature of the holding, crops and cropping and the treatment of different fields are given in table X.

Looking to the distribution of crops it will be seen that cotton is the most important crop; next comes *bajri*. During the year under study cotton occupied 35·73 per cent, *bajri* 28·64 per cent, *kulthi* 13·78 per cent, and groundnut 12·75 per cent of the land.

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

602

Field No.	Area	Nature of land	1927-28			1928-29		
			Area	Crop	Treatment	Plot No.	Crop	Treatment
1	14 1	Medium black soil; level		Cotton	Not manured	2	<i>Bajri</i>	Twenty cart-loads of F. Y. M. were given.
2	14 2	Lighter class of soil; level	4 2	<i>Bajri</i>	Do.	1	Cotton	Not manured.
			3 10	<i>Jowar</i>	Do.	3	Groundnut	Do.
			0 30	Cotton	Do.	5	<i>Kulthi</i>	Do.
3	2 12	Medium black soil; level		Groundnut	Do.	4	<i>Jowar</i>	Do.
4	5 6	Medium black soil; level	3 0	Cotton	Do.	3	Groundnut	Do.
			2 6	Groundnut	Do.	4	<i>Jowar</i>	Do.
5	13 18 (rented area).	Medium black soil, a bit sloping; a small <i>nala</i> crosses the field.		<i>Bajri</i>	Do.	1	Cotton	Do.

FARM STUDIES

COSTS AND RECEIPTS

Abstract of expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost for the total holding (viz. 48 acres and 39 gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses :		
(a) Manure	25 0 0	
(b) Seeds	92 12 0	
(c) Outside labour	152 6 0	
(d) Depreciation on implements and tools ..	25 0 0	
(e) Upkeep of bullocks (excluding interest on their value)	162 10 8	
(f) Assessment and L. F. C. on owned land and rent of leased land	62 1 7	
		519 14 3
II. Rent of owned land excluding assessment and L. F. C.	135 0 0	
		135 0 0
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	6 12 10	
(b) Interest on the value of equipment and implements	15 0 0	
(c) Interest on the value of bullocks	63 3 2	
		85 0 0
<i>Total cost of production (excluding wages for family labour)</i>		739 14 3

*DETAILS OF OUT-OF-POCKET EXPENSES

1. Manure :	Rs. a. p.	Rs. a. p.
(a) Twenty carts of F. Y. M. at Rs. 2-8-0 per cart given for <i>bajri</i> crop (plot No. 2). Only 50 per cent of the cost is charged.		25 0 0
2. Seeds :		
(a) Cotton 600 lbs. at Rs. 50 per <i>khandi</i> of 800 lbs. Usual rate was Rs. 35; but the man had to pay Rs. 50 since the seed was bought on credit	37 8 0	
(b) <i>Bajri</i> (80 lbs.)	5 0 0	
(c) <i>Matki</i> (58 lbs.)	4 0 0	
(d) Groundnut (20 <i>payalis</i>)	40 0 0	
(e) <i>Jowar</i> (20 lbs.)	1 4 0	
(f) <i>Kulthi</i> (85 lbs.)	5 0 0	
		92 12 0

	Rs. a. p.	Rs. a. p.
3. Wages of outside labour :		
(a) Cotton ; (158 women)	31 6 0	
(b) Cotton ; (contract picking).....	30 0 0	
(c) Bajri ; (51 men and 28 women).....	32 8 0	
(d) Groundnut ; (16 men and 61 women)	21 0 0	
(e) Groundnut ; (contract harvesting)	16 0 0	
(f) Jowar ; (21 men)	10 8 0	
(g) Kulthi ; (22 men).....	11 0 0	
	-----	152 6 0
4. Depreciation on implements and tools :		
Opening inventory	125 0 0	
Closing inventory	100 0 0	
	-----	25 0 0
5. Bullock labour cost (excluding interest) :		
(a) Depreciation on the value of four bullocks		
	Rs. a. p.	
Opening inventory	400 0 0	
Closing inventory	350 0 0	
	-----	50 0 0
(b) Death allowance on the bullocks at 5 per cent on Rs. 400	20 0 0	
(c) Charges on account of housing at Rs. 4 per bullock per year	16 0 0	
	Rs. a. p.	
(d) Feed and fodder	100 10 8	
Concentrates	26 0 0	
	-----	126 10 8
Against the above cost (a) to (d) must be set off Rs. 50 the value of 20 cart-loads of F. Y. M.	-50 0 0	
	-----	162 10 8
6. Land assessment and L. F. C. for owned land and rent of leased land :		
(a) Land assessment and L. F. C. on owned land. Part of plot No. 1 (4 acres and 2 gunthas)	2 13 4	
Plot No. 2	15 3 8	
Plot No. 3	4 4 2	
Plot No. 4	3 13 5	
Plot No. 5	5 15 0	
(b) Rent of leased land (part of plot No. 1, 13 acres and 18 gunthas)	30 0 0	
	-----	62 1 7
Total out-of-pocket expenses.....		----- ----- 519 14 3

Family Labour Income.—Table XI gives the family labour income, i.e., the remuneration obtained by the farmer and his family for the work done by them on the farm. The details of the costs of production have been given above. The value of produce is taken from the statements of the costs and receipts of the various plots (pp. 608 to 622).

TABLE XI—FAMILY LABOUR INCOME

Crop	Area	Value of produce		Cost of production (excluding wages of family labour)			Family labour income	
				Out-of-pocket expenses	Interest on working capital	Rent of owned land		Total
1	2	3		4	5	6	7	8
	A. g.	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	48 39	911 4 0	519 14 3	85 0 0	135 0 0	739 14 3	+171 5 9	
Cotton	17 20	319 8 0	196 15 3	28 8 0	5 15 0	231 6 3	+88 1 9	
Bajri	14 1	302 8 0	126 0 0	20 8 11	100 0 0	246 9 5	+55 14 7	
Groundnut	6 10	218 0 0	115 1 5	17 0 3	10 5 0	142 6 8	+75 9 4	
Jowar	4 18	46 4 0	39 12 0	10 2 10	9 3 0	59 1 10	-12 13 10	
Kukhi	6 30	25 0 0	42 1 1	8 12 0	9 9 0	60 6 1	-35 6 1	

Column 4 shows expenses over manure, seed, hired labour, depreciation on equipment, assessment and L. F. C. for owned land, rent of leased land and cost of upkeep of bullocks. *Column 5*.—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on feeds, fodder for the work-animals, money spent on the current agricultural operations. Fixed capital includes implements and work-animals. *Column 6* shows the estimated rent of owned land minus the assessment and L. F. C. *Column 8* shows the wages earned by the farmer and his family members.

The value of the gross produce obtained from the farm was Rs. 911-4-0, while the cost of production (excluding the wages of the farm family) was Rs. 739-14-3, thus leaving Rs. 171-5-9 as the family labour income.

Farm Business Income.—In addition to the family labour income shown in table XI the farmer could save the rent of the owned land and the interests on the working capital which are debited to the costs. Table XII gives the farm business income or the aggregate income of the farmer i.e., the value of the produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	48 39	911 4 0	519 14 3	+391 5 9
Cotton	17 20	319 8 0	} 519 14 3	} +391 5 9
Bajri	14 1	302 8 0		
Groundnut	6 10	218 0 0		
Jowar	4 18	46 4 0		
Kulthi	6 30	25 0 0		

The gross receipts obtained were Rs. 911-4-0, while the out-of-pocket expenses came to Rs. 519-14-3, thus leaving Rs. 391-5-9 as total income obtained by the farmer and his family on account of wages for the work done by them on the farm, interest on the working capital and the return on their owned land as shown below.

	Rs. a. p.
Family labour income	171 5 9
Interest on working capital	85 0 0
Rent of owned land	135 0 0
	391 5 9

Out of this sum of Rs. 391-5-9 the farmer could pay Rs. 192 interest on his debt of Rs. 800 shown in the inventory.

ANALYSIS

The farm family put in 506 man units and 202 woman units on the crops grown in 1928-29. Taking two woman units equal to one man unit, they put in 607 total units. The farmer had to engage 110 man units and 247 woman units at a cost of Rs. 152-6-0 on daily wages and contract work. It may, therefore, be said that 72 per cent of the work was done by the farm family. Outside labour was employed when there was pressure of work as for weeding and harvesting crops.

For the 607 home units the farmer made Rs. 171-5-9 labour income or four annas and six pies wage per day. His farm business income came to Rs. 391-5-9. Looking to the ill-distribution of rainfall and high wages of

day-labour he has not fared badly, as he was able to pay Rs. 192 the interest on his debt. It may be noted that the rate of interest was as high as 24 per cent.

Table XIII shows the yields of the main produce and the labour units spent per acre. It may be noted that in this table bullock units are included, taking one bullock unit equal to one man unit equal to two woman units.

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of produce	Quantity lbs.		
1	Seed-cotton.....	148	(a)26·30	The per acre yield is low as the crops were damaged by the heavy showers in the month of September.
2	<i>Bajri</i> grain	287	24·93	
3	Groundnut (pods)	491	(b)48·68	
4	<i>Jowar</i> grain.....	198	29·88	
5	<i>Kulthi</i> grain	60	19·55	

(a) Includes 3·5 units for contract payment.

(b) " 5 " " " " " "

Though labour units spent per acre can be called normal, the yield is poor, being about one-half in the case of groundnut and *bajri* and only one-third in the case of cotton, *jowar* and *kulthi*. None of the plots except plot No. 2 received any manure. Plot No. 2 measuring over 14 acres received only 20 cart-loads of F. Y. M. The crop estimate (*annewari*) by the Revenue officers was 8 *annas*, though the *rayats* thought it should have been still less. Though the amount of rainfall was normal, its distribution was very bad; the long break of five weeks soon after the *kharif* crops were sown and the damaging rainfall of 7·52 inches in the third week of September, were responsible for the poor yields.

Following are the statements of costs and receipts of the crops grown on the farm—

STATEMENT No. 132

COTTON—17·5 acres in 1928-29

PLOT No. (1)

Previous crop—Bajri, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ^a	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											
(a) Harrowing.....	24	..	48	..	..	..	72	4·12	....	....	Three harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds.....	..	..	..	..	..	..	..	..	37 8 0	2 2 3	For the plot 600 lbs. of cottonseed (Rs. 37-8-0). This sum includes interest, as the seed was taken on local practice of paying 50 per cent more seed.
(b) Sowing and covering....	30	20	40	..	..	..	80	4·57	....	....
3. After-care and tillage											
(a) Weeding.....	17	52	..	..	108	..	97	5·54	22 0 0	1 4 1	Four weedings were given. First weeding required 8 men and 108 women; second 3 men and 0 women; the third 9 men and 16 women; and fourth 2 men and 32 women. Out of this 50 women were paid at 3 annas each and 28 at 4 annas each.
(b) Interculturing.....	26	..	38	..	..	..	64	3·06	....	....	Two hoeings were given. A hoe with two men and two bullocks worked for 7 days and another with one man and two bullocks for 12 days.
4. Picking cotton and pre- paring for market.....	12	2	12	..	50	..	50	2·86	39 6 0	2 4 0	First cotton picking was done by contract. It required Rs. 30 cash. For the second picking 50 women were paid at 3 annas each.
5. Removing stubbles.....	12	..	24	..	..	..	36	2·05	....	....

MO-18 Q II-03

6. Charges for bullock labour.	..	..	..	..	..	..	..	..	78 8 3	4 7 10	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feeds, fodder, depreciation etc. ..	56	8	9									
(b) Interest on the value of bullocks, feeds and fodder ..	21	15	0									
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	18 14 7	0 12 9	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation	8	11	2									
(b) Interest.....	5	3	5									
8. Interest on fluid capital (i.e., wages for hired labour and price of seeds)...	..	..	..	..	..	..	..	..	1 5 1	0 1 2	Charged at 12 per cent per annum.
9. Rent of land	38 12 4	2 3 5		Thirteen acres and 18 f gunthas of land was taken on lease while 4 acres and 2 gunthas of land was owned. The rent of leased land was Rs. 80 and of owned land was taken as Rs. 8-12-4.
Total.....	121	74	162	..	158	..	399	22 80	231 6 3	13 3 6		

¹Family labour not charged. ²Home bullock labour charged under item 6.

KAVTHI (A)

STATEMENT No. 132—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 17·5 acres	Per acre	For 17·5 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Seed-c o t- ton	2,592	148·11	319 8 0	18 4 2	Sold at Rs. 17-12-0 per <i>maund</i> of 144 lbs. Sold in the village.
Total..	..	..	319 8 0	18 4 2

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 17·5 acres .	319 8 0	231 6 3	(a) 5 15 0 (b) 28 8 0	+88 1 9	+122 8 9
Per acre	18 4 2	13 3 6	1 15 6	+5 0 8	+7 0 2

STATEMENT No. 133

BAJRI—14 acres 1 guntha in 1928-29

PLOT No. (2)

Previous crop—Cotton in 1927-28

(a) Cost of Production

MO. II. Q. 84-39a

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	12	..	24	..	..	..	36·0	2·56	....	....	Two harrowings were given. A harrow required one man and two bullocks.
2. Manure and manuring											
(a) Manures .....	..	..	..	..	..	..	..	..	25 0 0	1 12 0	For the plot 20 carts of F. Y. M. at Rs. 2-8-0 each were given; only 50 per cent of the total cost of manure is charged to this crop.
(b) Manuring	7	..	10	..	..	..	17·0	1·23	....	....
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	9 0 0	0 10 3	Bajri 80 lbs. (Rs. 5) and matki 58 lbs. (Rs. 4).
(b) Sowing and covering ..	8	..	12	..	..	..	18·0	1·23	....	....
4. After-care and tillage											
(a) Weeding	8	..	..	..	..	..	8·0	0·57	....	....	One weeding was given.
(b) Interculturing	6	..	8	2	..	..	16·0	1·15	1 0 0	0 1 2	One hoeing was given. A set of hoes required two men and two bullocks. Two men paid at 8 annas each.
(c) Watching	19	7	..	..	..	..	22·5	1·6	....	....

KAVYHI (A)

611

STATEMENT No. 133—concl'd.

612

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
5. Harvesting and preparing for market	108	10	56	40	28	..	232·0	16·54	31 8 0	2 3 11	For <i>mathi</i> harvest 42 men and four bullocks were required; remaining labour was required for <i>bajri</i> harvest; 49 men and 28 women paid at 8 and 4 annas each respectively.
6. Charges for bullock labour. Rs. a. p.	..	..	..	..	..	..	..	..	53 5 1	3 12 10	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc... 38 6 5											
(b) Interest on the value of bullocks, feeds and fodder..... 14 14 8											
7. Charges for implements and tools..... Rs. a. p.	..	..	..	..	..	..	..	..	9 7 1	0 10 10	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation..... 5 14 5											
(b) Interest..... 3 8 8											
8. Interest on fluid capital (i.e., wages of hired labour and price of seeds and manure.....)	..	..	..	..	..	..	..	..	2 1 7	0 2 5	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	115 3 8	8 3 5	The land was owned.
Total.....	106	17	110	51	28	..	340·5	24·03	246 9 5	17 9 4	

¹Family labour not charged. ²Home bullock labour charged under item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 14 acres and 1 guntha	Per acre	For 14 acres and 1 guntha	Per acre	
<i>Bajri</i> (grain).	Lbs. 4,032	Lbs. 287.48	Rs. a. p. 210 8 0	Rs. a. p. 15 0 2	Valued at Rs. 42 per map of about 804 lbs.
<i>Bhoos</i> of <i>bajri</i> 4 cartloads.	..	..	48 0 0	3 6 9	Valued at Rs. 12 per cart of 1,200 lbs.
<i>Mondha</i> fodder of <i>bajri</i> , three carts.	..	..	24 0 0	1 11 5	Valued at Rs. 8 per cart of 900 lbs.
<i>Matki</i> (grain).	240	17.1	15 0 0	1 1 1	Valued at 16 lbs. per rupee.
<i>Bhoos</i> of <i>matki</i> .....	..	..	5 0 0	0 5 8	Estimated value.
Total..	..	..	302 8 0	21 9 1	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 14 acres and 1 guntha.	302 8 0	246 9 5	(a) 100 0 0 (b) 20 8 11	+55 14 7	+176 7 6
Per acre ..	21 9 1	17 9 4	8 9 6	+3 15 9	+12 9 3

KAYTHI (A)

STATEMENT No. 134

614

GROUNDNUT—6·25 acres in 1928-29.

PLOT No. (3)

Previous crop—Jowar and Cotton, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing.....	10	..	20	..	..	..	30·0	4·8	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	12	..	24	..	..	..	30·0	5·76	....	....	Five harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds.....	..	..	..	..	..	..	..	..	40 0 0	6 6 5	For the plot 296 lbs. of groundnut seed.
(b) Sowing and covering ..	6	4	8	..	..	..	16·0	2·56	....	....
3. After-care and tillage											
(a) Weeding	17	36	..	..	40	..	55·0	5·6	7 8 0	1 8 2	Three weedings were given. 1st weeding required 48 women, 2nd 16 men, and 14 women and the 3rd, one man and sixteen women. 40 women were paid at 3 annas each.
(b) Interculturing.....	12	..	20	2	..	..	34·0	5·44	1 0 0	0 2 7	Two hoeings were given. Two men paid at annas 8 each.
(c) Watching .....	..	28	..	..	..	..	11·5	1·84	0 4 0	0 0 8	Only four annas were given to one <i>Bhil</i> for watching.

FARM STUDIES

for market	58	32	12	14	21	..	110.5	17.68	28 4 0	4 8 4	Fourteen men were paid at 8 annas each and 21 women at 4 annas each. Over and above this Rs. 16 were paid in cash for harvesting groundnut. (Contract labour is not included in the units shown).
5. Charges for bullock labour	..	..	..	..	..	..	..	..	40 11 5	6 8 2	The total annual cost on account of draft bullocks is distributed over different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc...	29	5	2								
(b) Interest on the value of bullocks, feeds and fodder	11	6	3								
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	7 3 4	1 2 5	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation	4	8	1								
(b) Interest....	2	11	3								
7. Interest on fluid capital (i.e., wages for hired labour and price of seeds)...	..	..	..	..	..	..	..	..	2 14 9	0 7 5	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	14 9 2	2 5 4	The land was owned.
Total	115	95	84	16	61	..	293.0	43.68	142 6 8	22 12 6	

¹Family labour not charged. ²Home bullock labour charged under item 5.

KAVITHI (A)

STATEMENT No. 134—concl.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 6.25 acres	Per acre	For 6.25 acres	Per acre	
Groundnut pods ..	Lbs. 3,072	Lbs. 491.52	Rs. a. p. 198 0 0	Rs. a. p. 31 10 11	Sold at Rs. 16-8-0 per <i>palla</i> of 256 lbs.
Vines (5 cart loads) ..	..	..	20 0 0	3 3 2	Valued at Rs. 4 per cart.
Total..	..	..	218 0 0	34 14 1	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 6.25 acres	Rs. a. p. 218 0 0	Rs. a. p. 142 6 8	Rs. a. p. (a)10 5 0 (b)17 0 3	Rs. a. p. +75 9 4	Rs. a. p. +102 14 7
Per acre	34 14 1	22 12 7	4 5 11	+12 1 6	+16 7 5

STATEMENT No. 135

JOWAR—4 acres 18 gunthas in 1928-29

PLOT No. (4)

Previous crop—Groundnut in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing.....	18	..	36	..	..	..	54	12'13	....	....	Two ploughings were given. A plough required one man and two bullocks.
(b) Harrowing	4	..	8	..	..	..	12	2'60	....	....	Three harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds.....	..	..	..	..	..	..	..	..	1 4 0	0 4 6	For the plot 20 lbs. of <i>jowar</i> seed.
(b) Sowing and covering	2	..	4	..	..	..	6	1'35	....	....
3. After-care and tillage											
(a) Weeding	7	6	..	..	..	..	10	2'24	....	....
(b) Interculturing	3	..	4	1	..	..	8	1'81	0 8 0	0 1 10	One hoeing was given. Outside man was paid annas 8.
4. Harvesting, tying, breaking earheads and preparing for market.....	♦ 15	..	8	20	..	..	48	9'66	10 0 0	2 3 11	Twenty men were paid annas eight each.

KATHI (A)

617

STATEMENT No. 135—concl'd.

618

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
5. Charges for bullock labour..	..	..	..	..	..	..	..	..	20 1 4	6 8 7	The total annual cost on account of draft bullocks is distributed over different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc... 20 15 1											
(b) Interest on the value of bullocks, feeds and fodder .. 8 2 3											
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	5 2 5	1 2 6	The total annual charges are distributed over different plots in proportion to the labour units used on them.
(a) Depreciation .. 3 3 6											
(b) Interest .. 1 14 11											
7. Interest on fluid capital (i.e., wages of hired labour and price of seeds).....	..	..	..	..	..	..	..	..	0 1 8	0 0 4	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	13 0 5	2 14 10	The land was owned.
Total.....	49	6	60	21	..	..	133	29·88	59 1 10	13 4 6	

¹Family labour not charged. ²Home bullock labour charged under item 5.

(b) Yield and Value

NAME OF PRODUCT	Quantity.		Value		REMARKS
	For 4 acres 18 gunthas	Per acre	For 4 acres 18 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	880	197.75	33 12 0	7 9 4	Valued at Rs. 27 per map of 704 lbs.
Kadbi (400 bundles).	1,400	314.61	10 0 0	2 3 11	Valued at Rs. 2-8-0 per 100 bundles.
Bhoos ....	..	..	2 8 0	0 9 0	Estimated value.
Total..	..	..	46 4 0	10 6 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For four acres and 18 gunthas.	46 4 0	59 1 10	(a) 9 3 0 (b) 10 2 10	-12 13 10	+6 8 0
Per acre	10 6 3	13 4 6	4 5 8	-2 14 3	+1 7 5

KAYI (A)

STATEMENT No. 136

KULTHI—6.75 acres in 1928-29

PLOT No. (5)

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot		
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	12	..	24	..	..	..	30	5.88	....	....	Four harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	5 0 0	0 11 10	For the plot 85 lbs. of <i>kulthi</i> seed.
(b) Sowing and covering ..	4	..	8	..	..	..	12	1.77	....	....
3. After-care and tillage											
(a) Weeding	8	10	..	..	..	..	13	1.98	....	....	One weeding was given.
(b) Interculturing	12	..	14	2	..	..	28	4.15	1 0 0	0 2 4	Two hoeings were given. A set of hoes required two men and two bullocks. Two men were paid at annas 8 each.
4. Harvesting and preparing for market.....	19	..	4	20	..	..	43	6.37	10 0 0	1 7 0	Twenty men were paid at annas eight each.

5. Charges for bullock labour.	24 3 9	3 9 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc...	17 7 3										
(b) Interest on the value of bullocks, feeds and fodder.....	6 12 0										
6. Charges for implements and tools.....	4 4 7	0 10 2	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation.....	2 10 10										
(b) Interest.....	1 9 9										
7. Interest on fixed capital (i.e., wages for hired labour and price of seeds.....)	0 5 9	0 0 10	Charged at 12 per cent per annum.
8. Rent of land.....	15 8 0	2 4 0	The land was owned.
Total.....	55	10	50	22	132	19'55	60 6 1	8 15 1	

¹Family labour not charged, ²Home bullock labour charged under item 5.

KAVITHI (A)

621

STATEMENT No. 136—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 6.75 acres	Per acre	For 6.75 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Kulthi</i>	408	60.44	15 0 0	2 3 7	Sold at Rs. 30 per <i>map</i> of 816 lbs.
<i>Bhoos</i> ....	..	..	10 0 0	1 7 8	Estimated value.
Total..	..	..	25 0 0	3 11 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 6.75 acres	25 0 0	60 6 1	(a) 9 9 0 (b) 8 12 0	-35 6 1	-17 1 1
Per acre	3 11 3	8 15 1	2 11 5	-5 3 10	-2 8 5

KAVTHI (B), 1929-30

General information about the village, distribution of land, crops and cropping have already been given under the first part of the investigation i.e. Kavthi (A), 1928-29, of which part (B) is a continuation. The family under observation was, however, divided in 1928-29; one of the sons insisted on separation, and, therefore, the strength of the family and the size of the holding changed. The boy who separated from the father and the brother was not agreeable to supply information for cost study. The acreage remained with the old farmer will be found in table X (page 628).

THE SEASON, 1929-30.

The total rainfall as recorded during the year was only 18·10 inches or only about 75 per cent of the average of the place.

The fortnightly distribution of rainfall in the year is given in table VI.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1929

(ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						} 18·10
0·0	0·0	0·0	0·0	0·0	0·75	3·07	0·30	0·62	0·61	0·0	0·0	
						Second fortnight						
0·0	0·0	0·0	0·0	0·0	8·79	0·42	0·36	3·18	0·0	0·0	0·0	

The monsoon opened early i.e., on the 4th of June but the current was rather weak. The current was strengthened by about the third week of June and at the end of the month the record reached to 9·5 inches. Sowing operations were finished by the middle of July. First fortnight of July brought in 3·07 inches, which gave good start to crops and maintained their vigour throughout the month of July. Second fortnight of July received only 42 cents but since there was sufficient moisture in the soil, crops kept on growing well. From the beginning of August to the middle of September there was a long break of six weeks with only 1·28 inches of ineffective rainfall. This shortage, at the time when crops needed moisture most, proved very harmful. The rainfall amounting to 3·18 inches, received in the second fortnight of September, spoiled crops, especially cotton which was ready for picking. In the *kharif* tract failure of south-west monsoon means a failure of the year and naturally the incomes recorded were poor.

THE FARMER

After giving a share to one of his sons the farmer retained fourteen acres and one guntha of land. He, therefore, hired seventeen acres and twenty-one gunthas of land on share system. The total area cultivated by the old farmer and one of the boys was thirty-one acres and twenty-two gunthas.

(a) *Human labour*.—In the year 1929-30 (after the separation of the eldest son) there were following persons in the family :—

- (1) The farmer 53 years old.
- (2) Farmer's second son 26 " "
- (3) Farmer's daughter-in-law 21 " "

Since the investigation closed soon after the crops were gathered, the distribution and use of the family labour, given in table VII, deals with a period of 9 months, from June 1929 to February 1930. As in similar cases the table shows the productive employment on the farm for the period only, whether on the crops of 1928-29 or 1929-30.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Persons	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Total	Percentage of the labour used to total labour available.
Two men and one woman or three adults.	$\frac{41}{90}$	$\frac{53}{93}$	$\frac{76}{93}$	$\frac{46}{90}$	$\frac{64}{93}$	$\frac{46}{90}$	$\frac{5}{93}$	$\frac{0}{93}$	$\frac{16}{84}$	$\frac{347}{819}$	42.36

Note.—The denominator shows available labour, while the numerator shows the labour used.

Family labour does not seem to have been efficiently employed. The obvious reason was the disturbance of the organization caused by the separation. In the previous year one of the two women managed the household work, liberating the other woman for farm work. During the year 1929-30, there was only one woman in the family who was, of necessity, engaged in the household work. She could work only for 33 days. The same holds good with man labour. The old man continued more as a manager and there was only one man available for active farm work. Hence the proportion of labour utilized was smaller as compared to the previous year.

(b) *Bullock work*.—During the year 1929-30 the farmer had left two bullocks with him. Monthly distribution of their work, from June 1929 to February 1930, is given in table VIII.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Total.	Percentage of the units employed to the units available
Two bullocks	$\frac{50}{60}$	$\frac{50}{62}$	$\frac{14}{62}$	$\frac{2}{60}$	$\frac{28}{62}$	$\frac{30}{60}$	$\frac{0}{62}$	$\frac{0}{62}$	$\frac{0}{58}$	$\frac{174}{548}$	31.75

Note.—Denominators show available bullock units, while the numerators show the units used.

In the months of June and July bullocks were well employed. In the months of October and November they did fair amount of work, while during the rest of the period they were not well employed. As has been pointed in several places this distribution does not synchronize with the period of the year's crops and the table simply shows the trend of the employment of bullocks. However, it can be said that the bullocks were not efficiently used.

The opening and closing inventory of the property of the farmer is given in table No. IX. The value of the inventory fell by Rs. 267-3-3 at the end of the year. It was due to the poor returns from the farm and accumulation of interest on the debt incurred. The low returns were due to the poor season and the low prices of farm produce.

Nature of holding, lands, crops and cropping.—The farmer had only 14 acres and one guntha of land in one block. This block was assessed at Rs. 14-2-0 plus the L. F. C, (Rs. 1-1-8). He took 17 acres and 21 gunthas on *batai* agreeing to give one-third of the produce to the owner. The total area of the holding was thus 31 acres and 22 gunthas which was about the size of an average cultivating holding of the village. The owned land was close to the village; while the leased land, in two adjacent blocks, was about one-fourth mile away from the village.

The nature of land, crops and cropping and treatment of different fields held by the farmer, in 1928-29 and 1929-30, are given in table X.

TABLE IX—INVENTORY OF THE PROPERTY

Item	1920			Remarks	Item	1930			Remarks
	Quantity or number		Approximate value			Quantity or number		Approximate value	
<i>Assets</i>									
1. Real estate	A.	g.	Rs. a. p.		1. Real estate	A.	g.	Rs. a. p.	
(A) Land	14	1	1,425 0 0		(A) Land	14	1	1,425 0 0	
(B) Buildings					(B) Buildings				
(a) House	1		300 0 0		(a) House	1		300 0 0	Some repairs were made.
(b) Cattle-shed	1		150 0 0		(b) Cattle-shed	1		150 0 0	" " "
Total Real estate			1,875 0 0		Total Real estate			1,875 0 0	
2. Livestock					2. Livestock				
(a) Bullocks	2		150 0 0		(a) Bullocks	2		140 0 0	
(b) Cow	1		80 0 0		(b) Cow	1		25 0 0	
Total Livestock			180 0 0		Total Livestock			165 0 0	
3. Implements and tools					3. Implements and tools				
(a) Plough	1		7 0 0		(a) Plough	1		6 0 0	
(b) Seed-drill	1		11 0 0		(b) Seed-drill	1		10 0 0	
(c) Harrow	1		3 8 0		(c) Harrow	1		3 0 0	
(d) Hoes	2		4 8 0		(d) Hoes	2		4 0 0	
(e) Yokes	2		2 0 0		(e) Yokes	2		1 8 0	
(f) Tools and ropes ..	..		4 0 0		(f) Tools and ropes ..	....		2 8 0	
(g) Ropes					(g) Ropes .....	....		2 0 0	New purchase.
Total implements and tools ..	..		32 0 0		Total implements and tools ..			29 0 0	

3. Farm produce and supplies on hand			4. Farm produce and supplies on hand		
(a) Bajari	1,920 lbs.	105 0 0	Valued at Rs. 42 per map of 788 lbs.	(a) Kulthi	200 lbs. 9 0 0
(b) Malki	120 "	7 8 0	Valued at 16 lbs. per rupee.	(b) Jowar	138 lbs. 7 14 0
(c) Jowar	440 "	16 14 0	Valued at Rs. 27 per map of 704 lbs.	(c) Malki	58 lbs. 4 0 0
(d) Kulthi	204 "	7 8 0	Valued at Rs. 30 per map of 816 lbs.	(d) Kadbi	100 bundles 4 0 0
(e) Fodder	2,100 "	36 0 0		(e) Bhoos	12 0 0
(f) F. Y. M.	25 cart-loads.	75 0 0	Valued at Rs. 3 per cart.	(f) F. Y. M.	15 cartloads 45 0 0
Total farm produce		247 14 0		Total farm produce ..	81 14 0
5. Cash on hand		30 0 0		5. Cash on hand	20 0 0
		30 0 0			20 0 0
Total Assets		2,364 14 0		Total Assets	2,170 14 0
Liabilities				Liabilities	
(a) Debts .....	..	500 0 0	At 12 per cent	(a) Debts	500 0 0 At 12 per cent
(b) Debts .....	..	110 0 0	" " "	(b) Debts	110 0 0 " " "
Total Liabilities		610 0 0		(c) Interest accumu- lated	73 3 3
Net Value of the Farm at the Beginning of the Year .....	..	1,754 14 0		Total Liabilities	683 3 3
				Net Value of the Farm at the End of the Year	1,487 10 9

SUMMARY

	Rs.	a.	p.
Net worth of the farm at the beginning of 1929 ..	1,754	14	0
" " " " " 1930 ..	1,487	10	9
Loss in net worth	267	3	3

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Field No.	Area	Nature of land	Previous year i.e. 1928-29		Year under study i.e. 1929-30		
			Crop	Treatment	Crop	Plot No.	Treatment
1	14 1	Medium black soil; level	<i>Bajri</i> ..	20 cart-load of F. Y. M. were given to the whole plot.	<i>Cotton</i> ..	2	25 cart-loads of F. Y. M. were applied. Three ploughings and four harrowings were given.
2	11 4	<i>Barad</i> soil ..	<i>Bajri</i> ..	Not manured ..	<i>Jowar</i> ..	1	Not manured. Only four harrowings were given as preparatory tillage.
3	6 17	<i>Do</i>	<i>Do</i>	<i>Do</i>	<i>Kulthi</i> ..	3	Not manured. Only two harrowings were given as preparatory tillage.

Looking to the distribution of crops it will be seen that cotton is the most important crop; next comes *jowar*. During the year under study cotton claimed 45 per cent, *jowar* 35 per cent, and *kulthi* 20 per cent of the farm.

COSTS AND RECEIPTS

Expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost for the total cultivated area (viz 31 acres and 22 gunthas)	
	Rs.	a. p.
*I. Out-of-pocket expenses:		
(a) Manure	55	0 0
(b) Seeds	22	4 0
(c) Outside labour	53	12 0
(d) Depreciation on implements and tools	5	0 0
(e) Cost of bullock labour (excluding interest on the value)	90	8 0
(f) Assessment and L.F.C. on owned land and rent of leased land	33	10 8
		260 2 8
II. Rent of owned land excluding assessment and L.F.C.....	100	0 0
		100 0 0

Item of expenditure	Cost of the total cultivated area (viz 31 acres and 22 gunthas)	
	Rs. a. p.	Rs. a. p.
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	4 7 1	
(b) Interest on the value of equipment and tools	3 13 6	
(c) Interest on the value of bullocks, feed, and fodder fed to them	28 3 3	
	-----	36 7 10
<i>Total cost of production (excluding wages for family labour)</i>		396 10 6

*DETAILS OF OUT-OF-POCKET EXPENSES

1. Manures :	Rs. a. p.	Rs. a. p.
(a) Twenty-five cart-loads of F.Y.M. at Rs. 3 per load given to 7 acres and one guntha of land under cotton ; 50 per cent of the cost is charged to cotton	37 8 0	
(b) Charges on account of residual manure. In the previous year 14 acres and one guntha of plot No. 2 was given 20 cart-loads of F.Y.M. at Rs. 2-8-0 per cart; 35 per cent of this manure cost is charged to plot No. 1.	17 8 0	
	-----	55 0 0
2. Seeds :		
(a) Cotton-seed 400 lbs.	17 0 0	
(b) Jowar-seed 31 lbs.	1 12 0	
(c) Mutki-seed 4 lbs.	0 4 0	
(d) Kulthi-seed 67 lbs.	3 4 0	
	-----	22 4 0
3. Outside labour :		
(a) Labour engaged on daily wages for cotton crop, 126 women	31 8 0	
(b) Labour engaged on piece-work for picking cotton	11 0 0	
(c) Labour engaged on daily wages for jowar crop, 3 man units and 12 woman units	4 11 0	
(d) Day-labour engaged for kulthi, 21 woman units	6 9 0	
	-----	53 12 0
4. Depreciation on implements and tools :		
Opening inventory	32 0 0	
Closing inventory	27 0 0	
	-----	5 0 0

	Rs. a. p.	Rs. a. p.
5. <i>Bullock labour cost (excluding interest) :</i>		
(a) Depreciation on the value of two bullocks.		
Value as per opening inventory	150	
Value as per closing inventory	140	
	10 0 0	
(b) Death allowance on the bullocks at 5 per cent on Rs. 150	7 8 0	
(c) Charges on account of housing at Rs. 4 per bullock per year	8 0 0	
(d) Feeds and fodder		
Fodder.....	57 0 0	
Concentrates	28 0 0	
	85 0 0	
From the above costs (a) to (d) Rs. 20 have to be deducted for 10 cart-loads of F.Y.M. at Rs. 2 each	-20 0 0	
		90 8 0
6. <i>Land assessment and L.F.C. on owned land and rent of leased land :</i>		
(a) Assessment and L.F.C. on owned land		
Field No. 2	15 3 8	
(b) Rent of leased land—		
Plot No. 1	10 7 0	
Plot No. 3	8 0 0	
		33 10 8
		260 2 8
<i>Total out-of-pocket expenses.....</i>		

Family Labour Income.—Table XI gives the family labour income, i.e., the remuneration obtained by the farm family for the work done by them on the farm. The details of the cost of production have already appeared above. The value of produce is taken from the statements of the costs and receipts of various plots (pp. 633 to 641).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production excluding wages of family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
Total	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	81 22	278 13 0	260 2 8	36 7 10	100 0 0	396 10 6	-117 13 6
<i>Jowar</i>	11 4	31 5 0	29 13 0	4 10 7	..	34 7 7	-3 2 7
<i>Cotton</i>	14 1	223 8 0	203 0 6	28 0 7	100 0 0	331 1 1	-107 0 1
<i>Kulthi</i>	6 17	24 0 0	27 5 2	3 12 8	....	31 1 10	-7 1 10

Column 4 shows expenses over manure, seed, hired labour (including labour engaged on piece-work), depreciation on equipment, assessment and L.F.C. for owned land, rent for leased land and the cost of upkeep of bullocks. *Column 5* shows interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on feeds, fodder for the work animal and on current agricultural operations. Fixed capital includes value of implements and work animals. *Column 6* shows estimated rent of owned land minus the assessment and L.F.C. *Column 8* shows the wages earned by the farmer and his family members.

The value of the gross produce obtained from the farm was Rs. 278-13-0, while the cost of production (excluding the wages of the farm family) came to Rs. 396-10-6. This means the family labour income was minus Rs. 117-13-6.

Farm Business Income.—The total of family labour income, rent of owned land (excluding assessment and L.F.C.) and interest on working capital came to Rs. 18-10-4 only, as will be seen from table XII.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business Income
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	31 22	278 13 0	260 2 8	+18 10 4
<i>Jowar</i>	11 4	31 5 0	} 260 2 8	+18 10 4
<i>Cotton</i>	14 1	223 8 0		
<i>Kulthi</i>	6 17	24 0 0		

Since gross receipts amounted to Rs. 278-13-0 and out-of-pocket expenses to Rs. 260-2-8, the residue (Rs. 18-10-4) represents the wage of the family, rent of owned land and interest on working capital as shown below :—

	Rs. a. p.
Family labour income	— 117 13 6
Rent of owned land	+ 100 0 0
Interest on working capital	+ 36 7 10
	+ 18 10 4

ANALYSIS

The farm family put in 293 man units and 33 woman units ; taking woman as half a unit, the family put in 309·5 units work on the crops of 1929-30. Besides, the farmer had to pay for 3 man units and 159 woman units (Rs. 42-12-0) and for picking cotton (Rs. 11-0-0). The housewife was not much available for farm work, consequently larger amount of outside woman labour had to be employed for weeding and harvesting the crops.

For the 309·5 home units the farmer could not make any labour wage. On the other hand he lost Rs. 117-13-6. His farm business income came to Rs. 18-10-4, a very poor return for family labour, owned land and the capital invested.

Table XIII shows the yields of the main produce and the labour units, including the bullock labour spent per acre. (One man unit=one bullock unit=two woman units).

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of the produce	Quantity lbs.		
1	<i>Jowar</i> (grain)	18·8	10·35	The land was poor and had not received any manure. Medium black soil. Received F. Y. M. for cotton. (Includes 1·5 units for contract payment). Land was not good. No manure was given.
2	Seed-cotton	145·5	35·50	
3	<i>Kulthi</i> (grain)	46·9	11·05	

Jowar (plot No. 1).—Eleven acres and four gunthas of rented land was under *jowar*. The land was poor and was, moreover, neglected by the landowner. The lessee also could not pay much attention. The rainfall conditions, obtaining in the year, were unsatisfactory and the crop could not return even the low costs of production. Yield of grain per acre came to only 18 lbs. Though cost of production was low (Rs. 3-1-8 per acre) there was a loss of Re. 0-4-6.

Cotton (plot No. 2).—There were 14 acres and one guntha under cotton. This being an owned plot it received better cultivation. Half of the plot was manured with 20 cart-loads of F.Y.M. in the previous year and the remaining half received 25 cart-loads during the year under study. The crop was very good till the first week of August, but the long break in August and September spoiled the prospects. Rains in the latter part of September further damaged the harvest and its quality. The yield of seed-cotton was only 145 lbs. per acre which is far below the average. The cost incurred in expectation of good yields could not be recovered.

Kulthi (plot No. 3).—Like the *jowar* plot, this plot was also taken on rent and was close to it. It is not necessary to repeat the remarks regarding treatment of land and condition of the crop.

The statements of the costs and receipts of the various plots worked by the farmer follow.

STATEMENT No. 137

JOWAR—11 acres 4 gunthas in 1929-30

PLOT No. (1)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	11	..	22	..	..	..	33	2.97	....	....	Four harrowings were given. A harrow required one man and two bullocks.
(b) Cutting shrubs, etc....	7	..	..	..	..	..	7	0.63	....	....
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	....	..	2 0 0	0 2 11	For the plot 31 lbs. of <i>jowar</i> (Rs. 1-12-0) and 4 lbs of <i>malki</i> (annas four).
(b) Sowing and covering ..	4	..	4	..	..	..	9	0.72	....	....
3. After-care and tillage											
(a) Interculturing	6	..	6	..	..	..	12	1.08	....	....	One interculturing was given. A set of hoes required two men and two bullocks.
(b) Weeding	30	..	..	..	..	..	30	2.70	....	....	Two weeding were given. 1st weeding required 16 men and 2nd 14 men.

KAYTHI (B)

633

STATEMENT No. 137—concl'd.

634

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
4. Harvesting and preparing for market											
(a) For <i>jowar</i>	8	..	4	1	12	..	10	1·71	4 1 0	0 5 10	Twelve women were paid at 5 annas each. One man was paid five annas. Two men paid at 5 annas each.
(b) For <i>matki</i>	4	..	..	2	..	..	6	0·54	0 10 0	0 0 11
5. Charges for bullock labour	15 12 3	1 6 9	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the unit used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation etc. 12 0 4											
(b) Interest on the value of bullocks, feeds and fodder 3 11 11											
6. Charges for implements and tools	1 2 10	0 1 8	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation .. 0 10 8											
(b) Interest	0 8 2										
7. Interest on fluid capital (i.e., wages of hired labour and price of seeds)	0 6 6	0 0 7	Charged at 12 per cent per annum.
8. Rent of land	10 7 0	0 15 0	The land was taken on lease on share system. One-third of the gross produce was given as rent.
Total	70	..	36	8	12	..	115	10·35	34 7 7	8 1 8	

¹Family labour not charged.

²Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 11 acres and 4 gunthas	Per acre	For 11 acres and 4 gunthas	Per acre	
<i>Jowar</i>	Lbs. 209	Lbs. 18·8	Rs. a. p. 11 13 0	Rs. a. p. 1 1 0	Valued at 14 annas for 15·5 lbs. (i.e. one <i>payali</i>).
<i>Matki</i>	87	7·8	6 0 0	0 8 8	Valued at Re. 1 for 14·5 lbs. (i.e. one <i>payali</i>).
<i>Kadbi</i> (150 bundles).	450	40·5	6 0 0	0 8 8	Valued at Rs. 4 per 100 bundles.
<i>Bhoos</i> ...	....	....	7 8 0	0 10 10	Estimated value.
Total ..	....	....	31 5 0	2 13 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 11 acres and 4 gunthas....	31 5 0	34 7 7	(a) 4 10 7 (b) 0 6 9	-3 2 7	+1 8 0
Per acre ..	2 13 2	3 1 8	0 6 9	-0 4 6	+0 2 3

KATHI (B)

635

STATEMENT No. 138

636

COTTON—14 acres 1 guntha in 1929-30

PLOT No. (2)

Previous Crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo- men ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	33	..	66	..	..	..	99	7.05	....	....	Three ploughings were given. A plough required one man and two bullocks.
(b) Harrowing	22	..	44	..	..	..	66	4.70	....	....	Four harrowings were given.
2. Manure and manuring											
(a) Residual manure .....	..	..	..	..	..	..	..	..	17 8 0	1 8 11	In the previous year 20 carts of farmyard manure at Rs. 2-8-0 per cart were given to this plot; 35 per cent of the total cost is charged to this crop.
(b) Manure .....	..	..	..	..	..	..	..	..	37 8 0	2 10 11	For the plot 25 carts of F.Y.M. at Rs. 3 per cart were given. Only 50 per cent of the cost is charged to this crop.
(c) Manuring	16	..	16	..	..	..	32	2.29	....	....
3. Seeds and sowing											
(a) Seed .....	..	..	..	..	..	..	..	..	17 0 0	1 3 4	For the plot 400 lbs. of seed.
(b) Sowing and covering ..	14	..	14	..	..	..	28	1.99	..	....

FARM STUDIES

STATEMENT No. 138—concll.

638

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 14 acres and 1 guntha	Per acre	For 14 acres and 1 guntha	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
See d-c o t- ton	2,042	145.5	223 8 0	15 14 11	Thirteen maunds of seed-cotton, sold at Rs. 15-12-0 per maund and 1 1/4 maunds at Rs. 15 per maund (maund = 144 lbs.)
Total ..			223 8 0	15 14 11	

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 14 acres and 1 guntha	223 8 0	331 1 1	(a) 100 0 0 (b) 28 0 7	-107 9 1	+20 7 6
Per acre ..	15 14 11	23 9 8	9 2 1	-7 10 9	+1 7 4

FARM STUDIES

STATEMENT No. 139

KULTHI—6 acres 17 gunthas in 1929-30

PLOT No. (3)

*Previous crop—Bajri in 1928-29**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bul-locks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	5	..	10	..	..	..	15	2'33	....	....	Two harrowings were given. A harrow required one man and two bullocks.
(b) Cutting shrubs etc.	2	..	..	..	..	..	2	0'32	....	....
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	3 4 0	0 8 1	For the plot 67 lbs. of <i>kuthi</i> seed.
(b) Sowing and covering ..	3	..	0	..	..	..	9	1'40	....	....
3. After-care and tillage											
(a) Interculturing	6	..	6	..	..	..	12	1'87	....	....	One interculturing was given.
4. Harvesting, thrashing and preparing for market	16	3	..	..	21	..	33	5'13	6 9 0	1 0 5	Twenty-one women were paid at five annas each.

KATHI (B)

639

STATEMENT No. 139—concl.

640

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Charges for bullock labour	..	..	..	..	..	..	..	..	11 13 2	1 13 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation etc. 9 0 3											
(b) Interest on the value of bullocks, feeds and fodder 2 12 11											
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	0 14 1	0 2 2	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation 0 7 11											
(b) Interest .. 0 6 2											
7. Interest on fluid capital (i.e. wages for hired labour and price of seeds).....	..	..	..	..	..	..	..	..	0 9 7	0 1 5	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	8 0 0	1 3 11	The land was taken on lease on share-system. One-third of the gross produce was given as rent.
Total	32	3	27	..	21	..	71	11·05	31 1 10	4 13 5	

¹Family labour not charged. ²Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 6 acres and 17 gunthas	Per acre	For 6 acres and 17 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Kulthi</i> (18 <i>payals</i>)	301.5	46.9	13 8 0	2 1 7	Valued at 12 annas per <i>payal</i> of 16.75 lbs.
<i>Bhoos</i> (42 bags) ..	..	..	10 8 0	1 10 2	Valued at 4 annas a bag.
Total ..	..	..	24 0 0	3 11 9	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 6 acres and 17 gunthas ..	24 0 0	31 1 10	(b) 3 12 8	-7 1 10	-3 5 2
Per acre ..	3 11 9	4 13 5	1 9 11	-1 1 8	-0 8 3

DHANDARPHAL, 1929-30

Dhandarphal is a village situated on the bank of the river Pravara, seven miles to the west of Sangamner, the *taluka* town and a market place in Ahmednagar District, with which it is connected by a good road going to Akola. The climate, on the whole, is temperate and healthy. In the cold season air is dry and bracing. The total annual rainfall of Sangamner is about 21 inches. The chief dependence is on the *khari* rains, though it is usually insufficient and precarious. The village is protected, to some extent by a number of wells. The water supply in the wells, naturally depends upon the sufficiency or otherwise of the rainfall. Generally only one year out of four is a good year. The year under study was one of the bad years. The soil is mostly light or medium black. Along the banks of the Pravara, soil is rich and gradually shades into thin and poor as it draws nearer the hills.

Tables I, II, III and IV are based on village records and personal enquiry. The following table shows the area, population and cultivated area per capita.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Area held	Area cultivated in 1928-29	Population according to 1931 census	Cultivated area per capita
A. g.	A. g.		A. g.
3,021 30	2,898 33	1,469	1 38·9

Out of the total area held, 122 acres and 37 gunthas were uncultivable. The net cultivated area, therefore, was 2,898 acres and 33 gunthas, out of which 62 acres and 18 gunthas were cropped twice in the year. The gross cropped area, therefore, was 2,961 acres and 11 gunthas.

There were 390 draft bullocks. Looking to the nature of crops and cropping this number is not small. The total number of cattle was 727, besides there were 583 sheep and goats. Looking to the paucity of *bagayat* cropping, the manure produced by these animals should provide a fair amount for the cultivated area.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held	Area cultivated	No. of <i>khatedars</i>	Average area per <i>khatedar</i>	
			Total area	Cultivated area
A. g.	A. g.		A. g.	A. g.
3,021 30	2,898 33	345	8 30·34	8 16·1

TABLE III—AVERAGE CULTIVATING HOLDING

Net area cultivated	No. of cultivators	Area per cultivator
A. g.		A. g.
2,898 33	222	13 2·31

Out of the 345 *khatedars*, 148 did not cultivate their lands, whereas 25 cultivators were pure tenants. Average cultivating holding was too small for a tract, getting only 20 inches rainfall.

TABLE IV—SIZE AND DISTRIBUTION OF PROPRIETARY HOLDINGS

Size of holding Acres	Number of holdings	Per cent
Total....	345	100·00
Below 5	158	45·80
5 to 10	81	23·50
10 to 20	69	20·00
20 to 30	24	6·94
30 to 40	6	1·74
40 to 50	1	0·28
50 to 75	6	1·74
Above 75	0	0·0

TABLE IV (a)—SIZE AND DISTRIBUTION OF CULTIVATING HOLDINGS

Size of holding Acres	Number of holdings	Per cent
Total....	222	100·00
Below 5	86	38·73
5 to 10	46	20·72
10 to 20	35	15·76
20 to 30	22	9·91
30 to 40	16	7·21
40 to 50	8	3·61
50 to 75	8	3·61
75 to 100	1	0·45
Above 100	0	0·0

It may be said that about 60 per cent of the holdings (falling below 10 acres) were too small. Some of the small holders having wells manage to eke out fair living. Large holdings were mostly *jirayat*.

TABLE V—CROPS OF THE VILLAGE

Crops	1928-29				1929-30					
	Area		Per cent		Area		Per cent			
	A.	g. A.	A.	g.	A.	g. A.	A.	g.		
Total.....	2961	11 2961	11	100·00	100·00	2911	11 2911	11	100·00	100·0
<i>Kharif</i> crops		2098	0		70·85		2,089	24		71·78
<i>Bajri</i>	1753	25		59·22		1687	21		57·97	
<i>Matki</i>	147	23		4·98		168	17		5·79	
<i>Til</i>	64	24		2·19		69	11		2·38	
<i>Mug</i>	73	7		2·47		83	17		2·86	
Others	59	1		1·99		80	38		2·78	
<i>Rabi</i> crops		839	27		28·36		795	37		27·34
<i>Jowar</i>	202	16		6·84		317	15		10·91	
<i>Wheat</i>	478	29		16·17		404	30		13·90	
<i>Gram</i>	83	18		2·82		24	32		0·85	
<i>Safflower</i>	59	38		2·02		41	27		1·43	
Others	15	6		0·51		7	13		0·25	
Twelve months crop, and perennial			23 24		0·79			25 30		0·88
Fruits	7	12		0·24		8	36		0·31	
Lucerne	7	17		0·25		13	39		0·48	
Sugarcane	8	65		0·30		2	35		0·09	

Dhandarphal is predominantly a *kharif* village, having 71 per cent of the area under *kharif* crops, and only about 28 per cent under *rabi* crops. The area under perennial irrigation is less than one per cent. The chief crop of the village is *bajri* which occupies about 60 per cent of the cultivated area. *Matki*, *til* and *mug* are grown as mixture in *bajri*. Wheat, which comes next, occupies about 15 per cent and then comes *shalu-jowar*. Sugarcane, wheat and fruit are the cash crops of the village.

In a *kharif* tract receiving insufficient rainfall a regular system of rotation is not possible. *Bagayat* lands intended for *bajri* receive ploughing and harrowing. *Bajri* is followed either by wheat or gram in the next *rabi* season. At times, *khondya* (hot weather irrigated fodder *jowar*) may be taken if *rabi* rains are insufficient. *Jirayat bajri* is rarely manured, while *bagayat bajri* may receive 6 to 10 cart-loads of farm-yard manure per acre.

Bagayat jowar receives the same treatment as *bagayat bajri* and is rotated with *bajri*, wheat or *khondya*, while *jirayat jowar* is rotated with *bajri*, wheat or *til*.

Bagayat cultivation is restricted to a small area on wells. The number of wells was 108, which supplied water to about 100 acres in 1928-29.

Since the farmer, under study, had taken some land on *batai*, a few lines describing the system, in vogue, will not be out of place. The terms of *batai* vary from village to village and even in the same village. In this village the assessment and local-fund cess are generally paid by the land-owner. He also contributes one-half or three-fifths of the seeds and manure, and receives the same proportion of the produce. All labour and other costs are met by the tenant. As regards garden crops like onion, chillies and sugarcane the land-owner and the tenant share the cost of seeds, planting, weeding and harvesting, half and half. All the other costs are borne by the tenant. The produce is shared by the owner and the tenant, half and half.

For want of sufficient employment on farms, many people from the village have to go to Sangamner, Ahmednagar and Bombay in search of employment. During the year under study, due to the failure of the season, about 250 people had left the village in search of work outside. Five of the small farmers plied carts for hire to supplement their earnings.

THE SEASON, 1929-30

Regular rainfall records for the village are not available. Table No. VI gives the rainfall of Sangamner which is only 7 miles from the village. It is believed that there is generally no difference in the rainfall of Sangamner and Dhandarphal. The total amount of rainfall received in the year, ending in December 1929, was 13·91 inches or about 33 per cent short of the normal rainfall for the place.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1929
(ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						
0·58	0·03	0·0	0·60	0·0	0·0	1·62	0·0	0·09	1·42	0·0	0·0	13·91
						Second fortnight						
0·0	0·0	0·0	0·53	0·0	4·24	0·09	0·35	4·31	0·0	0·0	0·05	

The monsoon broke in the third week of June and continued for some days in the first week of July, when there was a break, which allowed time for sowing. In the second week of July there were occasional light showers. There was then a long break up to the middle of September and all the *kharif* crops received a bad check. Rain again began with light showers from the second week of September and continued till the end of the first week of October. These rains, however, proved harmful to *bajri*, with the result that the earheads did not fill in, and, the harvest was very poor. The rains of September helped *rabi* crops to some extent.

The crop estimate of the village in 1929-30 was only 6 *annas*.

THE FARMER

The farmer owned 19 acres and 2 gunthas and had taken on lease 12 acres and 33 gunthas. The total area of the holding, therefore, came to 31 acres and 35 gunthas. Since 30 gunthas were cropped twice, the gross cropped area came to 32 acres and 25 gunthas. The holding was in two blocks, two miles apart from each other. The soil of the owned area was medium black. Of the rented area a field of 2 acres and 19 gunthas was poor and shallow, while the rest of the area was medium black. According to the terms of renting the landowner contributed three-fifths of the cost of seed and received the same proportion of the produce from two fields (one of 4 acres and 21 gunthas and another of 3 acres and 2 gunthas), while in the case of the other two (one of 2 acres and 31 gunthas and another of 2 acres and 19 gunthas) the owner paid half the cost of seeds and received half the gross produce. The assessment and local-fund cess of the land was paid by the landlord and the farmer bore all other costs of production.

(a) *Human labour*.—The farmer's family consisted of the following members :—

(1) The farmer	35 years.
(2) Farmer's wife	25 "
(3) Their eldest daughter	10 "
(4) ,, second daughter	7 "
(5) ,, third daughter	4 "
(6) Farmer's brother	28 "
(7) Wife of farmer's brother	20 "
(8) Farmer's mother	55 "

There were thus five adult members in the family. The girls were of little use on the farm, though they helped their mother in the household. The monthly distribution of the available labour and its utilization, from June 1929 to May 1930, are given in table VII. The period mentioned does not synchronize with the period taken by the crops of the year. The table only shows how the family generally utilized their labour in connection with their farm.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Percentage of labour employed to labour available
Two men	15	47	5	4	5	34	34	20	16	15	35	0	220	30·13
	60	62	62	60	62	60	62	62	56	62	60	62	730	
Three women	24	43	0	0	8	27	28	16	8	0	2	0	156	14·25
	90	93	93	90	93	90	93	93	84	93	90	93	1,095	

Note.—The denominators denote the available labour units, while the numerators show labour units employed.

The distribution of the family labour shows that even after making allowance for household work in the case of the women, the family was not efficiently employed, as the percentage of employment on the farm came to only 30·13 per cent in the case of men and 14·25 per cent in the case of women. The family was fairly well engaged during the sowing and the harvesting seasons, while the periods of forced idleness were very long. There was not sufficient work for them even if they had the desire to work more. This is usually the case in dry tracts, where farmers have to depend upon precarious rainfall during a short period. Practically there was no work in August, September (1929) and May 1930.

Whenever there was pressure of work the farmer received help from his neighbours which was repaid when they were in need of help. Thus he could get 8·5 man units and 23·5 bullock units in exchange.

Due to the nature of dry cultivation and especially on account of the bad season, there was no demand for labour in the village and hence the family could not earn wages as day-labourers.

(b) *Bullock labour*.—The farmer had four bullocks throughout the year except during August, September and October when there were only three bullocks. The area of his owned land (19 acres and 2 gunthas) was too small for four bullocks and hence he had to take on lease more land (12 acres and 33 gunthas). Even then the holding was too small for four bullocks as will be seen from the utilization of bullock labour given in table VIII.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Percentage of units employed to the total available units
Three bullocks for the whole year and fourth bullock for nine months	48 120	80 124	14 93	18 90	14 93	14 120	30 124	52 124	48 112	48 124	52 120	0 124	418 1368	30·5

Note.—The denominators denote the available labour units, while the numerators show the labour units used.

The table shows that only 30·5 per cent of the available bullock labour could be utilized. It seems in a tract like this two pairs of bullocks could conveniently manage 40 to 45 acres of land. Looking to the strength of the family and the number of bullocks, the farmer would have done better if he had taken on lease *bagayat* instead of *jirayat* land, as in that case he could have got more and steady work for the family and the bullocks.

The opening and closing inventories of the property of the farmer are given in table IX.

TABLE IX—INVENTORY OF THE PROPERTY

648

1929				1930					
Item	Quantity or number	Approximate value		Remarks	Item	Quantity or number	Approximate value		Remarks
		Rs. a. p.	Rs. a. p.				Rs. a. p.	Rs. a. p.	
<i>Assets</i>					<i>Assets</i>				
1. Real estate					1. Real estate				
(A) Land .					(A) Land				
(a) Field No. 1 ..	19 2	3,000 0 0			(a) Field No. 1 ..	19 2	3,000 0 0		
(B) Buildings					(B) Buildings				
(a) House	1	500 0 0			(a) House	1	500 0 0		
(b) Cattle shed ..	1	100 0 0			(b) Cattle shed ..	1	100 0 0		
Total real estate ...			3,600 0 0		Total real estate			3,600 0 0	
2. Livestock					2. Livestock				
(a) Bullocks	5	340 0 0			(a) Bullocks	4	221 0 0		One bullock was sold for Rs. 100.
(b) Cows	4	115 0 0			(b) Cows	3	100 0 0		One cow died.
(c) Bull calf	1	40 0 0			(c) Bull calves	2	60 0 0		
(d) Young calves...	2	15 0 0			(d) Young calves ..	3	40 0 0		
Total livestock.....			510 0 0		(e) Goats	2	12 0 0		
					Total livestock.....			433 0 0	

FARM STUDIES

3. Implements, tools, etc.		
(a) Plough	1	15 0 0
(b) Harrows	2	4 0 0
(c) <i>Farat</i>	2	3 0 0
(d) Seed-drill	1	5 0 0
(e) Hoes	2	3 8 0
(f) <i>Moghad</i>	1	5 8 0
(g) Ropes, etc.....		15 0 0
Total implements and tools.....		51 0 0
4. Farm produce and supplies on hand		
(a) <i>Bajri</i>		9 0 0
(b) Wheat.....		8 0 0
(c) <i>Malki</i> and <i>mug</i>		1 0 0
(d) <i>Bhoos</i>		10 0 0
(e) Farmyard manure		12 0 0
Total produce on hand..		40 0 0

3. Implements, tools, etc.		
(a) Plough	1	13 0 0
(b) Harrows	2	3 8 0
(c) <i>Farat</i>	2	2 8 0
(d) Seed-drill	1	4 0 0
(e) Hoes	2	3 0 0
(f) <i>Moghad</i>	1	4 0 0
(g) Ropes, etc.....		10 0 0
Total implements and tools.....		40 0 0
4. Farm produce and supplies on hand		
(a) <i>Bajri</i>		136 0 0
(b) <i>Jowar</i>		2 14 0
(c) Wheat		11 3 0
(d) <i>Malki</i>		3 12 0
(e) <i>Mug</i>		3 0 0
(f) Gram		2 5 0
(g) Tobacco		5 0 0
(h) <i>Sarmad</i>		60 0 0
(i) <i>Kadbi</i>		2 0 0
(j) <i>Bhoos</i>		12 8 0
(k) Farmyard manure		40 0 0
Total produce on hand.		278 10 0

TABLE XI—INVENTORY OF THE PROPERTY—*concl'd.*

1929				1930				
Item	Quantity or number	Approximate value		Remarks	Item	Approximate value		Remarks
		Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.	
5. Cash on hand			91 0 0					
<i>Total Assets</i>			4,292 0 0		<i>Total Assets</i>		4,351 10 0	
<i>Liabilities</i>					<i>Liabilities</i>			
(a) Debt taken from money lender		250 0 0		At 24 per cent.	Old debt	150 0 0		At 24 per cent.
(b) Miscellaneous amount owed to others		25 0 0			Accumulated interest.	86 0 0		
					New debt	200 0 0		At 24 per cent.
<i>Total Liabilities</i>			275 0 0		<i>Total Liabilities</i>		886 0 0	
<i>Net worth of the Farm</i> ..			4,017 0 0		<i>Net worth of the Farm</i>		3,965 10 0	

FARM STUDIES

SUMMARY

	Rs. a. p.
Net worth of the farm at the beginning of the study	4,017 0 0
Net worth of the farm at the close of the study	3,965 10 0
<i>Loss in net worth</i>	<u>51 6 0</u>

During the course of the year the inventory fell by Rs. 51-6-0. The value of the real estate remained the same, while the value of the livestock went down by Rs. 77. The young stock, however, appreciated. Implements and tools depreciated by Rs. 11 at the end of the year. Much of the produce obtained from the farm, during the year, was held over and hence there was a rise of Rs. 238-10-0 under farm produce and supplies. There was considerable increase in debt and that too at a high rate of interest. The fall in the value of inventory was mainly due to the poor season and low prices of farm produce.

Nature of holding, lands, crops and cropping.—The owned land measuring 19 acres and 2 gunthas was in two blocks lying near each other. The leased area of 12 acres and 33 gunthas was in three places. A block of two acres and 31 gunthas was at a distance of about two miles from the owned land, while the other two blocks were close to the owned land. The total area of the holding was thus 31 acres and 35 gunthas. Since 30 gunthas were cropped twice the gross cropped area was 32 acres and 25 gunthas. Of the total gross cropped area of 32 acres and 25 gunthas, the farmer had 26 acres and 2 gunthas or 79·85 per cent of the holding under *bajri*, 5 acres and 13 gunthas or 16·32 per cent under wheat, 20 gunthas or 1·53 per cent under groundnut and the remaining 30 gunthas or 2·3 per cent under gram.

The nature of holding, crops and cropping and the treatment of different fields during the years 1928-29 and 1929-30 are given in table X.

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Field No.	Area	Nature of land	1928-29 (previous year)		1929-30 (year under study)			
			Name of crop	Treatment	Name of crop	Plot No.	Treatment	
	A. g.				A. g.			
Owned								
1	16 0	Fairly level, medium black soil.	Wheat and gram.	<i>Jirayat</i> cultivation; did not receive any manure.	<i>Bajri</i>....16 0	1	<i>Jirayat</i> cultivation; did not receive any manure.	
					Gram after <i>bajri</i> .	0 30	8	Do.
2	3 2	Do.	<i>Bajri</i>	Do.	Wheat .. 2 22	6	Do.	
					Groundnut.	0 20	7	Do.
Taken on lease								
3	4 21	Do.	Wheat and <i>bajri</i> .	Do.	<i>Bajri</i> 4 21	2	Do.	
4	2 31	Do.	<i>Bajri</i>	Do.	Wheat .. 2 31	5	Do.	
5	2 19	Poor light soil.	Do.	Do.	<i>Bajri</i> 2 19	3	Do.	
6	3 2	Fairly level, medium black soil.	<i>Bajri</i> and wheat.	Do.	Do. 3 2	4	Do.	
	31 35						32 25	

COSTS AND RECEIPTS

Costs incurred except the unpaid labour of the family are given in the subjoined abstract of costs. Below the abstract are given the details of out-of-pocket expenses, forming an important sub-head of the abstract.

ABSTRACT OF COSTS

Item of expenditure	Total cost for the gross cropped area, viz. 32 acres and 25 gunthas	
	Rs.	a. p.
*I. Out-of-pocket expenses :		
(a) Seeds.....	22	5 3
(b) Outside labour.....	25	3 0
(c) Depreciation on implements and tools.....	11	0 0
(d) Upkeep of bullocks (excluding interest)....	94	12 0
(e) Assessment and L. F. C. on owned land....	42	3 0
(f) Rent of leased land.....	51	0 8
		<hr/> 246 7 11
II. Rent of owned land (excluding assessment and L. F. C.)	147	13 0
		<hr/> 147 13 0
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations.....	1	5 10
(b) Interest on the value of implements and tools.....	6	2 0
(c) Interest on the value of bullocks and on cost of feed and fodder consumed by them	34	8 6
		<hr/> 42 0 4
<i>Total cost of production (excluding wages of family labour)</i>		<hr/> 436 5 3

* DETAILS OF OUT-OF-POCKET EXPENSES

	Rs.	a. p.	Rs.	a. p.
1. Seeds :				
(a) Bajri 102 lbs.....	7	2 6		
(b) Math 15.5 „	0	11 0		
(c) Mug 14.5 „	0	10 0		
(d) Hulga, jowar, til and ambadi.....	0	9 0		
(e) Wheat 98 lbs	9	12 9		
(f) Gram 24 „	2	0 0		
(g) Groundnut 11 lbs.	1	8 0		
			<hr/> 22	5 3

	Rs. a. p.	Rs. a. p.
2. Outside labour engaged on daily wages :		
(a) Bajri mixture (plot Nos. 1, 2, 3 and 4); 21·25 men and 68·25 women	21 4 0	
(b) Wheat (plot Nos. 5 and 6); 2 men and 6 women	2 1 0	
(c) Groundnut (plot No. 7); 10 women	1 14 0	
	<hr/>	25 3 0
3. Depreciation on implements and tools :		
	Rs.	
Opening inventory.....	51	
Closing inventory.....	40	
	<hr/>	11 0 0
		<hr/>
		11 0 0
4. Charges for upkeep of bullocks (excluding interest) :		
	Rs.	
(a) Depreciation on bullocks		
Opening inventory.....	340	
Closing inventory Rs. 221 and Rs. 100 the price of one bullock sold in the interval.....	321	
	<hr/>	19 0 0
(b) Death allowance on (four bullocks) at 5 per cent on Rs. 240	12 0 0	
(c) Charges on account of housing at Rs. 4 per bullock per annum.....	16 0 0	
(d) Feeds and fodder.....	71 12 0	
Against the above costs from (a) to (d) must be set off Rs. 24 the value of 12 carts of F. Y. M.....	-24 0 0	
	<hr/>	94 12 0
5. Land assessment and L. F. C. for owned land and rent for the leased land :		
(i) Owned land—Land assessment and L. F. C.		
Field No. 1—area 16 acres.....	35 7 0	
Field No. 2—area 3 acres and 2 gunthas....	6 12 0	
(ii) Rent of leased land		
Area 12 acres and 33 gunthas (leased on conditions given on page 646)	51 0 8	
	<hr/>	93 3 8
		<hr/>
Total out-of-pocket expenses		246 7 11

Family Labour Income.—Table XI gives the family labour income i.e., the remuneration obtained by the farm family for their work on the farm.

TABLE XI—FAMILY LABOUR INCOME

Crop	Area	Value of produce	Cost of production excluding wages of family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total.....	32 25	341 15 3	246 7 11	42 0 4	147 13 0	436 5 3	-94 6 0
<i>Bajri</i>	26 2	280 8 0	181 5 7	27 4 0	123 9 0	332 2 7	-51 10 7
Wheat.....	5 13	20 11 3	50 1 3	11 13 7	19 10 3	81 9 1	-60 13 10
Groundnut.....	0 20	5 12 0	9 2 0	1 14 3	3 13 9	14 14 0	-9 2 0
Gram.....	0 30	4 0 0	5 15 1	1 0 6	0 12 0	7 11 7	-3 11 7
<i>Babul</i> trees from the farm .....	..	31 0 0	..	..	..	..	+31 0 0

Column 4.—"Out-of-pocket expense" include costs of manure, seeds, hired labour on daily wages, depreciation on dead stock, cost of upkeep of bullocks, rent of leased land, assessment and local-fund cess on owned land and the miscellaneous cash expenses. *Column 5.*—Interest on working capital both fixed as well as fluid capital. Fluid capital includes money spent on the current agricultural operations and on feed and fodder for the work animals. Fixed capital includes implements and work animals. *Column 6* denotes the estimated rent of owned land minus the assessment and local-fund cess. *Column 8* shows wages earned by the family.

The value of the gross produce obtained from the farm was Rs. 341-15-3 only, while the costs of production excluding the unpaid wages for the work done by the farm family came to Rs. 436-5-3. The family labour income was, therefore, minus Rs. 94-6-0. As some crops failed and others gave short harvests due to poor season, the farmer could not make any wage for family labour.

Farm Business Income.—The loss shown was off-set only by the rent of owned land and the interest on the working capital, leaving Rs. 95-7-4 as farm business income shown in table XII. The table gives the farm business income or the aggregate income of the farmer, i.e., the value of the produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
Total.....	A. g. 32 25	Rs. a. p. 341 15 3	Rs. a. p. 246 7 11	Rs. a. p. +95 7 4
<i>Bajri</i>	26 2	280 8 0	} 246 7 11	+95 7 4
Wheat.....	5 13	20 11 3		
Groundnut.....	0 20	5 12 0		
Gram.....	0 30	4 0 0		
<i>Babul</i> trees from the farm...	..	31 0 0		

Thus when out-of-pocket expenses, viz. Rs. 246-7-11, are deducted from the gross receipts of Rs. 341-15-3, the farmer obtained an income of Rs. 95-7-4 on account of the wages for the work done by the farm family on the different crops grown on the farm, interest on the working capital and rent of owned land minus assessment and local-fund cess.

The farm business income thus arrived at tallies with the figures shown in table XII.

	Rs. a. p.
Family labour income.....	—94 6 0
Interest on working capital.....	42 0 4
Rent of owned land.....	147 13 0
	<hr/>
	+95 7 4

Tables XI and XII are compiled from the abstract of expenditure and the details of out-of-pocket expenses already given and the detailed statements of receipts and costs of the different plots appearing on pp. 657 to 680.

In addition to the farm business income the farmer got Rs. 38 by way of selling milk. Milch-cattle are not included in the farm business and hence the costs and sale proceeds on account of milch-cattle are not included in the regular farm business. The farmer, besides, made a net profit of Rs. 14 in a side business. He purchased *bajri* from other farmers and sold it at Akola and made this profit. The aggregate income of the family was, therefore, Rs. 147-7-4.

ANALYSIS

The farm family put in 129·5 man units and 177·25 woman units of work on the crops grown in 1929-30. Taking two woman units equal to one man unit, the farm family in all put in 218·125 units. The farmer

had to engage 23·25 man units and 84·25 woman units costing Rs. 25-3-0. The farmer besides obtained 8·5 man units and 23·5 bullock units in exchange for about the same amount of work he did for others. It may, therefore, be said that 74·57 per cent of the work was done by the farm family. Outside labour was employed only when it was absolutely necessary.

For the 218·125 home labour units the farmer could not get any remuneration ; on the other hand he sustained a loss of Rs. 94-6-0. His farm business income came to Rs. 95-7-4. The reason for this small income was poor season and consequent failure of crops.

Table XIII shows the labour units required per acre, the yields of the main produce obtained and the general remarks on the crops. All labour, including home labour, hired labour and even bullock labour, is included under the heading "Labour units" to get some idea of the returns for human and bullock labour expended on the farm. (One man unit equal to one bullock unit equal to two woman units.)

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of product	Quantity lbs.		
1	Bajri.....	146·25	11·35	The yield of all the plots was very poor due to the failure of rains. The effects of scarcity of rain was more pronounced in lighter soils and hence the yield of plot No. 3 was very meagre. The number of labour units required for plot No. 3 were more as that plot was small. On the whole the crops were failures. Proportionately larger number of units for plot No. 6 were due to more tillage.
2	"	95·47	12·60	
3	"	29·09	22·01	
4	"	118·03	13·94	
5	Wheat.....	43·24	13·42	
6	"	42·35	24·7	
7	Groundnut.....	120·00	44·25	
8	Gram.....	48·00	20·66	

The yield of all the plots was very poor due to the failure of rains. *Annewari* of the *kharif* crops was 6 annas.

The statements giving costs and receipts of the different plots of the farmer are as follows ;—

STATEMENT No. 140

BAJRI—16 acres in 1929-30

PLOT No. (1)

Previous crop—Wheat and gram, 1928-29

(a) Cost of Production

No. III Q 84-42

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Men	Labour on daily wages		Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²		Women	Bullocks ¹			For the plot	Per acre	
1. Preparatory tillage													
(a) Harrowing.....	10'0	..	24'0	..	..	..	..	..	34'0	2'125	....	....	Two harrowings were given: one harrow having one man and two bullocks for eight days and another with one man and four bullocks for two days.
(b) Collecting deep-rooted weeds.....	..	11'25	..	..	..	..	..	..	5'625	0'35	....	....	Collecting deep-rooted weeds, thorns, etc.
2. Seeds and sowing													
(a) Seeds.....	..	..	..	..	..	..	..	..	..	..	6 2 6	0 6 2	For the plot seeds:— Rs. a. p. Bajri 68 lbs. 4 14 0 Muth 8 " 0 3 6 Mug 7 " 0 5 0 Hulga 8 " 0 2 0 Jowar 6 " 0 5 6 Til and 1 lb. 0 1 6 ambadi 96 6 2 6
(b) Sowing and covering	8'5	..	17'0	..	..	..	..	..	25'5	1'596	....	....
3. Harvesting, thrashing and preparing for the market.....	33'0	39'5	12'5	2	8	16	50'5	..	110'5	7'279	15 14 0	0 15 10	Sixteen men were paid at 6 annas; 19'5 women at 4 annas; 31 women were paid bajri worth Rs. 5.

DHANDARPHAL

637

STATEMENT No. 140—concl'd.

658

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Men	Labour on daily wages		Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²		Women	Bullocks			For the plot	Per acre		
						Rs. a. p.			Rs. a. p.					
4. Charges for bullock labour.....	..	..	..	..	..	..	..	..	..	..	Rs. a. p. 44 0 9	Rs. a. p. 2 12 0	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc. 32 4 6														
(b) Interest on the value of bullocks, feeds and fodder..... 11 12 3														
5. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	..	5 13 4	0 5 10	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation..... 3 12 0														
(b) Interest.. 2 1 4														
6. Interest on fluid capital (i.e., cost of seeds).....	..	..	..	..	..	..	..	..	..	..	0 5 11	0 0 5	Charged at 12 per cent per annum. The land was owned. Rent is distributed in proportion to the value of crops taken on the plot in the same year. Thirty gunthas of this plot were put under gram (plot No. 8).
7. Rent of land.....	..	..	..	..	..	..	..	..	..	..	157 10 6	9 13 8	
Total.....	51·5	50·75	53·5	2	8	16	50·5	..	181·625	11·85	229 15 0	14 5 11		

¹ Family and exchange human labour not charged.² Home and exchange bullock labour charged under item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 16 acres	Per acre	For 16 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri	2,340	146.25	130 0 0	8 2 0	Valued at 18 lbs. per rupee.
Til .....	..	..	1 3 3	0 1 3	Estimated value.
Jowar	17.25	1.08	0 12 0	0 0 9	Valued at 23 lbs. per rupee.
Matki ....	..	..	0 4 0	0 0 3	Estimated value.
Sarmad (2,750 bundles).	6,050	378.125	55 0 0	3 7 0	Valued at Rs. 2 per 100 bundles.
Bhoos (20 bags) ..	800	50.00	10 0 0	0 10 0	Valued at 8 annas per bag. <i>Mug, hulga</i> and <i>ambadi</i> crops failed.
Total ..	..	..	197 3 3	12 5 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 16 acres	197 3 3	229 15 0	(a) 123 9 0 (b) 14 3 6	-32 11 9	+105 0 9
Per acre...	12 5 3	14 5 11	8 9 9	-2 0 8	+ 6 9 1

STATEMENT No. 141

660

BAJRI—4 acres 21 gunthas in 1929-30

PLOT No. (2)

Previous crop—Wheat and bajri, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Men	Labour on daily wages		Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²		Women	Bullocks			Rs. a. p.	Rs. a. p.	
1. Preparatory tillage													
(a) Harrowing	6	..	12	..	..	..	..	..	18	3.98	....	....	Three harrowings were given.
(b) Collecting deep-rooted weeds, etc. ....	..	6	..	..	..	..	..	..	3	0.66	....	....	Collecting weed roots, stubbles, etc.
2. Seeds and sowing													
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	1 4 0	0 4 5	Rs. a. p. Bajri 15 lbs..... 1 0 0 Math 3 ,, 0 2 0 Mug 3 ,, 0 2 0 <hr/> 21 1 4 0
(b) Sowing and covering	2	..	4	1	2	..	..	..	0	1.99	....	....
3. Harvesting, thrashing and preparing for market	13	14	4	..	..	..	6	..	27	5.97	1 8 1	0 5 3	Six women were paid at 4 annas each.

FARM STUDIES

4. Charges for bullock labour .. .. .	..	..	..	..	..	..	..	..	..	..	15 12 1	3 7 8	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Ra. a. p.														
(a) Feeds, fodder, depreciation, etc.....	11	8	9											
(b) Interest on the value of bullocks, feeds and fodder	4	3	4											
5. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	..	2 1 5	0 7 4	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.														
(a) Depreciation.....	1	5	6											
(b) Interest....	0	11	11											
8. Interest on fluid capital (i.e., cost of seeds) .....	..	..	..	..	..	..	..	..	..	..	0 1 3	0 0 4	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	..	..	..	24 0 6	5 5 0	The land was taken on lease on share system. The landlord paid three-fifths of the cost of seeds and received the same proportion of the total yield. The net rent comes to Rs. 24-0-6 (Rs. 24-12-6 - Rs. 0-12-0).
Rs. a. p.														
(a) Depreciation.....	1	5	6											
(b) Interest....	0	11	11											
Total.....	21	20	20	1	2	..	6	..	57	12'6	44 11 3	9 14 0		

¹Family and exchange human labour not charged.

²Home and exchange bullock labour charged under item 4.

STATEMENT No. 141—concl'd.

662

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4 acres and 21 gunthas	Per acre	For 4 acres and 21 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Bajri.....	432	95·47	24 0 0	5 4 10	It was not a good year. Valued at 18 lbs. per rupee.
Matki.....	..	..	0 8 0	0 1 9	Estimated value.
Til.....	..	..	0 12 9	0 2 10	Do.
Sarmad (700 bundles)....	1,540	340·33	14 0 0	3 1 6	Valued at Rs. 2 per 100 bundles.
Bhoos (4 bags).	160	35·36	2 0 0	0 7 1	Valued at 8 annas per bag.
Total ..	..	..	41 4 9	9 2 0	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4 acres and 21 gunthas.	41 4 9	44 11 3	(b) 5 0 6	-3 6 6	+1 10 0
Per acre...	9 2 0	9 14 0	1 1 9	-0 12 0	+0 5 9

FARM STUDIES

STATEMENT No. 142

BAJRI—2 acres 19 gunthas in 1929-30

PLOT No. (3)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour co-operation		Labour on daily wages			Total units	Units Per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											Rs. a. p.	Rs. a. p.	
(a) Harrowing and leveling	5	9	12	..	..	1	..	..	22.5	9.09	0 6 0	0 2 5	Several operations were given. Women collected weed-rhizomes, and old stubbles.
2. Seeds and sowing													
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	0 13 0	0 5 3	Rs. a. p. Bajri 9 lbs..... 0 9 0 Math 3 ,, 0 2 0 Mug 3 ,, 0 2 0
(b) Sowing and covering.	2	..	4	1	2	..	..	..	9.0	3.63	....	....	15 0 13 0
3. Harvesting, thrashing and preparing for market	8	13	2	..	2	2	5	..	23.0	9.29	1 2 0	0 7 3	Two men were paid at annas four and five women at annas two each.
4. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	15 12 1	6 5 10	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.

DHANDARPHAL

663

STATEMENT No. 142—concl'd.

664

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
											Rs. a. p.	Rs. a. p.	
(a) Feeds, fodder, depreciation etc. .. 11 8 9													
(b) Interest on the value of bullocks, feeds and fodder .. 4 8 4													
5. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	..	2 1 5	0 13 6	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them.
(a) Depreciation .. 1 5 6													
(b) Interest .. 0 11 11													
6. Interest on fluid capital (i.e., wages of hired labour and cost of seeds).	..	..	..	..	..	..	..	..	..	..	0 1 2	0 0 6	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	..	..	..	3 9 6	1 7 8	The land was taken on lease on share system. The landlord paid half the cost of seeds and received same proportion of the total yield. The net rent comes to Rs. 3-9-6. (Rs. 4-0-0—Re. 0-6-6.)
Total	15	22	18	1	4	3	5	..	54.5	22.01	23 13 2	9 10 0	

¹Family and exchange human labour not charged.²Home and exchange bullock labour charged under item 4.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 19 gunthas	Per acre	For 2 acres and 19 gunthas	Per acre	
<i>Bajri</i>	Lbs. 72	Lbs. 29·09	Rs. a. p. 4 0 0	Rs. a. p. 1 9 10	Valued at 18 lbs. per rupee.
<i>Sarmad</i> (150 bundles) ..	330	133·33	3 0 0	1 3 5	Valued at Rs. 2 per 100 bundles.
<i>Bhoos</i> (2 bags) ..	80	32·32	1 0 0	0 6 5	Valued at annas 8 per bag. The yield was poor as it was one of the bad years.
Total ..	..	..	8 0 0	3 3 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assesment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 2 acres and 19 gunthas.	Rs. a. p. 8 0 0	Rs. a. p. 23 13 2	Rs. a. p. (b) 5 0 5	Rs. a. p. — 15 13 2	Rs. a. p. — 10 12 9
Per acre ..	3 3 8	9 10 0	2 0 6	— 6 6 4	— 4 5 10

DHANDARPHAL

STATEMENT No. 143

BAJRI—3 acres 2 gunthas in 1929-30

PLOT No. (4)

Previous crop—Bajri and wheat, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Labour on daily wages			Total units	Units Per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²	Men	Women	Bullocks			Rs. a. p.	Per acre	
1. Preparatory tillage													
(a) Harrowing	1	..	2	1'0	2	..	..	..	6'0	1'96	....	....	Two harrowings were given.
2. Seeds and sowing													
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	0 13 0	0 4 8	For the whole plot 12 lbs. of <i>bajri</i> and 8 lbs. of <i>mug</i> and <i>matki</i> .
(b) Sowing and covering	1	..	2	1'0	2	..	..	..	6'0	1'96	....	....
3 Harvesting, tying, breaking earheads, thrashing and preparing for market	11	16'75	4	0'5	1	2'25	6'75	..	30'5	10'02	2 6 0	0 12 6	The 2'25 men on day-wages were paid at annas six; 3'25 women at annas four each and 3 women were paid in kind <i>bajri</i> worth Re. 0-9-6 and one woman was paid annas 2 for half a day's work.

4. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	0 5 0	8 0 10	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
Rs. a. p.																							
(a) Feeds, fodder, depreciation etc. ..	6	13	3																				
(b) Interest on the value of bullocks, feeds and fodder ..	2	7	9																				
5. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	1 3 9	0 6 6	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.																							
(a) Depreciation ..	0	12	8																				
(b) Interest ..	0	7	1																				
6. Interest on fluid capital (i.e., cost of seeds) .....	..	..	..	..	..	..	..	..	..	..	0 0 9	0 0 3	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	..	..	..	19 14 8	6 8 6	The land was taken on share system. The landlord paid three-fifths the cost of seeds and received the same proportion of the total yield. The net rent comes to Rs. 19-14-8. (Rs. 20-6-5—Rs. 0-7-9.)
Total	13	16	75	8	2	5	5	2	25	6	75	..		42	5	13	94	38	11	2	11	0	10

¹Family and exchange human labour not charged.

²Home and exchange bullock labour charged under item 4

DHANDARPHAL

667

STATEMENT No. 143—concl'd.

668

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
	For 3 acres and 2 gunthas	Per acre	For 3 acres and 2 gunthas	Per acre							
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.							
<i>Bajri</i>	360	118.03	20 0 0	6 8 11	The yield was poor as it was one of the bad years. <i>Bajri</i> at 18 lbs. per rupee.						
<i>Sarmad</i> (800 bundles) ..	1,320	432.8	12 0 0	3 14 11	Valued at Rs. 2 per 100 bundles.	For 3 acres and 2 gunthas.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
						Per acre ..	34 0 0	33 11 2	(b) 2 15 7	+0 4 10	+3 4 5
<i>Bhoos</i> (4 bags) ..	160	52.46	2 0 0	0 10 6	Valued at annas 8 per bag. The mixture (crops) failed.		11 2 4	11 0 10	0 15 7	+0 1 7	+1 1 1
Total	34 0 0	11 2 4							

FARM STUDIES

STATEMENT No. 144

WHEAT—2 acres 31 gunthas in 1929-30

PLOT No. (5)

*Previous crop—Bajri, 1928-29**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men 1	Women 1	Bullocks 2	Men 1	Bullocks 2	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage											Rs. a. p.	Rs. a. p.	
(a) Harrowing and levelling	6'0	..	12	..	..	..	..	..	18'0	6'49	....	....	Four harrowings and a levelling were given.
(b) Collecting weed rhizomes and stubbles ..	..	2'0	..	..	..	..	..	..	1'0	0'36	....	....
2. Seeds and sowing													
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	5 0 0	1 12 10	For the plot 50 lbs. of wheat seed at 10 lbs. per rupee.
(b) Sowing and covering	1'0	..	2	1	2	..	..	..	6'0	2'16	....	....
3. Harvesting, thrashing and preparing for market	4'5	4'5	2	..	..	2	3	..	12'25	4'41	1 8 0	0 8 8	Two men were paid at annas six and three women at annas four each.

DHANDARPHAL

669

STATEMENT No. 144—concl'd.

670

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre		
4. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	Rs. a. p. 12 14 5	Rs. a. p. 4 10 4	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.														
(a) Feeds, fodder, depreciation, etc.....	9	7	3											
(b) Interest on the value of bullocks, feeds and fodder	3	7	2											
5. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	..	1 11 3	0 9 10	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.														
(a) Depreciation	1	1	6											
(b) Interest....	0	9	9											
6. Interest on fluid capital (i.e., cost of seeds).....	..	..	..	..	..	..	..	..	..	..	0 4 9	0 1 0	Charged at 12 per cent. per annum. The land was taken on lease on share system. The landlord paid half the cost of seeds and received the same proportion of the total yield. The net rent comes to Rs. 3-8-0 (Rs. 6-0-0 - Rs. 2-8-0).
7. Rent of land .....	..	..	..	..	..	..	..	..	..	..	3 8 0	1 4 2	
Total	11'5	6'5	16	1	2	2	3	..	37'25	13'42	24 14 5	8 15 7		

¹Family and exchange human labour not charged. ²Home and exchange bullock labour charged under item 4.

FARM STUDIES

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	3	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
	For 2 acres and 31 gunthas	Per acre	For 2 acres and 31 gunthas	Per acre							
Wheat ..	Lbs. 120	Lbs. 43·24	Rs. a. p. 8 0 0	Rs. a. p. 2 14 0	Valued at 15 lbs. per rupee.	Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
Straw and dhooos (8 bags) ..	320	115·31	4 0 0	1 7 0	Valued at annas 8 per bag. The yield is poor as it was one of the bad years.	For 2 acres and 31 gunthas	Rs. a. p. 12 0 0	Rs. a. p. 24 14 5	Rs. a. p. (b) 4 5 8	Rs. a. p. -12 14 5	Rs. a. p. -8 8 9
Total ..	..	..	12 0 0	4 5 0		Per acre ..	4 5 0	8 15 7	1 9 1	-4 10 7	-3 1 6

DHANDARPHAL

STATEMENT No. 145

672

WHEAT—2 acres 22 gunthas in 1929-30

PLOT No. (6)

Previous crop—Bajri in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
											Rs. a. p.	Rs. a. p.	
1. Preparatory tillage													
(a) Ploughing	5·5	3·5	18·0	..	..	..	..	..	25·25	9·9	....	....	Two ploughings were given. For 3½ days, there was only one boy and one man and four bullocks and some day two men and four bullocks.
(b) Collecting deep-rooted weed-roots and old stubbles .....	..	15·5	..	..	..	..	..	..	7·75	3·04	....	....	Collecting <i>kashya</i> .
(c) Harrowing	3·5	..	7·0	..	..	..	..	..	10·5	4·12	....	....	Four harrowings were given.
2. Seeds and sowing													
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	4 12 9	1 14 1	For the plot 48 lbs. of wheat seed at 10 lbs. per rupee.
(b) Sowing and covering.	0·75	..	1·5	0·75	1·5	..	..	..	4·5	1·74	....	....
3. Harvesting, thrashing and preparing for market	5·0	9·0	4·0	..	..	..	3	..	15·0	5·9	0 9 0	0 3 6	Three women were paid at annas 3 each.

FARM STUDIES

4. Charges for bullock labour .. .. .	..	..	..	..	..	..	..	..	..	..	22 14 6	8 15 9	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
Rs. a. p.																						
(a) Feeds, fodder, depreciation, etc.....	16	12	0																			
(b) Interest on the value of bullocks, feeds and fodder.....	6	1	11																			
5. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	..	3 0 7	1 8 1	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.																						
(a) Depreciation	1	15	2																			
(b) Interest....	1	1	5																			
6. Interest on the fluid capital (i.e., cost of seeds) .....	..	..	..	..	..	..	..	..	..	..	0 4 7	0 1 9	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	..	..	..	25 1 3	9 13 4	The land was owned. (It is a part of plot of 3 acres and 2 gunthas).
Total	14	75	28	30	5	0	75	1	5	..	3	..	63	0	24	7	56	10	8	22	3	6

¹Family and exchange human labour not charged. ²Home and exchange bullock labour charged under item 4.

STATEMENT No. 145—concl'd.

674

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 22 gunthas	Per acre	For 2 acres and 22 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat ..	108	42.35	7 3 3	2 13 2	Valued at 15lbs. per rupee.
Straw and bhoots.	..	..	1 8 0	0 9 5	Estimated value. The yield is poor as it was one of the bad years.
Total ..	..	..	8 11 3	3 6 7	

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 22 gunthas	8 11 3	56 10 3	(a) 19 10 3 (b) 7 7 11	—47 15 5	—20 13 3
Per acre	3 6 7	22 3 6	10 10 3	—16 9 8	—8 2 8

FARM STUDIES

STATEMENT No. 146

PLOT No. (7)

GROUNDNUT— $\frac{1}{2}$ acre in 1929-30Previous crop—*Bajri* in 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing	1.5	..	6	..	..	..	7.5	15.0	....	....	Two ploughings were given. A plough required one man and four bullocks.
(b) Collecting stubbles, weed rhizomes, etc.....	..	6.5	..	..	..	..	3.25	6.5	....	....	Collecting weed roots, etc.
(c) Harrowing	0.5	..	1	..	..	..	1.5	3.0	....	....	Two harrowings were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	1 8 0	3 0 0	For the plot 11 lbs. of groundnut seed.
(b) Sowing and covering	0.5	0.25	1	..	..	..	1.625	3.25	....	....
3. After-care and tillage											
(a) Weeding .....	..	..	..	..	10	..	5.0	10.0	1 14 0	3 12 0	One weeding was given. Ten women were paid at annas 3 each.

DHANARPHAL

875

STATEMENT No. 146—concl'd.

676

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting .....	..	6'5	..	..	..	..	3'25	6'5	....	....	Hand-digging, collecting vines, etc.
5. Charges for bullock labour	..	..	..	..	..	..	..	..	5 11 9	11 7 6	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc.									4 3 3		
(b) Interest on the value of bullocks, feeds and fodder									1 8 6		
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	0 12 1	1 8 2	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation									0 7 9		
(b) Interest									0 4 4		
7. Interest on fixed capital (i.e., cost of seeds and wages of hired labour).....	..	..	..	..	..	..	..	..	0 1 5	0 2 10	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	4 14 9	9 13 6	The land was owned. (It is a part of a plot of 8 acres and 2 gunthas).
Total.....	2'5	18'25	8	..	10	..	22'125	44'25	14 14 0	29 12 0	

¹Family labour not charged.

²Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For half acre	Per acre	For half acre	Per acre	
Groundnut pods ..	Lbs. 60	Lbs. 120	Rs. a. p. 3 12 0	Rs. a. p. 7 8 0	Valued at 16 lbs. per rupee. Crop was poor.
Vines ....	..	..	2 0 0	4 0 0	
Total ..	..	..	5 12 0	11 8 0	Estimated value.

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For half acre.	Rs. a. p. 5 12 0	Rs. a. p. 14 14 0	(a) 3 13 9 (b) 1 14 3	Rs. a. p. -9 2 0	Rs. a. p. -3 6 0
Per acre	11 8 0	29 12 0	11 8 0	-18 4 0	-6 12 0

DHANDARPHAL

STATEMENT No. 147

678

GRAM—0·75 acre in 1929-30

PLOT No. (8)

*Previous crop—Bajri in 1929-30**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²	Men ¹	Women	Bullocks			For the plot	Per acre	
											Rs. a. p.	Rs. a. p.	
1. Preparatory tillage													
(a) Harrowing	1·0	..	2	..	..	..	..	..	3·0	4·0	....	....	Three harrowings were given.
2. Seeds and sowing													
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	2 0 0	2 10 8	For the plot 24 lbs. of gram seed at 12 lbs. per rupee.
(b) Sowing and covering	0·25	..	1	0·25	1	..	..	..	2·5	3·84	....	....
3. After-care and tillage													
(a) Weeding .....	..	16	..	..	..	..	..	..	8·0	10·66	....	....

FARM STUDIES

4. Harvesting and preparing for market ..	4	..	..	..	..	..	..	2.0	2.60	....	....
5. Charges for bullock labour ..	..	..	..	..	..	..	..	..	..	2 13 11	8 13 2	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc. ..	2	1	8									
(b) Interest on the value of bullocks, feeds and fodder	0	12	8									
6. Charges for implements and tools ..	..	..	..	..	..	..	..	..	..	0 6 2	0 8 8	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation ..	0	8	11									
(b) Interest ..	0	2	8									
7. Interest on fluid capital (i.e., cost of seeds) ..	..	..	..	..	..	..	..	..	..	0 2 0	0 2 8	Charged at 12 per cent per annum.
8. Rent of land ..	..	..	..	..	..	..	..	..	..	2 5 6	3 2 0	The land was owned. Rent is distributed in proportion to the value of crops taken on the plots in the same year. Gram followed <i>bajri</i> (part of plot No. 1).
Total	1.25	20	8	0.25	1	..	..	..	15.5	20.66	7 11 7	10 4 9

¹Family and exchange human labour not charged.

²Home and exchange bullock labour charged under item 5.

STATEMENT No. 147—concl'd.

680

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS	1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
	For 0.75 acre	Per acre	For 0.75 acre	Per acre							
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.		Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
Gram	36	48	3 0 0	4 0 0	Valued at 12 lbs. per rupee.						
Bhoos ....	..	..	1 0 0	1 5 4	Estimated value.						
Total ..	..	..	4 0 0	5 5 4			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
						For 0.75 acre	4 0 0	7 11 7	(a) 0 12 0 (b) 1 0 6	-3 11 7	-1 15 1
						Per acre ..	5 5 4	10 4 9	2 6 0	-4 15 5	-2 9 5

FARM STUDIES

KANHUR, 1929-30

Kanhur is a fairly big village in the Parner *taluka* of Ahmednagar District and is about 15 miles from Supa, a place of some historical importance, situated on the Poona-Ahmednagar road. The village is about 8 miles to the north of Parner, the headquarters of the *taluka* with which it is connected by a good road, which runs through hills to the elevated plateau in which the village under study is situated. Though the average rainfall recorded is 23 inches it is uncertain and ill-distributed. Rainfall in September and October is generally more dependable and hence people grow more of *rabi* crops. Being situated on an elevated plateau, the climate is excellent. In the cold season climate is bracing and in the hot season temperature is kept down by the cool breezes. The major portion of the village land is fairly deep and suitable for growing wheat, *shalu jowar* and gram. Land, by the sides of the two streams, which pass through the village area, is not deep, while a very small portion is very light. Tables I, II, III, IV and V are based on village records and personal enquiry for the year 1928-29.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Area held	Area cultivated in 1928-29	Population according to 1931 census	Cultivated area per capita
A. g.	A. g.		A. g.
9,092 17·25	*9,481 23·25	3,082	3 3·06

* Out of the total area held, 108 acres and 21 gunthas were uncultivated, while 497 acres and 27 gunthas were double cropped.

There were 793 plough cattle for 9,481 acres of cultivated land which means one pair for about 24 acres. For a dry tract like Kanhur-Pathar the number of farm animals is not bad. The total number of cattle was 1,885 and that of sheep and goat 1,269. For a tract of scarce rainfall the supply of manure is quite sufficient. The number of milch animals was 111, which shows that the supply of milk in the village was poor.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held	No. of land holders	Average area per land holder
A. g. 9,092 17·25	672	A. g. 13 21·21

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated	No. of cultivators	Average area per cultivator
A. g. 9,481 23·25	382	A. g. 24 32·83

It will be noticed that the average proprietary holding (table II) and the area per capita (table I) are too small for the tract. The average unit of cultivation, though much larger than the average proprietary holding, is not big enough to maintain a family. It is too small for four bullocks, and too large for two. Table IV shows the size and percentage of the proprietary holdings in the village.

TABLE IV—SIZE AND DISTRIBUTION OF PROPRIETARY HOLDINGS

Size of holdings Acres	No. of holdings	Per cent
Total	672	100·00
Below 5	240	35·72
5 to 10	151	22·47
10 to 20	143	21·28
20 to 30	79	11·75
30 to 40	26	3·87
40 to 50	13	1·93
50 to 75	12	1·78
75 to 100	4	0·60
Above 100	4	0·60

TABLE IV (a)—SIZE AND DISTRIBUTION OF CULTIVATING HOLDINGS

Size of holdings Acres	No. of holdings	Per cent
Total	382	100·00
Below 5	50	13·07
5 to 10	69	18·08
10 to 20	83	21·74
20 to 30	80	20·94
30 to 40	48	12·56
40 to 50	24	6·28
50 to 75	21	5·50
75 to 100	6	1·57
Above 100	1	0·26

There were 672 landholders of whom 446 were classed agriculturists and the remaining 226 as non-agriculturists in the village records. Of the 446 agriculturists only 377 cultivated lands. There were besides 5 cultivators who did not possess any land and were pure tenants. There were thus 382 cultivators. From table IV (a) it will be seen that 52·89 per cent of the total cultivating holdings were below 20 acres, while 33·50 per cent were between 20 and 40 acres. Greater number of holdings ranged between 5 to 30 acres.

There were 125 wells in the village, out of which 49 were working in 1929-30. Whenever there is more rainfall large number of wells are worked. Most of the wells were situated by the side of the two small streams which pass through the village area. Whenever there is sufficient supply of water in the streams the cultivators of the adjoining fields put up small temporary bunds across the streams and use the water for irrigating crops. In 1929-30 rainfall being insufficient no land could be irrigated on these streams. Normally the wells and the streams provide water for about 375 acres of land. Cultivators having irrigation facilities are able to spread their work over a longer period and use home labour more productively. About 10 cultivators supplemented their agricultural earnings by plying carts. About 200 persons had gone out in search of work to Bombay, Poona, Indore and other cities.

Table V gives the area and percentage of the important crops of the village, in the years 1928-29 and 1929-30. *Bajri* as the main crop contains *tur*, *kulga*, *mug*, *chavali* and *jowar* and wheat as main crops contain safflower.

TABLE V—CROPS OF THE VILLAGE

Crops	1928-29				Per cent		Crops	1929-30					
	Area							Area					
	A.	g.	A.	g.	100·00	100·00		A.	g.	A.	g.	100·00	100·00
Total.....	9,481	23·25	9,481	23·25	100·00	100·00	Total ..	9,058	17	9,058	17	100·00	100·00
<i>Kharif</i> crops			1,738	28		18·83	<i>Kharif</i> crops.....			852	32		3·90
<i>Bajri</i>	1,014	25			10·70		<i>Bajri</i>	166	13			1·83	
<i>Hulga</i>	252	21			2·66		<i>Hulga</i>	52	34			0·58	
<i>Tur</i>	240	02			2·53		<i>Tur</i>	25	33			0·28	
Others	231	20			2·44		<i>Math and udid</i>	31	03			0·35	
<i>Rabi</i> crops			7,729	33·25		81·58	<i>Rabi</i> crops			8,697	25		96·01
<i>Jowar</i>	3,971	10			41·88		<i>Jowar</i>	6,558	30			72·410	
Wheat	3,061	05			32·29		Wheat	1,025	00			11·310	
Safflower	467	34			4·94		Safflower.....	985	06			10·874	
Gram	197	05			2·08		Gram	128	04			1·410	
Others.....	32	19·25			0·34		Linseed	0	25			0·006	
Perennial crop			13	02		0·14	Perennial crop.....	8	0			0·09	
Lucerne	7	22			0·08		Sugarcane	8	0			0·09	
Sugarcane	5	20			0·06								

The net cultivable area held was 9,092 acres and 17·25 gunthas. In 1928-29, 108 acres and 21 gunthas were not cultivated, while 497 acres and 27 gunthas were double cropped. The total cropped area in the year was, therefore, 9,481 acres and 23·25 gunthas. In 1929-30, the net cropped area came to 9,058 acres and 17 gunthas.

The distribution of the crops shows that the *rabi* crops occupy by far the largest area i.e., 80 to 96 per cent. The acreage under *bagayat* crops is negligible. When monsoon opens well the percentage of *kharif* crops goes up to 20 per cent. When early rains are poor, as in the year under study, the percentage falls as is seen from the figures.

The chief crops are *shalu jowar*, wheat, safflower and *bajri*. Wheat is chiefly raised for the market. Wheat from Kanhur and 8 or 10 surrounding villages is known in the market as *Kanhur-Pathar* wheat and it always fetches a rupee or two more per *palla* in the Poona and Ahmednagar markets than the wheat of other tracts. Some merchants from Kanhur collect wheat from the surrounding villages and send it usually to Poona or Ahmednagar. The chief irrigated crops of the village are potato, sweet potato, sugarcane, brinjals, chillies, garlic and onion. Small area of *bakshi* wheat is also irrigated. Whenever rainfall is deficient some of the *bajri* and *jowar* fields, situated near water supply, also receive irrigation. Garden produce, small as it is, is consumed locally.

There is no fixed system of rotation, cropping plans being changed to suit the vagaries of rainfall. In the heavier types of soils wheat is rotated with *rabi jowar*. Sometimes to break up the *rabi* rotation, *bajri* is taken in the *kharif* season. In the lighter class, when there is sufficient early rainfall, *bajri* is taken after *rabi jowar*. Sometimes in the heavier soils wheat may be taken for two years successively and the land then put under *bajri*. The area under *bajri* depends upon the character and distribution of the early rainfall. Usually when the early rains are found sufficient for sowing, lighter soils and a small proportion of medium soils also are put to *bajri*. If rainfall afterwards is not found sufficient *bajri* is harrowed down and the land is put under *rabi jowar* or wheat. *Jirayat* lands are ploughed generally after every two or three years, the ploughing being generally given for the wheat crop. *Bagayat* lands are ploughed every year and are manured with 18 to 20 cart-loads of farmyard manure per acre every two or three years. *Jirayat* crops are manured at very long intervals, generally 10 to 15 years, at the rate of about 12 to 15 cart-loads of farmyard manure per acre. A cultivator who has got some *bagayat* land rarely manures his dry crops. Almost all his manure is used in manuring irrigated crops.

THE SEASON, 1929-30

There was no rainuauge at Kanhur. Rainfall at Parner, which is only 8 miles from Kanhur, according to the opinion of the farmers, does not differ much from that of Kanhur. The average rainfall at the nearest rainuauge is about 23 inches and is chiefly received from the north-east

monsoon. In 1929 Parner got 17·10 inches of rainfall which was about 6 inches below the average.

The fortnightly distribution of rainfall at Parner in 1929 is given in table VI.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1929
(ACRE INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
0·0	0·03	0·0	0·07	0·0	1·30	0·93	0·10	0·20	3·91	0·0	0·0	} 17·10
0·0	0·10	0·0	1·69	0·11	3·81	0·26	0·29	4·30	0·0	0·0	0·0	

It will be seen that more than half of the total rain was received in two months—September and October. The ante-monsoon showers in April were found useful for preparatory cultivation. The regular monsoon broke early in the first week of June. Rains, however, were not sufficient for sowing till 26th of the month when about 3 inches of rain was received in two days. *Bajri* was sown by the middle of July, but afterwards there was a long break of over two months and the crops withered. Most of the farmers in the village grubbed up their *bajri* crops and prepared the land for *shalu jowar* and gram. The heavy showers in the third week of September were found useful for sowing *rabi* crops which were sown before the end of the first week of October. After 10th October (i.e., after sowing) the place did not get even a drop of rain; only the crops in the heavier soils could give some yield but those in the lighter soils failed entirely. The season on the whole was very poor, the annewary of the *kharip* as well as the *rabi* crops being only *annas* six.

THE FARMER

The farmer owned 40 acres and 10 gunthas of land in two blocks adjacent to one another, about a mile and a quarter from the village site. Of the total area held 5 acres and 10 gunthas are uncultivable waste. The net cultivated area was therefore 35 acres.

(a) *Human Labour*.—The farmer had four members in his family including himself. The ages of the farmer and of the members of his family are given below:—

(1) The farmer	36 years.
(2) Farmer's wife	29 "
(3) Farmer's sister's son	11 "
(4) Farmer's son	5 "

During the previous year (1928-29) the farmer cultivated only 19 acres (viz. the cultivable area in field No. 1) while field No. 2, measuring

16 acres and 36 gunthas, of which 36 gunthas were unculturable, was given on lease. The farmer had three bullocks and so to make two teams he wanted a fourth-one. He also thought that additional man labour was necessary and he therefore took a partner. The terms of partnership were as follows : the partner, his wife and their one bullock were to work on the farm with the owner, his wife and their three bullocks ; any extra labour required was to be provided by the owner ; in the same way, the land assessment and L. F. C. were to be paid by him ; the partner was to contribute one-fourth share of seed and to get one-fourth share of the produce. Almost all the work on the farm was done by the members of the two families. The farmer had to employ 24 extra women for harvesting *jowar* and wheat, though he got 5 man units 3 woman units and 37 bullock units on exchange system.

Monthly distribution of the labour of the farmer and his wife from April 1929 to March 1930, is given in table VII. The distribution shows how the labour was employed. It may be noted that the labour was not necessarily used on the farmer's lands, nor for the crops of 1929-30 only.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	Apr.	May	Jun	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total	Percentage of labour employed to labour available
Farmer	$\frac{8}{30}$	$\frac{31}{31}$	$\frac{22}{30}$	$\frac{22}{31}$	$\frac{17}{31}$	$\frac{19}{30}$	$\frac{8}{31}$	$\frac{22}{30}$	$\frac{25}{31}$	$\frac{28.5}{31}$	$\frac{28}{28}$	$\frac{22}{31}$	$\frac{252.5}{365}$	69.2
Farmer's wife.....	$\frac{3}{27}$	$\frac{1}{31}$	$\frac{12}{30}$	$\frac{0}{31}$	$\frac{0}{31}$	$\frac{10}{30}$	$\frac{19}{31}$	$\frac{0}{30}$	$\frac{4}{31}$	$\frac{26}{31}$	$\frac{27}{28}$	$\frac{15}{31}$	$\frac{117}{365}$	32.05

Note.—The denominator shows available labour units, while numerators show units employed.

The housewife could not put in much work as farm operations, like after tillage and harvesting, where woman labour is required, did not demand such labour because of the unfavourable season. Very little of the time, released from household work, could be used on the farm. The farmer's sister's son tended cattle.

(b) *Bullock work.*—As shown in the inventory the farmer had three draught bullocks. Two bullocks make a team in the tract and to make up two teams the farmer had to seek the help of a partner. Monthly distribution of the work of the three bullocks, from April 1929 to March 1930, is given in table VIII.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Apr	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total	Percentage of labour employed to labour available
Three bullocks	2	38·5	63·5	81	60	57	24	30	13	3	46	24	513	46·8
	91	93	90	93	93	90	93	90	93	93	84	93	1,095	

Note.—The denominators denote available bullock units, while the numerators show the units employed.

Thus only 46·8 per cent of the available bullock labour could be made use of. Had the season been more favourable, more bullock labour could have been utilized for interculturing reaping and thrashing crops. At the time of ploughing and sowing, however, the farm needed more than four bullocks and the farmer had to borrow 37 bullock units from outside, which he obtained free on exchange system.

The opening and closing inventories of the property are given in table IX. The worth of the business fell by Rs. 104 at the end of the year. Though this fall is partly due to the depreciation of capital, it is largely due to the failure of crops and hence the fluid capital fell from Rs. 205 to Rs. 139.

Nature of the holding, lands, crops and cropping.—The nature of land crops and cropping and treatment of different fields held by the farmer in 1928-29 and 1929-30 are given in table X.

The total area held by the farmer was 40·25 acres out of which 5·25 acres were uncultivable. The uncultivable area supplied grass worth Rs. 10, and mango fruits worth Rs. 25 from a tree standing in the waste land. The net cultivated area was 35 acres. The farmer had put in 9 acres under *bajri* which, having withered, had to be grubbed. These 9 acres were put under *rabi* crops, 6 acres under *shahu jowar* and 3 acres under gram. Including these crops he had 19 acres under *jowar*, 3 acres under gram and 13 under wheat.

TABLE IX—INVENTORY OF THE PROPERTY

		1929				1930		
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		Remarks
<i>Assets</i>	A. g.	Rs. a. p.	Rs. a. p.	<i>Assets</i>	A. g.	Rs. a. p.	Rs. a. p.	
1. Real estate				1. Real estate				
(A) Land				(A) Land				
(a) Field No. 1	23 14	1,700	0 0	(a) Field No. 1 ..	23 14	1,700	0 0	There is no change in the value of land.
(b) Field No. 2	16 36	1,600	0 0	(b) Field No. 2	16 36	1,600	0 0	
	40 10	3,300	0 0		40 10	3,300	0 0	
(B) Buildings				(B) Buildings				
(a) House	1	425	0 0	(a) House	1	425	0 0	
(b) Cattle shed	1	175	0 0	(b) Cattle shed ..	1	160	0 0	
		600	0 0			585	0 0	
Total, Real estate ..			3,900 0 0	Total, Real estate ..			3,885 0 0	
2. Livestock				2. Livestock				
(a) Bullocks	3	230	0 0	(a) Bullocks	3	206	0 0	
(b) Bull calf	1	41	0 0	(b) Bull calf	1	45	0 0	The bull calf though four years old was not fit for work. Its condition was not satisfactory.
(c) Cows	3	110	0 0	(c) Cows	3	105	0 0	Two out of the three cows were in milk at the beginning of the year and one was dry. Both the milking cows were dry at the close of the year.

NO. II Q 84-44

KANHUR

689

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Apr	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total	Percentage of labour employed to labour available
Three bullocks	2	38·5	63·5	81	60	57	24	30	13	3	46	24	513	46·8
	96	93	90	93	93	90	93	90	93	93	84	93	1,095	

Note.—The denominators denote available bullock units, while the numerators show the units employed.

Thus only 46·8 per cent of the available bullock labour could be made use of. Had the season been more favourable, more bullock labour could have been utilized for interculturing reaping and thrashing crops. At the time of ploughing and sowing, however, the farm needed more than four bullocks and the farmer had to borrow 37 bullock units from outside, which he obtained free on exchange system.

The opening and closing inventories of the property are given in table IX. The worth of the business fell by Rs. 104 at the end of the year. Though this fall is partly due to the depreciation of capital, it is largely due to the failure of crops and hence the fluid capital fell from Rs. 205 to Rs. 139.

Nature of the holding, lands, crops and cropping.—The nature of land crops and cropping and treatment of different fields held by the farmer in 1928-29 and 1929-30 are given in table X.

The total area held by the farmer was 40·25 acres out of which 5·25 acres were uncultivable. The uncultivable area supplied grass worth Rs. 10, and mango fruits worth Rs. 25 from a tree standing in the waste land. The net cultivated area was 35 acres. The farmer had put in 9 acres under *bajri* which, having withered, had to be grubbed. These 9 acres were put under *rabi* crops, 6 acres under *shalu jowar* and 3 acres under gram. Including these crops he had 19 acres under *jowar*, 3 acres under gram and 13 under wheat.

TABLE IX—INVENTORY OF THE PROPERTY

1929				1930					
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		Remarks	
<i>Assets</i>	A. g.	Rs. a. p.	Rs. a. p.	<i>Assets</i>	A. g.	Rs. a. p.	Rs. a. p.		
1. Real estate				1. Real estate					
(A) Land				(A) Land					
(a) Field No. 1	23 14	1,700 0 0		(a) Field No. 1 ..	23 14	1,700 0 0		There is no change in the value of land.	
(b) Field No. 2	16 36	1,600 0 0		(b) Field No. 2	16 36	1,600 0 0			
	40 10	3,300 0 0			40 10	3,300 0 0			
(B) Buildings				(B) Buildings					
(a) House	1	425 0 0		(a) House	1	425 0 0			
(b) Cattle shed	1	175 0 0		(b) Cattle shed	1	160 0 0			
		600 0 0				585 0 0			
Total, Real estate . .			3,900 0 0	Total, Real estate . .			3,885 0 0		
2. Livestock				2. Livestock					
(a) Bullocks	3	280 0 0		(a) Bullocks	3	206 0 0			The bull calf though four years old was not fit for work. Its condition was not satisfactory.
(b) Bull calf	1	41 0 0		(b) Bull calf	1	45 0 0			
(c) Cows	3	110 0 0		(c) Cows	3	105 0 0			
								Two out of the three cows were in milk at the beginning of the year and one was dry. Both the milking cows were dry at the close of the year.	

77-88-11-01

KANHUR

689

TABLE IX—INVENTORY OF THE PROPERTY—*concl'd.*

1929			1930					
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		Remarks
		Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.	
<i>Assets—contd.</i>				<i>Assets—contd.</i>				
(d) Calves (young)	2	10	0 0	(d) Calves (young)...	2	20	0 0	
Total, Livestock ..			391 0 0	Total, Livestock....			376 0 0	
3. Implements, tools etc.				3. Implements, tools etc.				
(a) Plough	1	15	0 0	(a) Plough		1	0 0	The plough was broken but the share was useful.
(b) Harrow	1	3	0 0	(b) Harrow	1	3	0 0	There is no change in the value.
(c) Seed-drill	1	6	0 0	(c) Seed-drill	1	5	0 0	
(d) Leveller	1	3	0 0	(d) Leveller	1	3	0 0	There was no change in the value because of repairs.
(e) Hoes	2	4	0 0	(e) Hoes	2	4	0 0	
(f) Ropes etc.		20	0 0	(f) Ropes and other tools.....		17	0 0	
Total, Implements, tools etc.....			51 0 0	Total, Implements, tools etc.....			33 0 0	
4. Farm produce and supplies on hand				4. Farm produce and supplies on hand				
(a) Wheat	1,551 lbs.	110	0 0	(a) Wheat	2,027 lbs.	138	0 0	
(b) Jowar	1,008 lbs.	48	0 0	(b) Jowar	843 lbs.	35	0 0	
(c) Tur	356 lbs.	19	0 0	(c) Bhoos	50 lbs.	15	0 0	

(d) <i>Bhoos</i> .....	.....	5 0 0	(d) <i>Kadbi</i>	2,500 bundles ..	50 0 0
(e) <i>Hulga</i>	898 lbs.	20 0 0	(e) <i>Manure</i>	15 cartloads ..	30 0 0
(f) <i>Kadbi</i>	2,000 bundles ..	40 0 0			
(g) <i>Manure</i>	16 cartloads ..	32 0 0			
Total farm produce and supplies		274 0 0	Total farm produce and supplies		268 0 0
5. Money kept with village <i>bania</i>		200 0 0	5. Cash on hand		34 0 0
6. Amount due from others		5 0 0	6. Amount due from others		105 0 0
Total Assets		4,821 0 0	Total Assets		4,701 0 0
Liabilities			Liabilities		
Miscellaneous amounts owed to others		21 0 0	Miscellaneous amounts owed to others		5 0 0
Total Liabilities		21 0 0	Total Liabilities		5 0 0
Net worth of the Farm ..		4,800 0 0	Net worth of the Farm ..		4,696 0 0

SUMMARY

	Rs.	a.	p.
Net worth of the farm at the beginning	4,800	0	0
Net worth of the farm at the close	4,696	0	0
<i>Loss in net worth</i>		104	0 0

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Field No.	Area	Nature of land and soil	Previous year i.e., 1928-29		Year under study i.e., 1929-30				
			Name of crop	Treatment	Name of crop	Plot No.	Treatment		
1	23 14	Four acres and fourteen gunthas uncultivable; about 11 acres heavy black soil, and remaining medium black and level.	A. g.		A. g.				
			9 0	Wheat	Not manured	0 0	Bajri was sown in <i>kharf</i> season but was grubbed and 5 acres <i>shulu</i> and 3 acres gram were taken in the <i>rabi</i> season.	1	Not manured.
								3	
								5	
			5 0	<i>Bajri</i>	Do.	5 0	<i>Wheat</i>	6	Not manured.
			5 0	<i>Jowar</i>	One acre was given four cart-loads of F.Y.M.	5 0	<i>Jowar</i>	2	Do.
2	10 36	Thirty-six gunthas uncultivable; the remaining medium type and fairly level. There was a well but there was not sufficient water for irrigation purposes.	In 1928-29 this field was given on lease for Rs. 125.						
			A. g.						
			2 20	<i>Jowar</i> and gram	} Not manured.	2 20	<i>Wheat</i>	7	One acre and 25 gunthas were given 13 carts of F. Y. M.
			2 20	Gram		2 20	<i>Wheat</i>	9	Not manured.
			3 0	<i>Wheat</i>		3 0	<i>Wheat</i>	8	Do.
			8 0	<i>Wheat</i>		8 0	<i>Jowar</i>	4	Do.
40 10									

RECEIPTS AND COSTS

Abstract of expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of expenditure	Cost for the total holding (viz., 40½ acres)	
	Rs. a. p.	Rs. a. p.
I. *Out-of-pocket expenses :		
(a) Manure	15 12 9	
(b) Seeds	48 14 9	
(c) Outside labour (including labour supplied by the partner)	58 4 0	
(d) Depreciation on implements and tools	18 0 0	
(e) Cost of bullock labour (excluding interest)..	103 6 9	
(f) Land assessment and L. F. C.	36 15 0	
		281 5 3
II. Rent of land (excluding assessment and L. F. C.)	208 1 0	
		208 1 0
III. Interest on working capital		
(a) Interest on the money required for current agricultural operations	4 3 2	
(b) Interest on the value of implements, tools etc.	6 1 11	
(c) Interest on the value of bullocks, feed and fodder consumed by them	35 15 4	
		46 4 5
<i>Total cost of production (excluding wages for family labour).....</i>		535 10 8

*DETAILS OF OUT-OF-POCKET EXPENSES

I. Manures :	Rs. a. p.	Rs. a. p.
(a) Thirteen cartloads of F.Y.M. at Rs. 2 per cart given to plot No. 7 ; only 50 per cent of this manure cost is charged	13 0 0	
(b) Charges on account of residual manure. In the previous year (1928-29) one acre (in plot No. 2) was given four cartloads of F.Y.M ; 35 per cent of this manure cost is charged to plot No. 2.	2 12 9	
		15 12 9

	Rs. a. p.	Rs. a. p.
2. Seeds :		
(a) <i>Bajri</i> (35 lbs.)	2 0 0	
(b) Mixture in <i>bajri</i>		
<i>Tur</i> 69 lbs.	3 6 9	
<i>Hulga</i> 11½ lbs.	0 8 0	
<i>Mug</i> ¼ lbs.	0 0 6	
<i>Chavali</i> ½ lbs.	0 0 9	
Other pulses	0 1 6	
	<hr/>	
(c) <i>Jowar</i> 155 lbs.	4 1 6	
(d) Safflower 31 lbs.	9 2 0	
(e) Linseed ¼ lb.	1 15 3	
(f) Gram 105 lbs.	0 0 6	
(g) Wheat 350½ lbs.	7 5 6	
	24 6 0	
	<hr/>	
		48 14 9
3. Wages of outside labour :		
(a) <i>Jowar</i> (plot Nos. 3 and 4), 12 women.....	2 4 0	
(b) Wheat (plot Nos. 7, 8 and 9), 12 women ..	2 4 0	
(c) Cost on account of the partner. The value of the fourth share of the produce (excepting receipts on account of <i>bajri</i> 's plot and miscellaneous receipts) came to Rs. 64-7-4. Deducting the value of the share of seed excepting for <i>bajri</i> plot (Rs. 10-11-4) the net amount, to be debited on account of the partner, came to Rs. 53-12-0.....	53 12 0	
	<hr/>	
		58 4 0
4. Depreciation on implements and tools :		
Opening inventory	51 0 0	
Closing inventory	33 0 0	
	<hr/>	
	18 0 0	
	<hr/>	
		18 0 0
5. Bullock labour cost (excluding interest) :		
(a) Depreciation		
Value of 3 bullocks as per opening inventory Rs. 230-0-0. Value of same bullocks as per closing inventory Rs. 206 0 0	24 0 0	
(b) Death allowance on the three bullocks at 5 per cent on Rs. 230	11 8 0	
(c) Charges on account of housing at Rs. 4 per bullock 4 × 3 = Rs. 12.....	12 0 0	
(d) Feed and fodder		
Fodder		
Value of <i>kadbi</i> , <i>bhoos</i> , grass and charges for grazing Rs. 61. This was required for the three working bullocks, 1 bull-calf and 3 cows. Bullocks' share therefore comes to Rs. 26-2-3. Cost of sugarcane tops and other fodder fed only to the three working bullocks come to Rs. 23-4-6; therefore total fodder	49 6 9	
Feeds		
Value of 4 maunds and 1 <i>payali</i> of <i>hulga</i> fed to the 3 working bullocks	24 8 0	
	<hr/>	
	121 6 9	
Against the above costs (a) to (d) must be set off Rs. 18, the value of 9 cartloads of F. Y. M. obtained from the 3 bullocks during the year	-18 0 0	
	<hr/>	
		103 6 9
6. Land assessment and L. F. C. :		
Field No. 1—area 23 acres and 14 gunthas.	17 13 0	
Field No. 2—area 16 acres and 36 gunthas.	19 2 0	
	<hr/>	
		36 15 0
	<hr/>	
Total out-of-pocket expenses		281 5 3

Family Labour Income.—Table XI gives the family labour income i.e., the remuneration obtained by the farmer and his wife for the work done by them on the farm. The figures of costs of production have already appeared above. The value of produce is taken from the cost-and-receipt statements of the various plots (pp. 699 to 726).

TABLE XI—FAMILY LABOUR INCOME

Crop	Area	Value of produce	Cost of production excluding wages of family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	49 10	294 13 0	281 5 8	46 4 5	208 1 0	535 10 8	-240 13 8
<i>Bajri</i>	9* 0	2 0 0	12 9 0	2 9 9	<i>Nil</i>	15 2 9	-13 2 9
<i>Shalu jowar</i>	19 0	153 0 0	108 7 10	14 4 4	109 1 6	231 13 8	-78 13 8
Gram	3 0	18 12 0	17 2 7	1 14 4	15 5 0	34 5 11	-15 9 11
Wheat.....	13 0	86 1 0	142 4 10	27 8 0	78 7 6	248 4 4	-162 3 4
Waste land and a mango tree.....	5 10	35 0 0	0 13 0	<i>Nil</i>	5 3 0	6 0 0	+29 0 0

Column 4.—Out-of-pocket expenses include costs of manure, seed, hired labour (including payment made to the partner), depreciation on dead stock and work animals, feed and fodder consumed by work animals, the death allowance of bullocks and the cost of their housing, rent of leased land and assessment and L. F. C. on owned land. *Column 5.*—Interest on working capital both fixed as well as fixed capital. Fixed capital includes money spent on feed and fodder for the work animals and money spent on the current agricultural operations. Fixed capital includes implements and work animals. *Column 6* denotes the estimated rent of land minus the assessment and L. F. C. *Column 8* shows wages earned by the family.

The gross receipts obtained from the farm were Rs. 294-13-0, while the cost of production (excluding the wages for family labour) was as high as Rs. 535-10-8. The farm family could not earn anything for their labour; on the other hand they suffered a loss of Rs. 240-13-8.

Farm Business Income.—The loss of Rs. 240-13-8, shown above, does not mean that the farmer was out-of-pocket for whole of the sum, since in the costs of production are included not only the out-of-pocket expenses, but also the interest on working capital and rent of owned land. These, though debited to costs, are saved by the farmer. Table XII gives the farm business income or the aggregate income of the farmer i.e., the value of the produce minus only the out-of-pocket expenses.

*After *bajri* was grubbed three acres were put under gram and six acres under *jowar* in the *rabi* season.

TABLE XII—FARM BUSINESS INCOME.

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total....	49 10	294 13 0	281 5 3	13 7 9
<i>Bajri</i>	9 0	2 0 0	} 281 5 3	+13 7 9
<i>Shalu jowar</i>	19 0	153 0 0		
<i>Gram</i>	3 0	18 12 0		
<i>Wheat</i>	13 0	86 1 0		
<i>Waste land and a mango tree</i>	5 10	35 0 0		

The gross receipts obtained, as seen above, were Rs. 294-13-0, while the out-of-pocket expenses came to Rs. 281-5-3, thus leaving Rs. 13-7-9 only as business income of the farmer.

The farm business income made up of the family labour income, interest on working capital and rent of owned land (excluding assessment and L.F.C.) as shown below, tallies with the figures arrived at in table XII.

	Rs. a. p.
Family labour income	- 240 13 8
Interest on working capital	+ 46 4 5
Rent of owned land	+208 1 0
	+ 13 7 9

ANALYSIS

The following is the summary of the labour supplied by the owner (together with the exchange labour obtained) and his partner. The summary is worked out from statements of costs and receipts referred to above. Hired labour is not included, as wages for such labour are included in the costs. The cost on account of bullock labour supplied by the farmer is included in the costs, and, therefore, cost on account of home bullocks is not taken into account while finding out the daily wage of the family. Bullock units supplied by the farmer are shown in the following summary only for comparing the same with those supplied by the partner.—

	Man units	Woman units	Bullock units	Total units
Labour supplied by the farmer	169·50	71·00	385·00	590·0
Labour supplied by the partner.....	171·00	68·75	102·25	307·6

Taking a bullock unit equal to a man unit and woman unit equal to half man unit, the partner supplied about 308 units and got Rs. 64-7-4 (the value of the fourth share of produce) minus Rs. 10-11-4 (the cost of the share of seeds or Rs. 53-12-0) as his income for human and bullock labour. He, therefore, made about two *annas* and ten *pies* per unit.

The farmer contributed 205 labour units and made minus labour income of Rs. 240-13-8. Such minus labour income, as also the very small farm business income (Rs. 13-7-9) were due to the extremely unsatisfactory season. Most of the *kharif* crop of the village had to be grubbed up and the yields of *rabi* crops were very poor.

Table XIII gives the yields of crops and the labour units required per acre and some general remarks on the condition of the crops in the year. Labour includes home labour, hired labour and also bullock labour. (One man unit = one bullock unit = two woman units).

TABLE XIII.—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS

Plot No.	Produce per acre		Labour units per acre	Remarks	
	Name of produce	Quantity			
1	<i>Bajri</i>	Lbs. Nil	4·8	For want of sufficient rain the crop had to be pulled. Larger number of labour units for plot No. 2 were due to the ploughing given.	
2	<i>Jowar</i> with <i>Safflower</i>	54·0 49·5	} 30·2		
3	<i>Jowar</i> .. <i>Safflower</i>	45·0 41·2			} 12·8
4	<i>Jowar</i> <i>Safflower</i>	67·5 61·9	} 14·96		
5	<i>Gram</i>	90·0			15·1
6	<i>Wheat</i>	79·9	33·1		
7	<i>Wheat</i>	65·8	54·6		The higher number of labour units for plot No. 7 were due to manuring.
8	<i>Wheat</i>	35·3	28·5		
9	<i>Wheat</i>	112·8	34·0		

The table is worked out from the information abstracted from the statements. The yields of all the crops were very poor due to the bad season, the rainfall being insufficient and ill-distributed. *Bajri* crop was sown in time but due to the long break of six weeks, following sowing, crops withered; they had to be grubbed; in fact most of the *bajri* in the village had to be pulled. In the same way though the rainfall in the third week of September and first week of October was found sufficient for sowing rabi crops, there was not a drop of rain after 10th of October and the yields naturally were very poor. The tract is admittedly a precarious tract getting insufficient rainfall and farmers, suffering from frequent disappointments, are not encouraged to level their lands to conserve moisture or use manure to increase the outturn of crops. Only one of the nine plots received a little manure (i.e. only 5 cartloads per acre). Even in the normal years crop yields are not large. In good years people expect about 300 lbs. grain per acre. Lands which are levelled produce a little more. It is worth while investigating into the possibilities of increasing outturns by dry farming methods. *Annewari* (both *kharif* and *rabi* crops) of the village for the year was 6 annas though the farmers were not satisfied with this estimate.

The following are the statements showing costs and receipts of individual plots comprising the farm.

STATEMENT No. 148

BAJRI—9 acres in 1929-30

PLOT No. (1)

*Previous crop—Wheat, 1928-29**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Partner's labour		Labour on dally wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bul-locks ²	Men ³	Bul-locks ³	Men	Women	Bullocks			For the plot	Per acre	
											Rs. a. p.	Rs. a. p.	
1. Seeds and sowing													Sown without any special preparation.
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	6 1 6	0 10 10	The following seeds were required for the whole plot:—
													Rs. a. p.
													85 lbs. <i>bajri</i>
													2 0 0
													69 lbs. <i>sur</i>
													3 6 9
													16 lbs. <i>hulga</i>
													0 8 0
													2 lbs. <i>mug, chavil,</i>
													<i>kiarasani</i> 0 2 0
													6 1 6
(b) Sowing and covering.	5·25	..	10·5	3·5	3·5	..	..	..	22·75	2·5	....	....
2. Grubbing	3·0	..	10·0	4·0	4·0	..	..	..	21·0	2·3	....	....
3. Payment made to partner .....	..	..	..	..	..	..	..	..	..	..	....	....	Partner was to be paid one-fourth of the gross produce. Since the crop failed, the partner was not paid anything.

KANHUR

699

STATEMENT No. 148—concl'd.

700

ITEM OF EXPENDITURE	Home labour			Partner's labour		Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bullocks ²	Men ²	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	Rs. a. p.	Rs. a. p.	The total annual cost, on account of draft bullocks, is distributed over different plots in proportion to the units used on them.
Rs. a. p.											7 6 10	0 13 2	
(a) Feeds, fodder, depreciation, etc.													
5 8 2													
(b) Interest on the value of bullocks feeds and fodder ..													
1 14 8													
5. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	Rs. a. p.	Rs. a. p.	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them.
Rs. a. p.											1 4 7	0 2 4	
(a) Depreciation ..													
0 15 4													
(b) Interest ..													
0 5 3													
6. Interest on fluid capital (i.e., wages of hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	..	Rs. a. p.	Rs. a. p.	Charged at 12 per cent per annum.
Rs. a. p.											0 5 10	0 0 8	
7. Rent of land .....	..	..	..	..	..	..	..	..	..	..	....	....	Since <i>bajri</i> crop failed and the land was put under <i>jowar</i> and <i>gram</i> (see plot Nos. 3 and 5) rent of the land is not charged.
Rs. a. p.													
Total.....	8'25	..	20'5	7'5	7'5	..	..	..	43'75	4'8	15 2 9	1 11 0	

¹Family labour not charged.²Home bullock labour charged under item 4.³For partner's remuneration see remark against item 3.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 9 acres	Per acre	
	Rs. a. p.	Rs. a. p.	
Bajri and mixture..	2 0 0	0 3 6	The withered crop was fed by the farmer to his cattle. The value of grazing is estimated at Rs. 2; after grubbing, the land was put under jowar and gram (vide plot Nos. 3 and 5).
Total	2 0 0	0 3 6	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 9 acres ..	2 0 0	15 2 9	(b) 2 9 9	-13 2 9	-10 9 0
Per acre	0 3 6	1 11 0	0 4 8	-1 7 6	-1 2 10

KANHUR

701

STATEMENT No. 149

JOWAR RABI—5 acres in 1929-30

PLOT No. (2)

*Previous crop—Jowar, 1928-29**(a) Cost of Production*

ITEM OF EXPENDITURE	Home labour			Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ³	Women ³	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
												Rs. a. p.	Rs. a. p.	
1. Preparatory tillage														
(a) Ploughing.....	5·0	..	33	10·0	..	11	..	..	..	59	11·8	....	....	One ploughing was given. A plough required one man and four bullocks. For some days two men were with the team.
(b) Harrowing	7·0	..	21	7·0	..	7	..	..	..	42	8·4	....	....	Three harrowings were given.
2. Manures and manuring														
(a) Charges for residual manure..	..	..	..	..	..	..	..	..	..	..	..	2 12 9	0 8 11	In the previous year one acre of this plot was given 4 cartloads of farmyard manure (Rs. 2 per cart); 85 per cent of the cost is charged to this crop.
3. Seeds and sowing														
(a) Seeds.....	..	..	..	..	..	..	..	..	..	..	..	3 4 9	0 10 6	For the plot 35 lbs. of jowar seed (Rs. 2-12-9) and 8 lbs. of safflower seed (8 annas).
(b) Sowing and covering	2·0	..	6	2·0	..	2	..	..	..	12	2·4	....	....

4. After-care and tillage (a) Watching	3·75	2·5	..	0·5	1·0	..	..	..	..	6	1·2	....	....
5. Harvesting, thrashing and preparing for market	8·5	10·0	1	10·75	11·5	1	..	..	..	32	0·4	....	....
6. Payment made to partner .....	..	..	..	..	..	..	..	..	..	..	..	8 11 6	1 11 11	One-fourth of the gross produce was the share of the partner (Rs. 9-8-0). From this Rs. 0-13-3 on account of one-fourth share of seed, are deducted.
7. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	..	22 1 4	4 6 8	The total annual cost on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.														
(a) Feeds, fodder, depreciation, etc.	16	6	2											
(b) Interest on the value of bullocks, feeds, and fodder ..	5	11	2											
8. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	..	3 13 2	0 12 3	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.														
(a) Depreciation ..	2	13	8											
(b) Interest ..	0	15	6											
9. Interest on fluid capital (i.e., wages of hired labour, price of seed and manure) ..	..	..	..	..	..	..	..	..	..	..	..	0 11 1	0 2 3	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	30 0 0	6 0 0	The land was owned.
Total	26·25	12·5	61	30·25	12·50	21	..	..	..	151	30·2	71 6 7	14 4 6	

¹Family labour not charged.

²Home bullock labour charged under item 7.

³For partner's remuneration see remark against item 6.

STATEMENT No. 149—concl'd.

704

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 5 acres	Per acre	For 5 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	270·0	54·0	11 3 0	2 3 10	Valued at Rs. 14 per <i>palla</i> of 337·5 lbs.
Safflower	247·5	49·5	11 0 0	2 3 2	Valued at Rs. 11 per <i>palla</i> of 247·5 lbs.
Kadbi (750 bundles)	660·0	132·0	15 0 0	3 0 0	Valued at Rs. 2 per 100 bundles.
Bhoos	30·0	6·0	1 0 0	0 3 2	Estimated value.
Total ..	....	....	38 3 0	7 10 2	

(c) Summary

1	2	3	4	5 (i.e. col 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 5 acres	38 3 0	71 6 7	(a) 25 8 6 (b) 7 5 9	-33 3 7	-0 5 4
Per acre ..	7 10 2	14 4 6	6 9 3	-6 10 4	-0 1 1

FARM STUDIES

STATEMENT No. 150

JOWAR—6 acres in 1929-30

PLOT No. (3)

Previous crop—*Bajri* (which was grubbed, vide plot No. 1), 1929-30 (a) Cost of Production

MO. II. Q. 84-45

ITEM OF EXPENDITURE	Home labour			Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bullocks ²	Men ³	Wo-men ³	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
												Rs. a. p.	Rs. a. p.	
1. Preparatory tillage														
(a) Harrowing	7'0	..	18	4'0	..	4	..	..	..	38'0	5'5	....	....	Four harrowings were given. A harrow required 1 man and 2 bullocks.
2. Seeds and sowing														
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	3 4 0	0 8 0	For the plot 35 lbs. of <i>jowar</i> seed (Rs. 2-12-0) and 8 lbs. of safflower seed (annas 8).
(b) Sowing and covering	2'0	..	6	2'0	..	2	..	..	..	12'0	2'0	....	....
3. After-care and tillage														
(a) Watching	4'5	1'25	..	0'25	1	..	..	..	..	5'87	0'9	....	....
4. Harvesting, tying bundles, breaking sorgheds, thrashing and preparing for market	6'0	11'50	2	6'0	0	..	..	4	..	26'25	4'4	0 12 0	0 2 0	Woman labour on daily wages paid at three annas each.
5. Payment made to partner .....	..	..	..	..	..	..	..	..	..	..	..	8 11 6	1 7 8	One-fourth of the gross produce was paid to the partner (Rs. 0-9-0) Rs. 0-13-3, on account of one-fourth share of seeds were paid by the partner.

KANHUR

705

STATEMENT No. 150—concl'd.

706

ITEM OF EXPENDITURE	Home labour			Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Bullocks ²	Men ³	Women ³	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre		
												Rs. a. p.	Rs. a. p.		
6. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	..	Rs. a. p. 9 6 6	Rs. a. p. 1 9 1	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.															
(a) Feeds, fodder, depreciation, etc. 6 15 9															
(b) Interest on the value of bullocks, feeds and fodder .. 2 6 9															
7. Charges for implements and tools ..	..	..	..	..	..	..	..	..	..	..	..	1 10 0	0 4 4	The total annual charges are distributed over the different plots in proportion to the bullock labour used on them.
Rs. a. p.															
(a) Depreciation 1 3 5															
(b) Interest 0 6 7															
8. Interest on fluid capital (i.e., wages of hired labour and price of seeds).....	..	..	..	..	..	..	..	..	..	..	..	0 3 1	0 0 6	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	36 0 0	6 0 0	The land was owned.
Total	19·5	12·75	26	12·25	10	6	..	4	..	77·12	12·8	50 15 10	9 15 11		

¹Family labour not charged. ²Home bullock labour charged under item 6. ³For the wages of the partner see remark against item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 6 acres	Per acre	For 6 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	270·0	45·0	11 3 0	1 13 10	Valued at Rs. 14 per <i>palla</i> of 337·5 lbs.
Safflower ..	247·5	41·2	11 0 0	1 13 4	Valued at Rs. 11 per <i>palla</i> of 247·5 lbs.
Kadbi (750 bundles)...	660·0	110·0	15 0 0	2 8 0	Valued at Rs. 2 per 100 bundles (crop being a failure bundles were very small).
Bhoos	30·0	5·0	1 0 0	0 2 8	Estimated value.
Total ..	..	..	38 3 0	6 5 10	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 6 acres..	38 3 0	59 15 10	(a) 30 10 0 (b) 3 0 5	-21 12 10	+11 13 7
Per acre	6 5 10	9 15 11	5 9 9	-3 10 1	+1 15 8

STATEMENT No. 151

JOWAR—8 acres in 1929-30

PLOT No. (4)

Previous crop—Wheat, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation		Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Wo-men ¹	Bull-ocks ²	Men ¹	Bull-ocks ²	Men ²	Wo-men ²	Bull-ocks ²	Men	Women	Bullocks			For the plot	Per acre		
														Rs. a. p.	Rs. a. p.		
1. Preparatory tillage																	
(a) Harrowing	6.5	..	20.0	..	..	7.0	..	7	..	..	..	40.5	5.06	..	..	Three harrowings were given.
2. Seeds and sowing																	
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	..	..	3 12 6	0 7 7	For the plot 40 lbs. of jowar seed (Rs. 3-3-0), 9 lbs. of safflower (nine annas and $\frac{1}{2}$ lb. linseed (half anna).
(b) Sowing and covering	2.0	..	6.0	2	4	2.0	..	2	..	..	..	18.0	2.25	..	..
3. After-care and tillage																	
(a) Watching	0.25	0.5	..	..	..	9.75	2	..	..	..	..	11.25	1.40	..	..
4. Harvesting, tying and preparing for market...	12.0	18.0	8.5	..	..	12.5	18	..	..	8	..	50.0	6.25	1 8 0	0 3 0	Hired woman labour was paid at 3 annas a day

1. Payment made to partner .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18 3 6	2 4 5	One-fourth of the gross produce was paid to the partner (Rs. 19-2-6). From this (Rs. 0-15-0) on account of one-fourth share of seeds is deducted.
3. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12 2 1	1 8 8	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc.																	
(b) Interest on the value of bullocks, feeds and fodder																	
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2 1 7	0 4 2	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
(a) Depreciation																	
(b) Interest ..																	
8. Interest on fluid capital (i.e., wages of hired labour and price of seeds .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0 3 7	0 0 5	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62 8 0	7 18 0	The land was owned.
Total	20*75	18*5	29*5	2	4	31*25	20	9	..	8	..	119*75	14*96	100 7 3	12 8 10		

¹Family and exchange human labour not charged. ²Home and exchange bullock labour charged under item 6. ³For partner's wages see remark against item 5.

STATEMENT No. 151—concl'd.

710

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 6 acres	Per acre	For 6 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	540	67.5	22 6 0	2 12 9	Valued at Rs. 14 per <i>palla</i> of 337.5 lbs.
Safflower....	495	61.9	22 0 0	2 12 0	Valued at Rs. 11 per <i>palla</i> of 247.5 lbs.
Linseed 1.5 seers .....	..	..	0 4 0	0 0 6	Estimated value.
<i>Kadbi</i> (500 bundles) ..	1,320	165.0	30 0 0	3 12 0	Valued at Rs. 2 per 100 bundles. As the crop was very poor bundles were very small.
<i>Bhoos</i>	60	7.5	2 0 0	0 4 0	Estimated value.
Total ..	..	..	76 10 0	9 9 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 8 acres	76 10 0	100 7 3	(a) 52 15 0 (b) 3 14 2	-23 13 3	+32 15 11
Per acre ..	9 9 3	12 8 10	7 1 7	-2 15 7	+4 2 0

FARM STUDIES

STATEMENT No. 152

GRAM—3 acres in 1929-30

PLOT No. (5)

Previous crop—*Bajri* (which was grubbed, vide (a) Cost of Production plot No. 1), 1929-30

ITEM OF EXPENDITURE	Home labour			Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ³	Women ³	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
												Rs. a. p.	Rs. a. p.	
1. Preparatory tillage														
(a) Harrowing	3·0	..	8·0	2·0	..	2·0	..	..	..	15·0	5·0	....	....	Three harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing														
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	7 7 9	2 7 11	For the plot 105 lbs. of gram seed (Rs. 7-5-0), 1-lb. of safflower seed (one anna) and 1·25 lbs. <i>Jowar</i> seed (1¼ anna).
(b) Sowing and covering	1·5	..	4·50	1·50	..	1·50	..	..	..	9·0	3·0	....	....
3. After-care and tillage														
(a) Watching .....	..	0·25	..	0·25	..	..	..	..	..	0·375	0·125	....	....
4. Harvesting, thrashing and preparing for market	7·0	6·25	0·75	7·0	5·75	0·25	..	..	..	21·0	7·0	....	....

KANHUR

711

STATEMENT No. 152—concl'd.

712

ITEM OF EXPENDITURE	Home labour			Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ³	Women ³	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
												Rs. a. p.	Rs. a. p.	
5. Payment made to partner .....	..	..	..	..	..	..	..	..	..	..	..	2 13 0	0 15 0	One fourth of the gross produce was paid to the partner (Rs. 4-11-0). From this Rs. 1-4-0 on account of the fourth share of seeds, are deducted.
6. Charges for bullock labour	4 12 0	1 9 7		The total annual cost on account of draft bullocks is distributed on the different plots in proportion to the units used on them.
Rs. a. p.														
(a) Feeds, fodder, depreciation, etc.														
(b) Interest on the value of bullocks, feeds and fodder ..														
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	..	0 13 3	0 4 5	The total annual charges are distributed over different plots in proportion to the labour units used on them.
Rs. a. p.														
(a) Depreciation ..														
(b) Interest ..														
8. Interest on fluid capital (i.e. wages of hired labour and price of seeds .....	..	..	..	..	..	..	..	..	..	..	..	0 7 2	0 2 5	Charged at 12 per cent per annum. The land was owned.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	18 0 0	6 0 0	
Total	11·5	6·5	18·25	10·75	5·75	3·75	..	..	..	45·375	15·125	34 5 11	11 7 4	

¹Family labour not charged. ²Home bullock labour charged under item 6. ³For partner's remuneration see remark against item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3 acres	Per acre	For 3 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	270	90	18 0 0	6 0 0	Valued at Rs. 24 per <i>palla</i> of 360 lbs.
<i>Bhoos</i> ....	..	..	0 12 0	0 4 0	Estimated value. Sprinkling of <i>jowar</i> and <i>safflower</i> failed.
Total ..	..	..	18 12 0	6 4 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3 acres	18 12 0	34 5 11	(a) 14 11 0 (b) 2 8 4	-15 9 11	+1 9 5
Per acre ..	6 4 0	11 7 4	5 11 9	-5 3 4	+0 8 5

KANHUR

STATEMENT No. 153

WHEAT—5 acres in 1929-30

PLOT No. (6)

Previous crop—Bajri, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Ex- change labour on coopera- tion	Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Bul- locks ²		Bul- locks ²	Men ³	Women ³	Bul- locks ³	Men	Women			Bul- locks	For the plot		Per acre
												Rs. a. p.	Rs. a. p.			
1. Preparatory tillage																
(a) Ploughing	14·5	..	39·0	9	10·0	..	10·0	..	..	..	82·5	10·5	..	..	One ploughing was given. A plough required two men and two bullocks. For 4·5 days team consisted of six bullocks.
(b) Harrowing	8·0	..	24·0	..	8·0	..	8·0	..	..	..	48·0	9·6	..	..	The field was harrowed twice.
2. Seeds and sowing																
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	..	9 13 0	1 15 5	For the plot 138 lbs. of wheat seed (Rs. 9-9-0), 2 lbs. of safflower (2½ annas) and 1·25 lbs. jowar (1¼ anna).
(b) Sowing and covering	2·0	..	6·0	..	2·0	..	2·0	..	..	..	12·0	2·4	..	..
After-care and tillage																
(a) Watching	0·5	0·5	..	..	0·5	..	..	..	..	..	1·25	0·25	..	..

4. Harvesting thrashing and preparing for market.....	7.5	5.25	3.5	..	5.5	4.75	0.5	..	..	..	22.0	4.4	..	..
5. Payment made to partner .....	..	..	..	..	..	..	..	..	..	..	..	..	6 8 7	1 4 11	One-fourth of the gross produce was paid to the partner (Rs. 8-15-10). From this Rs. 2-7-3 on account of one-fourth the cost of seeds are deducted.
6. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	..	..	20 8 0	5 14 5	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.															
(a) Feeds, fodder, depreciation etc.	21 14 3														
(b) Interest on the value of bullocks, feeds and fodder	7 9 0														
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	..	..	5 1 8	1 0 4	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.															
(a) Depreciation	8 12 11														
(b) Interest	1 4 9														
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) .....	..	..	..	..	..	..	..	..	..	..	..	..	0 9 5	0 1 10	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	..	30 0 0	6 0 0	The land was owned.
Total.....	32.5	5.75	72.5	9	26.0	4.75	20.5	..	..	..	165.75	33.15	81 8 8	16 4 11	

¹Family labour not charged.

²Home and exchange bullock labour charged under item 6.

³For partner's remuneration see remark against item 5.

STATEMENT No. 153—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 5 acres	Per acre	For 5 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat	399·5	79·9	27 3 3	5 7 1	Valued at Rs. 24 per <i>palla</i> of 352·5 lbs.
Straw and <i>bhoos</i>	435·0	87·0	8 12 0	1 12 0	
Total.....	..	..	35 15 3	7 3 1	Estimated value. Sprinkling of safflower and <i>jowar</i> failed.

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 5 acres..	35 13 3	81 8 8	(a) 25 14 6 (b) 9 1 11	-45 9 5	-10 9 0
Per acre	7 3 1	16 4 11	7 0 1	-9 1 10	-2 1 9

STATEMENT No. 154

WHEAT—2·5 acres in 1929-30

PLOT No. (7)

Previous crop—Jowar and gram, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on cooperation			Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wc-men ¹	Bul-locks ²	Men ¹	Wc-men ¹	Bul-locks ²	Men ²	Wc-men ²	Bul-locks ²	Men	Wc-men	Bul-locks			For the plot	Per acre	
															Rs. a. p.	Rs. a. p.	
1. Preparatory tillage																	
(a) Ploughing	6·0	..	18·0	..	..	12	6·0	..	..	..	..	..	42·0	10·8	..	..	One ploughing was given. A plough required two men and four bullocks. For some time the plough was managed by one man.
(b) Crushing clods..	2·0	..	6·0	..	..	..	2·0	..	2·0	..	..	..	12·0	4·8	..	..
(c) Harrowing	3·5	..	9·5	..	..	..	2·5	..	2·5	..	..	..	18·0	7·2	..	..	Three harrowings were given.
2. Manure and manuring																	
(a) Manure .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13 0 0	5 3 2	For only one acre and 25 gunthas 13 cartloads of manure at Rs. 2 per cart was given. Only 50 per cent of the manure cost is charged to this crop, the remaining to be charged to crops following.
(b) Manuring,..... carting, etc.	5·0	3·0	15·0	3	3	6	8·0	6·0	2·0	..	..	..	45·0	18·0	..	..

KANNUR

717

STATEMENT No. 154—*contd.*

718

ITEM OF EXPENDITURE	Home labour			Exchange labour on cooperation			Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men ³	Women ³	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
3. Seeds and sowing																	
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4 14 0	1 15 6	For the whole area 69 lbs. of wheat seed (Rs. 4-12-0), 1 lb. of safflower seed (one anna) and 1 lb. of <i>javair</i> seed (one anna).
(b) Sowing and covering	1·0	..	3·0	..	..	..	1·0	..	1·0	..	..	..	6·0	2·4	..	..
4. After-care and tillage																	
(a) Watching	1·0	0·25	..	..	..	..	0·5	..	..	..	..	..	1·62	0·6	..	..
5. Harvesting and preparing for market	2·75	2·75	0·75	..	..	..	3·0	2·25	1·0	..	4	..	12·0	4·8	0 12 0	0 4 10	Woman labour on daily wage paid at 8 annas.
6. Payment made to partner .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2 8 2	1 0 1	One-fourth of the gross produce was paid to the partner (Rs. 3-11-10). From this Rs. 1-8-8 on account of one-fourth of the cost of seeds are deducted.

FARM STUDIES

7. Charges for bullock labour .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	6	11	10	2	10	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.								
(a) Fees, fodder, depreciation, etc. 18 13 11																												
(b) Interest on the value of bullocks, feeds and fodder 6 9 0																												
8. Charges for implements and tools....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	0	6	1	12	2	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.								
(a) Depreciation.. 3 4 7																												
(b) Interest 1 1 11																												
9. Interest on fixed capital (i.e., wages of hired labour, cost of seeds and manure) .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	0	6	10	Charged at 12 per cent per annum.
10. Rent of land .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	8	6	7	13	0	The land was owned.
Total.....	21	25	6	0	52	25	3	3	18	23	0	8	25	8	5	..	4	..	136	62	54	6	71	10	0	28	10	5

¹Family and exchange human labour not charged. ²Home and exchange bullock labour charged under item 7. ³For partner's remuneration see remark against item 6.

KANHUR

STATEMENT No. 154—concl.

720

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2·5 acres	Per acre	For 2·5 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat ..	164·5	65·8	11 3 3	4 7 8	Valued at Rs. 24 per <i>palla</i> of 352·5 lbs.
Bhoos	186·0	74·4	3 12 0	1 8 0	Estimated value. Sprinkling of safflower and <i>jowar</i> failed.
Total..	..	..	14 15 3	5 15 8	

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2·5 acres ..	14 15 3	71 10 0	(a) 16 8 9 (b) 8 12 1	-56 10 9	-31 5 11
Per acre ..	5 15 8	28 10 5	10 11	-22 10 9	-12 8 10

FARM STUDIES

STATEMENT No. 155

WHEAT—3 acres in 1929-30

PLOT No. (8)

Previous crop—Wheat, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation	Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²		Bullocks ²	Men ³	Women ³	Bullocks ³	Men	Women			Bullocks	For the plot		Per acre
												Rs. a. p.	Rs. a. p.		
1. Preparatory tillage (a) Ploughing.....	2·0	..	19·5	4	6·5	..	6·5	..	..	..	38·5	12·8	..	..	One ploughing was given. For the first two days two men and six bullocks were on the plough. For the remaining 4-5 days the plough had one man and four bullocks.
(b) Harrowing	4·5	..	14·0	..	5·0	..	5·0	28·5	9·5	..	..		Four harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing (a) Seeds.....	..	..	..	..	..	..	..	..	..	..	..	..	5 5 0	1 12 4	For the whole area 74·5 lbs. of wheat seed (Rs. 5-3-0), 1 lb. of safflower seed (Rs. 0-1-0) and one lb. of <i>jowar</i> seed (anna 1).
(b) Sowing and covering	1·0	..	3·0	..	1·0	..	1·0	..	..	..	6·0	2·0	..	..
3. After-care and tillage (a) Watching	0·25	0·5	..	..	..	0·75	..	..	..	..	1·25	0·4	..	..
4. Harvesting and preparing for market.....	2·5	2·5	0·5	..	3·0	2·0	1·0	..	4	..	11·25	3·8	0 12 0	0 4 0	Woman labour on daily wage paid at 3 annas each.

STATEMENT No: 155—concl'd.

722

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation	Partner's labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Bullocks ²	Men ²	Women ²	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
													Rs. a. p.	Rs. a. p.	
5. Payment made to partner .....	..	..	..	..	..	..	..	..	..	..	..	..	1 1 7	0 5 10	One-fourth of the gross produce was paid to the partner (Rs. 2-6-10). From this Rs. 1-5-3 on account of one-fourth the cost of seeds, are deducted.
6. Charges for bullock labour.....	..	..	..	..	..	..	..	..	..	..	..	..	14 13 7	4 15 2	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.															
(a) Feeds, fodder, depreciation, etc.....	11	0	3												
(b) Interest on the value of bullocks, feeds and fodder.....	3	13	4												
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	..	..	..	2 9 1	0 13 9	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.															
(a) Depreciation	1	14	8												
(b) Interest.....	0	10	5												
8. Interest on fluid capital (i.e., wages of hired labour and cost of seeds) .....	..	..	..	..	..	..	..	..	..	..	..	..	0 5 1	0 1 8	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	..	23 7 0	7 13 0	The land was owned.
Total.....	10'25	8'0	37'0	4	10'25	2'0	13'5	..	4	..	85'5	28'5	48 5 4	10 1 9	

¹Family labour not charged.

²Home and exchange bullock labour charged under Item 6.

³For partner's wages see remarks column against Item 5.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3 acres	Per acre	For 3 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat....	106	35.3	7 3 3	2 6 5	Valued at Rs. 24 per <i>palla</i> of 352.5 lbs. Estimated value. Sprinkling of safflower and <i>jowar</i> failed.
Bhoos	124	41.5	2 8 0	0 13 4	
Total..	..	..	9 11 3	3 3 9	

(c) Summary

1	2	3	4	5 (i.e.col. 2-3)	6 (i.e.col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.). (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3 acres..	9 11 3	48 5 4	(a) 19 13 6 (b) 4 12 10	-38 10 1	-13 15 9
Per acre	3 3 9	16 1 9	8 3 5	-12 14 0	-4 10 7

STATEMENT No. 156

WHEAT¹—2·5 acres in 1929-30

PLOT No. (9)

Previous crop—Gram, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation	Partner's labour			Labour on dally wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Bullocks ²	Men ³	Women ³	Bullocks ³	Men	Women	Bullocks			For the plot	Per acre	
													Rs. a. p.	Rs. a. p.	
1. Preparatory tillage															
(a) Ploughing.....	6·0	..	18	2	3·0	..	6·0	..	..	..	35·0	14·0	..	..	One ploughing was given. A team of four bullocks with one man worked four days; another with two bullocks and one man worked five days.
(b) Harrowing	5·0	..	15	..	5·0	..	5·0	..	..	..	30·0	12·0	..	..	One harrowing was given with a four-bullock harrow which required two men to manage. Three harrowings were given with a two-bullock harrow which required one man.
2. Seeds and sowing															
(a) Seeds.....	..	..	..	..	..	..	..	..	..	..	..	..	4 14 9	1 15 6	For the plot 60 lbs. of wheat seed (Rs. 4-12-9), 1 lb. of safflower (anna one) and 1 lb. of <i>jowar</i> seed (one anna).
(b) Sowing and covering	1·0	..	3	..	1·0	..	1·0	..	..	..	6·0	2·4	..	..

STATEMENT No. 156—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2·5 acres	Per acre	For 2·5 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat....	282	112·8	19 3 3	7 10 11	Valued at Rs. 24 per <i>palla</i> of 352·5 lbs.
Bhoos	319	127·6	6 4 0	2 8 0	Estimated value. Sprinkling of safflower and <i>jowar</i> failed.
Total..	..	..	25 7 3	10 2 11	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2·5 acres	25 7 3	46 12 4	(a) 16 8 9 (b) 4 7 2	-21 5 1	-0 5 2
Per acre	10 2 11	18 11 4	8 6 4	-8 8 5	-0 2 1

JEUR, 1928-29

The village of Jeur is situated on the bank of a small river, the Sina, about 10 miles on the Nagar-Shevgaon road, to the north-east of Ahmednagar in the transition tract of the Deccan. Ahmednagar is the headquarters of the district and the market place for the village. The climate of the place is pleasant during monsoon and in the winter. From the month of April till the monsoon advances sufficiently it is very hot, temperature sometimes reaching to 107° F. The average annual rainfall at Ahmednagar, which is only 10 miles from the village, is 23·50 inches. The chief dependence of the place is on the rains generally received in the months of August and September, and hence people rely more on *rabi* crops. The village, however, is protected to some extent by a number of wells, though the water supply in wells is influenced by the character of monsoon. Proximity of Ahmednagar market and the facility of well irrigation have encouraged market gardening and a number of farmers grow fruits, vegetables and green groundnut for the market. A large portion of the land of the village is light *mal* land. On the northern side of the village fairly large blocks of heavy and medium black soil are found, while on the western side medium alluvial soil is met with along the banks of the river, which passes through the revenue village.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Area held in 1928-29		Area cultivated in 1928-29		Population according to 1931 Census	Cultivated area per capita	
A.	g.	A.	g.		A.	g.
11,380	0	9,094	3	4,193	2	6·7

Of the total area held, about 2,286 acres were not cultivated. The area cultivated, therefore, was 9,094 acres and 3 gunthas. The area per capita came to 2 acres and 6·7 gunthas.

According to the last quinquennial census there were 1,222 draft cattle, and, 1,134 milch-cattle. This shows that in proportion to the cultivated area and the number of the inhabitants the supply of draft and milch animals is quite adequate. The total number of cattle and horses was 3,274 and of sheep and goat 1,850. This number must supply sufficient manure for a tract like Ahmednagar, though this particular village, having a good bit of well irrigation, requires more manure than the neighbouring villages.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held	Area cultivated	No. of <i>khatedars</i>	Average area per <i>khatedar</i>					
			Total area	Cultivated area				
A.	g.	A.	g.	A.	g.			
11,380	0	9,094	3	1,121	10	6·06	8	4·5

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated	No. of cultivators	Area per cultivator
A. g.		A. g.
9,094 3	894	10 6·8

Since the number of cultivators is smaller than the number of *khatedars*, the average area cultivated per farmer is larger than the average (cultivated) area per *khatedar*; yet for the tract, the average cultivating holding is too small.

TABLE IV—SIZE AND DISTRIBUTION OF THE PROPRIETARY HOLDINGS

Size of the holding Acres	No. of hold- ings	Per cent
Total.....	1,121	100·00
Below 5.....	574	51·21
5 to 10.....	222	19·80
10 to 20.....	181	16·15
20 to 30.....	75	6·69
30 to 40.....	33	2·94
40 to 50.....	11	0·98
50 to 75.....	10	0·89
75 to 100.....	8	0·71
Above 100.....	7	0·63

TABLE IV (a)—SIZE AND DISTRIBUTION OF CULTIVATING HOLDINGS

Size of holdings Acres	No. of holdings	Per cent
Total.....	894	100·00
Below 5.....	384	42·95
5 to 10.....	175	19·57
10 to 20.....	165	18·45
20 to 30.....	80	8·95
30 to 40.....	42	4·70
40 to 50.....	15	1·68
50 to 75.....	23	2·58
75 to 100.....	7	0·78
Above 100.....	3	0·34

Comparison of tables IV and IV (a) shows that the distribution of land for cultivation was not as bad as for ownership. While there were 7 proprietary holdings of more than 100 acres each, there were only three such large cultivating holdings. Holdings below 5 acres predominated in both cases.

TABLE V—CROPS OF THE VILLAGE, 1928-29

Crops	Area		Per cent	
	A. g.	A. g.	100·00	100·00
Total ...	9,094	3 9,094	3	100·00
<i>Kharif</i> crops		2,969	15	32·65
<i>Bajri</i> and mixture	2,167	29		23·84
Groundnut	420	27		4·62
Cotton	361	30		3·98
Others	19	9		0·21
<i>Rabi</i> crops		6,060	21	66·64
<i>Jowar</i> and mixture	5,645	13		62·07
Onions and garlic	248	25		2·74
Wheat	116	10		1·28
Gram	29	15		0·32
Others	20	38		0·23
Perennial crops		64	7	0·71
Citrus gardens	25	19		0·28
Grapes	17	11		0·19
Guava	6	21		0·07
Lucerne	5	0		0·06
Flowers	3	36		0·11
<i>Papayas</i>	3	20		
Others	2	20		

It is a *rabi* village. Two-thirds of the area is generally under *rabi* crops and about one-third under *kharif* crops. Though the area under perennial irrigation is less than one per cent, the total area under irrigation comes to 11 per cent. The chief crop of the village is *shalu jowar* which occupies 62 per cent of the cultivated area ; *bajri* occupies 23 per cent ; groundnut and cotton come next. Groundnut, cotton, onions,

fruits and flowers are the money crops of the village. The acreage of *bajri*, which is usually sown in the lighter class of soil, is influenced by the character and the amount of early rainfall. If rains are late, *bajri* cannot be taken and even the light lands have to be put under *shalu* or in few cases under wheat or gram.

On account of the existence of a number of wells the area under irrigated crops is fairly large, being about 1,300 acres or about 11 per cent of the total cultivated area. Groundnut, onion, garlic and chillies are the more important crops in the *bagayat* lands, while *bajri* and *shalu* are taken in *jirayat* fields. Since there are a number of suitable supplementary crops, and as the amount and distribution of rainfall varies from year to year, a definite system of rotation is not followed. In *bagayat* lands groundnut, in the *kharif* season, is generally followed by onion, wheat or gram in the *rabi* season of the same year. In the second year such lands remain fallow in *kharif* season and go under *shalu* in *rabi* season. In the third year they may be put to *bajri* in *kharif* season and to wheat or garlic in the *rabi* season. In the fourth year groundnut may be taken again or the land may be put under chillies. As regards heavy *jirayat* lands, *shalu* is generally followed by cotton, wheat or gram in the following year. In the third year the lands may be put under *bajri*. In light *jirayat* lands *bajri* is followed by *shalu* in the next year. *Bajri* is seldom taken alone; rows of *tur* mixed with other pulses are almost invariably seen. In *shalu*, rows of safflower or linseed are sown.

Bagayat lands are ploughed every year, usually in the months of March, April and May after the *rabi* crops are gathered. *Jirayat* lands are usually ploughed every two or three years. On account of the presence of the wet cultivation manure is expensive. *Jirayat* crops are rarely manured. Irrigated crops like onion, garlic, chillies and brinjals may receive up to 20 cart-loads of farmyard manure per acre every alternate year. Wheat and *shalu* in *bagayat* land may be manured at about 10 or 15 cart-loads per acre.

Since the farmer under study had taken some land on *batai* (share system), a few lines describing the system, in vogue, will not be out of place. The conditions of *batai* vary from village to village and even in the same village. In this village the assessment and local-fund cess are generally paid by the landowner. In the case of irrigated crops all the labour, required for the ordinary operations like ploughing, harrowing, interculturing, watering, sowing, etc., is provided by the tenant. Landowner pays half the cost of seed, planting, weeding and harvesting for crops like onion and groundnut. Gross produce is divided between the tenant and the landowner half and half. At times in the case of garlic, some landowners prefer to pay the whole cost of seed and of outside labour required for planting, weeding and harvesting and take three-fourth of the produce leaving one-fourth to the tenant. In the case of *jirayat* crops like *bajri* and *shalu* the tenant bears the cost of seeds. The cost of more expensive seeds like wheat or gram, is shared half and half by the tenant and the landowner. The produce is divided half and half.

THE SEASON, 1928-29

Table VI gives the fortnightly distribution of rainfall at Ahmednagar which is only 10 miles from the village. It is believed that there is not any difference in the rainfall of Ahmednagar and Jeur. The total amount of rainfall, received from April to December in 1928, was 34.99 inches which was about 50 per cent above normal.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL OF AHMEDNAGAR IN 1928 (INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
						First fortnight						
0.0	0.0	0.0	0.03	0.0	8.60	2.43	0.13	0.26	4.13	0.0	0.07	} 34.99
						Second fortnight						
0.0	0.0	0.0	0.35	0.0	1.52	0.36	6.71	9.40	1.0	0.0	0.0	

The monsoon broke with heavy showers in the first week of June and it continued raining till about the end of the second week of the month, when there was a break which allowed time for sowing. Just after sowing, rains again came in heavy showers which washed off young plants in the uneven plots and checked the growth in others. From about the end of the second week of July to the end of the third week of August there were occasional light showers. In the last week of August there was heavy rain amounting to 5 to 6 inches in the course of two days which proved exceedingly harmful to *bajri* which was then in flower. As a result *bajri* heads did not fill in and the harvest was poor. After a fortnight of intermittent showers rains again started in the third week of September and continued till about the end of the first week of October. These rains interfered with the harvesting of *kharif* crops especially of groundnut. Only a few cultivators of the village could harvest their groundnut before these rains. Those who could gather groundnut before the land was too wet secured better price for their produce (viz., Rs. 20—22 per *palla*), while the majority of the farmers, whose harvests were delayed, could make only Rs. 14-8-0 per *palla*. Moreover, when the rains stopped every one began his delayed harvest and consequently the labour share for gathering nuts rose from $\frac{1}{3}$ th to $\frac{1}{2}$ rd and even to one-half. The August and September rains, however, were found very useful for *rabi* crops like wheat, *shalu* and gram. The crop valuation in the village was 7 *annas*.

THE FARMER

The farmer cultivated 13 acres and 27 gunthas of land in two blocks. Of this he owned 6 acres and 2 gunthas, the remaining was taken on *batai*. Since one of the acres was cropped twice, the gross cropped area was 14 acres and 27 gunthas.

(a) *Human labour*.—The farmer's family consisted of the following members—

(1) The farmer	55 years
(2) Farmer's wife	40 „
(3) Their eldest son	25 „
(4) „ second son.....	20 „
(5) Wife of the eldest son	15 „

There were thus five adult persons in the family. The farmer himself was an invalid and died some time after the enquiry commenced i.e. on the 1st of November 1928. The family, therefore, is taken to consist of only four adult workers. Monthly distribution of the available and utilized labour; from June 1928 to May 1929, is given in table VII. The period dealt with does not synchronize with the period taken by the crops of the year. The table only shows how the family was generally engaged as regards farm work.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Percentage of labour employed to labour available
Two men and two women or four adults	69·5	71·5	83	68	79	77	65	102·5	101	90·5	72	60	939	64·31
	120	124	124	120	124	120	124	124	112	124	120	124	1,460	

Note.—The denominator shows available labour units, while the numerator shows labour units employed.

The distribution of family labour was not bad. It was fairly even except from January to March when labour was more fully utilized. On account of the irrigated crops on their well, the farm family had steady work throughout. About 64 per cent of the available labour was utilized on the farm.

Whenever the young farmers were short of bullocks their neighbours helped them and in return these young men helped their neighbours. Thus they could get 20 man units and 71 bullock units in exchange. The days so spent on the neighbours' farms are included in table VII as being employed.

Due to the fairly large acreage under well irrigation in the village, there was good demand for labour and the family, under study, was not slow to take advantage of this demand. Thus the elder brother was employed as *saldar* or farm servant till 29th July 1928 at Rs. 75 per annum plus food (which may be valued at Rs. 60 per annum) and clothing (a pair of *dhoties*, one shirt, one turban, one blanket and a pair of shoes all worth Rs. 15). Besides, all the members of the family except the old farmer (who died on 1st November 1928) did outside work on daily wages, whenever farm work permitted them to do so. The following is the statement showing the number of days of outside work on daily

wages and the remuneration obtained by each of the four members of the family. This does not include the days they worked for others in exchange.

No.	Family member	No. of days' outside work on daily wages	Total wages obtained
Total.....		218	Rs. a. p. 46 6 6
1	Farmer's eldest son (between October 1928 and May 1929.....)	23	9 10 0
2	Farmer's second son.....	30	11 9 0
3	Farmer's wife.....	133	20 1 6
4	First son's wife.....	32	5 2 0

Thus, the family could earn Rs. 46-6-6 as wages from outside work, besides the cash of Rs. 75 received by the eldest boy in the course of the year.

(b) *Bullock labour.*—The family had two bullocks till 24th July 1928 for their own farm of 6 acres and 2 gunthas. Since they leased 7 acres and 25 gunthas for the year 1928-29, they found the two bullocks inadequate and so they purchased a third bullock on 24th July 1928, and, a fourth on 1st August 1928. They, however, found the farm to be too small for four bullocks though a bit too large for two, and so they preferred to sell two of the bullocks. They sold one bullock on 12th April 1929, and another on 17th May 1929. It is an interesting point in the organization of the factors of the production in farm business. The family could not think of keeping only three bullocks as a team requires either two or four bullocks. The monthly distribution of bullock labour, from June 1928 to May 1929, is shown in table VIII.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Percentage units employed to units available
2 Bullocks till 24th July 1928														
3 Bullocks till 31st July 1928	35	54	88	54	22	110	120	112	54	78	44	18	789	61.6
4 Bullocks till 12th April 1929	60	69	124	120	124	120	124	124	112	124	101	78	1280	
3 Bullocks till 16th May 1929														
2 Bullocks till end of May														

Note.—The denominators show available labour, while the numerator shows labour employed.

Due to the well irrigation facilities the work of the bullocks was well spread and efficient.

The opening and closing inventories of the property are given in table IX.

TABLE IX—INVENTORY OF THE PROPERTY

1928				1929				Remarks
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		
		A. g.	Rs. a. p.			Rs. a. p.	A. g.		Rs. a. p.	Rs. a. p.
<i>Assets</i>				<i>Assets</i>				
✓ 1. Real estate				✓ 1. Real estate				
(A) Land				(A) Land				
(a) One field	6 2	600 0 0		(a) One field	6 2	600 0 0		
(B) Buildings				(B) Buildings				
(a) House including open space		375 0 0		(a) House including open space		365 0 0		Requires some repairs.
Total real estate			✓ 975 0 0	Total real estate			✓ 965 0 0	
✓ 2. Livestock				✓ 2. Livestock				
(a) Bullocks	4	172 0 0		(a) Bullocks	Nil.	Nil.		All the bullocks were sold and the family became a labour family.
Total livestock			✓ 172 0 0	Total livestock			Nil.	
✓ 3. Implements and tools				3. Implements and tools				
(a) Plough	1	10 0 0		(a) Plough	1	8 0 0		
(b) Harrow	1	3 0 0		(b) Harrow	1	2 4 0		
(c) Seed-drill	1	5 0 0		(c) Seed-drill	1	4 0 0		
(d) Hoe	1	2 0 0		(d) Hoe	1	1 10 0		
(e) Kudalis	2	1 8 0		(e) Kudalis	2	1 4 0		
(f) Axe	1	0 8 0		(f) Axe	1	0 6 3		
(g) Fawda	1	0 12 0		(g) Fawda	1	0 8 0		
(h) Khurpis	3	0 6 0		(h) Khurpis	3	0 5 0		
(i) Baskets	2	0 4 0		(i) Basket	1	0 1 0		
(j) Ghamelas	2	0 14 0		(j) Ghamelas	2	0 12 0		
(k) Mhote	1	30 0 0		(k) Mhote	1	17 0 0		
(l) Nada, sondor, roller wheel, etc.		6 12 0		(l) Nada, sondor, roller wheel, etc.		✓ 5 4 0		
Total implements and tools			✓ 61 0 0	Total implements and tools			✓ 41 6 3	

3. Farm produce and supplies on hand			4. Farm produce and supplies on hand			
✓ (a) <i>Jowar</i>	1,028 lbs.	48 0 0	(a) <i>Jowar</i>	2,700 lbs.	128 0 0	
✓ (b) <i>Kadbi</i>	2,500 bundles	50 0 0	(b) <i>Linseed</i>	30 "	3 0 0	
			(c) <i>Wheat</i>	720 "	50 0 0	
Total farm produce and supplies on hand		98 0 0	✓ (d) <i>Kadbi</i>	1,000 bundles.	40 0 0	
			✓ (e) <i>Bhoos</i>		3 0 0	
			(f) <i>Manure</i>	6 carts.	18 0 0	
5. Money due from others			Total farm produce and supplies on hand.			242 0 0
✓ (a) Amount lent to a relative		25 0 0	5. Money due from others			
✓ (b) Amount due from outside for a bullock sold		40 0 0	(a) One share of co-operative society		10 0 0	
Total amount due from outside		65 0 0	Total amount due from outside			10 0 0
6. Cash on hand		0 0 0	6. Cash on hand			285 0 0
<i>Total Assets</i>		1,371 0 0	<i>Total Assets</i>			1,543 6 3
<i>Liabilities</i>			<i>Liabilities</i>			
✓ (a) Money owed to others		30 0 0	(a) Money owed to others		11 0 0	
<i>Total Liabilities</i>		30 0 0	(b) Debt of co-operative society		100 0 0	
<i>Net worth of the farm at the beginning of the year</i>		1,341 0 0	<i>Total Liabilities</i>			111 0 0
			<i>Net worth of the farm at the close of the year</i>			1,432 6 3

This consists of Rs. 110 obtained by sale of bullocks, Rs. 100 from Co-operative Society and Rs. 75 balance of the amount obtained by sale of farm produce.

JEUR

SUMMARY

	Rs.	a.	p.
Net worth of the farm at the beginning of the study	1,341	0	0
Net worth of the farm at the close of the study	1,432	0	0
<i>Gain in net worth</i>	91	6	3

735

TABLE X—CROPS, CROPPING AND THEIR TREATMENT

Field	Area	Nature of land	1927-28 i.e. (previous year)		1928-29 i.e. (year under study)		
			Crop	Treatment	Crop	Plot No.	Treatment
Owned land ...	A. g. 6 2	Very poor, shallow soil, sloping.	<i>Jowar rabi</i> ..	Neither manured nor irrigated. The field had never received any manure so far as the cultivator remembered.	<i>Jowar</i> ..	4	Neither manured nor irrigated.
Leased land ...	7 25	Medium black soil, level. The whole area was under the command of a well situated in the field.	A. g. 3 0 Wheat and gram. 4 25 <i>Jowar rabi</i> .	Irrigated but not manured.	A. g. 3 0 <i>Rabi-jowar</i> . 1 17 <i>Bajri</i> 2 0 Groundnut. 1 8 Wheat 0 15 Wheat 0 25 Onion and garlic.	3 1 2 5 6 7	Irrigated but not manured. Neither irrigated nor manured. Irrigated but not manured. Do. do. Both these plots were irrigated and manured. Wheat and onions were taken as second crops after harvesting <i>bajri</i> .

The value of the real estate fell by Rs. 10 due to depreciation on buildings. The family sold off all their bullocks and became day-labourers. The livestock, therefore, decreased by Rs. 172. Since the bullocks fetched only Rs. 110 the family lost about Rs. 62 on the bullocks. Implements and tools depreciated by Rs. 19-9-9. Much of the produce obtained from the farm, during the year, was held over, which accounts for the rise of Rs. 144 in the farm produce on hand. Out of Rs. 65 due from others, Rs. 55 were recovered. The cash of Rs. 285, on hand by the close of the year, consisted of Rs. 110 obtained by the sale of bullocks, Rs. 100 the loan from Co-operative Society and the balance from the sale of some farm produce. The inventory thus shows a rise of Rs. 91-6-3.

NATURE OF THE HOLDING, LANDS, CROPS AND CROPPING

The farmer owned 6 acres and 2 gunthas of land in one block. The rented area of 7 acres and 25 gunthas in another block was situated far away from his own land. The total area of the holding was thus 13 acres and 27 gunthas. One acre was cropped twice and hence the gross cropped area was 14 acres and 2 gunthas. Of the total gross cropped area of 14 acres and 27 gunthas, the farmer had one acre and 17 gunthas or 9·7 % under *bajri*, 2 acres or 13·6 % under groundnut, 9 acres and 2 gunthas or 61·7 % under *jowar*, 1 acre and 23 gunthas or 10·7 % under wheat, and the remainder viz., 25 gunthas or 4·3 % was under onions and garlic. The rented land had irrigation facilities. Land assessment was paid by landowner. The farmer had to bear all other costs on *bajri* and *jowar*. In the case of wheat, the landowner paid half the cost of seed. In the case of groundnut, onion and garlic, landowner bore half the cost of seed, sowing, weeding and harvesting.

The nature of the holding, crops and cropping and the treatment of different fields, during the years 1927-28 and 1928-29, are given in table X.

COSTS AND RECEIPTS

An abstract of expenditure on the holding is given below.

ABSTRACT OF COSTS

Item of expenditure	Cost on the total cultivated area viz., 14 acres and 27 gn.	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses :		
(a) Manure	0 12 0	
(b) Seeds	62 15 10	
(c) Outside labour charges.....	139 1 0	
(d) Depreciation on implements and tools	19 9 9	
× (e) Bullock labour cost (excluding interest)	138 0 0	
(f) Marketing charges	1 1 0	
(g) Assessment and local-fund cess for owned land	3 15 0	
(h) Rent for leased land	196 7 10	
	561 14 5	

Items of expenditure	Cost of the total cultivated area viz., 14 acres and 27 gn.	
	Rs. a. p.	Rs. a. p.
X ⁹ II. Rent of owned land excluding assessment and local-fund cess	26 1 0	26 1 0
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	5 14 1	
(b) Interest on the value of equipment and tools	8 14 1	
(c) Interest on the value of bullocks, on cost of feed and fodder consumed by them	28 2 2	
		42 14 4
<i>Total cost of production (excluding wages of home labour)</i>		630 13 9

*DETAILS OF OUT-OF-POCKET EXPENSES

	Rs. a. p.	Rs. a. p.
1. <i>Manure :</i>		
One-fourth cart of F. Y. M. given to onion seed-bed at Rs. 3 per cart	0 12 0	0 12 0
2. <i>Seeds :</i>		
(a) Bajri, 6 lbs.	0 8 0	
(b) Hulga	0 2 0	
(c) Tur, 9 lbs.	0 8 0	
(d) Rala	0 1 4	
(e) Groundnut, 240 lbs. (pods)	25 7 0	
(f) Coriander, 8 lbs.	1 0 0	
(g) Jowar, 69 lbs.	2 6 6	
(h) Safflower, 2 lbs.	0 4 0	
(i) Linseed	0 3 0	
(j) Wheat, 95 lbs.	11 1 0	
(k) Onion seed, 14½ lbs.	17 0 0	
(l) Garlic seed	4 14 0	
		62 15 10
3. <i>Wages of outside labour :</i>		
(a) Bajri (Plot No. 1); twenty women	3 2 0	
(b) Groundnut (Plot No. 2); 1 man and 58 women	8 5 0	
Contract for harvesting	98 15 0	
(c) Jowar (Plot No. 3); 16 men and 19 women .	11 0 6	
(d) Onions (Plot No. 7); 94 women	17 10 6	
		139 1 0
4. <i>Depreciation on implements and tools :</i>		
Opening inventory	61 0 0	
Closing inventory	41 6 3	
		19 9 9

TABLE XI—FAMILY LABOUR INCOME

Crop	Area	Value of produce	Cost of production excluding wages of family labour				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total	14 27	583 13 8	561 14 5	42 14 4	26 1 0	630 13 9	-47 0 1
<i>Bajri</i>	1 17	23 8 0	19 9 5	1 1 5	Land was leased.	20 10 10	+2 13 2
Ground-nut	2 0	241 8 2	207 15 0	7 7 5	Do.	215 6 5	+26 1 9
Wheat	1 23	57 2 8	62 10 3	7 1 7	Do.	69 11 10	-12 9 2
Onions	0 25	48 0 0	76 0 7	9 13 3	Do.	85 13 10	-37 13 10
<i>Jowar</i>	9 2	213 10 10	195 11 2	17 6 8	Rs. 26 1 0 (For 6 acres and 2 gunthas of owned land).	239 2 10	-25 8 0

Column 4.—Out-of-pocket expenses include costs of manure, seeds, hired labour on daily wages and depreciation on dead stock, cost of upkeep of bullocks, marketing expenses, rent of leased land, assessment and local-fund cess on owned land. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on the current agricultural operations and money spent on feed and fodder for the work animals. Fixed capital includes implements and work animals. *Column 6* denotes the estimated rent of owned land minus the assessment and local-fund cess. *Column 8* shows wages earned by the family.

The value of the gross produce obtained from the farm was Rs. 583-13-8. only. The costs of production being as high as Rs. 630-13-9, the farm family did not make any labour income; on the contrary they suffered a loss of Rs. 47-0-1.

Farm Business Income.—The loss shown was offset by the rent of owned land and the interest on working capital, leaving a balance of Rs. 21-15-3 as shown in table XII. The table gives the farm business income or the aggregate income of the farmer i.e., the value of the produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
				Rs. a. p.
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total	14 27	583 13 8	561 14 5	+21 15 3
<i>Bajri</i>	1 17	23 8 0	561 14 5	+21 15 3
Groundnut	2 0	241 8 2		
Wheat	1 23	57 2 8		
Onions	0 25	48 0 0		
<i>Jowar</i>	9 2	213 10 10		

As seen above the gross receipts obtained by the farm family were Rs. 583-13-8, while the out-of-pocket expenses came to Rs. 561-14-5, thus leaving Rs. 21-15-3, as the total income obtained by the farm family, on account of the wages for the work done by them on the different crops grown on the farm, interest on the working capital and the rent of their owned land as shown below :—

	Rs.	a.	p.
Family labour income	—	47	0 1
Interest on working capital.....	+	42	14 4
Rent of owned land	+	26	1 0
Total	+	21	15 3

Besides, the farm family could earn Rs. 46-6-6 as day-wages, and Rs. 75 the yearly wage of one boy as already explained under family labour. In addition Rs. 20 were obtained as sale proceeds of a *babul* tree. Thus the total income of the family leaving out of consideration one man's board came to Rs. 163-5-9.

ANALYSIS

The farm family put in 311·5 man units and 156 woman units on the crops grown in 1928-29. Taking two woman units equal to one man unit, they put in 389·5 units. They, besides, secured 20 man units and 1 bullock unit on co-operation which were returned during the course of the year. It may, therefore, be said that 78·4 per cent of the work (excluding the contract work) was done by the farm family. Outside labour was employed when there was pressure of work. The family had to engage 17 man units and 191 woman units, costing Rs. 40-2-0, and to pay groundnut produce worth Rs. 98-15-0 for harvesting the crop.

For 389·5 home labour units the farm family could not get any remuneration; on the other hand they sustained a loss of Rs. 47. The farm business income came to Rs. 21-15-3 only. The reasons for this small income were the failure of crops on the owned land and the heavy share rent of the leased land. On reconsidering their position the brothers did not think it worth their while to continue in farming, and, at the end of the year, they left the land taken on lease, sold off their bullocks, rented their small holding and became day-labourers.

General remarks about crops.—Table XIII shows the yields of the main produce and the labour units (including bullock units) spent per acre, with the general remarks on crop conditions. This information is picked up from the statement of crops and receipts. (One man unit = one bullock unit = two woman units.)

TABLE XIII—YIELDS OF MAIN PRODUCE AND
LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce per acre		No. of work units per acre	REMARKS
	Name of produce	Yield lbs.		
1	<i>Bajri</i> and mixture	326·31	40·35	The plot was not manured. Heavy rains washed away the land, and another spell of heavy rains at the time of flowering interfered with pollination and hence the yield was below average.
2	Ground nut (pods)	1,644	195	The yield was normal. Includes 99 units for contract payment.
3	<i>Jowar</i>	1,111·6	124·25	It was an irrigated crop and was carefully looked after. The yield was above normal. <i>Mhot</i> irrigation increased labour units.
4	<i>Jowar</i>	Crop failed ..	19·25	The soil was poor and unlike plot No. 3, this plot was not irrigated. Heavy rains washed off most of the crop which did not revive afterwards.
5	Wheat	390	114·6	Both the wheat plots received well irrigation. Plot No. 5 was not level and the crop was patchy. It had received ploughing which increased labour. In plot No. 6 wheat, was taken after <i>kharif bajri</i> without much preparation. The yield was good.
6	Do.	832	74·66	
7	Onion ^s (bulbs).	12,288	396·4	Onions were taken after <i>bajri</i> in the same year. Late rains spoiled the seed-bed and hence the transplanting was delayed. The crop was attacked by thrips.

Bajri.—There was one plot of *bajri*, and as shown in table No. XIII above, the yield was very low. The sowing was done in time but soon afterwards there were heavy showers which washed the plot and checked the growth of the crop. Heavy rains in the last week of August proved exceedingly harmful to the crop, which was then in flower. The rent of the land (i.e., half the share of the gross produce) claimed over 61 per cent of the total out-of-pocket expenses.

Groundnut.—The plot of two acres of groundnut was on the whole maintained delicently. Though the heavy rainfall received after sowing checked the growth of the crops to some extent, they picked-up afterwards. Unfortunately the September and October rains were found very harmful to the crop, which was then ready for harvest. Coriander sown with groundnut also was caught in the rains and the quality of the produce was spoiled. The price obtained was, therefore, low, viz., Rs. 8-8-0 per *palla* as against Rs. 14 to 15 obtained by those who could harvest the produce before October rains.

Shalu.—There were two plots of *shalu*. One of these which was taken on lease was irrigated. The irrigated plot gave a high yield of 1,112 lbs. of grain per acre. The second plot was uneven and poor in quality and had, moreover, no facilities for irrigation. October rains carried away lot of soil and most of the plants. As a result nothing could be obtained from the plot.

Wheat.—There were two plots of irrigated wheat. The soil of both the plots was alike, medium black. Plot No. 5, however, was not level. Germination in this plot was uneven and growth patchy, as a result the yield was low. In plot No. 6 wheat was the second crop in the year, taken after *bajri*. The condition of the crop was good throughout, and a good yield of 832 lbs. per acre was obtained.

Onion.—Onion was taken after harvesting *bajri* in the same year. Heavy late rains spoiled the onion seed-beds and transplanting was delayed. The delay in transplanting had some effect on the yield. The price of onions was very low, and it is chiefly on this account that the plot could not show any labour income.

The statements giving costs and receipts of the different plots of the farmer are as follows :—

STATEMENT No. 157

BAJRI—1 acre 17 gunthas in 1928-29

PLOT No. (1)

Previous crop—Jowar (irrigated), 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage												Rs. a. p.	Rs. a. p.	
(a) Harrowing and levelling	2	..	4	..	..	..	..	..	..	6.0	4.21	---	---	
2. Seeds and sowing												1 3 4	0 13 6	For the plot 6 lbs. of bajri seed (annas 8), 9 lbs. of tur (annas 8) and vala mixture (3 annas and 4 pies).
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..
(b) Sowing and covering	1	..	2	1	..	2	..	..	..	6.0	4.21	---	---	
3. After-care and tillage												3 2 0	2 3 1	One weeding was given. Twenty women paid at Re. 0-2-8 each.
(a) Weeding	2	2	..	..	..	..	..	20	..	13.0	9.12			
4. Harvesting and preparing for the market														
(a) Harvesting, tying, cutting ear-heads and thresh-														

5. Charges for home and exchange bullock labour .....	..	..	..	..	..	..	..	..	..	..	..	8 11 2	8 9 7	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.														
(a) Feed, fodder, depreciation and death rate	8	1	1											
(b) Interest on value of bullocks, feeds, fodder ..	0	10	1											
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	..	..	0 10 2	0 7 2	The total annual charges for the farm are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.														
(a) Depreciation ..	0	7	0											
(b) Interest ..	0	3	2											
7. Interest on fluid capital (i.e., wages for hired labour and price of seeds) ..	..	..	..	..	..	..	..	..	..	..	..	0 4 2	0 2 11	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	..	..	..	11 12 0	8 8 11	The land was taken on lease. Half of the gross produce was given as rent.
Total	21	28	12	1	..	2	..	20	..	57.5	40.85	20 10 10	14 8 2	

¹Family and exchange human labour not charged.

²Home and exchange bullock labour charged under item 5.

STATEMENT No. 157—concl'd.

746

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS.
	For 1 acre and 17 gunthas	Per acre	For 1 acre and 17 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Bajri</i> (grains)	360	292.63	15 0 0	10 8 5	Sold at 15 lbs. per <i>palla</i> of 360 bls.
<i>Sarma</i> d 450 bundles ...	990	694.73	4 8 0	3 2 6	Valued at Re. 1 per 100 bundles.
<i>Tur</i> (grains) ..	18	12.63	1 0 0	0 11 3	Valued at 18 lbs. a rupee.
<i>Rala</i> (grains) ..	30	21.05	1 0 0	0 11 3	Valued at 30 lbs. a rupee.
<i>Hulga</i> (grains)	..	..	1 0 0	0 11 3	Estimated value.
<i>Bhoos</i> .....	..	..	1 0 0	0 11 3	
Total			23 8 0	16 7 11	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 17 gunthas	23 8 0	20 10 0	(b) 1 1 5	+ 2 13 2	+ 3 14 7
Per acre	16 7 11	14 8 2	0 12 2	+ 1 15 9	+ 2 11 11

FARM STUDIES

STATEMENT No. 158

GROUNDNUT--(Irrigated), 2 acres in 1928-29

PLOT No. (2)

Previous crop—Jowar (irrigated), 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
	Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.					
1. Preparatory tillage														
(a) Harrowing	7	..	14	..	..	..	..	..	..	21.0	10.50	....	....	Seven harrowings were given. A harrow required one man and two bullocks.
2. Seeds and sowing														
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	26 0 0	13 0 0	For two acres 240 lbs. of groundnut seed (Rs. 25-0-0) and 8 lbs. coriander seed (Rs. 1-0-0).
(b) Preparing seed, sowing and covering	7	7	2	2	..	4	..	10	..	23.5	11.75	1 4 0	0 10 0	Ten women paid at 2 annas each (six men and six women of the home labour were required for shelling pods).
3. After-care and tillage														
(a) Weeding	1	1	..	..	..	..	..	18	..	10.5	5.25	2 13 0	1 6 6	One weeding was given. Eighteen women paid at two and half annas each.

JMB

747

STATEMENT No. 158—contd.

748

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS.
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
												Rs. a. p.	Rs. a. p.	
4. Irrigation														
(a) Labour	30	--	60	2	--	8	--	--	--	100·0	50·00	--	--	
5. Harvesting ground-nut and coriander and preparing for the market	3	20	--	--	--	--	1	30	--	29·0	14·50	103 8 0	51 9 6	In addition to home labour one man and thirty women employed on day-labour were paid Rs. 4-4-0. Besides Rs. 98-15-0 worth of pods were given to other women who collected pods. Gathering pods was given on half share.
6. Marketing														
(a) Carting	4	--	4	--	--	--	--	--	--	8·0	4·00	0 11 0	0 5 6	Eleven annas were paid for one cart engaged on hire.
(b) Market charges ..	--	--	--	--	--	--	--	--	--	--	--	0 8 0	0 8 0	For brokerage etc.
7. Charges for bullock labour	--	--	--	--	--	--	--	--	--	--	--	24 4 2	12 2 1	The total annual cost of draft bullocks is distributed on different plots in proportion to the units used on them.
(a) Fees, fodder, depreciation and death-rate	20	2	5											
(b) Interest on the value of bullocks, feed, fodder ..	4	1	9											

FARM STUDIES

8. Charges for imple- ments and tools ..	..	..	..	..	..	..	..	..	..	..	..	4 2 6	2 1 3	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.														
(a) Depre- ciation... 2 13 9														
(b) Interest 1 4 9														
9. Interest on fluid capital (i.e., wages for hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	..	..	2 0 11	1 0 6	Charged at 12 per cent per annum.
10. Rent of land ....	..	..	..	..	..	..	..	..	..	..	..	50 9 10	25 4 11	Land was taken on share system. The owner paid Rs. 66-10-0 by way of half expenses on seeds, sowing, weeding and harvesting. The value of half of the produce (except gleaning) came to Rs. 117-3-10; therefore the rent came to Rs. 50-9-10.
Total	52	28	80	4	..	12	1	58	..	192-0	96-00	215 6 5	107 11 3	

¹Family and exchange human labour not charged.

²Home and exchange bullock labour charged under item 7.

STATEMENT No. 158—concl'd.

750

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres	Per acre	For 2 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Groundnut pods ..	3,138	1,569	197 14 0	98 15 0	Three <i>pallas</i> sold at 14 rupees per <i>palla</i> , 10.75 <i>pallas</i> sold at Rs. 14-8-0 in Ahmednagar Market. The total value includes the value of produce paid in kind to the labour engaged for harvesting.
Groundnut pods (gleaning) ..	150	75	7 0 6	3 8 3	Valued at annas 9 per 12 lbs.
Coriander.	624	312	22 1 8	11 0 10	Sold at Rs. 8-8-0 per <i>palla</i> of 240 lbs.
Vines, 58 bundles ..	....	....	14 8 0	7 4 0	Valued at 4 annas a bundle.
Total ..	....	....	241 8 2	120 12 1	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For two acres ..	241 8 2	215 6 5	(b) 7 7 5	+26 1 9	+33 9 2
Per acre.	120 12 1	107 11 3	3 11 9	+13 0 10	+16 12 7

FARM STUDIES

STATEMENT No. 159

JOWAR—(Irrigated), 3 acres in 1928-29

PLOT No. (3)

Previous crop—Gram and wheat, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage														
(a) Ploughing	5·0	..	15	..	..	5	..	..	..	25·0	8·34	....	....	One ploughing was given. A plough required one man and four bullocks.
(b) Harrowing	4·0	..	7	3	..	9	23·0	7·67	....	....		Four harrowings were given with a four bullock harrow.
2. Seeds and sowing														
(a) Seeds .....	..	..	..	..	..	..	..	..	..	..	..	1 8 0	0 8 0	For the plot 37·5 lbs. of <i>jowar</i> seed (Rs. 1-5-0) and linseed worth 3 annas.
(b) Sowing and covering	2·0	..	4	..	..	..	..	..	..	6·0	2·0	....	....
3. Irrigation														
(a) Labour	69·0	11·0	142	..	..	..	..	..	..	216·5	72·16	....	....	4 <i>mhot</i> required one man and two bullocks; at times woman managed the <i>mhot</i> .
4. After-care and tillage														
(a) Weeding	4·5	5·0	..	..	..	..	..	18	..	18·5	4·5	2 7 0	0 13 0	One weeding was given. Thirteen women paid at annas 3 each.
(b) Watching	5·0	32·5	..	..	..	..	..	..	..	21·25	7·08	....	....

JOUR

751

STATEMENT No. 159—concl'd.

752

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre		
5. Harvesting and preparing for the market (a) Harvesting, tying, cutting ear-heads, thrashing etc.	22.5	24.0	14	--	--	--	16	6	--	67.5	22.5	Rs. a. p. 8 9 6	Rs. a. p. 2 13 10	Sixteen men paid at 7 annas each. Six women paid in kind (produce worth Rs. 1-9-0). The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.	
6. Charges for bullock labour	--	--	--	--	--	--	--	--	--	--	51 10 11	17 13 8	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.		
Rs. a. p.															
(a) Fees, fodder, depreciation and death-rate											42 14 11				
(b) Interest on the value of bullocks, feeds, fodder ..											8 12 0				
7. Charges for implements and tools	--	--	--	--	--	--	--	--	--	--	8 13 9	2 15 3	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.		
Rs. a. p.															
(a) Depreciation ..											6 1 7				
(b) Interest ..											2 12 2				
8. Interest on fluid capital (i.e. wages for hired labour and price of seed)	--	--	--	--	--	--	--	--	--	--	0 10 7	0 8 6	Charged at 12 per cent per annum. The land was taken on lease. Half the gross produce was paid as rent.		
9. Rent of land	--	--	--	--	--	--	--	--	--	--	106 13 5	35 9 10			
Total	112.0	72.5	182	2		14	16	10		372.75	124.95	120 0 2	60 8 1		

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3 acres	Per acre	For 3 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
<i>Jowar</i>	3,335	1,111.6	154 10 10	51 9 0	Valued at Rs. 16 per <i>palla</i> of 345 lbs.
<i>Linseed</i>	30	10	3 0 0	1 0 0	Valued at 10 lbs. per rupee.
<i>Kadbi</i> (1,300 bundles) ..	10,400	3,466.66	52 0 0	17 5 4	Valued at Rs. 4 per 100 bundles.
<i>Bhaos</i> .....	..	..	4 0 0	1 5 4	Estimated value.
Total....	..	..	213 10 10	71 3 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3 acres	213 10 10	180 9 2	(b)12 2 9	+33 1 8	+45 4 5
Per acre. .	71 3 8	60 3 1	4 0 11	+11 0 7	+15 1 6

MO-I Q 84-482

5. Charges for implements and tools .. .. .	..	..	..	..	..	..	..	..	3 15 8	0 10 6
Rs. a. p.										
(a) Depreciation	2	11	10							
(b) Interest	1	3	10							
6. Interest on fluid capital (i.e., wages for hired labour and price of seeds) .. .. .	..	..	..	..	..	..	..	..	0 1 3	0 0 3
7. Rent of land .. .. .	..	..	..	..	..	..	..	..	30 0 0	4 15 4
Total ..	24	5	80	4	..	8	116	5	19	25
									58	9 8
									9	11 0

The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.

Charged at 12 per cent per annum.

The land was owned.

¹Family and exchange human labour not charged. ²Home and exchange bullock labour charged under item 4.

JEDR

755

STATEMENT No. 160—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 6 acres and 2 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
<i>Jowar</i>	Nil.	Nil.	Soil was very poor and sloping and the crop failed due to excess of rain.

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 6 acres and 2 gunthas ..	0 0 0	58 9 8	(a) 26 1 0 (b) 5 3 11	-58 9 8	-27 4 9
Per acre	0 0 0	9 11 0	5 2 10	-9 11 0	-4 8 2

STATEMENT No. 161

WHEAT (irrigated)—1 acre 8 gunthas in 1928-29

PLOT No. (5)

Previous crop—Jowar (irrigated), 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Total units.	Units per acre.	Cost excluding that of family labour.		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing.....	5·0	..	10	..	..	10	25·0	20·83	....	....	Two ploughings were given. A plough required one man and four bullocks.
(b) Harrowing and levelling	5·0	..	16	21·0	17·5	....	....		Several times harrowed and levelled. Three days with 4-bullock and two days with 2-bullock harrow.
2. Seeds and sowing											
(a) Seeds.....	..	..	..	..	..	..	..	..	8 8 0	7 1 4	For the plot 67·5 lbs. of wheat seed.
(b) Sowing and covering ..	2·0	..	4	..	..	..	6·0	5·0	....	....
3. Irrigation											
(a) Labour.....	16·0	..	32	4	..	16	68·0	56·67	....	....
4. Harvesting and preparing for the market											
(a) Harvesting, tying, thrashing, etc.	5·5	8	8	..	..	..	17·5	14·6	....	....

JEUR

167

STATEMENT No. 161—concl'd.

758

ITEM OF EXPENDITURE.	Home labour.			Exchange labour on co-operation			Total units.	Units per acre.	Cost excluding that of family labour.		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²			For the plot.	Per acre.	
5. Charges for bullock labour.	..	..	..	..	..	..	..	..	Rs. a. p. 25 5 0	Rs. a. p. 21 1 6	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p. (a) Feeds, fodder, depreciat to n, etc. .. 21 0 5											
(b) Interest on the value of bullocks, feeds, fodder. 4 4 7											
6. Charges for implements and tools .. .. .	..	..	..	..	..	..	..	..	4 5 6	3 9 11	The total annual charges are distributed over the different plots, in proportion to the bullock labour used on them.
Rs. a. p. (a) Depreciation 2 15 10											
(b) Interest .. 1 5 8											
7. Interest on fluid capital (i.e., wages for hired labour and price of seeds) ..	..	..	..	..	..	..	..	..	0 4 1	0 8 5	Charged at 12 per cent per annum.
8. Rent of land .. .. .	..	..	..	..	..	..	..	..	18 0 0	10 13 4	The land was taken on lease on share system. Half the gross produce minus Rs. 4-4-0 paid by the owner as half the cost of seeds.
Total	83·5	8	70	4	—	26	137·5	114·60	51 6 7	42 13 6	

¹Family and exchange human labour is not charged. ²Home and exchange bullock labour is charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 8 gunthas	Per acre	For 1 acre and 8 gunthas	Per acre	
Wheat ..	Lbs. 468	Lbs. 390.00	Rs. a. p. 32 8 0	Rs. a. p. 27 1 4	Valued at Rs. 25 per <i>palla</i> of 360 lbs.
Straw and chaff.	500	416.66	2 0 0	1 10 8	Estimated value.
Total ..	..	..	34 8 0	28 12 0	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 8 gunthas.	34 8 0	51 6 7	(b) 5 14 4	—16 14 7	—11 0 3
Per acre ..	28 12 0	42 13 6	4 14 7	—14 1 6	—9 2 11

JOUR

759

STATEMENT No. 162

WHEAT (IRRIGATED)—15 gunthas in 1928-29

PLOT No. (6)

Previous crop—Bajri (dry), 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	Wheat was taken just after harvesting of bajri and was sown without any preparatory tillage.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	2 9 0	6 13 4	For 15 gunthas 27'5 lbs. of wheat.
(b) Sowing and covering ..	1'0	..	2	..	..	..	3	8'00	....	....
3. Irrigation											
(a) Labour	2'0	..	4	2	..	8	16	42'66	....	....
4. Harvesting and preparing for the market											
(a) Harvesting, tying, thrashing etc.....	2'5	5	4	..	..	..	9	24'00	....	....

Charges for bullock labour								4 12 0	12 10 8	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
	Rs. a. p.									
(a) Feeds, fodder, depreciation etc.	3 15 2									
(b) Interest on the value of bullocks feeds, fodder	0 12 10									
6. Charges for implements and tools.....								0 13 0	2 2 8	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
	Rs. a. p.									
(a) Depreciation	0 9 0									
(b) Interest ..	0 4 0									
7. Interest on fluid capital (i.e., wages for hired labour and price of seeds).....								0 2 5	0 6 6	Charged at 12 per cent per annum.
8. Rent of land								10 0 10	20 12 10	The land was taken on lease. Half the gross produce minus Rs. 1-4-6 paid by the owner as half the cost of seeds.
Total.....	5 5	5	10	2	..	8	28	74 66	18 5 3	48 14 0

¹Family and exchange human labour not charged. ²Home and exchange bullock labour charged under item 5.

STATEMENT No. 162—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 15 gunthas	Per acre	For 15 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat ..	312	832	21 10 8	57 12 5	Valued at Rs. 25 per palla of 360 lbs.
Straw and chaff.	250	666.66	1 0 0	2 10 8	Estimated value.
Total..	..	..	22 10 8	60 7 1	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 15 gunthas.	22 10 8	18 5 3	(b) 1 3 3	+ 4 5 5	+ 5 8 8
Per acre.	60 7 1	48 14 0	3 3 4	+11 9 1	+14 12 5

STATEMENT No. 163

ONIONS AND GARLIC (IRRIGATED)—25 gunthas in 1928-29

PLOT No. (7)

Previous crop—Bajri (dry), 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
												Rs. a. p.	Rs. a. p.	
1. Preparatory tillage														
(a) Ploughing.....	4·5	..	18	..	..	..	..	..	..	22·5	36·0	....	....	Two ploughings were given. A plough required one man and four bullocks.
(b) Harrowing.....	2·0	..	8	..	..	..	..	..	..	10·0	16·0	....	....	Several harrowings were given. A harrow required one man and four bullocks.
2. Manure and manuring														
(a) Manures.....	..	..	..	..	..	..	..	..	..	..	..	0 12 0	1 8 8	One-fourth of a cart-load of farmyard manure worth twelve annas was given to seed-bed.
(b) Manuring.....	1·0	..	..	..	..	..	..	..	..	1·0	1·6	....	....
3. Seeds and sowing														
(a) Seeds.....	..	..	..	..	..	..	..	..	..	..	..	21 14 0	35 0 0	For the plot 14·5 lbs. of onion seed (Rs. 17-0-0) and garlic worth Rs. 4-14-0.
(b) Transplanting and dibbling.....	2·0	..	..	2	..	..	..	32	..	20·0	32·0	7 2 0	11 6 5	Fourteen women paid at annas three each and the remaining 18 at four annas each.

JEDR

763

STATEMENT No. 163—*contd.*

764

ITEM OF EXPENDITURE	Home labour			Exchange labour on co-operation			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
												Rs. s. p.	Rs. s. p.	
4. Irrigation														
(a) Labour.....	36·5	10·5	95	..	..	1	..	..	..	137·75	220·4	.....	....	Man generally managed one <i>whote</i> and sometimes two.
5. After-care and tillage														
(a) Weeding.....	2·0	7·0	..	..	..	..	..	27	..	19·0	30·4	5 1 0	8 1 7	Two weeding ^W were given. Twenty-seven women paid at three annas each.
(b) Watching	7·0	2·0	..	..	..	..	..	..	..	8·0	12·8	....	....
6. Harvesting and preparing for the market														
	8·0	..	4	..	..	..	..	35	..	29·5	47·2	5 7 6	8 12 0	Twenty women were required for harvesting onions and the remaining fifteen for garlic. The rest of the Labour was used for marketing. Woman unit paid at 2½ annas per day.
7. Charges for bullock labour .....	..	..	..	..	..	..	..	..	..	..	..	33 3 8	53 2 8	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.

FARM STUDIES

	Rs. a. p.																				
(a) Feed s., fodder, depreciation etc.	27	9	7																		
(b) Interest on the value of bullocks, feed, fodder ..	5	10	1																		
8. Charges for imple- ments and tools ..	..	..	..	..	..	..	..	..	..	..	5	11	8	9 2 0
	Rs. a. p.																				
(a) Depre- ciation ..	8	14	9																		
(b) Interest	1	12	6																		
9. Interest on fluid capital (i.e., wages for hired labour and price of seeds and manure) .....	..	..	..	..	..	..	..	..	..	..	2	6	8	8 18 10
10. Rent of land .....	..	..	..	..	..	..	..	..	..	..	4	8	9	6 12 5
Total	68	0	19	5	125	2	..	1	..	94	..	247	75	398	4	85	18	10	137	6	2

The total annual charge are distributed over different plots in proportion to the bullock labour used on them.

Charged at 12 per cent per annum.

The land was taken on lease. Half the gross produce minus Rs.19-12-3 (paid by the owner for half the cash cost over seed, planting, weeding and harvesting).

¹Family and exchange human labour not charged.

²Home and exchange bullock labour charged under Item 7.

STATEMENT No. 163—concl.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 25 gunthas	Per acre	For 25 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Onions.....	7,680	12,288	40 0 0	64 0 0	Sold at 192 lbs. per rupee.
Garlic	160	256	8 0 0	12 12 9	Sold at 20 lbs. per rupee.
Total..	..	..	48 0 0	76 12 9	

(c) Summary

1	2	3	4	5 (i.e.col. 2-3)	6 (i.e.col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F.C.) (b) Interest on working capital	Family labour income	Farm business income
For 25 gunthas.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	48 0 0	85 13 10	(b) 9 13 3	—37 13 10	—28 0 7
Per acre....	76 12 9	137 6 2	15 11 7	—60 9 5	—44 13 10

GOVANKOP, FARMER No. 1, 1928-29

Govankop is a small village about 3 miles to the east of Dharwar, the headquarters of the district. The district can roughly be divided into three regions—the Mallad, the Gadinad and the Yerinad. Mallad or the tract of heavy rainfall, receiving between 40 to 60 inches of rainfall, lies in the west, Yerinad getting between 15 and 22 inches lies in the east, while the Gadinad getting between 25 to 32 inches lies between these two. Gadinad or the transition tract naturally possesses some characteristics of both of the Mallad and the Yerinad. This tract, with an average rainfall of about 28 inches, is less liable to famine than the Yerinad tract which generally receives less than 22 inches.

The most important feature about the rainfall of the Gadinad is the prevalence of antemonsoon showers which facilitate preparatory tillage in good time and even admit of the sowing of certain crops in dry mulch, about a month in advance of the monsoon proper. Govankop is situated in the Gadinad tract and receives most of its rainfall from July to November. The long duration and better distribution of rainfall are due to the fact that the tract receives the benefit of the south-west as well as the north-east monsoons.

Soils at and near the village vary from deep black to light reddish soils. Most of the soils in the village are deep and black coloured.

The important crops are cotton, *jowar* and wheat. *Kulthi* and linseed are sown in cotton; *math* and *tur* in *jowar* and safflower in wheat. *Mug*, *chavali* and *udid* are minor crops. *Kulthi* is taken on lighter soils. The village has not got irrigation facilities, and, hence no irrigated crops are grown.

Following tables (I, II, III, IV and V) are based upon the village records and the information collected in personal enquiries.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Area held in 1928-29	Area cultivated in 1928-29	Population according to 1931 census	Cultivated area per capita
A. g.	A. g.		A. g.
1,241 19	1,225 32	524	2 13·5

Of the total area held, 15 acres and 27 gunthas were uncultivated. No area was double cropped.

According to the cattle census of 1930, there were 90 draft animals. This number, for an area of 1,226 acres, is too small, as the area per pair comes to more than 27 acres. There were 91 milch animals, a good number for the size of the village. Probably the vicinity of Dharwar

affords scope for selling milk. The total number of cattle was 304. There were only 50 sheep and goat. All the animals, taken together, can hardly provide sufficient manure for the large area of the village.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held	Area cultivated	No. of <i>khatedars</i>	Total area per <i>khatedar</i>	Cultivated land per <i>khatedar</i>
A. g.	A. g.		A. g.	A. g.
1,241 19	1,225 32	32	38 31·84	38 12·25

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated	No. of cultivators	Average area per cultivator
A. g.		A. g.
1,225 32	36	34 2·0

Since there were 36 actual cultivators and only 32 owners of land, the areas of cultivated land per cultivator and per owner come to 34 acres 2 gunthas and 38 acres 12·25 gunthas respectively.

TABLE IV—DISTRIBUTION OF PROPRIETARY HOLDINGS
ACCORDING TO SIZES

Size of holdings Acres	No. of holdings	Per cent
Total ..	32	100·00
Below 5.....	3	9·37
5 to 10.....	5	15·62
10 to 20.....	8	25·00
20 to 30.....	3	9·37
30 to 40.....	7	21·89
40 to 50.....	4	12·50
50 to 75.....	0	0·0
75 to 100.....	2	6·25
Above 100.....	0	0·0

TABLE IV (a)—DISTRIBUTION OF THE CULTIVATING HOLDING ACCORDING TO SIZES

Size of holdings Acres	No. of holdings	Per cent
Total	36	100·00
below 5.....	3	8·33
5 to 10.....	5	13·89
10 to 20.....	10	27·78
20 to 30.....	5	13·89
30 to 40.....	7	19·44
40 to 50.....	4	11·12
50 to 75.....	0	0·0
75 to 100.....	2	5·55
above 100.....	0	0·0

Though the size of average cultivating holding is over 34 acres, fifty per cent of the holdings are below 20 acres. Since only eight holdings, out of the thirty-six, are below 10 acres and only six above forty acres, the distribution of land cannot be said to be bad.

Table V gives the area and percentage of the seasonal cropping, together with the area and percentage of individual crops grown in the years 1927-28 and 1928-29.

TABLE V—CROPS OF THE VILLAGE

1927-28			1928-29				
Crops	Area		Per cent	Crops	Area		Per cent
	A.	G.			A.	G.	
Total.....	1,349	25 1,349	25 100·00 100·00	Total.....	1,225	32 1,225	32 100·00 100·00
I. <i>Kharif</i> crops.....	303	38	22·52	I. <i>Kharif</i> crops.....	373	26	30·48
<i>Kulthi</i>	89	22	6·63	<i>Kulthi</i>	20	29	1·69
<i>Tur</i>	55	22	4·12	<i>Tur</i>	50	0	4·07
<i>Udid</i>	14	1	1·04	<i>Udid</i>	19	26	1·60
<i>Mug</i>	8	8	0·59	<i>Mug</i>	26	0	2·12
<i>Rala</i>	3	25	0·27	<i>Rala</i>	23	34	1·95
<i>Alundi</i>	1	34	0·14	<i>Alundi</i>	2	25	0·22
Other crops.....	131	11	9·73	Other crops.....	230	32	18·83
II. <i>Semi rabi</i> crops.....	780	89	57·86	II. <i>Semi rabi</i> crops.....	736	12	60·07
<i>Jowar</i>	400	2	29·64	<i>Jowar</i>	318	12	25·67
Cotton.....	380	37	28·22	cotton.....	418	0	34·10
III. <i>Rabi</i> crops.....	264	28	19·62	III. <i>Rabi</i> crops.....	115	34	9·45
Wheat.....	213	33	15·85	Wheat.....	69	20	5·67
Gram.....	27	8	2·02	Gram.....	34	0	2·77
Safflower.....	23	27	1·75	Safflower.....	12	14	1·01

Jowar is taken as late *kharif* and cotton as early *rabi* crops, as the distribution of rainfall is favourable for such a cropping. Comparison of the gross cropped area, of the two years treated above, shows that in 1927-28 about 123 acres were double cropped, taking crops like groundnut in the *kharif* and wheat in the *rabi* seasons.

The important crops are cotton, *jowar* and wheat. In the year under observation (1928-29), about 34 per cent of the area was under cotton, 26 per cent under *jowar* and about 8 per cent under wheat and gram. *Tur*, *mug*, *chavali* and *udid* are *kharif* crops. *Kulthi* is taken on lighter soils. The most widely practised rotation on good lands is cotton and *jowar*. Manure, if at all given, is given to *jowar* crop at the rate of about 3 to 4 cart-loads of farmyard manure per acre. Groundnut is a recent introduction in Dharwar tract and is finding a place in the rotation. After groundnut wheat is usually taken in *rabi* season in the same year. Cotton is sown in the month of August and picked in March-April. *Jowar* is sown in July and harvested in December. Groundnut is sown in June-July and harvested in September-October. Wheat is sown in October and harvested in January.

The climate of the place is pleasant, healthy and equable. The mean maximum temperature in April is about 101° F., while the mean minimum in December is about 63° F. The following table, showing the fortnightly distribution of rain, gives the average of 20 years, from 1908-09 to 1927-28, at the Government Farm, Dharwar. Since Govankop village is only a mile to the east of the farm, the rainfall conditions of the place can be taken to be practically the same as at the farm.

TABLE VI (a)—FORTNIGHTLY DISTRIBUTION OF AVERAGE RAINFALL AT DHARWAR FARM FROM 1908 TO 1927 (Inches)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
						First fortnight						} 26.81
0.08	0.08	0.02	0.87	1.35	1.77	2.41	2.17	0.95	2.30	1.45	0.12	
						Second fortnight						
0.02	0.0	0.21	0.86	1.24	1.42	3.33	1.29	3.0	1.49	0.43	0.0	

It may be noted that the amount of rainfall and its distribution, from the middle of April to the middle of November, are favourable for raising *kharif* as well as *rabi* crops.

THE SEASON, 1928-29

The total rainfall, as recorded at the Dharwar farm in 1928-29, was 26.73 inches which was equal to the average of 20 years.

TABLE VI (b)—FORTNIGHTLY DISTRIBUTION OF RAINFALL AT DHARWAR FARM IN 1928

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
						First fortnight						
0.02	0.0	0.0	1.41	2.11	2.82	1.13	1.05	0.80	0.16	0.0	0.24	} 26.73
						Second fortnight						
0.0	0.0	0.0	1.38	0.14	0.11	5.45	3.65	0.45	5.81	0.0	0.0	

The usual ante-monsoon showers, received in the month of April and in the first fortnight of May, were found very useful for preparatory tillage. Monsoon broke quite in time on the 4th June, but it was not strong enough for sowing purposes. The rains, however, came in full vigour by about the first week of July and sowing of groundnut could be done by about the middle of the month; sowing operations for *jowar* and cotton soon followed. The copious rainfall, received in July, was found very useful to the crops sown. A long break of rain, with only small intermittent showers for about six weeks in the months of September and October, caused some anxiety to the farmers and told badly on the groundnut crop whose pods were filling. Consequently groundnut gave a poor yield. Good and heavy rains, obtained in the second fortnight of October, were found very useful for cotton and *jowar* crops, which needed moisture most. These rains, however, had a bad effect on groundnut crop which was, by that time, ready for harvest. The groundnut crop of the year thus suffered from two causes—the want of rains during its growing period and the unwanted rainfall at the time of harvest.

The rains in October were found opportune as they facilitated *rabi* sowings, especially of wheat, in time. Small showers accompanied by severe cold in the month of December, a few foggy days of February and the ante-monsoon showers early in April, however, were responsible for reducing the yield of cotton crop. Stem-borers and hoppers did some damage to *jowar* and consequently the crop was not good.

THE FARMERS

Two farmers were selected for study. Farmer No. 1 owned 7 acres and 37 gunthas of land and had taken on lease 16 acres and 13 gunthas. Farmer No. 2 owned 15 acres and 7 gunthas and in addition had taken on lease 5 acres and 8 gunthas of land.

FARMER No. 1

The farmer, as stated above, owned 7 acres and 37 gunthas of which 10 gunthas were not cultivable. The uncultivable area provided some grass only. He had taken 16 acres and 13 gunthas of land on lease. His holding was thus 24 acres and 10 gunthas, out of which 10 gunthas were

uncultivable; while 15 gunthas were twice cropped. The gross cropped area was, thus, 24 acres and 15 gunthas. The intensity of cropping was therefore 101·5 per cent.

(a) *Human labour*.—The farm family consisted of six members as given below :—

(1) Farmer.....	42 years.
(2) Farmer's nephew	24 „
(3) Farmer's wife	30 „
(4) Farmer's first daughter.....	10 „
(5) „ second daughter.....	7 „
(6) „ third daughter.....	1 year.

There were thus only three adult workers in the family—two men and one woman. The children were too young for farm work, though the eldest daughter occasionally did light work like weeding, cotton picking and tending cattle, etc. Also the 7-year child picked cotton and tended cattle, whenever her elder sister was occupied on the farm or was ill. The two men together put in 343 days' work, while the woman put in 103½ days' work on the crops grown during the year. The two girls together put in 161 days' work.

The monthly distribution of home labour, from 18th May 1928 to 17th May 1929, is shown in table VII. It may be noted that the distribution of labour, given in the table, shows how the family was employed during the year, not necessarily on their farm alone nor exclusively on the crops grown in 1928-29.

The total shown in the last but one column will not, therefore, tally with the total of home labour supplied by the family as given in the analysis of the crops grown in 1928-29, as the period dealt with does not synchronize with the crop production of the year. Moreover, miscellaneous labour, which cannot be debited to any crop, is included in the table.

TABLE VII—UTILIZATION AND SPREAD OF FAMILY LABOUR

Working members	May	Jun.	Jul.	Aug.	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Percent- age of labour employed to labour available
Two men and one woman or (three members).	16 42	30 90	43 93	47 93	46 90	53 93	57 90	64·5 93	79·6 93	57·5 84	51·5 93	31·5 90	10 51	695·5 1,095	54·38

Note.—The denominators show the available units, while the numerators show the units employed.

(b) *Bullock labour*.—The farmer had two bullocks. Table VIII gives the utilization of their work from 18th May 1928 to 17th May 1929.

TABLE VIII—UTILIZATION AND SPREAD OF BULLOCK WORK

Bullock	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total	Percentage of the units employed to units available
Two bullocks.	$\frac{18}{28}$	$\frac{42}{60}$	$\frac{43}{62}$	$\frac{48}{62}$	$\frac{30}{60}$	$\frac{21}{62}$	$\frac{40}{60}$	$\frac{16}{62}$	$\frac{10}{62}$	$\frac{32}{56}$	$\frac{12}{62}$	$\frac{24}{60}$	$\frac{20}{34}$	$\frac{355}{730}$	48.6

Note.—The denominators show available labour units, while the numerators show the labour used.

It may be noted that the table relates to a particular period which does not synchronize with the time taken by the work on the crops. The bullocks put in 336 days' work for the year's crops. It means that less than 50 per cent of the available units could be used, and yet the farmer had to hire fourteen bullock units at the time of sowing and ten at the time of thrashing *jowar*. This shows that the work was not well planned. The farm (24 acres) was too large for one pair but too small for two.

The opening and closing inventories of the property of the farmer for the year 1928-29 are given in table No. IX.

It may be noted that there was a fall of Rs. 48-13-10 in the course of the year. The two bullocks depreciated in value by Rs. 10. The buffalo when valued at the beginning of the study was in milk. At the close of the year she was dry and consequently her value was less by Rs. 50. The buffalo-bull calf valued at Rs. 30, at the beginning of the year, was sold for Rs. 104, and another was purchased for Rs. 10. The two buffalo calves appreciated in value from Rs. 25 to Rs. 70.

Nature of holding, lands, crops and cropping.—The nature of lands, crops, cropping and treatment of different fields held by the farmer in 1927-28 and 1928-29 are given in table X.

The farmer thus had only 7 acres and 37 gunthas of land in two blocks, 10 gunthas of which were uncultivable waste. The two blocks together were assessed at Rs. 25-1-0 plus L. F. C., Rs. 1-9-0. The farmer had besides taken on lease 16 acres and 13 gunthas for which he paid Rs. 297 rent. The total area of the holding was thus 24 acres and 10 gunthas. The owned land was close-by the village, while the leased land, in two blocks near one another, was about a mile and half from the village.

During the year under study the farmer had 17 acres and 19 gunthas or about 72 per cent of the total area under cotton, 6 acres and 3 gunthas or 25 per cent under *jowar* and a very small percentage under other crops.

TABLE IX—INVENTORY OF THE PROPERTY

Item	1928		Rs. a. p.	Item	1929		Rs. a. p.
	Quantity or number	Approximate value			Quantity or number	Approximate value	
<i>Assets</i>	A. g.	Rs. a. p.	Rs. a. p.	<i>Assets</i>	A. g.	Rs. a. p.	Rs. a. p.
1. Real estate				1. Real estate			
(A) Land				(A) Land			
(a) Field No. 1.....	5 4	1,785 0 0		(a) Field No. 1.....	5 4	1,785 0 0	
(b) „ 2.....	2 38	847 8 0		(b) „ 2.....	2 38	847 8 0	
	7 37	2,632 8 0			7 37	2,632 8 0	
(B) Buildings				(B) Buildings			
(a) Farm house	1	400 0 0		(a) Farm house	1	400 0 0	
Total real estate			3,082 8 0	Total real estate			3,082 8 0
2. Livestock				2. Livestock			
(a) Bullocks	2	100 0 0		(a) Bullocks	2	90 0 0	
(b) Buffalo	1	90 0 0		(b) Buffalo	1	40 0 0	
(c) Bull calf	1	30 0 0		(c) Bull calf newly purchased ..	1	10 0 0	
(d) Buffalo calves	2	25 0 0		(d) Buffalo calves	2	70 0 0	
Total livestock.....			245 0 0	Total livestock.....			210 0 0
TOTAL LIVESTOCK.....							

3. Implements, tools, etc.		
(a) Wooden plough.....	1	6 8 0
(b) Harrows.....	2	16 0 0
(c) Hoes.....	4	20 0 0
(d) Jowar seed-drill.....	1	12 0 0
(e) Cotton seed-drill.....	1	11 0 0
(f) Ropes and other implements.		15 0 0
Total implements and tools		80 8 0
4. Farm produce and supplies on hand		
(a) Jowar.....	100 lbs.	48 0 0
(b) Wheat.....	480 "	36 0 0
(c) Mug and matki.....	48 "	8 0 0
(d) Tur.....	40 "	2 8 0
(e) Chillies.....	2 maunds	9 0 0
(f) Bhoos.....	2,560 lbs.	40 0 0
(g) Kadbi and other grass.....	3,600 "	22 0 0
(h) Farmyard manure.....	12 carts	21 0 0
Total farm produce and supplies on hand.....		181 8 0

3. Implements, tools, etc.		
(a) Wooden plough.....	1	5 13 7
(b) Harrows.....	2	14 6 5
(c) Hoes.....	4	18 0 0
(d) Jowar seed-drill.....	1	10 12 10
(e) Cotton seed-drill.....	1	9 14 4
(f) Ropes and other implements..		13 8 0
Total implements and tools.....		72 7 2
4. Farm produce and supplies on hand		
(a) Jowar.....	1,500 lbs.	57 11 0
(b) Wheat.....	125 "	7 13 0
(c) Mug and matki.....	24 "	1 8 0
(d) Tur.....	88 "	4 14 0
(e) Safflower.....	48 "	1 11 0
(f) Bhoos.....	1,000 "	7 10 0
(g) Kadbi and other grass.....	4,000 "	12 8 0
(h) Paddy straw.....		5 0 0
(i) Ambadi fibre.....		2 0 0
(j) Farmyard manure.....	25 carts	30 0 0
Total farm produce and supplies on hand.....		180 11 0

TABLE IX—INVENTORY OF THE PROPERTY—*concl'd.*

Item	1928		Rs. a. p.	Item	1929		Rs. a. p.
	Quantity or number	Approximate value			Quantity or number	Approximate value	
	A. g.	Rs. a. p.			A. g.	Rs. a. p.	
5. Cash on hand		152 0 0		5. Amount receivable on account of cotton and groundnut sold			578 0 0
Total cash on hand			152 0 0	<i>Total Assets</i>			4,023 10 2
<i>Total Assets</i>			3,691 8 0	<i>Liabilities</i>			
<i>Liabilities</i>				(a) Debt			
(a) Debt				Part of field No. 1 mortgaged for Rs. 700 at 12 per cent per annum simple interest	700 0 0		
Part of field No. 1 mortgaged for Rs. 700 at 12 per cent per annum simple interest		700 0 0		(b) Interest to be paid for the above amount for one year; besides the amount of interest shown in opening inventory still not paid		196 0 0	
(b) Interest to be paid on the above amount for 16 months ..		112 0 0		(c) Rent of land to be paid		297 0 0	
<i>Total Liabilities</i>			812 0 0	<i>Total Liabilities</i>			1,193 0 0
<i>Net worth of the farm</i>			2,879 8 0	<i>Net worth of the farm at the close of the year</i>			2,830 10 2

SUMMARY.		Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928.....		2,879 8 0	
Do. do. 1929.....		2,830 10 2	
<i>Loss in net worth</i>			48 13 10

TABLE X.—CROPS, CROPPING AND THE TREATMENT OF DIFFERENT FIELDS HELD BY THE FARMER IN 1927-28 AND 1928-29

Field No.	Area	Nature of land	1927-28			1928-29		
			Crop	Plot No.	Treatment	Crop	Plot No.	Treatment
Owned land 1	A. G.	Fairly level with a slight slope, black cotton soil.	Potato in the <i>khari</i> f and wheat in the <i>rabi</i> season (2 acres and 26 gunthas). <i>Jowar</i> (2 acres and 18 gunthas).	1	Ploughed twice with an iron plough and manured with five cart-loads of F. Y. M. per acre.	Cotton (4 acres and 26 gunthas).	1	Land was ploughed once and harrowed seven times. Manure was not given.
	2			Ploughed once with a wooden plough and harrowed 4 times. No manure was given.	Chillies, 3 gunthas	6	Ploughed twice with a wooden plough and harrowed five times. Manure was given at 10 cart-loads of F. Y. M. per acre.	
Leased land 3	2 33	Sloping and liable to be washed. Infested with <i>hari</i> ali weed. Medium black cotton soil.	Groundnut and <i>udid</i> in the <i>khari</i> f and wheat and gram in the <i>rabi</i> season; waste 10 gunthas.	3	Ploughed once with a wooden plough and harrowed 4 times. Wheat and gram sown after harrowing. No manure was given to the plot.	Groundnut in the <i>khari</i> f and wheat in the <i>rabi</i> season (15 gunthas).	6	Ploughed once with a wooden plough and harrowed five times. No manure was given. Harrowed four times and sown without manuring.
	4	Heavy black cotton soil with <i>karal</i> patches, a slight slope.		4	Harrowed several times and sown without giving any manure.	<i>Jowar</i>	4	Harrowed five times and sown. Manure was not given.
				5	Ploughed once with a wooden plough and harrowed 4 times. No manure was given.	Cotton	2	Ploughed once with a wooden plough and harrowed five times. No manure was given.
				6	Harrowed several times and sown without giving any manure.	Cotton	3	Ploughed once with a wooden plough and harrowed twice before sowing. Manure was not given.
	5	Heavy black cotton soil with <i>karal</i> patches, fairly level with a slight slope with very little <i>hari</i> ali.		Fallow in the <i>khari</i> f and wheat in the <i>rabi</i> season (3 acres and 20 gunthas).	6	Harrowed several times and sown without giving any manure.	<i>Jowar</i>	5	Harrowed five times and sown without manuring.
24 10					1			

GOVANKOP, FARMER 1

TABLE IX—INVENTORY OF THE PROPERTY—*concl'd.*

Item	1928		Rs. a. p.	Item	1929		Rs. a. p.
	Quantity or number	Approximate value			Quantity or number	Approximate value	
	A. g.	Rs. a. p.			A. g.	Rs. a. p.	
5. Cash on hand		152 0 0		5. Amount receivable on account of cotton and groundnut sold			578 0 0
Total cash on hand			152 0 0	<i>Total Assets</i>			4,023 10 2
<i>Total Assets</i>			3,691 8 0	<i>Liabilities</i>			
<i>Liabilities</i>				(a) Debt			
(a) Debt				Part of field No. 1 mortgaged for Rs. 700 at 12 per cent per annum simple interest		700 0 0	
Part of field No. 1 mortgaged for Rs. 700 at 12 per cent per annum simple interest		700 0 0		(b) Interest to be paid for the above amount for one year; besides the amount of interest shown in opening inventory still not paid		196 0 0	
(b) Interest to be paid on the above amount for 18 months ..		112 0 0		(c) Rent of land to be paid		297 0 0	
<i>Total Liabilities</i>			812 0 0	<i>Total Liabilities</i>			1,193 0 0
<i>Net worth of the farm</i>			2,879 8 0	<i>Net worth of the farm at the close of the year</i>			2,830 10 2

SUMMARY.

	Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928.....	2,879 8 0	
Do. do. 1929.....	2,830 10 2	
<i>Loss in net worth</i>		48 13 10

TABLE X—CROPS, CROPPING AND THE TREATMENT OF DIFFERENT FIELDS HELD BY THE FARMER IN 1927-28 AND 1928-29

Field No.	Area	Nature of land	1927-28			1928-29		
			Crop	Plot No.	Treatment	Crop	Plot No.	Treatment
Owned land 1	5 4	Fairly level with a slight slope, black cotton soil.	Potato in the <i>kharif</i> and wheat in the <i>rabi</i> season (2 acres and 26 gunthas).	1	Ploughed twice with an iron plough and manured with five cart-loads of F. Y. M. per acre.	Cotton (4 acres and 26 gunthas).	1	Land was ploughed once and harrowed seven times. Manure was not given.
			<i>Jowar</i> (2 acres and 18 gunthas).	2	Ploughed once with a wooden plough and harrowed 4 times. No manure was given.	Chillies, 3 gunthas	8	Ploughed twice with a wooden plough and harrowed five times. Manure was given at 10 cart-loads of F. Y. M. per acre.
2	2 33	Sloping and liable to be washed. Infested with <i>hariati</i> weed. Medium black cotton soil.	Groundnut and <i>udid</i> in the <i>kharif</i> and wheat and gram in the <i>rabi</i> season; waste 10 gunthas.	3	Ploughed once with a wooden plough and harrowed 4 times. Wheat and gram sown after harrowing. No manure was given to the plot.	Groundnut in the <i>kharif</i> and wheat in the <i>rabi</i> season (15 gunthas).	6	Ploughed once with a wooden plough and harrowed five times. No manure was given. Harrowed four times and sown without manuring.
						<i>Jowar</i>	4	Harrowed five times and sown. Manure was not given.
Leased land 3	10 30	Heavy black cotton soil with <i>karal</i> patches, a slight slope.	Fallow in the <i>kharif</i> and wheat in the <i>rabi</i> season.	4	Harrowed several times and sown without giving any manure.	<i>Jowar</i>	2	Ploughed once with a wooden plough and harrowed five times. No manure was given.
						<i>Jowar</i> (2 acres and 3 gunthas).	5	Ploughed once with a wooden plough and harrowed 4 times. No manure was given.
4	2 3	Black cotton soil with <i>hariati</i> patches. Fairly level; in neglected condition; has not received manure for long time.	Fallow in the <i>kharif</i> and wheat in the <i>rabi</i> season (3 acres and 20 gunthas).	6	Harrowed several times and sown without giving any manure.	<i>Jowar</i>	5	Harrowed five times and sown without manuring.
						<i>Jowar</i>	5	Harrowed five times and sown without manuring.
5	8 20	Heavy black cotton soil with <i>karal</i> patches, fairly level with a slight slope with very little <i>hariati</i> .						
	24 10							

GOVANKOP, FARMER 1

COSTS AND RECEIPTS

Abstract of expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

ITEM OF EXPENDITURE	Cost of the total cultivated area (viz., 24 acres and 15 gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses :		
(a) Manures	3 0 0	
(b) Seeds.....	15 9 8	
(c) Outside labour.....	33 6 0	
(d) Depreciation on equipment and tools	8 0 10	
(e) Upkeep of bullocks (excluding interest on their value).....	71 7 0	
(f) Marketing charges.....	29 4 3	
(g) Assessment and L. F. C. on owned land and rent of leased land	323 10 0	
		484 5 9
II. Rent of owned land (excluding assessment and L. F. C.)		
	134 6 0	
		134 6 0
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	3 0 5	
(b) Interest on value of equipment and tools ...	9 10 6	
(c) Interest on value of bullocks, feed and fodder fed to them	19 10 0	
		32 4 11
<i>Total cost of production (excluding the wages for family labour).....</i>		651 0 8

*DETAILS OF OUT-OF-POCKET EXPENSES

<i>Manure :</i>	Rs. a. p.	Rs. a. p.
Four carts of F. Y. M. at Rs. 1-8-0 per cart were given to chillies (Plot No. 8); 50 per cent of the cost is charged	3 0 0	
	3 0 0	3 0 0
 <i>Seeds :</i>		
(a) Cotton seed, 125 lbs.	6 12 4	
(b) Gram, kulthi and linseed	1 2 0	
(c) Jowar, 26 lbs.	1 4 10	
(d) Tur, 42 lbs.	3 2 0	
(e) Matki, 13 lbs.	0 10 6	
(f) Ambadi	0 4 0	
(g) Groundnut, 15 lbs.	1 5 0	
(h) Wheat, 14 lbs.	1 0 0	
(i) Safflower seed	0 1 0	
	15 9 8	15 9 8
 <i>Labour on daily wages and piece-work :</i>		
(a) Cotton (plot Nos. 1, 2 and 3); 8 men, 6 women and 8 bullocks	7 5 0	
(b) Jowar (plot Nos. 4 and 5); 7 men, 25 women and 16 bullocks	15 13 0	
(c) Groundnut (plot No. 6); 2 women	0 8 0	
(d) Cotton (plot Nos. 1 and 3). Contract for up-rooting cotton stubbles	9 12 0	
	33 6 0	33 6 0
 <i>Depreciation on equipment and tools :</i>		
Opening inventory	80 8 0	
Closing ,,	72 7 2	
	8 0 10	8 0 10
 <i>Charges for bullock labour excluding interest :</i>		
	Rs. a. p.	
(a) Depreciation on 2 bullocks :		
Opening inventory	100 0 0	
Closing ,,	90 0 0	
	10 0 0	10 0 0

5. *Charges for bullock labour excluding interest—concl'd.*

	Rs. a. p.	Rs. a. p.
(b) Death allowance on Rs. 100 at 5 per cent on two bullocks	5 0 0	
(c) Charges on account of housing at Rs. 4 per bullock per annum	8 0 0	
(d) Feeds and fodder :		
	Rs. a. p.	
Fodder	38 7 0	
Concentrates	25 0 0	
	<hr/>	
	63 7 0	
	86 7 0	
Against the above costs from (a) to (d) must be set off Rs. 15 the value of 10 cart-loads of F. Y. M. at Rs. 1-8-0 each	-15 0 0	
	<hr/>	
		71 7 0

6. *Marketing charges :*

Gunny (<i>bardan</i>) for cotton; the <i>bardan</i> was not returned	24 0 0	
Brokerage and other charges	5 4 3	
	<hr/>	
		29 4 3

7. *Land assessment and L. F. C. on owned land and rent for the leased land :*

Owned land—Land assessment and L. F. C. :

Field No. 1—area 5 acres and 4 gunthas	20 3 0
„ 2 „ 2 „ 33 „	6 7 0

Rent of leased land :

Area—16 acres and 13 gunthas	297 0 0
------------------------------------	---------

323 10 0

Total, out-of-pocket expenses....

484 5 9

Family Labour Income.—Table XI gives the family labour income, i.e., the remuneration obtained by the farmer and the other working members of his family for their work on the farm. The figures of cost of production have already been given in the abstract of costs. The value of produce is taken from the cost and receipt statements of the various plots (pp. 784 to 807).

TABLE XI—FAMILY LABOUR INCOME

Crop	Area	Value of produce	Cost of production excluding wages for family labour.				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Total ..	24 15	798 6 2	484 5 9	32 4 11	134 6 0	651 0 8	+147 5 6
Cotton.....	17 19	573 0 2	354 1 6	21 3 8	74 9 6	449 14 8	+123 1 6
Jowar.....	6 3	189 8 0	114 10 6	7 15 2	45 1 0	167 10 8	+21 13 4
Groundnut ..	0 15	19 4 6	5 11 6	1 1 11	8 7 0	15 4 5	+ 4 0 1
Wheat.....	0 15	11 9 6	5 10 3	1 8 8	5 1 3	12 4 2	- 0 10 8
Chillies.....	0 3	5 0 0	4 4 0	0 7 6	1 3 3	5 14 9	- 0 14 9

Column 4.—Out-of-pocket expenses include costs of manure, seeds, hired labour on daily wages and piece-work, depreciation on deadstock, cost of upkeep of bullocks, marketing expenses, rent of leased land, assessment and L. F. C. on owned land. Column 5.—Interest on working capital both fluid as well as fixed capital. Fluid capital includes moneys spent on the current agricultural operations and money spent on feed and fodder for the work animals. Fixed capital includes implements and work animals. Column 6 denotes the estimated rent of owned land minus the assessment and L. F. C. Column 8 shows wages earned by the family.

The value of the gross produce obtained was Rs. 798-6-2, while the costs of production, excluding the wages of the farm family, came to Rs. 651-0-8, leaving Rs. 147-5-6 as family labour income.

Farm Business Income.—In addition to the family labour income shown in table XI, the farmer saved the rent of land (minus assessment and L. F. C.) and interest on the working capital, which have been debited as costs. Table XII gives the farm business income, i.e., the value of the produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total.....	24 15	798 6 2	484 5 9	314 0 5
Cotton.....	17 19	573 0 2	} 484 5 9	} +314 0 5
Jowar.....	6 3	189 8 0		
Groundnut ..	0 15	19 4 6		
Wheat.....	0 15	11 9 6		
Chillies.....	0 3	5 0 0		

Thus when the out-of-pocket expenses (viz., Rs. 484-5-9) are deducted from the gross receipts (Rs. 798-6-2) the farmer obtained a total income of Rs. 314-0-5, on account of the wages for himself and his family, the

interest on the working capital and the rent of owned land minus assessment and L. F. C.

The farm business income thus arrived at tallies with the figures shown in the table above.

	Rs.	a.	p.
Family labour income	147	5	6
Interest on working capital	32	4	11
Rent of owned land	134	6	0
	<hr/>		
	314	0	5

ANALYSIS

Family Labour Income.—The farmer, as explained, made Rs. 147-5-6 as family labour income. He, besides, earned Rs. 17-13-6 as wages by working some days as day-labourer. The family labour income can thus be said to be Rs. 165-3-0.

Farm Business Income.—The farm business income, arrived at in table XII, is Rs. 314-0-5. To get at the total income of the farmer, must be added the sum of Rs. 17-13-6 referred to in the last paragraph. Besides, the farmer made Rs. 74 on a bull calf. (It was valued at Rs. 30 in the opening inventory and was sold for Rs. 104 at the end of the year). The aggregate income was thus Rs. 405-13-11.

The farm family supplied 343 man units, 103·5 woman units and 161 child units. Taking two woman units or four child units equal to one man unit, it may be said that they supplied 435 labour units. The farmer had only to employ 15 man units, 33 woman units and 24 bullock units from outside.

For the 435 labour units, the farmer made a family labour income of Rs. 147-5-6. He, therefore, made about 5 annas and 5 pies per man unit, which is not a bad wage on one's own farm. His farm business income was Rs. 314-0-5, while the total income (including day-wages) came to Rs. 405-13-11. The season on the whole was not satisfactory. Groundnut crop of the year suffered from two causes—the want of rain during its growing period and untimely rainfall at the time of the harvest. Stem-borers and grass-hoppers did some damage to *jowar*. Foggy days of February and ante-monsoon showers early in April were responsible in reducing the yield of cotton.

General remarks about crops.—Table XIII shows the yields of the main produce and the labour units (including bullock units) spent per acre. Even bullock labour (both owned and hired) is included, taking one bullock unit equal to one man unit. A woman unit is considered one-half and a child unit one-fourth of a unit.

Cotton (plot Nos. 1, 2 and 3).—There were three plots under cotton. Plot No. 1 was owned, while plot Nos. 2 and 3 were taken on lease. The owned plot was better in quality and had, moreover, received careful cultivation; further, being closer to the village the crop could be carefully watched. The leased plots (Nos. 2 and 3) were inferior with *karal* patches. The owned plot gave 304 lbs. of seed-cotton per acre which

may be taken as an average yield in the tract. The crop was picked in time. Plot No. 2 yielded 214 lbs. and plot No. 3 only 54 lbs. per acre. The lower yields of the leased plots are attributable to the inferior quality of the soil and less care devoted towards cultivation, being situated about one and half miles from the village. Plot No. 3 was poor from the beginning and was badly damaged by the ante-monsoon showers.

Jowar (plot Nos. 4 and 5).—Plot No. 4, which was owned was close to the village. Moreover, it was better in quality and had received more care. Plot No. 5, taken on lease, was poorer and being one and half miles away from the village was neglected. The owned plot gave 971 lbs. of grain per acre as against 336 lbs. obtained from the leased plot. The yield from the owned land may be taken to be equal to the average for the tract. The crop in the leased land was attacked by grasshoppers ; even the earheads were attacked.

Groundnut (plot No. 6).—It was a small plot measuring only 15 gunthas on the road side. The crop looked promising but was pilfered by passers-by. The farm family also drew upon green pods. The yield obtained for sale, viz., 629 lbs. per acre was naturally low.

Wheat (plot No. 7).—Wheat was taken as a second crop after harvesting groundnut. The area was small and hence proper care could not be taken of it. The yield (341 lbs. per acre) was not bad.

Chillies (plot No. 8).—The small 3-guntha plot was meant more for home use. Green chillies were used for home consumption of which no count could be taken. The produce obtained for sale was therefore low.

TABLE XIII—YIELD OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of produce	Yield in lbs.		
1	Seed-cotton.....	304·3	40·5	Includes 3 units for contract payment.
	<i>Kulthi</i>	11·18		
	Gram.....	3·01		
	Linseed.....	5·16		
2	Seed-cotton.....	214·42	22·79	
	<i>Kulthi</i>	4·83		
	Linseed.....	2·23		
3	Seed-cotton.....	53·97	28·00	Includes 3 units for contract payment.
	<i>Kulthi</i>	18·79		
	Linseed.....	7·23		
4	<i>Jowar</i>	970·87	51·50	
5	<i>Jowar</i>	285·71	37·9	
	<i>Mug and matki</i>	13·73		
	<i>Tur</i>	36·57		
6	Groundnut.....	629·33	101·33	
7	Wheat.....	341·33	92·00	
	Safflower.....	128·00		
8	Chillies (dry).....	373·33	233·33	

The statements giving costs and receipts of the different plots of the farmer are as follows :—

COTTON—4 acres 26 gunthas in 1928-29

STATEMENT No. 164

PLOT No. (1)

Previous crop—Wheat and jowar in 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			Per the plot	Per acre	
1. Preparatory tillage										Rs. a. p.	Rs. a. p.	
(a) Ploughing	9'0	..	..	18	..	..	..	27'0	5'8	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing and leveling	19'5	..	..	39	..	..	..	58'5	12'58	....	....	Seven operations were given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	2 3 9	0 7 8	For the plot 32 lbs. of cotton-seed (Rs. 1-11-9) and <i>kuthi</i> , gram and linseed mixture (Rs. 0-8-0).
(b) Sowing and covering ..	3'0	1'0	1	2	2	..	2	9'75	2'10	1 8 0	0 5 2	Two men and two bullocks hired from outside paid at six annas each.
3. After-care and tillage												
(a) Weeding	11'0	5'0	10	..	..	..	..	16'0	3'44	....	....	Three weedings were given.
(b) Interculturing	14'0	..	..	18	..	..	..	32'0	6'88	....	....	Three interculturings were given. Yoke carried one or two hoes.
4. Harvesting and preparing for market												

(b) Subsidiary crops	6'0	1'75	..	1	..	..	..	7'87	1'69	....	....
5. Marketing													
(a) Carting	2'0	..	..	2	..	..	..	4'0	0'87	....	....
(b) Marketing .....	..	..	..	..	..	..	..	..	..	10 0 3	2 2 5	Rs. 3 were required for the purchase of <i>bardan</i> and Rs. 2-0-3 for <i>dalaik</i> , etc.
6. Removing cotton stubbles.	..	..	..	..	..	..	..	..	..	6 12 0	1 7 3	The work was given on contract.
7. Charges for bullock labour	..	..	..	..	..	..	..	..	..	21 10 11	4 10 8	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.													
(a) Feeds, fodder, depreciation etc. .. 17 0 2													
(b) Interest on the value of bullocks, feeds and fodder .. 4 10 9													
8. Charges for implements and tools.....	..	..	..	..	..	..	..	..	..	4 3 6	0 14 6	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.													
(a) Depreciation .. 1 14 9													
(b) Interest .. 2 4 9													
9. Interest on fluid capital (i.e., wages for hired labour and price of seeds).....	..	..	..	..	..	..	..	..	..	0 10 1	0 2 2	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	..	93 0 0	20 0 0	The land was owned.
Total	64'5	26'75	50	80	2	..	2	174'37	37'5	140 0 6	80 1 10		

¹Family labour not charged. ²Home bullock labour charged under item 7.

STATEMENT No. 164—concl'd.

786

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 4 acres and 26 gunthas	Per acre	For 4 acres and 26 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Seed-cotton.....	1,415	304.30	205 9 3	44 3 5	Sold at Rs. 195 per <i>naga</i> of about 1,344 lbs.
Kulhi....	52	11.18	2 0 0	0 6 10	Valued at 26 lbs. per rupee.
Gram.....	14	3.01	1 0 0	0 3 5	Valued at 14 lbs. per rupee.
Linseed...	24	5.16	2 0 0	0 6 10	Valued at 12 lbs. per rupee.
Bhoos.....	80	17.20	0 8 0	0 1 9	Valued at 160 lbs. per rupee.
Total ..	..	..	211 1 3	45 6 3	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 4 acres and 26 gunthas.	211 1 3	140 0 6	(a) 74 9 6 (b) 7 9 7	+71 0 9	+153 3 10
Per acre ..	45 6 3	30 1 10	17 10 10	+15 4 5	+32 15 3

FARM STUDIES

COTTON—10.75 acres in 1928-29

Previous crop—Wheat in 1927-28

STATEMENT No. 165

PLOT No. (2)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage										Rs. a. p.	Rs. a. p.	
(a) Ploughing	13	..	..	26	..	..	..	39.0	3.63	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	21	..	..	42	..	..	..	63.0	5.86	....	....	Five harrowings were given. A harrow required one and two bullocks.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	4 8 9	0 6 1/9	For the plot 77 lbs. cotton seed (Rs. 4-2-0) and linseed and <i>kulthi</i> (annas six).
(b) Sowing and covering ..	5	.	..	5	5	..	5	20.0	1.86	3 12 0	0 5 7	Five men and five bullocks at 6 annas each.
3. After-care and tillage												
(a) Interculturing	36	..	..	36	..	..	..	72.0	6.70	....	....	Three interculturings were given. A set of hoes required two men and two bullocks.
4. Harvesting and preparing for market												
(a) Cotton picking .....	..	30.0	58	..	..	..	..	29.5	2.75	....	....
(b) Harvesting and thrashing <i>kulthi</i> and linseed....	7	4.5	1	4	..	..	..	13.5	1.25	....	....
5. Marketing												
(a) Carting	4	..	..	4	..	..	..	8.0	0.74	....	....

STATEMENT No. 165—concl'd.

788

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
5. Marketing—cont'd. (b) Marketing charges	Rs. a. p. 14 13 6	Rs. a. p. 1 6 1	Rs. 12 were required for the purchase of <i>barlan</i> (gunny) and Rs. 2-13-6 for brokerage, etc.
6. Removing cotton stubbles.	
7. Charges for bullock labour. Rs. a. p. (a) Feeds, fodder, depreciation etc. 24 13 6 (b) Interest on the value of bullocks, feeds and fodder 6 13 4	31 10 10	2 15 2	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
8. Charges for implements and tools	6 2 8	0 9 2	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p. (a) Depreciation 2 12 11 (b) Interest 3 5 9	
9. Interest on fixed capital (i.e. wages of hired labour and price of seeds)	0 15 8	0 1 5	Charged at 12 per cent per annum.
10. Rent of land	207 7 3	19 4 1	The land was taken on lease on cash system.
Total	86	34*5	59	117	5	..	5	245*0	22*79	269 6 8	25 1 0	

¹ Family labour not charged.² Home bullock labour charged under item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 10.75 acres	Per acre	For 10.75 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Seed-cotton..	2,305	214.42	337 9 9	31 6 5	Sold at different rates.
<i>Kulthi</i>	52	4.83	2 0 0	0 3 0	Valued at 26 lbs. per rupee.
Linseed	24	2.23	2 0 0	0 3 0	Valued at 12 lbs. per rupee.
<i>Bhoos</i>	80	7.44	0 8 0	0 0 9	Estimated value.
Total ....	..	..	342 1 9	31 13 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 10.75 acres ...	342 1 9	269 6 8	(b) 11 2 9	+72 1 1	+83 13 10
Per acre ..	31 13 2	25 1 0	1 0 7	+6 12 2	+7 12 9

GOVANKOP, FARMER I

STATEMENT No. 166

COTTON—2 acres 3 gunthas in 1928-29

PLOT No. (3)

Previous crop—Jowar, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing	4'0	..	..	8	..	..	..	12'0	5'78	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	2'0	..	..	4	..	..	..	6'0	2'89	....	....	Two harrowings were given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	1 1 10	0 8 7	For the plot 16 lbs. of cottonseed (Rs. 0-18-10) and <i>kutti</i> and linseed mixture (annas 4).
(b) Sowing and covering ..	1'0	..	..	1	1	..	1	4'0	1'93	0 11 0 K. S.	0 5 3	One man at 5 annas and one bullock at 6 annas.
3. After-care and tillage												
(a) Weeding	2'0	1'0	1	..	..	4	..	4'75	2'29	0 12 0	0 5 10	One weeding was given. Four women were paid at 3 annas each.
(b) Interculturing	10'0	..	..	10	..	..	..	20'0	9'64	....	....	Three interculturings were given. A set of hoes required two men and two bullocks.
4. Harvesting and preparing for market												

(d) Harvesting and thrashing kullhi and linseed ...	1'5	1'25	..	1	..	2	..	4'12	1'99	0 10 0	0 4 9	Two women were paid 5 annas each.
(e) Marketing charges ....	..	..	..	..	..	..	..	..	..	4 2 6	2 0 0	This includes the cost of <i>bardan</i> (gunny).
5. Removing cotton stubbles.	..	..	..	..	..	..	..	..	..	3 0 0	1 7 2	The work was given on contract.
6. Charges for bullock labour.	..	..	..	..	..	..	..	..	..	6 8 1	3 2 2	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
	Rs. a. p.											
(a) Feeds, fodder, depreciation etc.	5	1	8									
(b) Interest on the value of bullocks, feeds and fodder....	1	6	5									
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	1 4 3	0 9 10	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
	Rs. a. p.											
(a) Depreciation.	0	9	2									
(b) Interest.	0	11	1									
8. Interest on fluid capital (i.e., wages of hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	0 5 10	0 2 9	Charged at 12 per cent per annum.
6. Rent of land .....	..	..	..	..	..	..	..	..	..	22 0 0	10 9 8	The land was taken on lease on cash rent.
Total	20'5	4'25	1	24	1	6	1	51'87	25'00	40 7 6	19 8 0	

¹Family labour not charged. ²Home bullock labour charged under item 6.

STATEMENT No. 166

COTTON—2 acres 3 gunthas in 1928-29

PLOT No. (3)

Previous crop—Jowar, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing	4·0	..	..	8	..	..	..	12·0	5·78	....	....	One ploughing was given. A plough required one man and two bullocks.
(b) Harrowing	2·0	..	..	4	..	..	..	6·0	2·89	....	....	Two harrowings were given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	1 1 10	0 8 7	For the plot 16 lbs. of cottonseed (Rc. 0-13-10) and <i>kulthi</i> and linseed mixture (annas 4).
(b) Sowing and covering ..	1·0	..	..	1	1	..	1	4·0	1·93	0 11 0 k. S.	0 5 3	One man at 5 annas and one bullock at 6 annas.
3. After-care and tillage												
(a) Weeding	2·0	1·0	1	..	..	4	..	4·75	2·29	0 12 0	0 5 10	One weeding was given. Four women were paid at 3 annas each.
(b) Interculturing	10·0	..	..	10	..	..	..	20·0	9·64	....	....	Three interculturings were given. A set of hoes required two men and two bullocks.
4. Harvesting and preparing for market												

(a) Cotton picking .....	..	2'0	..	..	..	..	..	1'0	0'28	....	....
(b) Harvesting and thrashing <i>kulthi</i> and linseed ...	1'5	1'25	..	1	..	2	..	4'12	1'99	0 10 0	0 4 9	Two women were paid 5 annas each.
(c) Marketing charges ....	..	..	..	..	..	..	..	..	..	4 2 6	2 0 0	This includes the cost of <i>bardan</i> (gunny).
5. Removing cotton stubbles.	..	..	..	..	..	..	..	..	..	3 0 0	1 7 2	The work was given on contract.
6. Charges for bullock labour.	..	..	..	..	..	..	..	..	..	6 8 1	8 2 2	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation etc.	Rs. p.	5	1	8								
(b) Interest on the value of bullocks, feeds and fodder....	1	6	5									
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	1 4 3	0 9 10	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation.	0	9	2									
(b) Interest.	0	11	1									
8. Interest on fluid capital (i.e., wages of hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	0 5 10	0 2 9	Charged at 12 per cent per annum.
6. Rent of land .....	..	..	..	..	..	..	..	..	..	22 0 0	10 9 8	The land was taken on lease on cash rent.
Total	20'5	4'25	1	24	1	6	1	51'87	25'00	40 7 6	19 8 0	

¹Family labour not charged. ²Home bullock labour charged under item 6.

GOVANKOP, FARMER I

791

STATEMENT No. 166—*concd.*

792

(b) *Yield and Value*

(c) *Summary*

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 3 gunthas	Per acre	For 2 acres and 3 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Cotton....	112	53·97	16 13 2	8 1 9	Sold at Rs. 200 per <i>naga</i> of about 1,344 lbs.
Kulhi....	39	18·79	1 8 0	0 11 7	Valued at 26 lbs. per rupee.
Linseed ...	15	7·23	1 4 0	0 9 7	Valued at 12 lbs. per rupee.
Bhoos.....	40	19·27	0 4 0	0 1 11	Valued at 160 lbs. per rupee.
Total....	..	..	19 13 2	9 8 10	

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 3 gunthas..	19 13 2	40 7 6	(b) 2 7 4	-20 10 4	-18 3 0
Per acre ..	9 8 10	19 8 0	1 2 11	-9 15 2	-8 12 3

FARM STUDIES

JOWAR—2 acres 23 gunthas in 1928-29

PLOT No. (4)

Previous crop—Groundnut, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage (a) Harrowing	6.75	..	..	13.5	..	..	..	20.25	7.86	Rs. a. p.	Rs. a. p.	Five harrowings were given.
2. Seeds and sowing (a) Seeds .....	..	..	..	..	..	..	..	..	..	2 0 0	0 12 5	The following seeds were required for the whole plot:— Rs. a. p. 10 lbs. <i>jowar</i> .. 0 8 0 20 ,, <i>tur</i> .. 1 2 0 5 ,, <i>matki</i> .. 0 4 0 <i>Ambadi</i> worth .. 0 2 0 <hr/> 2 0 0
(b) Sowing and covering ..	4.0	..	..	4.0	2	..	4	14.00	5.44	2 2 0	0 13 2	Two men and four bullocks paid at 5 and 6 annas each respectively.
3. After-care and tillage (a) Weeding	8.0	3	4.0	..	..	10	..	15.5	6.03	1 14 0	0 11 8	One weeding was given. 10 women paid at three annas each.
(b) Interculturing	8.0	..	..	8.0	..	..	..	16.0	6.2	.....	.....	Two interculturings were given. A set of hoes required two men and two bullocks.

GOVANKOP, FARMER 1

793

STATEMENT No. 166—*concd.*

792

(b) *Yield and Value*

(c) *Summary*

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 3 gunthas	Per acre	For 2 acres and 3 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Cotton....	112	53·97	16 13 2	8 1 9	Sold at Rs. 200 per <i>naga</i> of about 1,344 lbs.
Kulhi....	39	18·79	1 8 0	0 11 7	Valued at 26 lbs. per rupee.
Linseed...	15	7·23	1 4 0	0 9 7	Valued at 12 lbs. per rupee.
Bhoos.....	40	19·27	0 4 0	0 1 11	Valued at 160 lbs. per rupee.
Total....	..	..	19 13 2	9 8 10	

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 3 gunthas..	19 13 2	40 7 6	(b) 2 7 4	-20 10 4	-18 3 0
Per acre ..	9 8 10	19 8 0	1 2 11	-9 15 2	-8 12 3

FARM STUDIES

STATEMENT No. 167

JOWAR—2 acres 23 gunthas in 1928-29

PLOT No. (4)

Previous crop—Groundnut, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage										Rs. a. p.	Rs. a. p.	
(a) Harrowing	6.75	..	..	13.5	..	..	..	20.25	7.86	....	....	Five harrowings were given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	2 0 0	0 12 5	The following seeds were required for the whole plot:— Rs. a. p. 10 lbs. <i>jowar</i> .. 0 8 0 20 ,, <i>tur</i> .. 1 2 0 5 ,, <i>malki</i> .. 0 4 0 <i>Ambadi</i> worth .. 0 2 0 <hr/> 2 0 0
(b) Sowing and covering ..	4.0	..	..	4.0	2	..	4	14.00	5.44	2 2 0	0 13 2	Two men and four bullocks paid at 5 and 6 annas each respectively.
3. After-care and tillage												
(a) Weeding	8.0	3	4.0	..	..	10	..	15.5	6.03	1 14 0	0 11 8	One weeding was given. 10 women paid at three annas each.
(b) Interculturing	8.0	..	..	8.0	..	..	..	16.0	6.2	....	....	Two interculturings were given. A set of hoes required two men and two bullocks.

GOVANKOP, FARMER I

793

STATEMENT No. 167—concl'd.

794

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS	
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre		
4. Harvesting, tying bundles, breaking earheads, thrashing and preparing for market	35.25	18	8.5	6.5	4	12	4	66.87	25.97	Rs. a. p. 7 0 0	Rs. a. p. 2 11 6	Four men and four bullocks at 8 annas each and twelve women at 4 annas each. The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.	
5. Charges for bullock labour.	..	..	..	..	..	..	..	..	..	8 10 10	3 5 11
Rs. a. p.													
(a) Feeds, fodder, depreciation etc.													
(b) Interest on the value of bullocks, feeds and fodder.....													
6. Charges for implements and tools	1 11 0	0 10 6		The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.													
(a) Depreciation.													
(b) Interest.....													
7. Interest on fluid capital (i.e., wages of hired labour and price of seeds)	0 5 0	0 2 3	Charged at 12 per cent per annum. The land was owned.	
8. Rent of land .....	..	..	..	..	..	..	..	..	..	51 8 0	20 0 0
Total	62.0	21	12.5	32.0	6	22	8	132.62	51.60	75 3 7	29 3 5		

¹ Family labour not charged. ² Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 2 acres and 23 gunthas	Per acre	For 2 acres and 23 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowar	2,500	970.87	100 0 0	38 13 4	Valued at 25 lbs. per rupee.
Ambadi ..	..	..	2 0 0	0 12 5	Estimated value.
Kadbi	5,600	2,174.75	17 0 0	6 12 9	Valued at 320 lbs. per rupee.
Bhoos	400	155.34	2 8 0	0 15 6	Valued at 160 lbs. per rupee.
Total ..	..	..	122 0 0	47 6 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour.	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 2 acres and 23 gunthas..	122 0 0	75 3 7	(a) 45 1 0 (b) 3 2 5	+46 12 5	+94 15 10
Per acre ..	47 6 0	29 3 5	18 11 7	+18 2 7	+36 14 2

GOVANKOP, FARMER 1

STATEMENT No. 168

796

JOWAR—3·5 acres in 1928-29

PLOT No. (5)

Previous crop—Wheat in 1927-28(a) *Cost of Production*

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Harrowing	9·0	..	..	18·0	..	..	..	27·0	7·72	....	....	Five harrowings were given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	8 5 4	0 15 3	The following seeds were required for the whole plot:— Rs. a. p. 16 lbs. <i>jowar</i> 0 12 10 32 „ <i>tur.</i> 2 0 0 8 „ <i>m a t k i</i> and <i>mug.</i> 0 6 6 <i>Ambadi</i> .. 0 2 0 <hr/> 3 5 4
(b) Sowing and covering ..	2·0	..	..	2·0	1	..	2	7·0	2·0	1 1 0	0 4 10	One man at 5 annas and two bullocks at 6 annas each.
2. After-care and tillage												
(a) Interculturing	14·0	..	..	14·0	..	..	..	28·0	8·0	....	....	Three interculturings were given. A set of hoes required two men and two bullocks.

FARM STUDIES

4. Harvesting, thrashing and preparing for market															
(a) For <i>jowar</i>	22.0	7	1.5	6.75	..	3	0	40.15	11.47	3 12 0	1 1 2	Three women at 4 annas each and six bullocks at 8 annas each.			
(b) For <i>makhi, mug, tur</i> and <i>ambadi</i>	19.75	2	..	9.75	..	..	..	30.50	8.71	....	....		
5. Charges for bullock labour..	..	..	..	..	..	..	..	..	..	18 11 2	3 14 8	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them ¹			
Rs. a. p.															
(a) Feeds, fodder, depreciation, etc.....	10 11 11														
(b) Interest on the value of bullocks, feeds and fodder.....	2 15 3														
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	2 10 7	0 12 2	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.			
Rs. a. p.															
(a) Depreciation.	1 3 4														
(b) Interest	1 7 3														
7. Interest on fluid capital (i.e., wages of hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	0 6 3	0 1 9	Charged at 12 per cent per annum.			
8. Rent of land .....	..	..	..	..	..	..	..	..	..	67 8 9	19 4 9	The land was taken on lease on cash system. (It is a part of land taken on lease.)			
Total	66.75	9	1.5	50.5	1	3	8	132.65	37.9	92 7 1	26 6 7				

¹Family labour not charged.

²Home bullock labour charged under item 5.

STATEMENT No. 168—concl'd.

798

(b) Yield and Value .

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3·5 acres	Per acre	For 3·5 acres	Per acre	
Jowar	Lbs. 1,000	Lbs. 285·71	Rs. a. p. 40 0 0	Rs. a. p. 11 6 10	Valued at 25 lbs. per rupee.
Mug and matki ..	48	13·73	3 0 0	0 13 9	Valued at 16 lbs. per rupee.
Tur	128	36·57	8 0 0	2 4 7	Do. do.
Ambadi ..	..	..	2 0 0	0 9 1	Estimated value.
Kadhi	4,000	1,142·85	12 8 0	3 9 2	Valued at 320 lbs. per rupee.
Bhoos	320	91·43	2 0 0	0 9 1	Valued at 160 lbs. per rupee.
Total ..	..	..	67 8 0	19 4 6	

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3·5 acres ...	67 8 0	92 7 1	(b) 4 12 9	-24 15 1	-20 2 4
Per acre ..	19 4 6	26 6 7	1 6 0	-7 2 1	-5 12 1

FARM STUDIES

STATEMENT No. 169

GROUNDNUT—15 gunthas in 1928-29

PLOT No. (6)

Previous crop—Jowar, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing	2.5	..	..	5.0	..	..	..	7.5	20.0	....	....	Two ploughings were given. A plough required one man and two bullocks.
(b) Harrowing	1.25	..	..	2.5	..	..	..	8.75	10.0	....	....	Five harrowings were given.
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	1 5 0	8 8 0	For the plot 15 lbs. of groundnut seed.
(b) Sowing and covering ..	0.5	0.5	..	1.0	..	..	..	1.75	4.68	....	....
3. After-care and tillage												
(a) Watching .....	..	..	29	..	..	..	..	7.75	19.38	....	....	One girl was watching the field for 29 days.
(b) Interculturing	1.0	..	..	1.0	..	..	..	2.0	5.38	....	....	One interculturing was given. A set of hoes required two men and two bullocks.
4. Harvesting and preparing for market	6.0	5.0	5	..	..	2	..	10.75	28.66	0 8 0	1 5 4	Two women paid at 4 annas each.
5. Marketing												
(a) Carting	3.0	..	..	2.0	..	..	..	5.0	13.33	....	....
(b) Brokerage and other marketing charges .....	..	..	..	..	..	..	..	..	..	0 4 0	0 10 8	

GOVANKOP, FARMER I

799

STATEMENT No. 169—concl.

800

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p. 3 2 0	Rs. a. p. 8 5 4	
6. Charges for bullock labour.	..	..	..	..	..	..	..	..	..	Rs. a. p. 3 2 0	Rs. a. p. 8 5 4	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.												
(b) Interest on the value of bullocks, feeds and fodder....												
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	0 9 8	1 9 9	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation												
(b) Interest.....												
8. Interest on fluid capital (i.e., wages for hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	0 1 11	0 5 1	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	9 5 10	24 15 7	The land was owned. The rent is charged in proportion to the value of yields as the plot was cropped twice in the same year (see plot No. 7).
Total	14'25	5'5	84	11'5	..	2	..	38'00	101'33	15 4 5	40 11 9	

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 15 gunthas	Per acre	For 15 gunthas	Per acre	
Groundnut.	Lbs. 251	Lbs. 669.33	Rs. a. p. 18 0 6	Rs. a. p. 48 1 4	Sold at Rs. 15-2-0 per <i>bhar</i> of about 208 lbs.
Vines	200	533.33	1 4 0	3 5 4	Valued at 160 lbs. per rupee.
Total ..	..	..	19 4 6	51 6 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minua assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For 15 gunthas.	Rs. a. p. 19 4 6	Rs. a. p. 15 4 5	Rs. a. p. (a) 8 7 0 (b) 1 1 11	Rs. a. p. +4 0 1	Rs. a. p. +13 9 0
Per acre	51 6 8	40 11 9	25 7 9	+10 10 11	+36 2 8

STATEMENT No. 170

WHEAT—15 gunthas in 1928-29

PLOT No. (7)

Previous crop—Groundnut, 1928-29

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing	2·0	..	..	4	..	..	..	6·0	16·0	....	....	Two ploughings were given. A plough required one man and two bullocks.
(b) Harrowing	3·5	..	..	5	..	..	..	8·5	22·66	....	....	Four harrowings were given. Harrow required one man and two bullocks. One extra man was required.
(c) Collecting weeds .....	..	..	2	..	..	..	..	0·5	1·34	....	....
2. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	1 1 0	2 13 4	For the plot 14 lbs. of wheat (Rs. 1) and safflower seed (one anna).
(b) Sowing and covering ..	1·0	..	..	2	..	..	..	3·0	8·0	....	....
3. Harvesting, thrashing and preparing for market	10·0	1	..	6	..	..	..	16·5	44·00	....	....	Plot being small proportionately more labour was required.

4. Charges for bullock labour.	..	...	..	..	..	..	..	..	..	4 9 8	12 4 5	The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.	3	9	10									
(b) Interest on the value of bullocks, feeds and fodder	0	15	10									
5. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	0 14 4	2 6 3	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Depreciation	0	6	6									
(b) Interest	0	7	10									
6. Interest on fluid capital (i.e., wages for hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	..	0 1 0	0 2 8	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	..	..	5 10 2	15 0 5	The land was owned. The rent is charged in proportion to the value of the yield as the plot was double cropped in the same year, the previous crop being groundnut (Plot No. 6).
Total.....	16.5	1	2	17	..	..	..	34.5	92.00	12 4 2	32 11 1	

¹Family labour not charged. ²Home bullock labour charged under item 4.

STATEMENT No. 170—concl'd.

804

(b) Yield and Value

(c) Summary

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 15 gunthas	Per acre	For 15 gunthas	Per acre	
Wheat ...	Lbs. 128	Lbs. 341·33	Rs. a. p. 8 0 0	Rs. a. p. 21 5 4	Valued at 16 lbs. per rupee.
Safflower..	48	128·00	2 0 0	5 5 4	Valued at 24 lbs. per rupee.
W h e a t straw and bhoots ..	256	682·66	1 9 6	4 4 0	Valued at 160lbs. per rupee.
Total ...	..	..	11 9 6	30 14 8	

1	2	3	4	5 (i.e. col. 2—3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 15 gunthas	11 9 6	12 4 2	(a) 5 1 3 (b) 1 8 8	-0 10 8	+5 15 3
Per acre ..	30 14 8	32 11 1	17 10 5	-1 12 5	+15 14 0

FARM STUDIES

STATEMENT No. 171

CHILLIES—3 gunthas in 1928-29

PLOT No. (8)

Previous crop—Jowar, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bullocks ²	Men	Women	Bullocks			For the plot		
										Rs. a. p.	Rs. a. p.	
1. Preparatory tillage												
(a) Ploughing	0·5	..	..	1	..	..	..	1·5	20·0	....	....	Two ploughings were given. A plough required one man and two bullocks.
(b) Harrowing	0·5	..	..	1	..	..	..	1·5	20·0	....	....	Five harrowings were given.
(c) Collecting weeds, etc...	1·0	..	..	..	..	..	..	1·0	13·33	....	....
2. Manure and manuring												
(a) Manures (F. Y. M.) ..	..	..	..	..	..	..	..	..	..	3 0 0	40 0 0	For the plot 4 carts of F. Y. M. at Rs. 1-8-0 each were required; 50 per cent of the total cost is charged to the crop.
(b) Spreading and manuring	4·0	..	..	..	..	..	..	4·0	53·34	....	....	The manure was on the spot and hence no carting required.
3. Seeds and sowing												
(a) Seeds .....	..	..	..	..	..	..	..	..	..	....	....	Seedlings obtained free of cost from a neighbour.
(b) Making seed-beds	2·5	0·5	1	2	..	..	..	5·0	66·67	....	....
(c) Planting	3·0	..	..	..	..	..	..	3·0	40·00	....	....

GOVANKOP, FARMER 1

805

STATEMENT No. 171—concl'd.

806

ITEM OF EXPENDITURE	Home labour				Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Girls ¹	Bul- locks ²	Men	Women	Bullocks			For the plot	Per acre	
										Rs. a. p.	Rs. a. p.	
4. After-care and tillage (a) Weeding	1'0	..	..	..	..	..	..	1'0	13'38	....	....
5. Harvesting (i.e., gathering chillies) and preparing for market .....	..	1'0	..	..	..	..	..	0'5	6'66	....	....
6. Charges for bullock labour. Rs. a. p.	..	..	..	..	..	..	..	..	..	1 1 6	14 9 4	The total annual cost on account of draft bullocks in distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, d e p r e c i a t i o n, e t c 0 13 9												
(b) Interest on the value of bullocks, feeds and fodder.... 0 3 0												
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	..	0 3 4	2 12 5	The total annual charges are distributed on different plots in proportion to the bullock labour used on them.
Rs. a. p.												
(a) Deprecia- tion												
(b) Interest												
8. Interest on fluid capital (i.e., wages of hired labour and price of seeds and manure) .....	..	..	..	..	..	..	..	..	..	0 1 11	1 9 7	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	..	1 8 0	20 0 0	The land was owned.
Total.....	12'5	1'5	1	4	..	..	..	17'5	238'83	5 14 9	78 15 4	

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3 gunthas	Per acre	For 3 gunthas	Per acre	
Dry chillies	Lbs. 28	Lbs. 373.33	Rs. a. p. 3 0 0	Rs. a. p. 40 0 0	Valued at Rs. 3 per maund of 28 lbs.
Green chillies ....	..	..	2 0 0	26 10 8	Estimated value.
Total ..	..	..	5 0 0	66 10 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. s. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 3 gunthas	5 0 0	5 14 9	(a) 1 3 3 (b) 0 7 6	-0 14 9	+0 12 0
Per acre ..	66 10 8	78 15 4	22 4 8	-12 4 8	+10 0 0

GOTANKOP, FARMER 1

GOVANKOP, FARMER No. 2, 1928-29

General information about the village, regarding its geographic position, climate, communications, crops, cropping and distribution of land, is already given under Govankop farmer No. 1.

The farmer owned 15 acres and 7 gunthas of land. Besides, the farmer had taken on rent 5 acres and 8 gunthas in the year. His holding was thus 20 acres and 15 gunthas. Out of the holding, 25 gunthas were uncultivable, while one acre was twice cropped. The gross cropped area was thus $20\frac{3}{4}$ acres. The intensity of cropping was therefore 105 per cent.

(a) *Human labour*.—The farm family consisted of 3 members as given below :—

- | | |
|--------------------------|-----------|
| (1) The farmer | 32 years. |
| (2) His brother | 28 ,, |
| (3) Brother's wife | 12 ,, |

There were thus only two adult workers in the family. The two men together put in 495·5 days' work, while the girl worked only for 5·5 days on the farm. Out of the 495·5 man units, 336 were spent upon the year's crop. Occasionally the farmer and his bullocks worked for others and earned Rs. 21-6-0 as wages, in the course of the year.

The monthly distribution of the family labour, from 8th June 1928 to 7th June 1929, is shown in table VII. As mentioned under similar studies, the distribution of labour given shows how the family was employed during the year. The total shown in the last but one column will not tally with the total home labour supplied by the family on the crops grown in the year, given in the analysis; the period dealt with in table VII does not synchronize with the period of crop production. Moreover, miscellaneous labour which cannot be debited to any crop is included in the table.

TABLE VII—UTILIZATION AND SPREAD OF FAMILY LABOUR

Working members	June 1928	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 1929	Feb.	Mar.	Apr.	May	Total	Percentage of the labour employed to labour available.
Two men	37	45	32	47·5	45	45	46	49	45	51	31	22	495·5	67·8
	60	62	62	60	62	60	62	62	56	62	60	62	730	

Note.—The denominators show the available units, while the numerators show the units used.

It may be said that the utilization of family labour was satisfactory.

(b) *Bullock labour.*—The farmer had two bullocks till the 3rd of December 1928, when one of them was sold. On 7th February 1929 another bullock was purchased, but the same was sold on 8th May 1929. Thus the farmer had only one bullock from 4th December 1928 to 6th February 1929, when there was little work for bullocks on the farm. Table VIII gives the monthly distribution of bullock work for one year, from 8th June 1928 to May 1929. The distribution, given in the table, shows how the bullocks were employed, not necessarily on the farmer's own farm nor only for crops grown in 1928-29. Though the table shows that the bullocks worked 356 days, their work-days on the crops of the year came to only 314. The farmer besides had to hire 30 bullock units for sowing, interculturing and harvesting the crops to supplement his bullock force.

TABLE VIII—UTILIZATION AND SPREAD OF BULLOCK LABOUR

June 1928	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 1929	Feb.	Mar.	Apr.	May	Total	Per-centage of the labour employed to the labour available
38	48	50	40	22	24	8	14	36	16	34	26	356	56.78
46	62	62	60	62	60	34	31	50	62	60	38	627	

Note.—The denominators show available bullock labour, while the numerators show the units employed.

The opening and closing inventories of the property of the farmer for the year 1928-29 are given in table IX.

It may be noted that there is a fall of Rs. 66-12-10 in the value of the property at the close of the year. Livestock depreciated from Rs. 100 to Rs. 45. Implements also showed a fall of Rs. 7-4-0.

Nature of holding, land, crops and cropping.—The nature of lands, crops, cropping and treatment of different fields held by the farmer in 1927-28 and 1928-29 are given in table X.

The total area held by the farmer in 1928-29 was 20 acres and 15 gunthas out of which 25 gunthas were uncultivable. The cultivable area was, therefore, 19 acres and 30 gunthas, out of which 15 acres and 7 gunthas were owned and 5 acres and 8 gunthas taken on lease. The assessment of owned land was Rs. 48-7-6 and local-fund cess Rs. 3. The rent of the leased land was Rs. 64. The leased land was adjacent to one of the owned fields. The distant field was one and one-half miles from the village of Govankop.

TABLE IX—INVENTORY OF THE PROPERTY

1928				1929				Remarks
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		
<i>Assets</i>				<i>Assets</i>				
	A. g.	Rs. a. p.	Rs. a. p.		A. g.	Rs. a. p.		
1. Real estate				1. Real estate				
(A) Land				(A) Land				
(a) Field No. 1	5 26	1,695 0 0		(a) Field No. 1	5 26	1,695 0 0		There was no change in the value of land at the end of the year.
(b) Field No. 2	3 25	1,087 0 0		(b) Field No. 2	3 25	1,087 0 0		
(c) Field No. 3	5 36	1,475 0 0		(c) Field No. 3	5 36	1,475 0 0		
	15 7	4,257 0 0			15 7	4,257 0 0		
(B) Buildings				(B) Buildings				
(a) Farm house	1	100 0 0		(a) Farm house	1	100 0 0		Slight repairs were made.
Total real estate.....			4,357 0 0	Total real estate.....			4,357 0 0	
2. Livestock				2. Livestock				
(a) Bullocks	2	100 0 0		(a) Bullocks	1	45 0 0		One bullock was sold and the other was valued at Rs. 45 at the close of the year.
Total livestock.....			100 0 0	Total livestock.....			45 0 0	

3. Implements and tools		
(a) Country plough	1	6 8 0
(b) Harrows	2	16 0 0
(c) Hoes	9	15 0 0
(d) Jowar seed-drill	1	12 0 0
(e) Cotton seed-drill ..	1	11 0 0
(f) Ropes and other tools		12 0 0

Total implements and tools ..

4. Farm produce and supplies on hand

(a) Jowar	500 lbs.	12 0 0
(b) Wheat	240 lbs.	18 0 0
(c) Chillies .....	....	3 0 0
(d) Cotton seed	100 lbs.	5 0 0
(e) <i>Kalbi</i>	2,000 lbs.	10 0 0
(f) Paddy straw	1,600 lbs.	8 0 0
(g) <i>Bhoos</i>	1,600 lbs.	25 0 0
(h) F. Y. M. ....	....	19 4 0

Total farm produce and supplies on hand

72 8 0

3. Implements and tools		
(a) Country plough ..	1	5 13 7
(b) Harrows	2	14 6 6
(c) Hoes	3	13 8 0
(d) Jowar seed-drill	1	10 12 9
(e) Cotton seed-drill ..	1	9 14 5
(f) Ropes and other tools.		10 12 9

Total implements and tools

4. Farm produce and supplies on hand

(a) Jowar	676 lbs.	26 0 0
(b) Wheat	200 lbs.	12 8 0
(c) Gram	90 lbs.	6 7 0
(d) <i>Udid</i>	92 lbs.	5 2 0
(e) Linseed	12 lbs.	0 12 0
(f) <i>Math</i>	32 lbs.	2 0 0
(g) <i>Tur</i>	30 lbs.	1 10 7
(h) <i>Ambadi</i> .....	....	2 0 0
(i) Paddy	147 lbs.	7 0 0
(j) Cotton seed	560 lbs.	21 8 7
(k) <i>Kalbi</i>	2,400 lbs.	7 8 0
(l) <i>Bhoos</i>	2,590 lbs.	20 3 0
(m) Paddy straw .....	..	10 0 0
(n) F. Y. M.	10 cart-loads	20 0 0

Total farm produce and supplies on hand

65 4 0

TABLE IX—INVENTORY OF THE PROPERTY—*concl'd.*

1928				1929				Remarks
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		
<i>Assets</i>				<i>Assets</i>				On account of the part of the value of cotton and groundnut sold.
5. Cash on hand		Rs. a. p.	Rs. a. p.	5. Amounts receivable		Rs. a. p.	Rs. a. p.	
			130 0 0				180 0 0	
<i>Total Assets</i> ..			4,759 12 0	<i>Total Assets</i>			4,780 15 2	
<i>Liabilities</i>				<i>Liabilities</i>				
Debts and mortgages Field Nos. 1 and 2 mortgaged for Rs. 700 at 12 per cent per annum.		700 0 0		(a) Debt Field Nos. 1 and 2 mortgaged for Rs. 700 at 12 per cent per annum		700 0 0		
				(b) Interest on the above amount for 12 months		84 0 0		
				(c) Interest to be paid		13 0 0		
<i>Total Liabilities</i> ..			700 0 0	<i>Total Liabilities</i>			707 0 0	
<i>Net worth of the Farm</i> ..			4,059 12 0	<i>Net worth of the Farm</i>			3,992 15 2	

SUMMARY.

	Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928.....	4,059 12 0	
Net worth of the farm at the beginning of 1929.....	3,992 15 2	
<i>Loss in net worth</i>		66 12 10

TABLE X—NATURE OF HOLDING, LAND, CROPS AND CROPPING

Area	Nature of land	Previous treatment, 1927-28		1928-29 (i.e., year under study)		
		Crop	Treatment	Crop	Plot No.	Treatment
A. g. 5 22	Medium black soil with <i>karal</i> patches. Land very undulating and scored. 2 acres and 38 gunthas of this plot were owned, the remaining was taken on lease.	<i>Jowar</i> sown was grubbed on account of grass-hopper attack and then sown with cotton.	Ploughed once with a wooden plough; one harrowing with a 4-bullock harrow and four with a 2-bullock were given. No manure was given.	Groundnut and cotton in alternate rows.	1	Only four harrowings were given; manure was not given.
5 22	Do.	Do.	Do.	Cotton	2	Only harrowed. No manure was given.
3 0	The block measured 3 acres and 25 gunthas, out of which 25 gunthas were uncultivable waste. Heavy black cotton soil with <i>karal</i> patches. The land was sloping.	Half the area was under potato and the other half under groundnut in the <i>khari</i> season and the whole area under wheat the <i>rabi</i> season.	Two ploughings and four harrowings were given for the <i>khari</i> crops and manured at 7 cart-loads of F. Y. M. per acre.	<i>Jowar</i>	3	Do.
1 0	Heavy black cotton soil with <i>karal</i> patches and sloping. The land was owned.	Cotton	One ploughing and four harrowings were given. No manure was applied.	<i>Udid</i> followed by wheat in the <i>rabi</i> season.	4	One ploughing and six harrowings were given. Five cart-loads of F. Y. M. were applied.
4 0	Do.	Do.	Do.	Wheat 1 acre	5	Ploughed and harrowed. Only one acre was manured with sheep folding.
				Wheat 4 acres		
0 10	Do.	Do.	Do.	Gram	6	Ploughed and harrowed. No manure was given.
0 4	Heavy black cotton soil, sloping	Fallow .....	....	Cucumber.....	7	Two ploughings and six harrowings were given. No manure was applied.
0 12	Do.	<i>Jowar</i>	Ploughed once and harrowed four times.	Onion, chillies and brinjals.	8	Three ploughings and 7 harrowings were given. Manure was not applied.
0 25	Uncultivable waste.					
20 15						

GOVANKOP, FARMER 2

COSTS AND RECEIPTS

Abstract of expenditure.—In the following statement an abstract of expenditure for the farm is given.

ABSTRACT OF COSTS

Item of Expenditure	Total cost for 20½ acres of cropped area	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses		
(a) Manures	10 9 0	
(b) Seeds	51 4 5	
(c) Outside labour	84 8 3	
(d) Depreciation on equipment and tools	7 4 0	
(e) Bullock labour cost (excluding interest) ..	79 12 0	
(f) Marketing charges	8 11 6	
(g) Assessment and L. F. C. on owned land and rent of leased land	115 7 6	
	357 8 8	
II. Rent of owned land excluding assessment and L. F. C.	221 5 4	221 5 4
III. Interest on working capital		
(a) Interest on fluid capital required for current agricultural operations	5 11 5	
(b) Interest on the value of equipment and tools	8 11 2	
(c) Interest on the value of bullocks and on the cost of feed and fodder consumed by them	18 15 6	
	33 6 1	
<i>Total cost of production (excluding the wages for family labour)</i>		612 4 1

*DETAILS OF OUT-OF-POCKET EXPENSES

1. Manures :	Rs. a. p.	Rs. a. p.
(a) Four carts of F. Y. M. to plot No. 3 (Rs. 6), five carts of F. Y. M. to plot No. 4 (Rs. 7-8-0) and sheep-folding for plot No. 5 (Rs. 5). Out of the total cost of Rs. 18-8-0 only 50 per cent of the cost is charged to the crops taken in 1928-29. The remaining to be charged to succeeding crops	9 4 0	
(b) Residual manures Five cart-loads of F. Y. M. at Rs. 1-8-0 per cart were given to plot No. 4 ; 35 per cent of the cost is charged for the residue	1 5 0	
	10 9 0	

2. Seeds :	Rs. a. p.	Rs. a. p.
(a) Cotton seed 77 lbs.	4 2 0	
(b) Groundnut pcds 208 lbs. Rs. 22, shelling charges Rs. 2-12-0.	24 12 0	
(c) <i>Kulthi</i> and linseed mixture in cotton	0 8 0	
(d) <i>Jowar</i> seed 16 lbs.	1 0 0	
(e) <i>Tur</i> seed 14 lbs.	1 0 0	
(f) <i>Mug</i> and <i>matki</i> seed 8 lbs.	0 8 0	
(g) <i>Ambadi</i>	0 2 0	
(h) <i>Udid</i> 6 lbs.	0 6 0	
(i) Linseed 2 lbs.	0 2 0	
(j) Wheat seed 210 lbs.	15 0 0	
(k) Safflower seed 24 lbs.	1 0 0	
(l) Gram 8 lbs.	0 10 8	
(m) Cucumber	0 1 0	
(n) Onion seed 1 lb.	2 0 0	
	<hr/>	51 4 5
3. Outside labour engaged on daily wages and on piece-work :		
(a) For cotton crop (plot Nos. 1 and 2); 27·5 man units, 49·5 woman units and 79·5 bullock units.	50 10 3	
(b) For <i>jowar</i> crop (plot No. 3); 13 man units, 42 women and 12 bullocks.	23 10 0	
(c) For wheat crop (plot No. 5); 5 men, 4 women and 4 bullocks.	5 4 0	
(d) For <i>udid</i> crop (plot No. 4); 2 men and 2 bullocks.	1 8 0	
(e) For onions and chillies (plot No. 8); 2 men and 8 women.	3 8 0	
	<hr/>	84 8 3
4. Depreciation on equipment and tools :		
Opening inventory.	72 8 0	
Closing inventory.	65 4 0	
	<hr/>	7 4 0
5. Bullock labour cost (excluding interest) :		
(a) Depreciation		
The farmer had two bullocks till 3rd December 1928, valued at Rs. 50 each as per opening inventory. On 4th December 1928 one bullock was sold for Rs. 34. The depreciation on the bullock sold, therefore, comes Rs. 16. The other bullock was valued at Rs. 45 as per closing inventory. The depreciation on this bullock, therefore, comes Rs. 5. A new bullock was purchased for Rs. 40 on 7th February 1929 and the same was sold for Rs. 36, on 8th May 1929, the depreciation thus being Rs. 4. Therefore :		
(i) On the old bullock sold Rs. 16		
(ii) On the other old bullock Rs. 5		
(iii) On the new bullock sold Rs. 4	25 0 0	
(b) Death allowance on Rs. 50, the value of one bullock, which was with the farmer throughout the year at 5 per cent.	2 8 0	
(c) Charges on account of housing at Rs. 4 per bullock per year.	8 0 0	
(d) Feeds and fodder	Rs. a. p.	
Fodder.	41 4 0	
Concentrates.	21 0 0	
	<hr/>	62 4 0
	<hr/>	97 12 0
Against the above cost (a) to (d) must be set off Rs. 18 the value of 12 cart-loads of F. Y. M. at Rs. 1-8-0.	-18 0 0	
	<hr/>	79 12 0

ANALYSIS

The farm family supplied 336 man units and 5·5 woman units. Taking two woman units equal to one man unit, it may be said that they supplied about 339 labour units. The farmer had to employ 51·5 man units, 101·5 woman units and 30 bullock units in addition, which together with charges for piece-work cost him Rs. 84-8-3.

For the 339 family labour units the farmer made negative income of Rs. 139-5-1. He, however, made Rs. 115-6-4 as his farm business income. Since the farmer could not maintain his family on this small sum he had to sell his bullocks. He could not pay even the interest on the borrowed capital. The season on the whole was unsatisfactory.

General remarks about crops.—Table XIII shows the yields of the main produce and labour units including bullock units (both owned and hired) spent per acre and the general remarks on crop condition. The table is based on the information given in the statements of costs and receipts of the crops. (One man unit = one bullock unit = 2 woman units = 4 child units.)

TABLE XIII—YIELD OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce per acre		No. of work units per acre	Remarks
	Name of produce	Yield lbs.		
1	Seed-cotton	58·5	} 32·2	Plot Nos. 1 and 2 were uneven with <i>karal</i> patches and had not received manure for years. Includes 3 units for contract payment.
	Groundnut (dry pods) ..	155·7		
	<i>Kulthi</i>	9·4		
	Linseed	2·1		
2	Seed-cotton	98·7	} 23·4	Includes 4 units for contract payment.
	<i>Kulthi</i>	7·0		
	Linseed	2·1		
3	<i>Jowar</i>	875·3	} 60·6	Though plot has <i>karal</i> patches the manure given increased the yield.
	<i>Mug</i> and <i>matki</i>	13·3		
	<i>Tur</i>	16·6		
4	<i>Udid</i>	196·0	} 47·0	This plot was also manured, but the crop was not carefully looked after and hence the yield was poor.
	<i>Alasandi</i>	28·0		
5	Wheat	250·0	} 44·65	Only part of the plot was manured which gave good crop. The crop in the unmanured plot was very poor.
	Safflower	60·0		
6	Gram	440·0	58·00	Yield was average.
7	Cucumber	} ..	Both the plots were twice overflowed by rain water. Most of the crop was washed off and it never revived.
8	Onions and brinjals .....	..	

Cotton.—There were two plots of cotton viz., plot Nos. 1 and 2. In plot No. 1 cotton and groundnut were sown in alternate rows, while in plot No. 2 cotton had a mixture of *kulthi* and linseed. Both the plots were damaged by surface wash and were, moreover, badly infested with *hariali*. They had not received manure for many years. The cultivation of the crop, on the whole, was neglected and naturally the yields obtained were low.

Jowar (plot No. 3).—The plot had *karal* patches. The crop gave a yield of 905 lbs. of grains per acre, chiefly because of the manure given.

Udid (plot No. 4).—The plot gave a very low yield of 196 lbs. of *udid* and 28 lbs. of linseed per acre. Though the plot had received farmyard manure, it was not carefully looked after and the crop was very poor from the beginning to end.

Wheat (plot No. 5).—The yield obtained from the 5-acre plot of wheat also was low viz., 250 lbs. per acre. Safflower taken as row crop in wheat gave an yield of 60 lbs. per acre. One acre of this plot was manured with sheep-folding and another acre received farmyard manure. The crop in the manured portion was better.

Gram (plot No. 6).—The small 10-guntha plot of gram gave an average yield of 440 lbs. per acre.

Cucumber.—This was taken on a newly reclaimed patch of *hariali* ridden land on the side of a *nalla*. The cucumber crop was twice under water when the *nalla* was in flood. The yield obtained was very low and most of it was consumed by the farm family; the value had to be estimated.

Onion, chillies and brinjals (plot No. 8).—This plot also was a part of the reclaimed land along the bank of the *nalla*. When the *nalla* was twice in flood the crop was under water and consequently the growth was very poor and patchy. The small yield obtained was consumed at home.

It can be said that the cultivation of the different crops, on the whole, was neglected. Only the *jowar* plot could come up to the average, chiefly because of the manure. The small plots of gram, cucumber, onion, chillies and brinjals received very little attention. With a little more personal labour and attention, the cultivator could have increased the outturns.

The statements showing the costs and receipts of the different plots of the farmer are as follows:—

STATEMENT No. 172

820

GROUNDNUT AND COTTON—5 acres 22 gunthas
in 1928-29

PLOT No. (1)

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	9'0	..	18'0	..	..	..	27'0	4'9	....	....	Four harrowings were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	27 1 4	4 14 1	Following seeds were required for the whole plot: <div style="text-align: right; margin-left: 20px;"> Rs. a. p. 208 lbs. groundnut... 22 0 0 Shelling charges 2 9 0 38.5 lbs. cotton seed.. 2 4 4 Linseed and <i>kudhi</i> 0 4 0 <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> 27 1 4 </div>
(b) Sowing and covering ...	3'5	..	7'0	2'5	4'0	5'0	20'0	3'8	3 13 0	0 11 0	Man and bullocks on daily wages paid at annas six each and women at annas four each.

FARM STUDIES

3. After-care and tillage												
(a) Weeding	1.5	..	..	..	8.5	..	5.75	1.0	2 2 0	0 6 2	One weeding was given. Women on daily wages paid at annas four a day.	
(b) Inter-culturing	9.5	..	10.5	4.0	..	1.0	25.0	4.5	1 14 0	0 5 5	Man and bullock units on daily wages charged at annas 6 each. Two inter-culturings were given.	
(c) Watching	42.0	..	..	3.5	..	..	45.5	8.2	1 1 6	0 3 1	Outside men at 5 annas each.	
4. Harvesting and preparing for market												
(a) For groundnut	11.25	..	2.25	2.0	25.0	1.0	29.0	5.2	10 12 0	1 15 0	Two men at annas 8, 25 women at annas 6, 1 bullock at annas 6.	
(b) For <i>kulhi</i>	3.5	..	1.5	..	4.5	0.5	7.75	1.4	1 14 0	0 5 5	Women and bullock units at annas 6.	
(c) For cotton .....	..	..	..	..	..	..	..	..	3 9 0	0 10 3	Labour paid in kind, 25 lbs. seed-cotton.	
5. Removing cotton stubbles	..	..	..	..	..	..	..	..	4 8 0	0 13 0	Contract labour.	
6. Marketing												
(a) Carting	1.0	..	1.0	..	..	..	2.0	0.4	....	....
(b) Commission, etc. ....	..	..	..	..	..	..	..	..	5 0 2	0 14 5	<i>Bardan, adat, etc.</i>	
7. Charges for bullock labour..												
									12 10 6	2 4 6	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.	
	Rs. a. p.											
(a) Feeds, fodder, depreciation, etc.....	10	3	7									
(b) Interest on the value of bullocks, feeds and fodder	2	6	11									

STATEMENT No. 172—concl'd.

822

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
8. Charges for implements and tools .....	..	..	..	..	..	..	..	..	2 0 8	0 5 10	The total annual charges are distributed on different plots, in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation ..	0 14 10										
(b) Interest ..	1 1 10										
9. Interest on fluid capital (i.e., wages of hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	2 2 0	0 6 8	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	74 8 0	13 6 9	Two acres and twenty-four gunthas of this plot was taken on lease for Rs. 32, while the remaining was owned land.
Total	81·25	..	40·25	12·0	42·0	7·5	102·00	29·2	153 0 8	27 9 2	

¹Family labour not charged. ²Home bullock labour charged under item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 5 acres and 22 gunthas	Per acre	For 5 acres and 22 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Groundnut..	864	155.7	64 14 6	11 11 2	Sold at Rs. 15-10-0 per <i>her</i> of 208 lbs. of pods. Sold at Rs. 192 per <i>naga</i> of 1,344 lbs. of seed-cotton. The value includes the produce given to labour engaged for picking cotton.
Seed-cotton .	325	58.5	46 6 8	8 5 10	
<i>Kulthi</i>	52	9.4	2 0 0	0 5 9	Valued at 26 lbs. per rupee.
Linseed	12	2.1	1 0 0	0 2 10	Valued at 12 lbs. per rupee.
<i>Bhoos</i>	600	108.1	3 12 0	0 10 10	Valued at 160 lbs. per rupee.
Total.....	..	..	118 1 2	21 4 5	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 5 acres and 22 gunthas.	118 1 2	153 0 8	(a) 34 3 3 (b) 5 11 3	-34 15 6	+4 15 0
Per acre ..	21 4 5	27 9 2	7 3 1	-6 5 0	+0 14 4

GOVANKOP, FARMER 2

STATEMENT No. 173

824

COTTON—5 acres and 22 gunthas in 1928-29

PLOT No. (2)

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing	15·0	..	30·0	..	..	..	45·0	8·1	....	....	Six harrowings were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	2 5 5	0 6 9	For the plot 38·5 lbs. of cotton-seed (Rs. 2-1-5) and linseed and <i>kulthi</i> worth annas four.
(b) Sowing and covering ..	1·5	..	3·0	1·5	..	3·0	9·0	1·6	1 11 0	0 4 10	Outside men and bullocks paid at annas six each.
After-care and tillage											
(a) Weeding	1·5	..	..	7·5	1·0	..	9·5	1·7	3 1 0	0 8 11	One weeding was given. One woman at annas four and 7·5 men at annas six each.

FARM STUDIES

(b) Interculturing	10.5	..	12.5	5.0	..	1.0	29.0	5.2	2 4 0	0 6 6	Three interculturings were given. 5 men and 1 bullock charged at annas six each. A set of hoe required two bullocks and varying number of men.
(c) Watching	4.0	..	..	1.5	..	..	5.5	0.9	0 7 6	0 1 4	Man at 5 annas per day.
4. Harvesting and preparing for market											
(a) For cotton picking	..	..	..	..	..	..	..	..	7 2 3	1 4 7	Labour required for picking was paid in kind.
(b) Harvesting mixed crops	3.75	..	75	..	4.5	0.5	8.25	1.5	1 15 0	0 5 7	4.5 women at annas 6 each and 0.5 bullocks at annas 8 each.
5. Removing cotton stubbles	..	..	..	..	..	..	..	..	4 8 0	0 13 0	Contract work.
6. Marketing											
(a) Carting	1.0	..	1.0	..	..	..	2.0	0.4	....	....
(b) Commission, etc.	..	..	..	..	..	..	..	..	3 11 4	0 10 8	
7. Charges for bullock labour	..	..	..	..	..	..	..	..	15 2 10	2 11 9	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc.	Rs. a. p. .. 12 4 3										
(b) Interest on the value of bullocks, feeds and fodder	.. 2 14 7										

STATEMENT No. 173—concl'd.

826

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
Charges for implements and tools .. .. .	..	..	..	..	..	..	..	..	2 7 2	0 7 1	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation 1 1 10											
(b) Interest .. 1 5 4											
Interest on fluid capital (i.e., wages for hired labour and price of seeds) .. .. .	..	..	..	..	..	..	..	..	1 2 8	0 8 4	Charged at 12 per cent per annum.
Rent of land .. .. .	..	..	..	..	..	..	..	..	74 8 0	13 6 9	Two acres and twenty-four gunthas of this plot was leased for Rs. 82 while the remaining was owned.
Total	37·25	..	48·25	15·5	5·6	4·5	108·25	19·4	120 6 2	21 11 1	

¹Family labour not charged. ²Home bullock labour charged under item 7.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 5 acres and 22 gunthas	Per acre	For 5 acres and 22 gunthas	Per acre	
Seed-cotton	Lbs. 548	Lbs. 98·7	Rs. a. p. 79 12 7	Rs. a. p. 14 6 0	Sold at different rates. This includes the value of cotton given for picking. Valued at 26 lbs. per rupee. Valued at 12 lbs. per rupee. Valued at 160 lbs. per rupee.
Kulthi ..	39	7·0	1 8 0	0 4 3	
Linseed ..	12	2·1	1 0 0	0 2 10	
Bhoos	80	14·4	0 8 0	0 1 5	
Total..	..	..	82 12 7	14 14 6

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 5 acres and 22 gunthas.	82 12 7	120 6 2	(a) 34 3 3 (b) 5 6 7	-37 9 7	+2 0 3
Per acre..	14 14 6	21 11 1	7 2 3	-6 12 7	+0 5 8

STATEMENT No. 174

828

JOWAR—3 acres in 1928-29

PLOT No. (3)

Previous crop—Wheat, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Wo-men ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Harrowing and levelling	14'5	..	20'0	..	..	..	43'5	14'5	....	....	Number of operations were given. Harrows and levellers required one man and two bullocks each. Harrowing did not continue whole day, yet the team did not do any other work on these days.
2. Manure and manuring											
(a) Manures (F. Y. M.).....	..	..	..	..	..	..	..	..	3 0 0	1 0 0	For the plot four carts of F. Y. M. at Rs. 1-8-0 per cart were given; 50 per cent. of the total cost is charged to this crop.
(b) Carting	2'0	..	4'0	..	..	..	6'0	2'0	....	....
(c) Manuring	2'0	..	..	..	..	..	2'0	0'6	....	....

FARM STUDIES

3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	2 10 0	0 14 0	Following seeds were required for the whole plot: Rs. s. p. 16 lbs. jowar.. 1 0 0 14 lbs. tur .. 1 0 0 8 lbs. mug .. 0 4 0 4 lbs. matki.. 0 4 0 Ambadi .. 0 2 0 <hr/> 2 10 0
(b) Sowing and covering ..	1'0	..	2'0	3	..	2	8'0	2'7	1 14 0	0 10 0	Three men and two bullocks at annas 6 each per day.
4. After-care and tillage											
(a) Weeding .....	..	..	..	..	16	..	8'0	2'7	4 0 0	1 5 4	Women at annas four. Only one weeding was given.
(b) Interculturing	10'0	..	12'0	2	..	..	24'0	8'0	0 12 0	0 4 0	Two men at annas 6 each. Three interculturings were given.
5. Harvesting and preparing for market											
(a) For matki and tur	8'0	..	3'0	..	..	3	14'0	4'7	1 8 0	0 8 0	Three bullocks at 8 annas each.
(b) For ambadi	2'0	..	..	..	..	..	2'0	0'6	....	....
(c) For jowar	39'0	..	7'5	8	26	7	74'5	24'8	15 8 0	5 2 8	Outside man and bullock labour at annas 8 each; 8 women at annas four, 12 at annas 5 and 6 at annas 6 each.
6. Charges for bullock labour											
	..	..	..	..	..	..	..	..	18 1 3	6 0 5	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
	Rs. s. p.										
(a) Feeds, fodder, depreciation, etc.	14	9	8								
(b) Interest on the value of bullocks, feeds and fodder	3	7	7								

GOVANKOP, FARMER 2

STATEMENT No. 174—*concl.*

830

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	Rs. s. p.	Rs. s. p.	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
(a) Depreciation. 1 5 3									2 14 9	0 15 7	
(b) Interest..... 1 9 6											
8. Interest on fluid capital (i.e., wages for hired labour and cost of seeds and manure) .....	..	..	..	..	..	..	..	..	0 9 1	0 3 0	Charged at 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	..	..	72 8 0	24 2 8	The land was owned.
Total.....	78·5	..	57·5	18	42	12	182·0	60·6	123 5 1	41 1 8	

¹Family labour not charged.

²Home bullock labour charged under item 6.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 3 acres	Per acre	For 3 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Jowari grain ..	2,626	875.3	101 0 0	33 10 8	Valued at 26 lbs. per rupee.
Mug and matki ..	40	13.3	2 0 0	0 10 8	Valued at 20 lbs. per rupee.
Tur	50	16.6	2 8 0	0 13 4	Valued at 20 lbs. per rupee.
Ambadi ..	..	..	2 0 0	0 10 8	Estimated value.
Kadbi	6,400	2,133.3	20 0 0	6 10 8	Valued at 320 lbs. per rupee.
Bhoos	800	266.6	6 4 0	2 1 4	Estimated value.
Total..	..	..	133 12 0	44 9 4	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area.	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For three acres ..	133 12 0	123 5 1	(a) 57 2 6 (b) 5 10 2	+10 6 11	+73 3 7
Per acre ..	44 9 4	41 1 8	20 14 10	+3 7 8	+24 6 6

STATEMENT No. 175

832

UDID—1 acre in 1928-29

PLOT No. (4)

Previous crop—Cotton, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour Per acre	REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			
1. Preparatory tillage								Rs. a. p.	
(a) Ploughing	3	..	6	..	..	..	9	....	One ploughing was given. A plough required on a man and two bullocks.
(b) Harrowing	3	..	6	..	..	..	9	....	Six harrowings were given.
2. Manure and manuring									
(a) Manures (F. Y. M.) .....	..	..	..	..	..	..	....	3 12 0	For the plot five carts of F. Y. M. were given. Manure was charged at Rs. 1-8-0 per cart. Only 50 per cent of the total cost of manure is charged.
(b) Carting	2	..	4	..	..	..	6	....
(c) Manuring	2	..	..	..	..	..	2	....
3. Seeds and sowing									
(a) Seeds .....	..	..	..	..	..	..	....	0 8 0	For the plot 6 lbs. of <i>udid</i> and 2 lbs. of <i>alsundi</i> .
(b) Sowing and covering	2	..	2	1	..	2	7	1 2 0	One man and two bullocks were charged at annas six each.

FARM STUDIES

STATEMENT No. 175—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	For one acre	For one acre	
	Lbs.	Rs. a. p.	
<i>Udid</i>	196	8 12 9	Valued at 20 lbs. per rupee.
<i>Alundi</i>	28	1 12 0	Valued at 20 lbs. per rupee.
<i>Bhoos</i> .....	....	1 3 0	Estimated value.
Total	....	11 11 9	

(c) Summary

1	2	3	4	5 (i.e. col.2-3)	6 (i.e. col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Per acre	11 11 9	21 0 7	(a) 5 8 7 (b) 2 1 0	-9 4 10	-1 11 3

STATEMENT No. 176

WHEAT—5 acres in 1928-29

PLOT No. (5)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing and harrowing	52·5	..	105	..	..	..	157·5	31·5	....	....	One ploughing and number of harrowings were given.
(b) Collecting weeds .....	..	..	..	..	4	..	2·0	0·4	0 12 0	0 2 5	Woman at three annas a day.
2. Manure and manuring											
(a) Sheep-folding .....	..	..	..	..	..	..	..	..	2 8 0	0 8 0	For one acre Rs. 5 were paid for sheepfolding; 50 per cent of the cost is charged.
(b) Residual manure .....	..	..	..	..	..	..	..	..	1 5 0	0 4 2	Five cart-loads of farmyard manure at Rs. 1-8-0 per cart were given to the previous crop; 35 per cent of the cost is charged for the residue.
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	16 0 0	3 3 2	For the plot 210 lbs. of wheat (Rs.15) and 24 lbs. of safflower (Rs. 1-0-0).
(b) Sowing and covering ..	2·0	..	4	2	..	4	12·0	2·4	3 0 0	0 0 7	Two men and four bullocks at 8 annas each.

STATEMENT No. 176—concl'd.

836

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting and preparing for market	31'0	5'5	15	3	..	..	51'75	10'35	Rs. a. p. 1 8 0	Rs. a. p. 0 4 9	Three men at annas eight each.
5. Charges for bullock labour ..	..	..	..	..	..	..	..	..	38 15 2	7 12 8	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p. (a) Feeds, fodder, depreciation etc. .. 81 7 4											
(b) Interest on the value of bullocks, feeds and fodder .. 7 7 10											
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	6 4 9	1 4 2	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p. (a) Depreciation 2 18 9											
(b) Interest .. 3 7 0											
7. Interest on fixed capital (i.e., wages for hired labour and price of seeds and manure .....	..	..	..	..	..	..	..	..	1 5 4	0 4 3	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	92 14 1	18 9 3	The land was owned. One acre was cropped twice (Plot No. 4). Rent of this plot is distributed in proportion to the value of yields.
Total	85'5	5'5	124	5	4	4	223'25	44'65	104 8 4	32 14 5	

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 5 acres	Per acre	For 5 acres	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Wheat	1,250	250	78 2 0	15 10 0	Valued at 16 lbs. per rupee.
Safflower ..	300	60	12 8 0	2 8 0	Valued at 24 lbs per rupee.
Wheat straw and <i>bhoas</i> .	2,560	512	16 0 0	3 3 2	Valued at 160 lbs. per rupee.
Total....	..	..	106 10 0	21 5 2	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 5 acres	106 10 0	164 8 4	(a)77 2 8 (b)12 4 2	-57 14 4	+31 8 6
Per acre ..	21 5 2	32 14 5	17 14 2	-11 9 3	+6 4 11

GOVANKOP, FARMER 2

837

STATEMENT No. 177

GRAM—10 gunthas in 1928-29

PLOT No. (6)

Previous crop—Cotton

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing, harrowing, etc.	3.0	..	6	..	..	..	9.0	36	....	....
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	0 10 8	2 10 8	For the plot 8 lbs. of gram.
(b) Sowing	0.5	..	1	..	..	..	1.5	6	....	....
3. Harvesting and preparing for market	4.0	..	..	..	..	..	4.0	16	....	....
* Charges for bullock labour..	..	..	..	..	..	..	..	..	2 3 2	8 12 8	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p. a) Feeds, fodder, depreciation etc. 1 12 6											

(b) Interest on the value of bullocks, feeds and fodder	0	6	8													
5. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0	5	8	1	6	8	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them.
Rs. a. p.																
(a) Depreciation .	0	2	7													
(b) Interest ..	0	8	1													
6. Interest on fluid capital (i.e., wages for hired labour and price of seeds)..	..	..	..	..	..	..	..	..	0	0	8	0	2	8	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	..	..	5	14	2	28	8	8	The land was owned.
Total	7	5	..	7	14	5	58	9	2	4	36	9	4

¹Family labour not charged.

²Home bullock labour charged under item 4.

STATEMENT No. 177—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 10 gunthas	Per acre	For 10 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Gram	110	440	7 14 0	31 8 0	Valued at 14 lbs. per rupee.
Bhoos ..	30	120	0 3 0	0 12 0	Valued at 10 lbs. per anna.
Total..	..	..	8 1 0	32 4 0	

(c) Summary

1	2	3	4	5	6
				(i.e. col.2-3)	(i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. C. F.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 10 gunthas....	8 1 0	9 2 4	(a) 5 0 5 (b) 0 10 5	-1 1 4	+4 9 6
Per acre ..	32 4 0	36 9 4	22 11 4	-4 5 4	+18 6 0

STATEMENT No. 178

CUCUMBER—4 gunthas in 1928-29

PLOT No. (7)

Previous year—The land was fallow(a) *Cost of Production*

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the whole plot	Per acre	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing and harrowing	1·0	..	2	..	..	..	8·0	80·0	....	....	Two ploughings and six harrowings were given.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	....	..	0 1 0	0 10 0	
(b) Sowing	1·0	..	..	..	..	..	1·0	10·0	....	....
3. After-care and tillage											
(a) Weeding	1·0	..	..	..	..	..	1·0	10·0	....	....	One weeding was given.
4. Harvesting and preparing for market	0·5	..	..	..	..	..	0·5	5·0	....	....

GOVANKOP, FARMER 2

841

STATEMENT No. 178—concl.

842

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the whole plot	Per acre	
									Rs. s. p.	Rs. s. p.	
5. Charges for bullock labour ..	..	..	..	..	..	..	....	..	0 10 3	6 6 6	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. s. p.											
(a) Feeds, fodder depreciation etc. .. 0 8 3											
(b) Interest on the value of bullocks, feeds and fodder .. 0 2 0											
6. Charges for implements and tools ..	..	..	..	..	..	..	....	..	0 1 8	1 0 8	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. s. p.											
(a) Depreciation . 0 0 9											
(b) Interest .. 0 0 11											
7. Interest on fluid capital ..	..	..	..	..	..	..	....	..	....	....	Negligible.
8. Rent of land ..	..	..	..	..	..	..	....	..	2 5 8	23 8 8	The land was owned.
Total	3 5	..	2	..	..	..	5 5	55 0	3 2 7	31 9 10	

¹Family labour not charged. ²Home bullock labour charged under item 5.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 4 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
Fruit	1 14 6	19 1 0	Estimated value.
Total	1 14 6	19 1 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For four gunthas ..	1 14 6	3 2 7	(a) 2 0 2 (b) 0 2 11	-1 4 1	+0 15 0
Per acre	19 1 0	31 9 10	21 14 10	-12 8 10	+9 6 0

GOVINDOP, FARMER 2

STATEMENT No. 179

ONION CHILLIES AND BRINJALS—12 gunthas in
1928-29

PLOT No. (8)

Previous crops—Jowar, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			Plot	Per acre.	
									Rs. a. p.	Rs. a. p.	
1. Preparatory tillage											
(a) Ploughing and harrowing	5·0	..	10	..	..	..	15·0	50·0	....	....	Three ploughings and seven harrowings.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	2 0 0	6 10 8	Onion seeds (Ra. 2) chillies and brinjal seedlings got free.
(b) Planting	4·0	..	2	4	..	..	10·0	33·33	1 8 0	5 0 0	Four men were paid at annas six each per day.
3. After-care and tillage											
(a) Weeding	10·0	..	..	..	8	..	14·0	46·66	2 0 0	6 10 8	One weeding was given. Eight women were paid at annas 4 each.
(b) Interculturing	0·5	..	1	..	..	..	1·6	5·0	....	....

4. Harvesting and selling	2 0	..	..	..	..	..	2 0	0 66	....	....
5. Charges for bullock labour ..	..	..	..	..	..	..	..	..	4 1 6	13 10 4	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation etc. ..	3	4	11								
(b) Interest on the value of bullocks, feeds and fodder ..	0	12	7								
6. Charges for implements and tools.....	..	..	..	..	..	..	..	..	0 10 7	2 3 3	The total annual charges are distributed over different plots in proportion to the bullock labour used on them.
Rs. a. p.											
(a) Depreciation ..	0	4	10								
(b) Interest ..	0	5	9								
7. Interest on fluid capital (i.e., wages of hired labour and price of seeds) .....	..	..	..	..	..	..	..	..	0 5 3	1 1 6	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	7 1 0	23 8 8	This was owned land.
Total.....	21 5	..	13	4	8	..	42 5	141 65	17 10 4	58 18 1	

¹Family labour not charged. ²Home bullock labour charged under item 5.

STATEMENT No. 179—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Value		REMARKS
	For 12 gunthas	Per acre	
	Rs. a. p.	Rs. a. p.	
			Outturns were not weighed for the small plot.
Onions	5 0 0	16 10 8	Estimated value at village rates.
Chillies	3 0 0	10 0 0	Do. do.
Brinjals	2 0 0	6 10 8	Do. do.
Total..	10 0 0	33 5 4	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 12 gunthas..	10 0 0	17 10 4	(a) 6 0 6 (b) 1 7 7	-7 10 4	-0 2 3
Per acre	33 5 4	58 13 1	25 0 3	-25 7 9	-0 7 6

SHIRGAON, 1928-29

Shirgaon is a fairly large Konkan village on the west coast about 2 miles to the north of Ratnagiri, the headquarters of the district, with which it is connected by a good road. Ratnagiri District is one of the most thickly populated districts in the Bombay Presidency. Shirgaon receives about 102 inches of rainfall, major part of it falling between June and October. The average cultivated area (including fallow) per capita is only 16·37 gunthas, while the incidence of cultivated area comes to only 7·48 gunthas. Tables I, II, III, IV and V are based on the village records for the year 1928-29 and personal enquiries.

The following shows the total area held, population, cultivable and cultivated area per capita.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Area held in 1928-29		Area cultivated and fallow in 1928-29		Area cultivated in 1928-29		Population according to 1931 census	Area per capita	
							Cultivable	Cultivated
A.	g.	A.	g.	A.	g.		Gunthas	Gunthas
1,509	7	1,117	26·75	510	36·50	2,731	16·37	7·48

According to the cattle census of 1930, there were 391 bullocks and 55 he-buffaloes or a total number of 446 draft animals, while the area cultivated (in 1928-29) was about 511 acres. The number of draft animals, at the outset, appears to be too large for the area. This is the peculiarity of Konkan agriculture where farm work is concentrated during a short period and, therefore, cultivators have to maintain a larger number of draft animals than in any other part of the presidency. Since there is very little or no double cropping, the burden of draft animals has to be carried without getting any work from them for more than nine or ten months in the year.

Out of the total area held, 391 acres and 20·25 gunthas were uncultivable waste and 606 acres and 30·25 gunthas were fallow.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held		No. of land holders	Average area per holder
A.	g.		A. g.
1,509	7	346	4 14·47

The average area of the proprietary holding including the uncultivable waste and fallow comes only to 4 acres and 14·47 gunthas, whereas

the average of cultivated area per holder comes to only 1 acre and 1·1 gunthas.

TABLE III—AVERAGE SIZE OF THE CULTIVATING HOLDING

Area cultivated		No. of cultivators	Average area per cultivator	
A.	g.		A.	g.
510	36·50	497	1	1·1

It will be noticed that both the average proprietary and cultivating holdings are very small. This, read with the small area of only 7·48 gunthas per capita, shows how great the pressure of population is on land in the tract.

Table IV shows the range of proprietary holdings in the village.

TABLE IV—SIZE AND DISTRIBUTION OF THE PROPRIETARY HOLDINGS

Size of holding Acres		No. of holdings	Per cent
Total....		346	100·00
Below 5.....		276	79·77
5 to 10.....		26	7·51
10 to 20.....		26	7·51
20 to 30.....		10	2·89
30 to 40.....		3	0·87
40 to 50.....		4	1·16
50 to 75.....		0	0·0
75 to 100.....		0	0·0
Above 100.....		1	0·29

Since 79·77 per cent of the holdings are below 5 acres, it is worth while discussing the distribution of holdings below 5 acres.

TABLE IV (a)—SIZE AND DISTRIBUTION OF THE PROPRIETARY HOLDINGS BELOW 5 ACRES

Size of holding		No. of holdings	Per cent
Total ..		276	100·00
Below 20 gunthas		173	62·68
20 gunthas to one acre		36	13·05
1 to 2 acres		30	10·87
2 to 3 ..		13	4·71
3 to 4 ..		14	5·07
4 to 5 ..		10	3·62

The table reveals the extent to which the sub-division of holdings has gone. Of the 276 holdings below 5 acres, 173 or 62·68 per cent are 20 gunthas and less. It is obvious, therefore, why cultivators cannot make a living on the land.

The wide difference between the cultivable and the cultivated areas is due to the larger proportion of light *varkas* land which grows only hill-millet for four or five years and has then to be allowed to remain fallow for three to five years. Thus only less than half of the cultivable area remains under crops every year. Twenty-six per cent of the total area is uncultivable waste, growing only poor scrub grass.

The smallness of the holdings and the dependence upon short-season cropping leave the farming community, in this part of the country, without work for long periods in the year and many people, therefore, have to supplement their earnings by finding work in Bombay or in the cities and ports of the district or by engaging themselves in gathering fuel or grass for selling in the neighbouring cities. Economic condition of the people, in general and of the actual cultivators in particular, is very poor.

At the time of this enquiry about one-sixth of the total area of the village belonged to absentee landowners. There were 497 cultivators—pure tenants and owner cultivators—working their own land plus some land rented from others. The cultivated area per farmer averaged to only 1 acre and 1·1 gunthas on which the tiller of the soil can hardly be expected to make even a poor living.

Shirgaon is a *dhara* village and the landholders are known as *dharekaris*. The *dharekari* of Ratnagiri District has the same rights as are enjoyed by the occupant in the *rayatwari* tract of the Bombay Presidency. There were 346 *dharekaris*, out of whom 30 did not cultivate any land themselves. In the Ratnagiri and Kolaba Collectorates most of the land is held by *khots* whose position is similar to that of the Bengal *zamindars* without the Permanent Settlement. A very large proportion of the land in these two districts is cultivated by tenants who do not possess any land, and, hence a tenant farmer was selected for this study.

Table V gives the area and percentage of the *kharif*, *rabi* and perennial crops together with the area and percentage of the individual crops of the village, in the year 1928-29.

The net cultivated area in the village was 510 acres and 36·5 gunthas, of which 33 acres and 21·75 gunthas were double cropped. The gross cropped area in the village was, therefore, 544 acres and 18·25 gunthas.

Kharif crops occupy by far the largest area i.e. 71·7 per cent of the gross cropped area; *rabi* crops occupy only 6·16 per cent, while the acreage under twelve-months crops and fruit trees is 22·14 per cent.

The chief crop of the village is rice; next comes mango which is a money crop and is exported to Bombay.

Paddy is taken after paddy, in rice lands, year after year. On *varkas* land first crop taken is *nagli*; after this *vari*, *harik* or *barag*, and then *niger* follow in succession. The land is then left fallow for about four years before it is opened again for *nagli* and succeeding crops.

Of the *varkas* crops *naghi* alone is manured, generally with fish manure.

It may be noted that only some of the best low-lying lands, which retain moisture for a longer period, grow *rabi* crops. In 1928-29, only 33 acres and 21.75 gunthas were under *rabi* crops. Seventy per cent of this was under hot weather rice and *kulthi* and the remaining under *kadva*, *chavali*, *pavta* and other minor crops.

TABLE V—CROPS OF THE VILLAGE

Crop	Area				Per cent	
	A.	g.	A.	g.		
Total....	544	18.25	644	18.25	100.00	100.00
<i>Kharif</i> crops.....			390	15		71.70
Rice	320	29.75			58.92	
<i>Naghi</i>	52	33.75			9.70	
<i>Vari</i> and <i>barag</i>	4	12.00			0.79	
<i>Harik</i>	2	21.00			0.46	
<i>Tur</i>	0	5.00			0.02	
<i>Udid</i>	1	32.50			0.33	
<i>Til</i>	6	15.00			1.17	
Groundnut	0	26.00			0.13	
<i>Tag</i>	1	0			0.18	
<i>Rabi</i> crops			33	21.75		6.16
Hot weather rice	12	30.00			2.35	
<i>Kulthi</i>	10	3.75			1.86	
<i>Kadva</i>	3	16.00			0.63	
<i>Chavali</i>	2	28.00			0.50	
Knolkhol	0	10.00			0.05	
<i>Pavta</i>	2	10.00			0.42	
Chillies	1	8.00			0.23	
Brinjals	0	36.00			0.12	
Perennial and twelve months crops			120	21.5		22.14
Mango	104	35.75			19.26	
Cocconut	7	39.00			1.47	
Betel-nut	6	7.75			1.14	
Banana	1	11.00			0.23	
Sugarcane	0	8.00			0.04	

The soil of the village is derived from laterite rock which covers most of the district. Broadly speaking three kinds of soils, differing in character, due to their situation, are found in the village as in other village lying on the sea-coast of the district—(1) *mala*, (2) *kuryat* and (3) *varkas* (1) *Mala* land.—The low-lying fleshy loams, situated along the banks of nallas and rivers and suitable for growing late varieties of rice are known as *mala* lands. Owing to their situation they receive an abundant supply of water from the high-lying lands. Such lands retain sufficient moisture even in the *rabi* season. The bunds between the separate fields are small and are not sown with pulses as in the Maval. Such lands are transplanted

with the seedlings of late varieties of rice in the rainy season. After taking rice, some of these more suitable lands are sown with pulses or vegetables in the *rabi* season when there is sufficient moisture. Seedlings of rice are raised on *rabbed* seed-bed. *Rabbing* is done in the hot season with cowdung, dried jungle-wood branches, leaves and grass. Such material is arranged in layers on land intended for *rabbing*, and the whole is covered with fine dry earth. Fire is then set from the leeward side and the material is allowed to burn slowly. The *rabbed* material is worked in the soil and the area is sown with paddy seed, at the rate of about 6 lbs. per guntha of seed-bed as soon as monsoon sets in. About 8 gunthas of seed-bed is required to plant one acre of field. Under suitable rainfall condition seedlings become ready for transplanting within about 20 to 25 days, from the time of sowing the seed. The field where the seedlings are to be transplanted is ploughed 6 to 8 times early in the rainy season with a light 2-bullock plough. The land is further puddled in the rains and transplanted with seedlings from the seed-bed. (2) *Kuryat* lands.—The comparatively thinner lands on higher level at the foot of hills, suitable for growing early varieties of rice, are known as *kuryat*. Such soils are not very fertile and can grow only coarse and early varieties of rice. Like the *mala* lands, *kuryat* lands are also terraced into small plots. They are less clayey and being very porous require more frequent rains. A break of four or five days immediately tells on the crops. The lands are ploughed about 10 times after rains set in. The soil is puddled and sown broadcast with *rahu* (sprouted paddy) at the rate of about 80 lbs. per acre. Usually at the time of puddling, farmyard manure, at the rate of 5 to 10 cart-loads per acre, is given to the field. In *rabi* season *kuryat* lands cannot grow any crop. Both *mala* and *kuryat* lands grow rice after rice every year in *kharif* season. (3) *Varkas* land.—The third type of soil lying on the slopes of hills is known as *varkas* land. *Varkas* lands are shallow and poor in nature and are only suitable for growing hill-milletts such as *nachani*, *vari*, *barag* etc. As described under the crops of the village such lands remain under cultivation for four to five years and are allowed to remain fallow for three to five years, during which time they are allowed to grow grass and shrubs. After the fallow period the scrub growth is cut and burnt on the spot. The land is then ploughed or hand-dug and put to *naghi* in the first year, and then to other crops as described.

Smallness of holdings, concentration of rainfall during a short season and paucity of *rabi* crops conspire to concentrate all farm work during a few months. Cultivators, therefore, cannot employ themselves productively throughout the year in agricultural work and as a result they cannot make decent living.

Climate.—The climate of Shirgaon is healthy. Even in the heat of May maximum temperature rarely goes above 94°F., while the minimum average in January is about 67°F. The average rainfall of the place is about 102 inches and is almost certain and well distributed for *kharif* crops. The south-west monsoon breaks early in June and continues with short breaks till the middle of October.

Table VI (a) gives the average fortnightly distribution of rainfall of fifteen years, from 1914-15 to 1928-29, at the Government Farm, Shirgaon (Ratnagiri).

TABLE VI(a)—FORTNIGHTLY DISTRIBUTION OF RAINFALL
FROM 1914-15 TO 1928-29 (INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						
0.04	0.77	0.01	0.0	0.01	12.03	17.00	10.80	7.31	2.55	1.10	0.04	} 101.63
						Second fortnight						
0.02	0.0	0.0	0.0	1.30	16.40	15.74	9.64	5.44	1.22	0.21	0.0	

One, therefore, sees that though the total amount of rainfall is much more than is required by the *kharif* and *rabi* crops together, its concentration within a narrow period between June and October, combined with the rolling topography and porous nature of soil, restricts the cropping to *kharif* season only. Such of the *kharif* crops as cannot stand much rain cannot be included in the cropping.

THE SEASON, 1928-29

The total amount of rainfall received during the year was 114 inches which was above the average of the last fifteen years. The rains started early in the first week of June and continued favourably. The break of rains, for some time at the end of June, delayed the transplanting operations. The heavy showers in the month of August, while rice crop was flowering, interfered with pollination. Again the heavy rains in the middle of September caused some damage to crops that were being harvested or were ready for harvest. The crop estimate of *kharif* season was 10 annas.

The fortnightly distribution of rainfall is shown in Table VI (b).

TABLE VI (b)—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1928
(INCHES)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						
0.0	0.0	0.0	0.0	0.0	19.78	18.75	3.77	1.31	2.66	0.38	0.0	} 114.09
						Second fortnight						
0.0	0.0	0.0	0.0	0.0	11.38	22.70	23.69	6.11	3.56	0.0	0.0	

THE FARMER

The farmer under study was a tenant farmer owning no land of his own. He had taken on lease $9\frac{1}{4}$ acres of land scattered in six different places, plot No. 6 being $2\frac{1}{2}$ miles away from his hut. The terms of renting for the different plots are as follows :—

TERMS OF RENTING

Plot No.	Class of land	Area	Terms of renting
1	<i>Mala</i>	0 20	Two-fifths of the gross produce of paddy and half of the straw to be paid to the owner of land as rent.
2	Do.	0 10	Do.
3	Do.	0 12	Half of the gross outturn of paddy to be paid as rent.
4	<i>Kuryat</i>	1 8	Eighteen <i>maunds</i> of paddy to be paid as rent. (<i>Maund</i> = 64 lbs.).
5	<i>Varkas</i>	5 0	Rs. 10 cash and 50 bundles of hay to be paid as rent.
6	Do.	2 0	Thirty $\frac{1}{2}$ bundles of dry loppings of tree and 45 bundles of hay to be given as rent.

The farmer had been cultivating plot Nos. 3 and 4 for the past 20 years and had his little hut and cattle-shed on the land. Plot Nos. 1 and 2 were with him for five years, plot No. 5 for four years and plot No. 6 for two years. Of the $9\frac{1}{4}$ acres, 2 acres and 33.5 gunthas were under crop (see table No. X).

(a) *Human labour*.—The farm family consisted of seven members as given below :—

(1) The farmer	50 years.
(2) Farmer's brother	45 "
(3) Farmer's second brother	32 "
(4) Farmer's mother	65 "
(5) Farmer's wife	25 "
(6) Wife of the farmer's first brother	35 "
(7) The daughter of the farmer's first brother ..	10 "

There were thus six adult persons in the family. Since the mother of the farmer was old and the brother's daughter too young, there were three working men and two working women in the family. The family put in 373.5 man-days, and 222.5 woman-days on the farm, and 106 man-days and 26 woman-days as wage earners. It may be said that out of the available man labour 35 per cent could be utilized on the farm and 10 per cent as day-labour. Thirty per cent of the woman labour was

used on the farm and 4 per cent as day-labour. Only at the time of harvesting rice, the family had to engage 10 woman units.

The farm was too small for the size of the family and they had to supplement their farm income by doing outside work. The following table gives the number of days the family worked for others and the wages they obtained.

TABLE SHOWING THE WAGES EARNED FROM OUTSIDE WORK
BY THE MEMBERS OF THE FAMILY

No.	Family member	No. of days	Wages obtained			Remarks
			Rs.	a.	p.	
	Total....	132	59	5	0	
1	Farmer	26	12	12	0	In addition to wages he got liquor on two days.
2	Farmer's first brother.....	67	34	6	0	
3	Farmer's second brother	13	6	8	0	
4	Farmer's mother	2	....			She got only food for her two days' work.
5	Farmer's wife	5	1	3	0	The total wages include one <i>seer</i> of broken rice.
6	Wife of the farmer's first brother	10	2	4	0	The total wages include eight lbs. of broken rice.
7	The daughter of the farmer's first brother	9	2	4	0	

(b) *Bullock labour.*—As shown in the inventory the farmer owned three bullocks. For a cultivated area of 2 acres and 33·5 gunthas this number ordinarily looks to be too large. In the Konkan, however, a cultivator requires more bullock labour during a short season, while he has no work for bullocks during the remaining period. Even on a small farm there is plenty of work in the months of June and July. As a result the Konkan cultivator has to maintain comparatively larger number of bullocks. The cultivated area of the farmer was too large for two, but too small for four bullocks. Hence the farmer had to hire one bullock for 32 days to make two teams. It is interesting to note that between his three bullocks the farmer could get only 82 work units during the year, which means that he could utilize only 7·48 per cent of the bullock labour in course of the year though he had to hire bullock labour from others for some days. Bullock work in the Konkan is light, and it is more a question of securing a number than strength and cultivators, therefore, keep scrub cattle which are left to pick up their food in the off season.

The closing and opening inventories of the property of the farmer for the year 1928-29 are given in table IX.

TABLE IX—INVENTORY OF THE PROPERTY

1928				1929				Remarks
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		
		Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.	
<i>Assets</i>				<i>Assets</i>				
1. Real estate				1. Real estate				
(A) Land	<i>Nil.</i>			(A) Land	<i>Nil.</i>			
(B) Buildings				(B) Buildings				Required repairs.
(a) Farm hut	1	75 0 0		(a) Farm hut	1	50 0 0		
(b) Cattle-shed.	1	40 0 0		(b) Cattle-shed.	1	85 0 0		
Total real estate			115 0 0	Total real estate			85 0 0	
2. Livestock				2. Livestock				
(a) Bullocks	3	60 0 0		(a) Bullocks	3	51 0 0		
(b) Cow	1	25 0 0		(b) Cow	1	25 0 0		The cow was in milk.
(c) Calves	2	15 0 0		(c) Calves	2	20 0 0		
(d) Hen	1	1 0 0		(d) Hen	1	1 0 0		
Total livestock			101 0 0	Total livestock			97 0 0	
3. Implements tools etc.				3. Implements, tools etc.				
(a) Wooden plough	1	10 0 0		(a) Wooden plough	1	10 0 0		
(b) <i>Kudali</i>	1	0 12 0		(b) <i>Kudali</i>	1	0 12 0		
(c) <i>Fauada</i>	1	0 12 0		(c) <i>Fauada</i>	1	0 12 0		
(d) Sickles	5	3 0 0		(d) Sickles	5	3 0 0		
(e) <i>Koyatas</i>	2	2 0 0		(e) <i>Koyatas</i>	2	2 0 0		
(f) Crowbar	1	1 8 0		(f) Crowbar	1	1 8 0		
Total implements and tools			18 0 0	Total implements and tools			18 0 0	The implements and tools were repaired by the farmer in his spare time.

SHIRGAON

855

TABLE IX—INVENTORY OF THE PROPERTY—concl'd.

1928				1929				Remarks
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		
		Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.	
4. Farm produce and supplies on hand				4. Farm produce and supplies on hand				
(a) Paddy	4 maunds ..	15 0 0		(a) Paddy	10 maunds ..	22 8 0		
(b) Nachani	8 payalis ..	3 0 0		(b) Nachani	1 maund ..	4 0 0		
(c) Rice straw	8 bundles ..	2 0 0		(c) Rice straw	50 bundles ..	12 8 0		
(d) Hay .....	.....	.....		(d) Hay	60 bundles ..	10 0 0		
Total farm produce and supplies on hand....			20 0 0	Total farm produce and supplies on hand....			49 0 0	
<i>Total assets</i>			254 0 0	<i>Total assets</i>			249 0 0	
<i>Liabilities</i>				<i>Liabilities</i>				
1. Debt incurred from local <i>savkars</i> at 1 pice per rupee per month or 18½ per cent per annum.....		260 0 0		1. Debt incurred from local <i>savkars</i> at 1 pice per rupee per month or 18½ per cent per annum.....		235 0 0		During the year under study the farmer paid Rs. 25 towards principal and Rs. 12 towards interest on loan.
2. Amount owed to village shopkeeper		4 0 0		2. Miscellaneous amounts owed to others		10 0 0		
3. Miscellaneous amounts owed to others		15 0 0		3. Interest to be paid		36 12 0		
<i>Total liabilities</i>			279 0 0	<i>Total liabilities</i>			281 12 0	
<i>Net worth of the farm</i>			-25 0 0	<i>Net worth of the farm</i>			-32 12 0	

SUMMARY

Net worth at the beginning of the study	Rs. a. p.	-25 0 0
Do. close do.		-32 12 0
<i>Loss in net worth during the year</i>		7 12 0

The farmer was a landless tenant and had no real estate of his own, except one thatched cottage and a cattle-shed. At the beginning of the year, his liabilities were more than his assets by Rs. 25, at the end of the year the liabilities increased to Rs. 32-12-0.

Nature of holding, lands, cropping and treatment of the different fields are given in table X.

TABLE X—CROP, CROPPING AND THEIR TREATMENT

Plot No.	Area	Nature of land	Previous year i.e. 1927-28		Year under study (i.e. 1928-29)	
			Crop	Treatment	Crop	Treatment
	A. g.					
1	0 20	<i>Mala</i>	Rice	The field was not manured.	Rice	As in the previous year.
2	0 10	Do.	Do.	Do.	Do.	Do.
3	0 12	Do.	Rice in <i>kharif</i> and <i>kulhi</i> in <i>rabi</i> season.	Do.	Do.	Do.
4	1 8	<i>Kuryat</i>	Rice	Manured with 200 baskets of cattle dung.	Do.	Do.
5	0 4·5	<i>Varkas</i>	Fallow	No treatment of any kind.	<i>Nagli</i>	Two <i>maunds</i> of fishmanure was given.
	0 4	Do.	Do.	Do.	<i>Barag</i> ..	No manure was given.
	4 31·5	Do.	Do.	Do.	Fallow ..	Do.
6	0 13	Do.	Do.	Do.	<i>Nagli</i> ..	Do.
	0 2	Do.	Do.	Do.	<i>Barag</i> ..	Do.
	1 25	Do.	Do.	Do.	Fallow ..	Do.
	9 10					

Thus out of the leased land of $9\frac{1}{4}$ acres, only 2 acres and 33·5 gunthas were under crop in the year under study, while the remaining area was fallow. Of the cultivated area of 2 acres and 33·5 gunthas, $2\frac{1}{4}$ acres (or fully 79 per cent) were under rice; *nachni* occupied about 16 per cent and *barag* 5 per cent.

COSTS AND RECEIPTS

Abstract of expenditure.—In the following statement is given the abstract of expenditure for the farm.

TABLE IX—INVENTORY OF THE PROPERTY—concl.

1928				1929				Remarks
Item	Quantity or number	Approximate value		Item	Quantity or number	Approximate value		
		Rs. s. p.	Rs. s. p.			Rs. s. p.	Rs. s. p.	
4. Farm produce and supplies on hand				4. Farm produce and supplies on hand				During the year under study the farmer paid Rs. 25 towards principal and Rs. 12 towards interest on loan.
(a) Faddy	4 maunds ..	15 0 0		(a) Faddy	10 maunds ..	22 8 0		
(b) Nachani	8 payalis ..	3 0 0		(b) Nachani	1 maund ..	4 0 0		
(c) Rice straw	8 bundles ..	2 0 0		(c) Rice straw	50 bundles ..	12 8 0		
(d) Hay .....	.....	.....		(d) Hay	60 bundles ..	10 0 0	
Total farm produce and supplies on hand....			20 0 0	Total farm produce and supplies on hand....			49 0 0	
Total assets			254 0 0	Total assets			249 0 0	
Liabilities				Liabilities				
1. Debt incurred from local savkars at 1 pice per rupee per month or 18½ per cent per annum.....		260 0 0		1. Debt incurred from local savkars at 1 pice per rupee per month or 18½ per cent per annum.....		235 0 0		
2. Amount owed to village shopkeeper		4 0 0		2. Miscellaneous amounts owed to others.....		10 0 0		
3. Miscellaneous amounts owed to others.....		15 0 0		3. Interest to be paid		38 12 0		
Total liabilities			279 0 0	Total liabilities ..			281 12 0	
Net worth of the farm....			-25 0 0	Net worth of the farm ..			-32 12 0	

SUMMARY

Net worth at the beginning of the study	Rs. s. p.
Do. close do.	-25 0 0
	-32 12 0

		Rs. a. p.	Rs. a. p.
5. Bullock labour cost (excluding interest):			
(a) Depreciation			
	Rs.		
Opening inventory	60		
Closing inventory	51		
	—	9 0 0	
(b) Death allowance on three bullocks at 10 per cent on Rs. 60		6 0 0	
(c) Charges on account of housing at Rs. 3 per bullock per year		9 0 0	
(d) Feed and fodder			
Fodder			
Fodder worth Rs. 45-10-8 was consumed by three bullocks, one cow and two calves, or by five units. Share of the bullocks therefore comes to Rs. 27-6-4.			
Grazing			
The three bullocks got grazing for 5 months from August to December			
	Rs.		
	15-0-0		
Concentrates	Rs. 9-0-0		
	—	51 6 4	
Against the above costs (a) to (d) must be set off Rs. 6-12-0 the value of nine cartloads of farmyard manure obtained from the bullocks during the year, therefore			
		—6 12 0	
			68 10 4
6. Rent of land:			
	A. g.		
Field No. 1	0 20	27 1 10	
Field No. 2	0 10	12 3 7	
Field No. 3	0 12	18 9 0	
Field No. 4	1 8	49 8 0	
Field No. 5	5 0	18 5 4	
Field No. 6	2 0	10 0 0	
			135 11 9
<i>Total, out-of-pocket expenses....</i>			249 8 4

Family Labour Income.—Table XI gives the family labour income, i.e., the remuneration obtained by the farmer and his family for the work done by them for the different crops.

ABSTRACT OF COSTS

Item of expenditure	Cost for the total holding (viz. 9.25 acres)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses :		
(a) Manures	7 10 0	
(b) Seeds.....	21 12 3	
(c) Outside labour.....	15 12 0	
(d) Depreciation on implements and tools .....	.....
(e) Bullock labour cost (excluding interest) ..	68 10 4	
(f) Rent of land	135 11 9	
		249 8 4
II. Interest on working capital :		
(a) Interest on the money required for current agricultural operations	2 11 4	
(b) Interest on the value of implements and tools	2 2 6	
(c) Interest on the value of bullocks and on feed and fodder fed to them	17 3 2	
		22 1 0
<i>Total cost of production (excluding wages of family labour)</i>		271 9 4

***DETAILS OF OUT-OF-POCKET EXPENSES**

1. Manures :		
	Rs. a. p.	Rs. a. p.
(a) 200 baskets of farmyard manure at $\frac{1}{4}$ anna per basket given to rice crop (plot No. 4)	6 4 0	
(b) Two <i>maunds</i> of fish manure given for 4.5 gunthas of <i>nachni</i> crop (plot No. 5)	1 6 0	
		7 10 0
2. Seeds :		
(a) Paddy 332 lbs. at 16 lbs. per rupee	20 12 0	
(b) <i>Udid</i> 4 $\frac{1}{2}$ lbs. at 17 lbs. per rupee	0 4 3	
(c) <i>Nachni</i> 7 $\frac{1}{2}$ lbs. at 20 lbs. per rupee	0 6 0	
(d) <i>Barag</i> 7 $\frac{1}{2}$ lbs. at 20 lbs. per rupee	0 6 0	
		21 12 3
3. Outside labour :		
(a) Outside bullock labour engaged on daily wages for (puddling) the rice fields; 32 bullock units at 6 annas each	12 0 0	
(b) Outside woman labour engaged on daily wages for harvesting paddy; 10 woman units at 4 annas plus one meal worth two annas per unit	3 12 0	
		15 12 0
4. Depreciation on implements and tools :		
The implements and tools were repaired by the farmer in his spare time and there was no depreciation in their value		

Gross receipts obtained were Rs. 374-5-2, while the out-of-pocket expenses came to Rs. 249-8-4, thus leaving Rs. 124-12-10 as farm business income obtained from the farm by the farmer and his family, on account of the wages for the work done by them on the farm and the interest on the working capital. The family besides earned Rs. 59-5-0 during eight months (see page 854). The total income of the family, therefore, comes to Rs. 184-1-10. The farm business income, made up of the family labour income and interest on working capital as shown below, tallies with the figure arrived at in table XII :—

	Rs. a. p.
Family labour income	102 11 10
Interest on working capital	22 1 0
	124 12 10

Tables XII and XIII are based on the abstract of expenditure already given and the detailed statements of receipts and costs of the different plots appearing on pages 863 to 879.

ANALYSIS

The farm family did most of the work and had only to employ 10 woman units at the time of rice harvest. The farm with only 2 acres and 33·5 gunthas under crop was too small for three working men, two women and three bullocks. The family put in 373·5 man units and 222·5 woman units or in all about 485 work units and made a family labour income of Rs. 102-11-10 or about 41 pies per work unit. Since the family in their spare time worked for others, their wages amounted to Rs. 59-5-0 in course of the year. The total labour income on the farm and outside came to Rs. 162-0-10.

Table XIII gives the labour units required and the yields of the main produce obtained per acre, with remarks on the crops. All labour, including home labour, hired labour and even bullock labour, is included under the heading "labour units" to get some idea of the returns for the human and bullock labour expended on the farm. (One man unit equal to one bullock unit equal to two woman units.)

The table is worked out from the information abstracted from the statements of costs and receipts.

Though rainfall was sufficient the break at the end of June delayed the transplanting of rice till about the second week of July. The heavy showers of August, when the crops were flowering, did some damage, causing disturbances in fertilization. The costs of cultivation of all the plots were rather high. One of the causes of the high cost was the scattered nature of the holding and the long distances between plots. Plot Nos. 5 and 6 were very small. Since it was raining at the time of harvesting, the harvested crops had to be moved very often for airing and drying.

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production (excluding wages for family labour)			Family labour income
			Out-of-pocket expenses	Interest on working capital	Total	
1	2	3	4	5	6	7
Total....	A. g. 9 10	Rs. a. p. 374 5 2	Rs. a. p. 249 8 4	Rs. a. p. 22 1 0	Rs. a. p. 271 9 4	Rs. a. p. 102 11 10
Rice	2 10	301 5 7	218 3 9	21 11 2	239 14 11	61 6 8
Nachni	0 17.5	} 63 12 4	} 31 4 7	} 0 5 10	} 31 10 5	} 32 1 11
Barag	0 6					
Grass from fallow land	6 16.5					
Miscellaneous ..	..	*9 4 3	..	..	..	9 3 3

*Out of this Rs. 6-11-3 represent the value of 155 lbs. of *saral* (inferior paddy obtained by rethrasing) and Rs. 2-8-0 the value of 30 bundles of dry loppings of trees obtained from the different fields.

Column 4.—Out-of-pocket expenses include cost of manure, seed, hired labour, depreciation on deadstock and work animals, rent of leased land and feed and fodder fed to work animals, the death allowance of bullocks and the cost of their housing. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on feed and fodder for the work animals and on the current agricultural operations. Fixed capital includes implements and work animals. *Column 7* shows the wages earned by the farmer and his family members.

The value of the gross produce obtained from the farm was Rs. 374-5-2 and the cost of production (excluding the unpaid wages of the farm family) came to Rs. 271-9-4, thus leaving Rs. 102-11-10 as family labour income.

Farm Business Income.—In addition to the family labour income arrived in table XI, the farmer could save the interest on the working capital which has been debited to the costs. Table XII gives the farm business income or the aggregate income of the farmer, that is the value of the produce, minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area	Value of produce	Out-of-pocket expenses	Farm business income
Total....	A. g. 9 10	Rs. a. p. 374 5 2	Rs. a. p. 249 8 4	Rs. a. p. 124 12 10
Rice	2 10	301 5 7	} 249 8 4	} 124 12 10
Nachni	0 17.5	} 63 12 4		
Barag	0 6.0			
Grass from fallow land	6 16.5			
Miscellaneous (as shown in table XI) .....	..	9 3 3		

STATEMENT No. 180

PADDY—0·5 acre in 1928-29

PLOT No. (1)

Previous crop—Paddy, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bull-locks ²	Men	Women	Bull-locks			For the plot	Per acre	
1. Preparatory tillage									Rs. a. p.	Rs. a. p.	
(a) Ploughing	11·0	..	14	..	..	8	33·00	66·0	8 0 0	6 0 0	Six ploughings were given. A plough required one man and two bullocks. Eight bullocks are charged at 6 annas each.
(b) Harrowing	1·0	..	2	..	..	..	3·00	6·0	....	....	Three harrowings were given. A harrow required one man and two bullocks.
(c) Repairing of bunds	2·0	4·0	..	..	..	..	4·00	8·0	....	....
(d) <i>Rab</i> -making	5·0	2·0	..	..	..	..	6·00	12·0	....	....	Material collected for <i>rab</i> -making was got free.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	7 8 0	15 0 0	For 20 gunthas 120 lbs. of paddy seed at 16 lbs. per rupee.
(b) Growing of seedlings	1·0	1·5	1	..	..	..	2·75	5·5	....	....
(c) Transplanting	4·0	12·0	..	..	..	..	10·00	20·0	....	....
3. After-care and tillage											
(a) Weeding	1·5	2·5	..	..	..	..	2·75	5·5	....	....

SHIRGAON

863

TABLE XIII—YIELDS OF MAIN PRODUCE AND LABOUR REQUIREMENTS PER ACRE

Plot No.	Produce per acre		Labour units per acre	Remarks
	Name of produce	Quantity		
1	Paddy in <i>mala</i> land .	Lbs. 2,496·0	165·0	} The yield of rice was very good. The produce per unit also was not bad, both in <i>mala</i> and <i>kuryat</i> lands. Each unit in <i>kuryat</i> produced more paddy than in <i>mala</i> land, but the variety was coarse.
2	Do.	2,176·0	155·0	
3	Paddy in <i>kuryat</i> land.	2,880·0	185·8	
4	Paddy and <i>udid</i> (in <i>kuryat</i> land).	2,026·6	} 137·75	} The yield of <i>nachni</i> in plot No. 5 was more than in plot No. 6 because of fish manure given to plot No. 5. It may be noted that the units spent on crops only are taken here, leaving out the labour spent on cutting grass. Since <i>bands</i> of plot No. 6 were repaired more labour was required. The plots were very small and so proportionately more labour was required.
5	<i>Nachni</i>	16·6			} 321·0
6	<i>Barag</i>	666·66	} 411·0	
	<i>Nachni</i>	200·00		
	<i>Barag</i>	492·30		
	<i>Barag</i>	200·00		

Rice.—There were three plots of *mala* land and one of *kuryat* under rice. The total area of the three *mala* plots was 1 acre and 2 gunthas and the yield obtained was 2,656 lbs. of paddy (i.e. 2,529 lbs. per acre) and 2,890 lbs. of straw (or 2,752 lbs. per acre). The *kuryat* land which measured 1 acre and 8 gunthas produced 2,026·6 lbs. of paddy, 16·6 lbs. *udid* and 3,004 lbs. of straw per acre. The yields obtained were normal.

Other plots.—The farmer had 17·5 gunthas under *nagli*, 4 gunthas of which received fish manure. The outturn of manured plot was good. There were 6 gunthas under *barag*. Yield of *barag* was poor.

It will be seen that, on the whole, the farmer could make very low income. The principal reason was that he did not possess any land of his own and so had to pay a large part of the produce as rent. Rent of land formed the main item and claimed over 54 per cent of the total out-of-pocket expenses. Secondly the cultivated area of 2 acres and 33·5 gunthas was too little for the size of the family.

Due to the peculiar conditions in the Ratnagiri District it is difficult to organize farm work with a view to operating larger farms. Farm work is concentrated during a short period, while for the rest of the year farm families and their bullocks have no work. This will be clear from the fact that though the farmer had four working members and three bullocks he had to employ 10 woman units and as many as 32 bullocks units from outside. Only about 35 per cent of the family labour and 7·48 per cent of the home bullock labour could be used on the farm.

As compared to the Desh tract, the produce per unit of employed labour (in crop production) is certainly greater, but the difficulty is to utilize such labour on a large scale. This is due to the concentration of rain during a short period and consequent dependence on one crop system. To add to this, most of the cultivators are landless tenants and have to pay heavy rents. As a result, though crops are sure the actual tiller of the land has to lead a poor life.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 0.5 acre	Per acre	For 0.5 acre	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Paddy.....	1,248	2,496	53 10 0	107 4 0	Sold at Rs. 55 per <i>khandi</i> of 1,280 lbs.
Straw	1,360	2,720	11 5 4	22 10 8	Valued at 120 lbs. per rupee.
Total..	.....	.....	64 15 4	129 14 8	

(c) Summary

1	2	3	4	5 (i.e.col. 2-3)	6 (i.e.col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 0.5 acre.	64 15 4	58 1 5	(b) 4 11 10	+6 13 11	+11 9 9
Per acre.....	129 14 8	116 2 10	9 7 8	+13 11 10	+23 3 6

SHIRGAON

STATEMENT No. 180—concl'd.

864

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting, thrashing and preparing for market	12·0	14·0	..	..	4	..	21·00	42·0	Rs. a. p. 1 8 0	Rs. a. p. 3 0 0	Four women charged at 4 annas a day. Each woman got one meal in addition to daily wages, the average cost of which was 2 annas per meal. The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
5. Charges for bullock labour.	..	..	..	..	..	..	..	..	17 12 10	35 9 8	
Rs. a. p. (a) Feeds, fodder, depreciation, etc. ... 14 3 9 (b) Interest on the value of bullocks, feeds and fodder 3 9 1											
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0 7 3	0 14 6	The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots; since implements were repaired there was no depreciation.
(a) Interest .. Rs. 0 7 3											
7. Interest on fixed capital (i.e., wages for hired labour and cost of seeds) ...	..	..	..	..	..	..	..	..	0 11 6	1 7 0	Charged at 12 per cent per annum.
8. Rent of land .....	..	..	..	..	..	..	..	..	27 1 10	54 3 8	The land was taken on rent on a condition of giving 2/5th of paddy produce and half of the straw as rent of land.
Total	37·5	36·0	17	..	4	8	82·5	165·0	58 1 5	116 2 10	

¹Family labour not charged. ²Home bullock labour charged under item 5.

FARM STUDIES

MO-1 Q 84-55a

4. Harvesting, thrashing and preparing for market.....	4.5	6.5	..	..	..	..	7.75	31.0	....	....
5. Charges for bullock labour..	..	..	..	..	..	..	..	..	8 14 5	35 9 8	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
Rs. a. p.											
(a) Feeds, fodder, depreciation, etc.	7	1	11								
(b) Interest on the value of bullocks, feeds and fodder.....	1	12	6								
6. Charges for implements and tools .....	..	..	..	..	..	..	..	..	0 3 7	0 14 4	The total annual charges are distributed over different plots in proportion to the bullock labour used on the plots; since implements were repaired there was no depreciation.
(a) Interest..	Rs.	0	3	7							
7. Interest on fluid capital (i.e., wages of hired labour and price of seeds).....	..	..	..	..	..	..	..	..	0 5 0	1 4 0	Charged at 12 per cent per annum.
8. Rent of land.....	..	..	..	..	..	..	..	..	12 3 7	48 14 4	The land was taken on lease. Two-fifth of paddy and half of the straw were paid as rent.
Total.....	17.5	17.5	8.5	..	..	4	38.75	155.0	26 14 7	107 10 4	

¹Family labour not charged. ²Home bullock labour charged under item 4

SHIRGAON

867

STATEMENT No. 181

866

PADDY—0·25 acre in 1928-29

PLOT No. (2)

Previous crop—Paddy, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bul- locks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing (puddling) ..	5·5	..	7·0	..	..	4	16·5	66·0	1 8 0	6 0 0	Six ploughings were given. A plough required one man and two bullocks. Four bullocks were paid at 6 annas each per day.
(b) Harrowing	0·5	..	1·0	..	..	..	1·5	6·0	....	....	Three harrowings were given. A harrow required one man and two bullocks.
(c) Repairing bunds	1·0	2·0	..	..	..	..	2·0	8·0	....	....
(d) Rab-making	2·5	1·0	..	..	..	..	3·0	12·0	....	....	Collecting <i>rab</i> and <i>rabbing</i> the seed-bed.
2. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	3 12 0	15 0 0	For 10 gunthas 60 lbs. of paddy at 16 lbs. per rupee.
(b) Growing seedlings.....	0·5	1·0	0·5	..	..	..	1·5	6·0	....	....
(c) Transplanting.....	2·0	6·0	..	..	..	..	5·0	20·0	....	....
3. After-care and tillage											
(a) Weeding.....	1·0	1·0	..	..	..	..	1·5	6·0	....	....	One weeding was given.

FARM STUDIES

STATEMENT No. 182

PADDY—12 gunthas in 1928-29

PLOT No. (3)

Previous crop—Paddy, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bul- locks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing.....	7·0	..	9·0	5	21·0	70·0	1 14 0	6 4 0	Six ploughings were given. A plough required one man and two bullocks. Five bullocks were paid at 6 annas each. Three harrowings were given. A harrow required one man and two bullocks.
(b) Harrowing.....	0·5	..	1·0	..	..	..	1·5	5·0	....	....
(c) Repairing bunds.....	1·25	2·50	..	..	..	..	2·5	8·8	....	....
(d) Rab-making.....	3·0	1·0	..	..	..	..	3·5	11·7	....	....
2. Seeds and sowing											
(a) Seeds.....	4 8 0	15 0 0	Material for rab was got free. For 12 gunthas 72 lbs. of paddy at 16 lbs. per rupee.
(b) Growing seedlings.....	0·5	1·5	0·5	..	..	..	1·75	5·8	....	....
(c) Transplanting.....	2·5	7·5	..	..	..	..	6·25	20·8	....	....
3. After-care and tillage											
(a) Weeding.....	1·0	2·0	..	..	..	..	2·0	6·7	....	....

SHIRGAON

869

STATEMENT No. 181—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 0.25 acre	Per acre	For 0.25 acre	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Paddy.....	544	2,176	23 6 0	93 8 0	Sold at Rs. 55 per <i>khandi</i> of 1,280 lbs.
Straw.....	690	2,760	5 12 0	23 0 0	Valued at 120 lbs. per rupee.
Total..	..	..	29 2 0	116 8 0	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 0.25 acre	29 2 0	26 14 7	(b) 2 5 1	+ 2 3 5	+ 4 8 6
Per acre	116 8 0	107 10 4	9 4 4	+ 8 13 8	+ 18 2 0

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 12 gunthas	Per acre	For 12 gunthas	Per acre	
	Lbs.	Lbs.	Rs. a. p.	Rs. a. p.	
Paddy....	864	2,880	37 2 0	123 12 0	Sold at Rs. 55 per <i>khundi</i> of 1,280 lbs.
Straw.....	840	2,800	7 0 0	23 5 4	Valued at 120 lbs. per rupee.
Grass (24 bundles)	....	....	5 2 0	17 1 4	Sold at different rates.
Total....	....	....	49 4 0	164 2 8	

(c) Summary

1	2	3	4	5 (i.e.col. 2-3)	6 (i.e.col.5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For twelve gunthas.	49 4 0	36 9 5	(b) 2 13 9	+12 10 7	+15 8 4
Per acre....	164 2 8	121 15 4	9 8 6	+42 3 4	+51 11 10

SHIRGAON

STATEMENT No. 182—concl'd.

870

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks			For the plot	Per acre	
4. Harvesting, thrashing and preparing for market.....	7.5	8.5	..	..	..	..	11.75	39.2	Rs. a. p.	Rs. a. p.	
5. Cutting grass	5.0	1.0	..	..	..	..	5.5	18.3	....	....	Cutting grass from the bunds.
6. Charges for bullock labour Rs. a. p.	..	..	..	..	..	..	..	..	10 15 11	36 10 4	The total annual cost, on account of draft bullocks, is distributed on different plots in proportion to the units used on them.
(a) Feeds, fodder, depreciation, etc.....	8 12 8										
(b) Interest on the value of bullocks, feeds and fodder	2 3 3										
7. Charges for implements and tools.....	..	..	..	..	..	..	..	..	0 4 4	0 14 5	The total annual charges are distributed over different plots, in proportion to the bullock labour used on them; since implements were repaired there was no depreciation.
(a) Interest Rs.	0 4 4										
8. Interest on fixed capital (i.e., wages of hired labour and value of seeds).....	..	..	..	..	..	..	..	..	0 6 2	1 4 7	Charged at 12 per cent per annum.
9. Rent of land.....	..	..	..	..	..	..	..	..	18 9 0	51 14 0	The land was taken on lease on share system. Half the produce of paddy paid as rent (no straw was given).
Total.....	28.25	24.0	10.5	..	..	5	55.75	185.8	86 9 5	121 15 4	

¹Family labour not charged.

²Home bullock labour charged under item 6.

FARM STUDIES

3. Seeds and sowing													
(a) Seeds .....	..	..	..	..	..	..	..	..	5 4 3	4 6 2			For 1 acre and 8 gunthas 80 lbs. of paddy at 10 lbs. per rupee were required plus annas four and pies three worth <i>udid</i> seeds.
(b) Transplanting	2.5	3.0	..	..	..	..	4.0	3.33	....	....	
4. Harvesting, thrashing and preparing for market	19.0	25.0	..	..	6	..	34.5	28.8	2 4 0	1 14 0			Six women were paid at annas four each plus one meal, the average cost of which came to two annas per meal.
5. Cutting grass from bunds..	20.0	9.5	..	..	..	..	24.75	20.68	....	....	
6. Charges for bullock labour.	..	..	..	..	..	..	..	..	47 1 9	39 4 2			The total annual cost on account of draft bullocks is distributed on different plots in proportion to the units used on them.
	Rs. a. p.												
(a) Feeds, fodder, depreciation, etc.....	37	10	9										
(b) Interest on the value of bullocks, feeds and fodder	9	7	0										
7. Charges for implements and tools .....	..	..	..	..	..	..	..	..	1 2 11	0 15 9			The total anna distributed by were given to the proportion <i>thas</i> . used on the were repaired.
8. Interest on fluid capital (i.e., wages of hired labour, cost of manure and seeds) .....	..	..	..	..	..	..	..	..	1 2 7	0 15 6			Charged at <i>thas</i> of <i>nachani</i> seeds at lbs. of <i>barag</i> at 20 lbs. for 4 gunthas.
9. Rent of land .....	..	..	..	..	..	..	..	..	49 8 0	41 4 0			The land. Eighteen <i>ma</i> rent.
Total.....	75.5	58.5	45	..	6	15	165.25	137.75	118 5 6	98 9 11			the <i>nachani</i> and

¹Family labour not charged.

²Home bullock labour charged under item 6.

S GAON

cleaning

875

STATEMENT No. 183

872

PADDY—1 acre 8 gunthas in 1928-29

PLOT No. (4)

Previous crop—Paddy, 1927-28

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Units per acre	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bul- locks			For the plot	Per acre	
1. Preparatory tillage											
(a) Ploughing	27·0	..	89	..	..	15	81·0	67·5	5 10 0	4 11 0	Seven ploughings were given. A plough required one man and two bullocks. Fifteen bullocks paid at annas six each.
(b) Harrowing	3·0	..	6	..	..	..	9·0	7·5	....	....	Three harrowings were given. A harrow required one man and two bullocks.
(c) Repairing bunds	1·0	6·0	..	..	..	..	4·0	3·33	....	....
2. Manure and manuring											
(a) Manure .....	..	..	..	..	..	..	..	..	6 4 0	5 3 4	For 1 acre and 8 gunthas 200 baskets of cattle dung at half an anna per basket.
(b) Manuring	3·0	10·0	..	..	..	..	8·0	6·66	....	....

FARM STUDIES

A. g.
 NACHANI— 0 4·5
 BARAG— 0 4
 GRASS (FALLOW)— 4 31·5 } in 1928-29
 5 0 }

STATEMENT No. 184

PLOT No. (5)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks		For the plot	Rs. a. p.	
1. Preparatory tillage										
(a) Cleaning the fallow land	85·5	2	..	..	..	..	86·5	....	....	Cutting and burning shrubs and cleaning land.
2. Manure and manuring										
(a) Manure .....	..	..	..	..	..	..	---	1 6 0	....	Two maunds of fish manure were given to the nachani area of 4·5 gunthas.
(b) Manuring	2·0	2	..	..	..	..	3·0	....	....
3. Seeds and sowing										
(a) Seeds .....	..	..	..	..	..	..	---	0 6 0	....	For 4·5 gunthas 2·5 lbs. of nachani seeds at 20 lbs. per rupee and 5 lbs. of barag at 20 lbs. per rupee were required for 4 gunthas.
(b) Sowing	0·75	..	..	..	..	..	0·75	....	....
4. After-care and tillage										
(a) Weeding	7·0	7	..	..	..	..	10·5	....	....	One weeding was given to the nachani and barag.

SHIRGAON

875

STATEMENT No. 183—concl.

872

(b) Yield and Value

NAME OF PRODUCT	Quantity		Value		REMARKS
	For 1 acre and 8 gunthas	Per acre	For 1 acre and 8 gunthas	Per acre	
	lbs.	lbs.	Rs. a. p.	Rs. a. p.	
Paddy ..	2,432	2,026.6	104 8 0	87 1 4	Sold at Rs. 55 per <i>khandi</i> of 1,280 lbs.
Straw (103 bundles).	3,605	3,004.2	30 0 8	25 0 7	Valued at 120 lbs. per rupee.
Udid	20	16.6	1 5 4	1 1 9	Valued at 15 lbs. per rupee.
Grass (99 bundles).	..	..	22 2 3	18 7 2	Sold at different rates.
Total ..	..	..	158 0 3	131 10 10	

(c) Summary

1	2	3	4	(i.e. col. 5 & 6)	
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	REMARKS	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 1 acre and 8 gunthas	158 0 3	118 5 6	(b) 11 12 6	+39 10 9	+51 7 3
Per acre ..	131 10 10	98 9 11	9 13 1	+33 0 11	+42 14 0

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	<i>Nachani</i> 4.5 gunthas. <i>Barag</i> 4.0 gunthas. Grass 4 acres 31.5 gunthas	<i>Nachani</i> 4.5 gunthas. <i>Barag</i> 4.0 gunthas. Grass 4 acres 31.5 gunthas	
<i>Nachani</i>	lbs. 35	Rs. a. p. 1 12 0	Valued at 20 lbs. per rupee.
<i>Barag</i>	20	1 0 0	Valued at 20 lbs. per rupee.
Straw and <i>bhoos</i> ..	90	0 9 0	Valued at 160 lbs. per rupee.
Grass $\frac{1}{2}$ (108 bundles) ..	....	18 0 0	Valued at 6 bundles per rupee.
Grazing ....	....	17 13 8	Estimated value.
Total ..	....	39 2 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
For five acres (Misc. crops) ..	Rs. a. p. 39 2 8	Rs. a. p. 21 4 0	Rs. a. p. (b)0 5 5	Rs. a. p. +17 14 8	Rs. a. p. +18 4 1

STATEMENT No. 184—concl'd.

876

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks		For the plot		
								Rs. a. p.		
5. Harvesting, thrashing and preparing crops for market	7·5	18	1	..	..	..	17·5	....	
6. Cutting grass	22·0	10	..	..	..	..	27·0	....		For cutting grass from fallow land.
7. Charges for bullock labour .....	..	..	..	..	..	..	..	1 0 7		The total annual cost, on account of draft bullocks, is distributed on the different plots in proportion to the units used on them.
(a) Feeds, depreciation, fodder, etc.								0 13 8		
(b) Interest on the value of bullocks, feeds and fodder								0 3 4		
8. Charges for implements and tools .....	..	..	..	..	..	..	....	0 0 5		The total annual charges are distributed over the different plots in proportion to the bullock labour used on them; since implements were repaired there was no depreciation.
(a) Interest								Rs. 0 0 5		
9. Interest on fluid capital (i.e., wages for hired labour and cost of manure and seeds) .....	..	..	..	..	..	..	....	0 1 8		Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	....	18 5 4		The land was taken on lease. The rent given for 5 acres was Rs. 10 in cash and 50 bundles of hay valued at 6 bundles per rupee.
Total	74·75	39	1	..	..	..	95·25	21 4 0		

¹Family labour not charged.²Home bullock labour charged under item 7.

FARM STUDIES

(b) Yield and Value

NAME OF PRODUCT	Quantity	Value	REMARKS
	<i>Nachani</i> 13 gunthas.	<i>Nachani</i> 13 gunthas.	
	<i>Barag</i> 2 gunthas.	<i>Barag</i> 2 gunthas.	
	Grass 1 acre	Grass 1 acre	
	25 gunthas	25 gunthas	
<i>Nachani</i>	Lbs. 120	Rs. a. p. 6 0 0	Valued at 20 lbs. per rupee.
<i>Barag</i>	10	0 8 0	Valued at 20 lbs. per rupee.
Straw and <i>bhoos</i> ..	180	1 2 0	Valued at 160 lbs per rupee.
Grass (59 bundles).		9 13 4	Valued at 6 bundles per rupee.
Grazing.....	....	7 2 4	Estimated value of grazing obtained by the farmer's cattle.
Total.....	....	24 9 8	

(c) Summary

1	2	3	4	5 (i.e. col. 2-3)	6 (i.e. col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For two acres (Misc. crops) ..	24 9 8	10 6 5	(b) 0 0 5	+14 3 3	+14 3 8

STATEMENT No. 185

878

NACHANI—	A. g.	} in 1928-29
BARAG—	0 13	
FALLOW UNDER GRASS—	0 2	
	1 25	
	2 0	

PLOT No. (6)

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks		For the plot	
1. Preparatory tillage								Rs. a. p.	
(a) Cleaning the fallow land	36	20·0	..	..	..	..	46·0	....	This was required for cleaning the land, cutting shrubs and burning them, etc.
(b) Putting bunds	60	..	..	..	..	..	60·0	....
2. Seeds and sowing									
(a) Seeds .....	..	..	..	..	..	..	....	0 6 0	For 13 gunthas 5 lbs. of <i>nachani</i> seed at 20 lbs. and 2·5 lbs. <i>barag</i> seed at 20 lbs. per rupee for 2 gunthas of land.
(b) Sowing	1	1·0	..	..	..	..	1·5	....
3. After-care and tillage									
(a) Filling gaps	2	1·5	..	..	..	..	2·75	....
(b) Weeding	12	9·0	..	..	..	..	16·5	....	One weeding was given to the <i>nachani</i> plot.
4. Harvesting, thrashing and preparing for the market	18	19·0	..	..	..	..	27·5	....
5. Cutting grass	11	2·0	..	..	..	..	12·0	....	Labour required for cutting grass from the fallow land.
6. Interest on fluid capital (i.e., value of seeds) .....	..	..	..	..	..	..	....	0 0 5	Charged at 12 per cent per annum.
7. Rent of land .....	..	..	..	..	..	..	....	10 0 0	The land was taken on lease on share system. The rent given for two acres was 45 bundles of hay valued at Rs. 7-8-0 and 30 bundles of dry loppings of trees valued at Rs. 2-8-0.
Total	140	52·5	..	..	..	..	166·25	10 6 5	

¹Family labour not charged.

FARM STUDIES

TABLE III—AVERAGE CULTIVATING HOLDING

Area cultivated in 1928-29	No. of cultivators	Average area per cultivator
A. g.		A. g.
9,329 9	387	24 4.26

It may be noted that though the average cultivated area per *khatedar* is only 14 acres and 2.8 gunthas, that for each cultivator comes to 24 acres and 4.26 gunthas. Though the average unit of cultivation is thus improved, the fact that the tiller has to take land on rent increases his dependence on the landowner.

TABLE IV—SIZE AND DISTRIBUTION OF THE PROPRIETARY HOLDINGS

Size of holding Acres		No. of holdings.	Per cent
Total		663	100.000
Below	5	237	35.74
5 to	10	143	21.57
10 to	20	136	20.53
20 to	30	54	8.14
30 to	40	43	6.49
40 to	50	22	3.32
50 to	75	21	3.16
75 to	100	4	0.60
Above	100	3	0.45

There are 180 wells in the village, and in the years of satisfactory rainfall, when water supply is good, most of them are used for irrigation purposes. During the year under study, 426 acres and 32 gunthas were under well irrigation. Besides, an area of 319 acres and 19 gunthas was served by canal irrigation. Thus the total area under irrigation was 746 acres and 11 gunthas. Due to the irrigation facilities farm work is well spread and labour is more fully utilized. About 60 cultivators supplement their agricultural earnings by plying carts. Some of the people go out temporarily for work to Bombay or Nasik.

Table V gives the areas and percentages of the *khariif*, *rabi* and perennial crops in the years 1928-29 and 1929-30. *Bajri*, as main crop, contains *tur*, *hulga*, and *mug*, and wheat as main crop contains safflower and mustard.

OZAR, PART (A), 1928-29

The village of Ozar is in the Niphad *Taluka* of the Nasik District, about 12 miles to the north of Nasik City on the Bombay-Agra road. It is also connected by a good road with Kherwadi railway station of the G. I. P., about four miles to the east.

There is a great variation in the soils, and practically all types of soils, varying from thin light to deep black, are found in the village.

Bajri and wheat are the important crops. *Bajri* is sown with a mixture of *matki*, *tur* and *kulthi*. Wheat has a mixture of safflower and mustard. Country groundnut, onions, chillies, sugarcane, lucerne, potatoes, vegetables and fruit are the important irrigated crops. Some of the lands having irrigation facilities are double cropped in good years.

The village being under the command of the Kadwa, the Ozar-Tambat and the Banganga canals, facilities for irrigation are ample. The transport facilities to Nasik city and Kherwadi railway station are fully availed of. Onion, garlic, grapes and vegetables from this tract are consigned to Bombay.

TABLE I—LAND AND POPULATION OF THE VILLAGE

Area held		Area cultivated in 1928-29		Population according to 1931 census	Cultivated area per capita	
A.	g.	A.	g.		A.	g.
9,974	20	9,329	9	4,307	2	6·6

Of the total area held, 965 acres and 17 gunthas were uncultivated, while 320 acres and 6 gunthas were double cropped. The net cultivated area per head in 1928-29 came to 2 acres and 6·6 gunthas.

According to the last quinquennial cattle census there were 792 bullocks, which means one pair for about 23·5 acres of cultivated area. Since there is a good deal of irrigation, this incidence per pair is too high. There were 448 milch cattle which must provide a fair amount of milk to the village. The total number of cattle was 1,636 and of sheep 756, which ought to supply a fair amount of manure to fertilize village lands.

TABLE II—AVERAGE PROPRIETARY HOLDING

Area held		No. of <i>khatedars</i>	Area per <i>khatedar</i>	
Total area	Cultivated area		Total area	Cultivated area
A.	g.		A.	g.
9,974	20	663	15	1·78
			14	2·8

The position of the village as regards distribution of rainfall and water supply is satisfactory. Crops are well distributed between *kharif* and *rabi* seasons, about 53 per cent of the area is under *kharif* crops, *bajri* claiming the largest area, while 45 per cent is under *rabi* crops in which wheat occupies an important place. Some of the *rabi* crops like onion and some area of wheat are irrigated. The percentage of irrigated to total cultivated area comes to about 8 per cent of which 1.3 per cent is generally under perennial crops especially sugarcane, lucerne and fruits.

The chief irrigated crops of the village are onions, garlic, sugarcane, country groundnut, vegetables, grape and other fruit.

No definite system of rotation is followed. In the case of *jirayat* crops, where rainfall and its distribution necessitate changes in the cropping plans, it is not possible to follow a fixed plan of rotation. In heavy soils wheat is rotated with *bajri*, though occasionally wheat may be taken for two years and then may follow *bajri*. In the lighter class of soils *bajri* is rotated with *hulga* or groundnut. When monsoon opens with sufficient rainfall, area under *bajri* increases. When *kharif* rains are scanty, lands intended for *bajri* have to be put under wheat or gram. When rains are more favourable, *bajri* is followed by gram in the *rabi* season. *Jirayat* lands are ploughed only occasionally, that is once in three or four years. When such lands are to be ploughed, they receive two ploughings with a two-bullock plough in winter, as a preparation for *rabi* crops. *Jirayat* lands are scarcely manured. In the *bagayat* lands, unirrigated *bajri* in the *kharif* season is followed by onions under irrigation in the *rabi* season. When rainfall is insufficient even *bajri* crop may get one or two waterings. *Bagayat* lands are ploughed every year twice or thrice and generally manured with farmyard manure. A cultivator who has got some *bagayat* land rarely manures his dry crops. He uses all the available manure for irrigated crops.

Ozar being situated in the Maval, the climate is very healthy. In winter, at times, it is a bit too cold. In summer it does not get very hot and temperature is kept down by cool breezes. The average rainfall, at the nearest raingauge, is about 20 inches and is chiefly received from the south-west monsoon.

THE SEASON, 1928-29

In the year 1928 rainfall recorded at Ozar was 21.45 inches which was about 1.5 inches above the average. The fortnightly distribution of rainfall at Ozar in 1928 is given in table VI.

TABLE V—CROPS OF THE VILLAGE

1928-29					1929-30									
Crops	Area		Per cent		Crops	Area		Per cent						
	A. g.	A. g.	100'00	100'00		A. g.	A. g.	100'00	100'00					
Total....	9,329	9	9,329	9	100'00	100'00	Total....	9,278	28	9,278	28	100'00	100'00	
<i>Kharij crops</i>			4,966	32			53'36	<i>Kharij crops</i>			4,913	28		52'93
<i>Bajri</i>	3,839	17			41'15			<i>Bajri</i>	3,946	01			42'52	
<i>Hulga</i>	338	16			3'68			<i>Hulga</i>	337	09			3'66	
Groundnut	172	17			1'85			Groundnut	173	36			1'86	
<i>Tur</i>	414	16			4'44			<i>Tur</i>	311	33			3'36	
Vegetables	73	26			0'78			Vegetables	40	13			0'41	
Others	128	20			1'51			Others	104	11			1'12	
<i>Rabi crops</i>			4,242	05			45'34	<i>Rabi crops</i>			4,246	32		45'75
Wheat	3,818	15			40'82			Wheat	3,251	37			35'04	
Gram	186	11			1'99			Gram	415	11			4'48	
<i>Shalu</i>	13	16			0'14			<i>Shalu</i>	17	15			0'18	
Onions	200	28			2'15			Onions	177	32			1'89	
Others	23	15			0'24			Linseed	310	39			3'36	
Perennial crops			120	12			1'30	Others	73	18			0'80	
Sugarcane	42	15			0'46			Perennial crops			118	13		1'32
Lucerne	25	19			0'28			Sugarcane	53	02			0'56	
Fruit	52	18			0'56			Lucerne	19	19			0'28	
								Fruit	45	32			0'48	

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total	Percentage of the labour employed to labour available.
Farmer	12	25	24	23	18	25	18	22	16	24	20	25	252	69·04
	31	30	31	31	30	31	30	31	31	28	31	30	365	
Farmer's wife	0	6	11	28	20	28	16	19	7	22	14	14	185	50·6
	31	30	31	31	30	31	30	31	31	28	31	30	365	

Note.—The denominators denote available units, while the numerators show the units employed.

It can be said that the farmer and his wife contributed sufficient work, especially the wife as she did so while she had to cook for the family and look after the young children.

(b) *Bullock work.*—The farmer had four work bullocks. The monthly distribution of their work, from May 1928 to April 1929, is given in table VIII. For the reasons given above, the total bullock work will not tally with the total home bullock work utilized on the crops, grown in 1928-29.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total	Percentage of units employed to units available.
Four bullocks	24	50	82	92	58	112	78	10	14	26	54	64	659	45·13
	124	120	124	124	120	124	120	124	124	112	124	120	1,460	

Note.—The denominators denote available bullocks units, while the numerators show the units employed.

Roughly speaking only about 45 per cent of the available bullock units were utilized. It, therefore, seems that with four bullocks, one can manage larger area. The farmer could have easily managed about 30 acres of net cropped area in this tract.

The opening and closing inventories of the property of the farmer for two years 1928-29 and 1929-30 are given in table IX.

It may be noted that there was a fall of Rs. 243-5-8 in the first year and a rise of Rs. 220-14-0 in the second year, or a fall of Rs. 22-7-8 in the course of two years. The farmer lost two bullocks in 1929-30, otherwise there would have been rise in the second year also. In the year 1928-29 crops were poor, the total receipts being only Rs. 595-4-3. The crop estimate by the Revenue Authorities was six *annas*. In the year 1929-30 the crop estimate was ten *annas* and the total receipts of the farmer were Rs. 702-5-0.

Nature of the holding, lands, crops and cropping.—The nature of lands, crops and cropping and the treatment of different fields, operated in 1927-28 and 1928-29, are given in table X.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL AT OZAR IN 1928 (Inches)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						
0·0	0·0	0·0	0·0	0·0	1·75	3·53	0·50	0·0	1·0	0·30	0·45	} 21·45
						Second fortnight						
0·0	0·0	0·0	0·0	0·0	0·49	2·45	3·96	6·64	0·56	0·0	0·0	

It will be seen that most of the rainfall was received in four months—June to September. The regular monsoon broke in the second week of June. Rains, however, were not sufficient for sowing. *Bajri* was sown in the month of July, though sowing operations were hampered for want of clear weather. Continuous rain for 13 days in the month of July was not favourable for the growth of crops. The heavy showers of September were found useful for sowing *rabi* crops, though the rain interfered with the pollination of *bajri* which was in flowering stage. *Rabi* sowing was completed by the end of the 1st week of October. There was no appreciable rain from the 15th of October. The soil moisture being sufficient all the *rabi* crops thrived well till the end of December. The very cold winter and especially the frost of February adversely affected the *rabi* crops which, in the early stages, had given promise of good harvest. The season, despite good rainfall, was not satisfactory. The crop estimate for *kharif* season was six *annas*.

THE FARMER

The farmer owned 18 acres and 32·3 gunthas of land and had taken 12 acres and 30 gunthas on rent. Out of the cultivating holding of 31 acres and 22·3 gunthas, 5 acres and 10·3 gunthas were uncultivable, while 26·25 gunthas were twice cropped. The gross cropped area was thus 26 acres and 38·25 gunthas and net cropped area 26 acres and 12 gunthas.

(a) *Human labour*.—The farm family consisted of seven members as given below :—

(1) The farmer	36 years.
(2) Farmer's wife	32 "
(3) Their eldest son	16 "
(4) Their second son	13 "
(5) Their third son	10 "
(6) Their fourth son	7 "
(7) Their daughter	5 "

The eldest son was going to school, the second and third tended cattle. The remaining children were too young for any work. The distribution of the work of the two adult members (the farmer and his wife), from May 1928 to April 1929, is given below. Since farm work of consecutive years overlap the total units shown in table VII will not tally with the units absorbed by the year's crops. Besides miscellaneous labour which cannot be debited to any crop is included in the table.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total	Percentage of the labour employed to labour available.
Farmer	$\frac{12}{31}$	$\frac{25}{30}$	$\frac{24}{31}$	$\frac{23}{31}$	$\frac{18}{30}$	$\frac{25}{31}$	$\frac{18}{30}$	$\frac{22}{31}$	$\frac{16}{31}$	$\frac{24}{28}$	$\frac{20}{31}$	$\frac{25}{30}$	$\frac{252}{365}$	69·04
Farmer's wife	$\frac{0}{31}$	$\frac{6}{30}$	$\frac{11}{31}$	$\frac{28}{31}$	$\frac{20}{30}$	$\frac{28}{31}$	$\frac{16}{30}$	$\frac{19}{31}$	$\frac{7}{31}$	$\frac{22}{28}$	$\frac{14}{31}$	$\frac{14}{30}$	$\frac{185}{365}$	50·6

Note.—The denominators denote available units, while the numerators show the units employed.

It can be said that the farmer and his wife contributed sufficient work, especially the wife as she did so while she had to cook for the family and look after the young children.

(b) *Bullock work.*—The farmer had four work bullocks. The monthly distribution of their work, from May 1928 to April 1929, is given in table VIII. For the reasons given above, the total bullock work will not tally with the total home bullock work utilized on the crops, grown in 1928-29.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total	Percentage of units employed to units available.
Four bullocks	$\frac{24}{124}$	$\frac{50}{120}$	$\frac{82}{124}$	$\frac{92}{124}$	$\frac{58}{120}$	$\frac{112}{124}$	$\frac{78}{120}$	$\frac{10}{124}$	$\frac{14}{124}$	$\frac{26}{112}$	$\frac{54}{124}$	$\frac{64}{120}$	$\frac{659}{1,460}$	45·18

Note.—The denominators denote available bullocks units, while the numerators show the units employed.

Roughly speaking only about 45 per cent of the available bullock units were utilized. It, therefore, seems that with four bullocks, one can manage larger area. The farmer could have easily managed about 30 acres of net cropped area in this tract.

The opening and closing inventories of the property of the farmer for two years 1928-29 and 1929-30 are given in table IX.

It may be noted that there was a fall of Rs. 243-5-8 in the first year and a rise of Rs. 220-14-0 in the second year, or a fall of Rs. 22-7-8 in the course of two years. The farmer lost two bullocks in 1929-30, otherwise there would have been rise in the second year also. In the year 1928-29 crops were poor, the total receipts being only Rs. 595-4-3. The crop estimate by the Revenue Authorities was six *annas*. In the year 1929-30 the crop estimate was ten *annas* and the total receipts of the farmer were Rs. 702-5-0.

Nature of the holding, lands, crops and cropping.—The nature of lands, crops and cropping and the treatment of different fields, operated in 1927-28 and 1928-29, are given in table X.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL AT OZAR IN 1928 (Inches)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
						First fortnight						
0·0	0·0	0·0	0·0	0·0	1·75	3·53	0·50	0·0	1·0	0·30	0·45	} 21·45
						Second fortnight						
0·0	0·0	0·0	0·0	0·0	0·49	2·45	3·96	6·64	0·56	0·0	0·0	

It will be seen that most of the rainfall was received in four months—June to September. The regular monsoon broke in the second week of June. Rains, however, were not sufficient for sowing. *Bajri* was sown in the month of July, though sowing operations were hampered for want of clear weather. Continuous rain for 13 days in the month of July was not favourable for the growth of crops. The heavy showers of September were found useful for sowing *rabi* crops, though the rain interfered with the pollination of *bajri* which was in flowering stage. *Rabi* sowing was completed by the end of the 1st week of October. There was no appreciable rain from the 15th of October. The soil moisture being sufficient all the *rabi* crops thrived well till the end of December. The very cold winter and especially the frost of February adversely affected the *rabi* crops which, in the early stages, had given promise of good harvest. The season, despite good rainfall, was not satisfactory. The crop estimate for *kharif* season was six *annas*.

THE FARMER

The farmer owned 18 acres and 32·3 gunthas of land and had taken 12 acres and 30 gunthas on rent. Out of the cultivating holding of 31 acres and 22·3 gunthas, 5 acres and 10·3 gunthas were uncultivable, while 26·25 gunthas were twice cropped. The gross cropped area was thus 26 acres and 38·25 gunthas and net cropped area 26 acres and 12 gunthas.

(a) *Human labour*.—The farm family consisted of seven members as given below :—

(1) The farmer	36 years.
(2) Farmer's wife	32 "
(3) Their eldest son	16 "
(4) Their second son	13 "
(5) Their third son	10 "
(6) Their fourth son	7 "
(7) Their daughter	5 "

The eldest son was going to school, the second and third tended cattle. The remaining children were too young for any work. The distribution of the work of the two adult members (the farmer and his wife), from May 1928 to April 1929, is given below. Since farm work of consecutive years overlap the total units shown in table VII will not tally with the units absorbed by the year's crops. Besides miscellaneous labour which cannot be debited to any crop is included in the table.

Livestock								
(a) Bullocks	4	175 0 0	Milking	4	160 0 0	5	200 0 0	Two bullocks from old stock (value Rs. 75) died and three bullocks purchased (Rs. 150).
(b) Cows	2	55 0 0		1	30 0 0	1	25 0 0	One cow died.
(c) Buffalo	1	80 0 0		1	40 0 0	1	80 0 0	The buffalo was dry.
(d) Calf (young)	1	5 0 0		....	....	1	15 0 0	
(e) Buffalo Calf	....	....		....	....	1	5 0 0	
Total livestock	....	315 0 0			230 0 0		325 0 0	
3. Implements and tools								
(a) Plough	1	9 0 0		1	8 0 0	2	14 8 0	One plough purchased.
(b) Seed-drill	2	8 0 0		2	7 0 0	2	14 8 0	One drill purchased.
(c) <i>Moghad</i>	2	7 0 0		2	7 0 0	2	6 0 0	
(d) Harrows	2	6 0 0		2	5 0 0	2	9 8 0	One harrow purchased.
(e) Hoes	2	4 0 0		2	4 0 0	2	3 0 0	
(f) Cart	1	60 0 0		1	45 0 0	1	40 0 0	
(g) <i>Mhote</i>	1	10 0 0		1	4 0 0	1	6 0 0	
(h) Accessories of <i>mhote</i>	....	10 0 0			10 0 0		9 0 0	
(i) Ropes, etc.	....	7 0 0			1 0 0		4 14 0	Purchased at the beginning of the year.
(j) Hand tools	....	40 10 0			4 0 0		....
Total implements and tools	....	125 10 0			95 0 0		107 6 0	

TABLE IX—INVENTORY OF THE PROPERTY

1928				1929			1930		
Item	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
	A. g.	Rs. a. p.		A. g.	Rs. a. p.		A. g.	Rs. a. p.	
Assets									
1. Real Estate									
(A) Land									
(a) Field No. 1	0 27	575 0 0	Garden land.	0 27	575 0 0		0 27	575 0 0	
(b) Field No. 2	0 38	640 0 0	Do	0 38	640 0 0		0 38	640 0 0	
(c) Field No. 3	4 01	176 4 0	Dry land.	4 01	176 4 0		4 01	176 4 0	
(d) Field No. 4	3 35	135 0 0	Do.	3 35	135 0 0		3 35	135 0 0	
(e) Field No. 5	4 01	105 12 0	Do.	4 01	105 12 0		4 01	105 12 0	
(f) Field No. 6	5 10·3	90 0 0	Grazing land.	5 10·3	90 0 0		5 10·3	90 0 0	
	18 32·3	1,722 0 0		18 32·3	1,722 0 0		18 32·3	1,722 0 0	
(B) Buildings									
(a) Farmer's house	1	400 0 0		1	400 0 0		1	400 0 0	
Total real estate		2,122 0 0			2,122 0 0			2,122 0 0	

5. Cash on hand .....	....	....	....	....	15 0 0	
<i>Total Assets</i> ....	....	2,767 10 0		2,696 12 0	2,941 10 0	
<i>Liabilities.</i>						
(a) Debt incurred from money-lenders .....	....	25 4 0	....	200 0 0	200 0 0	At 12 per cent per annum.
(b) Interest on the above at 12 per cent per annum for 9 months. ....	....	2 4 4	....	....	24 0 0	
<i>Total Liabilities</i> ..	....	27 8 4		200 0 0	224 0 0	
<i>Net worth of the Farm at the beginning of the Year</i> .....	....	2,740 1 8		2,496 12 0	2,717 10 0	

SUMMARY

	Rs. a. p.	Rs. a. p.
Net worth of the farm at the beginning of 1928	2,740 1 8	
Net worth of the farm at the beginning of 1929	2,496 12 0	
<i>Loss in net worth in 1928</i>		243 5 8
Net worth of the farm at the beginning of 1929	2,496 12 0	
Net worth of the farm at the beginning of 1930	2,717 10 0	
<i>Gain in net worth in 1929</i>		220 14 0
<i>Net loss in two years</i>		22 7 8

OZAR (A)

TABLE IX—INVENTORAL OF THE PROPERTY—*concl.*

Item	1928			1929			1930		
	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks	Quantity or number	Approximate value	Remarks
		Rs. a. p.			Rs. a. p.			Rs. a. p.	
4. Farm produce and supplies on hand									
(a) Wheat	960 lbs.	60 0 0		915 lbs. ..	57 4 0		....	....
(b) Bajri	1,536	80 0 0		864 lbs. ..	55 0 0		1,152 lbs. ..	84 0 0	
(c) Gram.....	200	10 0 0		120 ..	7 0 0		....	....
(d) Tur	200	10 0 0		300 ..	12 8 0		291 lbs. ..	14 8 0	
(e) Sarmad	200	8 0 0		800 bundles ..	32 0 0		20,000 lbs. ..	80 0 0	
(f) Dhoo	50 bags.	25 0 0		80 bags ..	40 0 0		200 ..	14 0 0	
(g) F. Y. M.	8 cartloads	12 0 0		20 cartloads..	30 0 0		2 cartloads ..	3 0 0	
(h) Kulid .....	....	....		448 lbs. ..	16 0		400 lbs. ..	17 0 0	
(i) Chillies .....	....	....		....	....		40 lbs. ..	4 0 0	
(j) Groundnut pods.	....	....		....	....		60 lbs. ..	3 12 0	
(k) San seed ....	....	....		....	....		35 lbs. ..	7 0 0	
(l) Tur stalks ....	....	....		....	....		....	10 0 0	
Total farm produce and supplies on hand.....		205 0 0			249 12 0			237 4 0	

							Lucerne.... 6	After bajri (11.75 gunthas) 6 gunthas were put under lucerne and 5.75 gunthas under onions in the same year. Two carts of F. Y. M. were given to each plot.	
							Onions 5.75		
3	4	1	Reddish black light soil ..	Bajri.....	Not manured	Wheat	Not manured	Bajri	Not manured.
4	3	35	Medium black soil—low-lying.	Wheat	Do.	Bajri.....	Do.....	Wheat	Do.
5	4	1	Do.	Bajri	Do.	Wheat	Do.....	Bajri	Do.
6	5	10.3	Medium black	Grass land .....	....	Grass land.....	....	Grass land.....	....
7 (leased land)	12	30	Reddish black light soil cut by small streams.	Bajri	Not manured	Wheat	Not manured	Bajri	Not manured.
	31	22.8							

OZAR (A)

TABLE X—CROP, CROPPING AND THEIR TREATMENT

Field No.	Area	Nature of land	1927-28		1928-29		1929-30	
			Crop	Treatment	Crop	Treatment	Crop	Treatment
1	A. g. 0 27	Black alluvial soil situated on the bank of a big <i>nala</i> .	Gunthas		Gunthas		Gunthas	
			Onions 13·5 Bajri 23·5 27	21·5 gunthas of the land was manured with 8 cartloads of F.Y.M.	San 6·75 Lucerne.... 6·75 Bajri 13·5 27 Onions .. 13·5 (taken after <i>bajri</i> in the same year)	Not manured Manured with 2 cartloads of F. Y. M. Manured in the previous year. Manured with 9 cartloads of F. Y. M.	Lucerne.... 6·75 Lucerne.... 6·75 San 13·5 27 Onions 6·75 Onions 13·5	After grubbing lucerne, onions were taken in the same year. Not manured. Manured with 2 cartloads of F.Y.M. Do.
2	0 38	Deep, black, <i>bagayat</i> land.	Bajri	Only 11·75 gunthas were manured with 5 cartloads of F. Y. M.	Lemons .. 11·75 Bajri 28·5 Mug 2·75 38 Gram 12·75	Manured in the previous year. Not manured. Do. After <i>bajri</i> only 12·75 gunthas of land was put under gram in the same year.	Bajri 11·75 Wheat 12·75 Groundnut . 8 Chillies 2·75 Fallow 2·75 00	Bajri was taken after grubbing lemons. Not manured. Do. Do.

*DETAILS OF OUT-OF-POCKET EXPENSES

	Rs. a. p.	Rs. a. p.
1. Manure :		
(A) Manure, applied in the year—		
(a) Two cartloads of F. Y. M. at Rs. 1-8-0 each applied to lucerne; 70 per cent of the cost charged in the year	2 1 7	
(b) Nine cartloads of F. Y. M. at Rs. 1-8-0 each given to onions; 50 per cent of the cost charged in the year	6 12 0	
(B) Residual manure—		
(a) In the year 1927-28, 8 carts of F. Y. M. were applied costing Rs. 12; 50 per cent of the cost (Rs. 6) used in 1927-28, 35 per cent of it (Rs. 4-3-3) used for <i>kharif</i> crop of 1928-29 and	4 3 3	
Rs 1-2-0 the share of <i>rabi</i> crop (onion) taken on part in 1928-29	1 2 0	
		14 2 10
2. Seeds :		
(a) Lucerne 2·5 lbs.	3 0 0	
(b) San 10·5 lbs.	0 14 0	
(c) Lemon seedlings 60, worth Rs. 7-12-0 .....	.....
(d) <i>Bajri</i> 21 lbs.	1 9 6	
(e) <i>Tur</i> 19 lbs.	1 1 7	
(f) <i>Kulthi</i> 14 lbs.	0 14 0	
(g) <i>Mug</i> ¼ lb.	0 0 3	
(h) Gram 8 lbs.	0 7 0	
(i) Onions 10 lbs.	12 8 0	
(j) Wheat 576 lbs.	43 12 6	
		64 2 10
3. Wages of outside labour :		
(a) 4 men, 148·25 women	46 9 0	
		46 9 0
4. Depreciation on implements and tools :		
Opening inventory	125 10 0	
Closing inventory	95 0 0	
	30 10 0	
Out of Rs. 30-10-0, annas 14 and pies 9 go as capital cost to lemons next year ..	-0 14 9	
		29 11 3
5. Charges for bullocks labour (excluding interest) :		
(a) Depreciation	Rs. a. p.	
Value of 4 bullocks as per opening inventory ..	175 0 0	
Value of 4 bullocks as per closing inventory ..	160 0 0	
	15 0 0	
(b) Death allowance for 4 bullocks at 5 per cent on Rs. 175	8 12 0	
(c) Charges on account of housing at Rs. 4 per bullock per year	16 0 0	
(d) Feed and fodder	Rs. a. p.	
Lucerne	142 0 0	
	51 8 0	
	193 8 0	
Against the above costs (a) to (d) must be set off Rs. 18 the value of 9 cartloads of F.Y.M. Therefore	-18 0 0	
	215 4 0	
Out of Rs. 215-4-0, Rs. 6-8-0 go as capital cost to lemons next year	-6 8 0	
		208 12 0
6. Land assessment and L.F.C. on owned land....		41 0 6
7. Rent of leased land		91 5 9
Total out-of-pocket expenses		495 12 2

What about depreciation of the cows?

The area of 31 acres and 22·3 gunthas held by the farmer was in 7 blocks which were far away from each other. One of these plots was at about 2 miles away from the village. The remaining plots were within a radius of half a mile from the village.

COSTS AND RECEIPTS

Costs of production (except the unpaid labour of the family) with the details of the out-of-pocket expenses are given in the following abstract:—

ABSTRACT OF COSTS

Item of expenditure	Cost for the total cultivated area (viz. 31 acres and 36·80 gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses:		
(a) Manures	14 2 10	
(b) Seeds	64 2 10	
(c) Outside labour.....	46 9 0	
(d) Depreciation on implement and tools.....	29 11 3	
(e) Cost of bullock labour excluding interest on their value and on the value of feeds and fodder	208 12 0	
(f) Land assessment and L. F. C.	41 0 6	
(g) Rent of leased land	91 5 9	
		495 12 2
II. Rent of owned land excluding assessment and L.F.C.	103 13 2	
Rs. 9-6-3 the rent of lemon plot (statement No. 187) being capital cost is not charged		103 13 2
III. Interest on working capital :		
Rs. 2-12-8 being capital cost not included		
(a) Interest on fluid capital required for current agricultural operations.....	7 9 4	
(b) Interest on the value of implements and tools	14 9 11	
(c) Interest on the value of bullocks and of feeds and fodder fed to them.....	40 12 8	
		62 15 11
<i>Total cost of production (excluding wages for family labour)</i>		662 9 3

Table XII gives the farm business income or the aggregate income of the farmer i.e., the value of the produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME

Name of crop	Area		Value of produce		Out-of-pocket expenses		Farm business income	
	A.	g.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.
Total	31	36·8	595	4 3	295	12 2	+99	8 1
<i>Bajri, tur and kulthi</i>	4	32	124	10 9	} 495 12 2	} +99 8 1	} = 595	
<i>Mug</i>	0	2·75	0	6 0				
<i>San</i>	0	6·75	11	2 0				
<i>Wheat</i>	20	32·0	282	4 0				
<i>Gram</i>	0	12·75	7	7 0				
<i>Onions</i>	0	13·5	92	0 0				
<i>Lucerne</i>	0	6·75	57	6 6				
<i>Lemon</i>	0	11·75	0	0 0				
<i>Grass</i>	5	10·3	20	0 0				

The gross receipts obtained as detailed above were Rs. 595-4-3 while the out-of-pocket expenses were Rs. 495-12-2, thus leaving Rs. 99-8-1 as business income. The farm business income, made up of the family labour income, interest on working capital and rent of owned land as shown below, tallies with the figure arrived at in table No. XII.

	Rs.	a.	p.
Family labour income	—	67	5 0
Interest on working capital	+	62	15 11
Rent of owned land	+	103	13 2
		+99	8 1

Tables XI and XII are based on the abstract of expenditure already given and the statement of receipts and costs.

Family Labour Income.—Table XI gives the family labour income i.e. the remuneration obtained by the farmer and his wife for their work on the farm. The figures of cost of production have already been given. The value of the produce is taken from the cost and receipt statements (page 897 to 902).

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production (excluding wages for family labour)				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	31 36·8	595 4 3	495 12 2	62 15 11	103 13 2	662 9 3	—67 5 0
<i>Bajri, tur, kulthi</i>	4 32	124 10 9					
<i>Mug</i>	0 2·75	0 6 0					
<i>San</i>	0 6·75	11 2 0					
<i>Wheat</i>	20 32	282 4 0					
<i>Gram</i>	0 12·75	7 7 0	495 12 2	62 15 11	103 13 2	662 9 3	—67 5 0
<i>Onions</i>	0 13·5	92 0 0					
<i>Lucerne</i>	0 6·75	57 6 6					
<i>Lemon*</i>	0 11·75	0 0 0					
<i>Grass</i>	5 10·3	20 0 0					

Column 4.—Out-of-pocket expenses include, costs of manure, seeds, hired labour, depreciation on deadstock and work animals, value of feeds and fodder consumed by them, the death allowance of bullocks, the cost of their housing, rent of leased land and assessment and L. F. C. on owned land. *Column 5.*—Interest on working capital both fluid as well as fixed capital. Fluid capital includes money spent on feeds and fodder for the work animals and on current agricultural operations. Fix capital includes implements and work animals. *Column 6* denotes the estimated rent of owned land minus the assessment and L. F. C. *Column 8* shows wages earned by the family.

The gross receipts obtained from the farm were Rs. 595-4-3, while the cost of production (excluding the wages for family labour) was as high as Rs. 662-9-3. The farmer and his family could not earn anything for their labour. On the other hand they sustained a loss of Rs. 67-5-0.

Farm Business Income.—The loss of Rs. 67-5-0 shown above does not mean that the farmer was out-of-pocket for this much money, since in the cost of production are included not only the out-of-pocket expenses, but also the interest on working capital and rent of owned land, which were saved.

*Lemon plantation was laid in the year. Costs go as capital cost in the year 1929-30 while there were no receipts in 1928-29.

STATEMENT No. 186

MO-II Q 84-57
 GROSS CROPPED AREA—26 acres
 and 26·5 gunthas } in 1928-29
 AREA UNDER GRASS—5 acres
 and 10·3 gunthas }

(a) Cost of Production

ITEM OF EXPENDITURE	Home labour			Exchange bullock labour ²	Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			
1. Preparatory tillage									Rs. a. p.	
(a) Ploughing.....	67·25	..	231·5	..	..	..	..	298·750	....
(b) Harrowing.....	62·125	..	165·25	..	..	..	..	227·375	....
(c) Making beds.....	3·25	..	..	..	..	..	..	3·25	....
2. Manure and manuring										
(a) Charges for residual manure ..	..	..	..	..	..	..	..	..	5 5 3	Eight cartloads of F.Y.M. at Rs. 1-8-0 per cart were applied in 1927-28. Thirty-five per cent (Rs. 4-3-3) is charged to <i>kharif</i> crop of 1928-29, of the remaining 15 per cent (i.e., Rs. 1-12-0) only Rs. 1-2-0 are charged to <i>rabi</i> crop taken on part of the manured area.
(b) Manure (F. Y. M.) .....	..	..	..	..	..	..	..	..	8 13 7	Two cartloads of F.Y.M. at Rs. 1-8-0 each applied to lucerne; seventy per cent of the cost (Rs. 2-1-7) charged; nine cartloads at Rs. 1-8-0 each given to onions. Fifty per cent of the cost (Rs. 6-12-0) is charged.

OZAR (A)

897

ANALYSIS

The farm family contributed 386·75 man units and 162·25 woman units. Taking two woman units equal to one man unit, it may be said that they supplied 468 work units. The farmer had to employ 4 man units, 154·25 woman units and 8 bullock units on day-wages.

For the 468 labour units the farmer made a negative income of Rs. 67-5-0. He, however, made farm business income of Rs. 99-8-1. The farmer could not maintain the family on this small surplus and had to incur a fresh debt of Rs. 200 at 12 per cent. Though rainfall in the year was above normal, its distribution was unsatisfactory; the heavy showers of September had injurious effects on the *kharif* crops. There was severe cold in February which badly affected wheat-crop.

GENERAL REMARKS ABOUT CROPS

Bajri.—Area under *bajri* was 4 acres and 32 gunthas in two plots; the produce was 864 lbs. *bajri*, 448 lbs. *kulhi*, 300 lbs. *tur*, 3,000 lbs. *sarmad*, and 1,050 lbs. *bhoos*. The grain outturn was poor due to the ill-distribution of rainfall.

Mug.—Area under *mug* was 2·75 gunthas; yield was only 6 lbs.

San.—Area was 6·75 gunthas; part was used as green fodder and part gave 40 lbs. fibre.

Wheat.—Area under wheat in 3 plots was 20 acres and 32 gunthas. The produce was 4,230 lbs. grain and 5,150 lbs. of fodder. Due to February frost outturn was poor.

Gram.—Area under gram in two plots was 12·75 gunthas. The produce was 120 lbs. grain and 50 lbs. *bhoos*. The crop was affected by frost.

Onion.—Area under the crop was 13·5 gunthas which yielded 7,200 lbs.

Lucerne.—Area was 6·75 gunthas which yielded 4,225 lbs.

Lemon.—It was in its first year.

Grass.—The grass land was grazed by the farm cattle.

Costs and receipts of the holding are given in the next statement. Unlike the other studies labour and costs of individual plots are not listed separately in Ozar studies. It was found difficult for the investigator to secure from the farmer fractions of labour units required for some of the operations on small plots. Some plots were as small as 2·75 gunthas. There were over six small plots measuring less than 13 gunthas each.

2/19-48 0 II-OK

7. Charges for bullock labour .....	..	..	..	..	..	..	..	..	249 8 8	
Rs. a. p.										
(a) Feeds, fodder, depreciation, etc....	208	12	0							
(b) Interest on the value of bullocks, feeds and fodder....	40	12	8							
8. Charges for implements and tools..	..	..	..	..	..	..	..	..	44 5 2	
Rs. a. p.										
(a) Depreciation	29	11	8							
(b) Interest	14	9	11							
9. Interest on fluid capital (i.e. wages for hired labour, cost of seeds and manure).....	..	..	..	..	..	..	..	..	7 9 4	Charged at 12 per cent per annum.
10. Rent of land .....	..	..	..	..	..	..	..	..	236 3 5	Rent of owned land was estimated at Rs. 144-13-8 and that of leased land taken on share system came to Rs. 91-5-8.
Total.....	870*0	146*25	634*25	8	4	148*25	..	1,163*5	662 9 3	

¹Family labour not charged.

²Home and exchange bullock labour charged under item 7.

OZAR (A)

668

STATEMENT No. 186—*contd.*

898

ITEM OF EXPENDITURE	Home labour			Exchange bullock labour ³	Labour on dally wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²		Men	Women	Bullocks			
2. Manure and manuring— <i>contd.</i>									Rs. a. p.	
(c) Carting and spreading manure	3·0	3·5	6·0	..	..	..	..	10·75	....
3. Seeds and sowing										
(a) Seeds .....	..	..	..	..	..	..	..	....	64 2 10	Lemons (Rs. 3), <i>san</i> (14 annas), <i>bajri</i> (Rs. 1-9-0), <i>tur</i> (Rs. 1-1-7), <i>kulthi</i> (14 annas), <i>mug</i> (3 pies), gram (7 annas), onions (Rs. 12-8-0) and wheat (Rs. 48-12-6).
(b) Sowing and covering	34·375	20·5	48·75	..	..	24·0	..	105·375	4 8 0	Woman unit at 8 annas each.
4. After-care and tillage										
(a) Weeding	6·0	12·0	..	..	..	41·0	..	32·5	7 11 0	Woman unit at 3 annas each.
5. Irrigation										
(a) Labour	65·75	14·0	117·75	..	..	..	..	190·5	....
6. Harvesting and preparing for market	128·25	96·25	65·0	8	4	83·25	..	295·0	34 0 0	Fifteen women at 3 annas each, 36·25 women and 4 annas each. Four men and thirty-two women paid in kind produce worth Rs. 22-8-0.

FARM STUDIES

STATEMENT No. 187

CAPITAL COST STATEMENT OF LEMON—1928-29

Area—11·75 gunthas

Previous crop—Bajri, 1927-28

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour		REMARKS
	Men ¹	Women ¹	Bul- locks ²	Men	Women	Bullocks		For the whole plot		
								Rs.	a. p.	
1. Preparatory tillage										
(a) Ploughing, crushing clods, harrowing, levelling, making long beds, etc.....	6·0	..	16	..	..	..	22·0	....	
2. Manure and manuring										
(a) Charges for residual manure .....	..	..	..	..	..	..	....	2 10 0		Five carts of F.Y.M. at Rs. 1-8-0 per cart were given to the previous crop. Thirty-five per cent of the cost is charged to this crop for the residue.
3. Seeds and sowing										
(a) Seedlings .....	..	..	..	..	..	..	....	7 12 0		For the whole plot 60 plants were brought.
(b) Planting and making beds	2·0	1·0	2	..	..	..	4·50	....	

OZAR (A)

901

STATEMENT No. 186—concl'd.

900

(b) Yield and Value

NAME OF PRODUCT	Quantity			Value	REMARKS
	Area	Grain	Fodder		
	A. g.	Lbs.	Lbs.	Rs. a. p.	
<i>Bajri</i> , and <i>kulhi</i> mixture	4 32	1,612	4,060	124 10 9	<i>Bajri</i> 864 lbs. (Rs. 54), <i>kulhi</i> , 448 lbs. (Rs. 16), <i>tur</i> 300 lbs. (Rs. 12-8-0), <i>sarmad</i> 3,000 lbs. (Rs. 31-15-9) and <i>bhoos</i> 1,050 lbs. (Rs. 10-8-0).
<i>Mug</i> ..	0 2' 75	6	..	0 6 0	Valued at 16 lbs. per rupee.
<i>San</i> ..	0 0' 75	40 (fibre).	200	11 2 0	Fibre sold at 5 lbs. per rupee.
<i>Wheat</i> ..	20 32	4,280	5,150	282 4 0	<i>Wheat</i> 4,280 lbs. (Rs. 264- 7-0), <i>bhoos</i> 5,150 lbs. (Rs. 17-19-0).
<i>Gram</i> ..	0 12' 75	120	50	7 7 0	<i>Gram</i> 120 lbs. (Rs. 7), <i>bhoos</i> 50 lbs. (Rs. 0-7-0).
<i>Onions</i> ..	0 13' 5	7,200 (bulbs).	..	92 0 0	Sold at Rs. 10 per <i>khandi</i> of 800 lbs. Seedlings sold worth Rs. 2.
<i>Lucerne</i> ..	0 6' 75	..	4,225	57 6 6	Valued at Rs. 1-4-0 per 92 lbs.
<i>Grass</i> ..	5 10' 3	..	..	20 0 0	Estimated value.
Total ..	31 36' 8	..	..	595 4 3	

(c) Summary

1	2	3	4	5 (i.e., col. 2-3)	6 (i.e., col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L. F. C.) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 31 acres and 36' 8 gunthas.....	595 4 3	662 9 3	(a) 103 18 2 (b) 62 15 11	- 67 5 0	+ 90 8 1

FARM STUDIES

OZAR, PART (B), 1929-30

General description of the village regarding climate, rainfall, communication, crops and cropping, distribution of land among people and under crops have already appeared as introductory to Part (A), 1928-29. Tables I to V are not, therefore, repeated here. Part (B) dealing with the year 1929-30 is the continuation of the investigation begun in the year 1928-29.

THE SEASON

There were few ante-monsoon showers in the month of April though they were found insufficient for preparatory cultivation. The regular monsoon commenced early in the 1st week of June but continued rather weak up to 16th of June. Second week of June received smart showers and brought the record to 7.42 inches. Sowing was finished by the middle of July. The total rainfall during the year was 23.40 inches or about 3.40 inches above the average of the place. The fortnightly distribution of rainfall in the year is given in table VI.

TABLE VI—FORTNIGHTLY DISTRIBUTION OF RAINFALL IN 1929
(Inches)

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
					First fortnight							} 23.40
0.0	0.0	0.0	0.46	0.00	2.09	5.95	0.57	0.11	1.70	0.0	0.0	
					Second fortnight							
0.50	0.0	0.0	0.17	0.0	4.20	1.48	1.53	4.38	0.0	0.0	0.26	

It will be seen from the table that more than half of the rain fell in 6 weeks—June and 1st fortnight of July. During these 6 weeks the rainfall recorded was 12.24 inches. This gave a very good start to all the *kharif* crops. Though there was very little rain in the first fortnight of August, crops could hold on somehow, with the small supplement received in the latter part of the month. The heavy rainfall of 4.38 inches in the second fortnight of September spoiled *kharif* crops, though it was useful for *rabi* preparation. The distribution of rainfall was not very unsatisfactory. Extreme cold and the occurrence of frost in February, however, spoiled the prospects and caused anxiety to the cultivators. Wheat harvest was poor. Inter-crops such as safflower and mustard suffered most. The crop estimate both for *kharif* and *rabi* seasons was *annas* ten.

THE FARMER

There was no change whatsoever in the acreage of the cultivating holding of 31 acres and 22.3 gunthas. Out of the 31 acres and 22.3 gunthas, 5 acres and 10.3 gunthas were under grass as in the previous year, while 2.75 gunthas were fallow. It may be noted that 32 gunthas were double cropped including the 11.75 gunthas under lemon which had

STATEMENT No. 187—concl'd.

902

ITEM OF EXPENDITURE	Home labour			Labour on daily wages			Total units	Cost excluding that of family labour	Remarks
	Men ¹	Women ¹	Bullocks ²	Men	Women	Bullocks		For the whole plot	
								Rs. a. p.	
4. Irrigation labour	4·75	8·0	..	..	..	..	8·75	....	Canal irrigation.
5. After-care and tillage									
(a) Weeding and interculturing	4·0	2·0	2	..	6	..	10·0	1 2 0	Two weedings were given. The soil was also repeatedly harrowed. Women were paid at 3 annas.
(b) Cutting shoots, etc.....	..	5·0	..	..	..	..	2·5	....
6. Charges for bullock labour.....	..	..	..	..	..	..	....	7 12 4	
(a) Feeds, fodder, depreciation, etc.								Rs. a. p. 6 8 0	
(b) Interest on the value of bullocks, feeds and fodder..								1 4 4	
7. Charges for implements and tools .....	..	..	..	..	..	..	....	1 6 1	
(a) Depreciation								Rs. a. p. 0 14 9	
(b) Interest								0 7 4	
8. Interest on fluid capital (i.e., wages for hired labour and price of seedlings and manure).....	..	..	..	..	..	..	....	1 1 0	Charged 12 per cent per annum.
9. Rent of land .....	..	..	..	..	..	..	....	12 13 7	The land was owned and rent is calculated. Out of the sum of Rs. 12-13-7 Rs. 3-7-4 represent land assessment and L. F. C.
Total.....	16·75	16·0	20	..	6	..	47·75	34 9 0	

¹Family labour not charged.

²Home bullock labour charged under item 6.

In the year 1927-28, about 45 per cent of the available bullock units could be utilized. In the year under study too, the percentage is not much higher. The farmer would have done better if he had managed with two bullocks; with four bullocks he should have hired more area.

COSTS AND RECEIPTS

Costs of production, excluding the unpaid wages of the family labour, are given in the subjoined abstract with the details of the out-of-pocket expenses immediately below.

ABSTRACT OF COSTS

Item of expenditure	Cost for the total cultivated area (viz., 32 acres and 23.30 gunthas)	
	Rs. a. p.	Rs. a. p.
*I. Out-of-pocket expenses :		
(a) Manures	16 9 2	
(b) Seeds	46 10 6	
(c) Outside labour	48 13 0	
(d) Depreciation on implements and tools	31 10 0	
(e) Upkeep of bullocks excluding interest on the value	216 13 4	
(f) Assessment and L.F.C. on owned land	44 7 10	
(g) Rent of leased land	69 0 0	
(h) Capital cost incurred on lemons in previous year (statement No. 87)	34 9 0	
	508 8 10	
II. Rent of owned land excluding assessment and L.F.C.....	113 3 5	113 3 5
III. Interest on working capital :		
(a) Interest on fluid capital required for current agricultural operations	4 6 9	
(b) Interest on the value of implements and tools	14 6 2	
(c) Interest on the value of bullocks, feeds and fodder fed to them	47 6 2	
	66 3 1	
Total cost of production (excluding the wages for family labour)		687 15 4

*DETAILS OF OUT-OF-POCKET EXPENSES

I. Manure :	Rs. a. p.	Rs. a. p.
(A) Manures applied during the year—		
(a) Six cartloads of F.Y.M. at Rs. 1-8-0 each applied to onions; 50 per cent of the cost is charged in the year	4 8 0	
(b) Two cartloads of F.Y.M. at Rs. 1-8-0 each applied to lucerne; 50 per cent of the cost is charged as this plot was not under irrigation for 12 months	1 8 0	

to be grubbed. Lemon had to be pulled, as many of the plants withered and some died. Thus the net cropped area was 26 acres and 9.25 gunthas, while the gross cropped area, including the short stay of lemons in the field, was 27 acres and 13 gunthas.

(a) *Human labour*.—As in the previous year, the farm family consisted of 7 members. The adult workers were only two—the farmer and his wife. The eldest boy was available, at times, on the farm, at the cost of his studies. The younger boys tended cattle. The man and woman put in 251 and 195 days' work respectively on the farm during the year.

Monthly distribution of the family labour for the 12 months, from May 1929 to April 1930, is shown in table VII. The distribution in fact shows the productive employment of the family for the period in connection with farm business. The total work units, given in the last but one column, will not tally with the labour supplied by the family (as shown in the analysis), as the period dealt with does not synchronise with the crop production of the year.

TABLE VII—SPREAD AND UTILIZATION OF FAMILY LABOUR

Working members	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total	Percentage of the units employed to the units available
Farmer.....	23	13	24	22	16	27	25	29	19	23	23	7	251	68.76
	31	30	31	31	30	31	30	31	31	28	31	30	365	
Farmer's wife.....	5	7	25	13	7	18	17	24	19	24	24	12	195	53.42
	31	30	31	31	30	31	30	31	31	28	31	30	365	

Note.—The denominators show available labour units, while the numerators show units employed.

There were only two working members—one man and one woman—in the family; the man and woman put in 251 and 195 days' work respectively. It may be remembered that the woman did this work in addition to her household duties. The farmer's eldest son put in 96 days' work on the farm. Utilization of family labour can be called satisfactory.

(b) *Bullock labour*.—Table VIII gives the monthly distribution of bullock work for 12 months, from May 1929 to April 1930.

TABLE VIII—SPREAD AND UTILIZATION OF BULLOCK WORK

Bullocks	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total	Percentage of the units employed to labour units available
Four Bullocks.....	80	66	96	28	54	40	62	50	40	46	52	72	636	46.98
	124	120	124	124	120	124	120	124	124	112	124	120	1,400	

Note.—Denominators show available bullock units, while the numerators show the units used.

(c) Depreciation and death allowance on the value of two dead bullocks	Rs. a. p.	Rs. a. p.
(d) Charges of housing at Rs. 4 per bullock per year	17 0 1	
(e) Feeds and fodder	18 0 0	
Fodder	Rs. a. p.	
Lucerne	83 1 3	
Kulthi	50 0 0	
	32 0 0	
	165 1 3	
From the above costs (a) to (e) Rs. 30 have to be deducted for 20 cartloads of F. Y. M. at Rs. 1-8-0 each	-30 0 0	
6. Assessment and L. F. C. on owned land	44 7 10	216 13 4
7. Rent of leased land	69 0 0	44 7 10
8. Capital cost on account of lemons	34 9 0	69 0 0
		34 9 0
Total out-of-pocket expenses		508 8 10

Family Labour Income.—Table XI gives the family labour income, i.e., the remuneration obtained by the farmer and his family for the work on the farm.

TABLE XI—FAMILY LABOUR INCOME

Name of crop	Area	Value of produce	Cost of production (excluding wages of family labour)				Family labour income
			Out-of-pocket expenses	Interest on working capital	Rent of owned land	Total	
1	2	3	4	5	6	7	8
	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total ..	82 28'05	702 5 0	508 8 10	66 3 1	113 3 5	687 15 4	+14 5 8
Bajri, tur and kulthi ..	21 3'75	287 13 6	508 8 10	66 3 1	113 3 5	687 15 4	+14 5 8
Groundnut	0 8	18 0 0					
Chillies	0 2'75	4 4 0					
Sun	0 13'5	16 9 6					
Wheat	4 7'75	62 0 0					
Onions	0 26	181 4 0					
Lucerne	0 19'5	117 6 0					
Grass land	5 10'3	20 0 0					
Fallow land	0 2'75	0 0 0					
Lemon capital cost in the year	0 11'75	Crop grubbed.					

Column 4.—Out-of-pocket expenses include cost of manure, seeds, hired labour (including labour engaged on piece-work), depreciation on dead stock and work animals, value of feeds and fodder consumed by them. The death allowance of bullocks, the cost of their housing, rent of leased land and assessment and L. F. C. on owned land. *Column 5.*—Interest on working capital both fixed as well as fluid capital. Fluid capital includes money spent on feeds and fodder for the work animals and on current agricultural operations. Fixed capital includes implements and work animals. *Column 6* shows estimated rent of owned land. *Column 8* shows the wages earned by the family.

	Rs. a. p.	Rs. a. p.
(B) Residual manure—		
(a) Thirteen cartloads of F. Y. M. at Rs. 1-8-0 each were applied in the year 1927-28; 15 per cent of the cost is charged in this year . . .	2 14 9	
(b) Nine cartloads of F. Y. M. at Rs. 1-8-0 each were applied in the year 1928-29; 15 per cent of the cost is charged in this year . . .	2 0 5	
(c) Two cartloads of F.Y.M. at Rs. 1-8-0 each were applied in the year 1928-29 to lucerne; 30 per cent of the cost is charged in this year	0 14 5	
(d) Nine cartloads of F. Y. M. at Rs. 1-8-0 each were given to <i>san</i> in the year 1928-29; 35 per cent of the cost is charged in the year	4 11 7	
	<hr/>	16 9 2
2. Seeds :		
(a) <i>Bajri</i> 89 lbs.	7 6 9	
(b) <i>Tur</i> 113 lbs.	7 11 5	
(c) <i>Kulthi</i> 80½ lbs.	6 4 6	
(d) Wheat 104 lbs.	6 14 5	
(e) Safflower 1 lb.	0 1 0	
(f) Mustard ¼ lb.	0 1 5	
(g) <i>Shalu</i> 1½ lbs.	0 1 0	
(h) Lucerne 7 lbs.	7 0 0	
(i) Onions 8 lbs.	6 12 0	
(j) Onion seedlings	2 0 0	
(k) <i>San</i> 15 lbs.	1 2 0	
(l) Groundnut 10 lbs.	1 0 0	
(m) Coriander 1½ lbs.	0 4 0	
	<hr/>	46 10 0
3. Wages of outside labour :		
(a) Daily wages, 25 men and 187 women	46 9 0	
(b) Piece-work	2 4 0	
	<hr/>	48 13 0
Rs. a. p.		
4. Depreciation on implements and tools :		
Value of implements for the opening inventory	95 0 0	
Value of new implements purchased.	44 0 0	
	<hr/>	139 0 0
Value of old implements for closing inventory	75 14 0	
Value of new implements for closing inventory	31 8 0	
	<hr/>	107 6 0
		31 10 0
5. Bullock labour cost (excluding interest) :		
(a) Depreciation on the value of five bullocks—		
Value of 4 bullocks as per opening inventory Rs. 160; value of two bullocks died just after the inventory was taken was Rs. 75. Therefore the value of 3 bullocks bought just after the inventory was Rs. 150.		
Thus the value of 5 bullocks in the beginning was 235 0 0		
The value of 5 bullocks as per closing inventory 200 0 0		
	<hr/>	35 0 0
(b) Death allowance on bullocks at 5 per cent on Rs. 235	11 12 0	

Tables XI and XII are compiled from the abstract of expenditure already given and the statement of receipts and costs which follows.

ANALYSIS

The farm family supplied 332·25 man-units and 146 woman-units for the crops of 1929-30 and borrowed 4 man-units by way of exchange. Taking 2 woman-units equal to one man-unit it may be said that the farm family contributed 409 labour units. The farmer had in addition to employ 25 man-units and 187 woman-units costing Rs. 46-9-0. Besides he paid Rs. 2-4-0 for piece-work.

For the 409 labour units the farmer made only Rs. 14-5-8 or about 7 pies wage per day, which surely is very meagre. He, however, made farm business income of Rs. 193-12-2. In the previous year, the family had contributed 468 labour units and made a negative labour income, of Rs. 67-5-0, while the farm business income was Rs. 99-8-1. In the present year their farm business income came to Rs. 193-12-2. On the whole they did better in the year under study.

General remarks about crops.—The farmer put in 332·25 man-units and the housewife 146 woman-units on the farm for the year's crops.

Bajri.—Area under *bajri* was 21 acres and 3·75 gunthas in four plots. The produce was 2,475 lbs. *bajri*, 672 lbs. *kulthi*, 387 lbs. *tur*, 4,950 lbs. *sarmad* and 1,111 lbs. *bhoos*. The grain outturn was poor due to the poor soil and want of manure.

Wheat.—Area under wheat was 4 acres and 7·75 gunthas in three plots. The produce was 750 lbs. grain and 1,045 lbs. fodder. Extreme cold and occurrence of frost were responsible for the low yield.

Onions.—Twenty-six gunthas were under onions in three plots, which yielded 11,600 lbs. bulbs. The outturn was good due to the manuring and good care.

Lucerne.—Lucerne covered 19·5 gunthas and gave an outturn of 9,842 lbs.—not a bad outturn.

Groundnut.—Only 8 gunthas were under groundnut which yielded only 112 lbs. dry pods. The crop was not good.

Chillies.—A very small plot of 2·75 gunthas was under chillies which produced 40 lbs. of dry chillies.

San.—Area under *san* was 13·5 gunthas which yielded 35 lbs. fibre and 1,920 lbs. green fodder.

Lemons.—It was in its second year of planting. The plantation had very poor start and hence it had to be pulled.

Grass.—The grass land was grazed by the farm cattle.

The value of gross produce obtained from the farm was Rs. 702-5-0, while the costs of production excluding the wages of the family labour came to Rs. 687-15-4, leaving Rs. 14-5-8 as the family labour income.

Farm Business Income.—In addition to the family labour income shown in table XI, the farmer saved the rent of owned land excluding assessment and L.F.C. and interest on the working capital which have been debited as costs. Table XII gives the farm business income or the aggregate income of the farmer, i.e., the value of the produce minus only the out-of-pocket expenses.

TABLE XII—FARM BUSINESS INCOME.

Name of crop.	Area		Value of produce.	Out-of-pocket expenses.	Farm business income
	A.	g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Total	32	23·3	702 5 0	508 8 10	+193 12 2
<i>Bajri, tur and kulhi</i>	21	3·75	287 13 6	} 508 8 10	+193 12 2
Groundnut	0	8	13 0 0		
Chillies	0	2·75	4 4 0		
San	0	13·5	16 9 6		
Wheat	4	7·75	62 0 0		
Onion	0	26	181 4 0		
Lucerne	0	19·5	117 6 0		
Grass	5	10·3	20 0 0		
Lemons	0	11·75	0 0 0		

Since gross produce came to Rs. 702-5-0 and out-of-pocket expenses to Rs. 508-8-10, the balance of Rs. 193-12-2 represents farm business income, on account of the wages of the labour, the interest on working capital and the rent of owned land as shown below :—

	Rs. a. p.
Family labour income	14 5 8
Interest on working capital	66 3 1
Rent of owned land	113 3 5
	<hr/>
	193 12 2

(b) F. Y. M. ....	..	..	..	..	..	..	..	..	....	6 0 0	Nine cartloads at Rs. 1-8-0 each; only 35 per cent (Rs. 4-11-7) charged.
(c) Carting and spreading manure	4'5	0'75	5'0	..	..	..	..	..	0'875	....	Eight cartloads of F. Y. M. at Rs. 1-8-0 each; only 50 per cent charged.
3. Seeds and sowing											
(a) Seeds .....	..	..	..	..	..	..	..	..	....	46 10 0	<i>Bairi</i> 89 lbs. (Rs. 7-6-9), <i>tur</i> 118 lbs. (Rs. 7-11-5), <i>kulhi</i> 80½ lbs. (Rs. 6-4-6), wheat 104 lbs. (Rs. 6-14-5), safflower 1 lb. (anna one), mustard ¼ lb. (Rs. 0-1-5), <i>Shahu jowar</i> 1½ lbs. (anna one), lucerne 7 lbs. (Rs. 7), onion seed 8 lbs. (Rs. 6-12-0), onion seedling worth Rs. 2, <i>nan</i> 15 lbs. (Rs. 1-2-0), groundnut 10 lbs. (Rs. 1) and coriander 1½ lbs. (annas four).
(b) Sowing and covering ..	16'75	11'25	31'0	4	8	..	30	..	80'375	5 10 0	Woman-unit paid at three annas.
4. After-care and tillage											
(a) Interculturing	6'0	..	6'0	..	..	..	..	..	12'00	....
(b) Weeding	8'0	15'0	..	..	..	..	26	..	26'50	4 14 0	Woman labour was paid at three annas each.
(c) Earthing up	1'0	..	..	..	..	..	..	..	1'0	....
5. Irrigation											
(a) Labour	87'25	19'0	153'5	..	..	..	..	..	280'25	....

OZAR (B)

911

STATEMENT No. 188

910

Gross cropped area of the holding	A.	g.	} in 1929-30
Area under grass.....	27	1·3	
Fallow	5	10·3	
	0	2·75	

ITEM OF EXPENDITURE	Home labour			Exchange labour		Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²	Men	Women	Bullocks			
1. Preparatory tillage										Rs. a. p.	
(a) Ploughing	21·75	..	82·0	..	..	..	..	..	103·75	....
(b) Harrowing and levelling	76·0	..	178·5	..	..	..	..	..	254·5	....
(c) Making beds	5·0	..	3·5	..	..	..	..	..	8·5	....
2. Manure and manuring											
(a) Charges for residual manure .....	..	..	..	..	..	..	..	..	....	10 9 2	Thirteen cartloads at Rs. 1-8-0 each; only 15 per cent (Rs. 2-14-0) charged. Nine cartloads at Rs. 1-8-0 each; only 15 per cent (Rs. 2-0-5) charged. Two cartloads at Rs. 1-8-0 each; only 30 per cent (Rs. 0-14-0) charged.

FARM STUDIES

80-78 6 II-08

	Rs. a. p.													
(a) Depreciation	31	10	0											
(b) Interest	..	14	6	2										
10. Interest on fluid capital (i.e., wages of hired labour, price of seeds and manure).	..	..	..	..	..	..	..	..	..	4	6	9
11. Rent of land .....	..	..	..	..	..	..	..	..	..	226	11	3
12. Out-of-pocket expenses incurred by way of capital cost over lemons in previous year .....	..	..	..	..	..	..	..	..	..	34	9	0
Total	332	25	146	506	5	4	12	25	187	1,046	25	687	15	4

Charged at 12 per cent per annum.

Rent of owned land was estimated at Rs. 157-11-3 and that of leased land taken on share-system came to Rs. 69.

¹Family and exchange human labour not charged.

²Home and exchange bullock labour charged under item 8.

OZAR (B)

STATEMENT No. 188—contd.

912.

ITEM OF EXPENDITURE	Home labour			Exchange labour		Labour on daily wages			Total units	Cost excluding that of family labour	REMARKS
	Men ¹	Women ¹	Bullocks ²	Men ¹	Bullocks ²	Men	Women	Bullocks			
6. Harvesting and preparing for market	123·5	90·5	47·0	..	4	25	131	..	314·75	Rs. a. p. 38 5 0	Twenty-five men paid at 6 annas each, sixty-six women at 3 annas each, 38 women at 4 annas each, 5 women at 5 annas each, 24 women paid in kind produce worth Rs. 3-12-0. Besides Rs. 2-4-0 paid for piece-work.
7. Uprooting lemons	2·6	0·5	..	..	..	..	..	..	2·75	....
8. Charges for bullock labour	..	..	..	..	..	..	..	..	....	264 3 6
Rs. a. p.											
(a) Feeds, fodder, depreciation etc. .. 216 13 4											
(b) Interest on the value of feeds, fodder and bullocks..... 47 6 2											
9. Charges for implements and tools .....	..	..	..	..	..	..	..	..	....	40 0 2

FARM STUDIES

GLOSSARY

I. CROPS AND PLANTS

Alsandi	Cowpea (<i>Vigna catjang</i>).
Ambadi	Brown hemp (<i>Hibiscus cannabinus</i>).
Babul	A common tree (<i>Acacia arabica</i>).
Bajri	A small millet (<i>Pennisetum typhoideum</i>).
Bakshi Wheat	A variety of wheat (<i>Triticum pilosum</i>).
Banana	A fruit (<i>Musa paradisiaca var sapientum</i>).
Barag	A hill millet (<i>Panicum miliare</i>).
Ber or Bor	A kind of fruit tree (<i>Zizyphus jujuba</i>).
Bhendi	Lady's finger (<i>Hibiscus esculentus</i>).
Bhopla	Great pumpkin (<i>Cucurbita maxima</i>).
Brinjal	Egg plant (<i>Solanum melongena</i>).
Chavali	Cowpea (<i>Vigna catjang</i>).
Chillies	(<i>Capsicum frutescens</i>).
Coriander	(<i>Coriandrum sativum</i>).
Dodka	Towel gourd (<i>Luffa acutangula</i>).
Dudhya	Bottle gourd (<i>Lagenaria leucantha</i>).
Garlic	(<i>Allium sativum</i>).
Gram	Chick pea (<i>Cicer arietinum</i>).
Grapes	(<i>Vitis vinifera</i>).
Groundnut	Earthnut, peanut (<i>Arachis hypogaea</i>).
Guar	Clusterbean (<i>Cyamopsis psoralioides</i>).
Guava	A fruit (<i>Psidium gugava</i>).
Gul	Unrefined Indian sugar ; Jaggery.
Hariali	A deep rooted perennial creeping grass (<i>Cynodon dactylon</i>).
Harik	A small millet (<i>Paspalum scrobiculatum</i>).
Hulga	Horse gram (<i>Dolichos biflorus</i>).
Jowar	The large millet (<i>Andropogon sorghum</i>).
Kadwa or Pavta	A variety of <i>Dolichos lablab</i> grown in Konkan after rice.
Kapas	Seed cotton.
Khira	Cucumber (<i>Cucumis sativus</i>).
Khondya	A hot weather fodder variety of jowar.
Khurasani	Niger seed (<i>Guizotia abyssinica</i>).

STATEMENT No. 188—concl'd.

(b) Yield and Value

NAME OF PRODUCT	Quantity.			Value	REMARKS	
	Area		Grain			Fodder
	A.	g.	Lbs.	Lbs.	Rs. a. p.	
Bajri, tur and kulhi mixture ..	21	3'75	3,534	6,061	287 13 6	Bajri 2,475 lbs. (Rs. 170-1-6), kulhi 672 lbs. (Rs. 30), tur 387 lbs. (Rs. 19), sarma 4,950 lbs. (Rs. 33-4-0), bhoo 1,111 lbs. (Rs. 26-12-0) and tur stalks, etc. (Rs. 3-12-0).
Wheat.....	4	7'75	750	1,045	62 0 0	Wheat 750 lbs. (Rs. 43-12-0), fodder 1,045 lbs. (Rs. 18-4-0).
Onions.....	0	26	11,600 (bulbs).	..	181 4 0	Sold at Rs. 12-8-0 per khandi of 800 lbs.
Lucerne	0	19'5	..	9,842	117 6 0	Sold at different rates.
Groundnut....	0	8	112 (pods).	1,200	13 0 0	Groundnut pods (Rs. 7) and vines (Rs. 6).
Chillies	0	2'75	40	..	4 4 0	Valued at 10 lbs. per rupee (stalks valued at annas four).
San	0	13'5	35 (fibre).	1,920 (green fodder).	16 9 6	Fibre sold at 5 lbs. per rupee. Value of green fodder is estimated.
Grass	5	10'3	..	..	20 0 0	Estimated value
Lemons	0	11'75	..	..	..	Crop was grubbed up.
Total	32	23'80	..	..	702 5 0	

(c) Summary

1	2 \	3	4	5 (i.e., col. 2-3)	6 (i.e., col. 5+4)
Area	Gross income	Cost of production excluding wages of family labour	(a) Rent of owned land (minus assessment and L.F.C) (b) Interest on working capital	Family labour income	Farm business income
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
For 32 acres and 11'55 gunthas. ..	702 5 0	687 15 4	(a) 113 3 5 (b) 66 3 1	+14 5 8	+193 12 2

II. WEIGHTS, MEASURES, ETC.

Anna	One-sixteenth of a rupee; equivalent to $1\frac{1}{2}d.$ at exchange rate of one and six pence to the rupee.
Bhargadi.....	Gul from sixteen boilings of sugarcane juice—for four days' output. A <i>bhargadi</i> weighs about 3,500 lbs. of gul near Poona.
Bigha	A measure of land varying widely; the standard <i>bigha</i> is generally $\frac{1}{8}$ of an acre.
Boja.....	A load or bundle; for seed cotton = 392 lbs. in Khandesh.
Guntha	$\frac{1}{40}$ th of an acre.
Her	A measure of weight; 8 <i>maunds</i> or 8×26 lbs.
Khandi	A measure of weight and capacity which varies according to the commodity; varies for the same commodity in different localities; for cotton lint 784 lbs. in Bombay.
Map.....	A measure of capacity which varies in weight according to the commodity. A map of grains weighs as follows in East Khandesh:— Wheat = 768 lbs. Bajri = 720 „ Jowar = 672 „
<i>Maund</i>	A measure of capacity or weight varying in different localities.
Nag.....	A varying measure of weight for seed cotton, about 1,344 lbs. in Karnatak.
Palla	A measure of capacity or weight, usually 240 lbs.
Partan.....	Three acres of land.
Payali	A measure of capacity which varies in weight for different commodities; 4 seers (capacity) make one <i>payali</i> ; a <i>payali</i> will be approximately equal to 10 lbs. of cereals.
Pie	One-twelfth of an anna.
Rupee	A silver coin of the value of one shilling and six pence.
Seer.....	A varying measure of weight and capacity, usually 2.057 lbs.

Kulthi	Horse gram (<i>Dolichos biflorus</i>).
Kunda.....	A deep rooted perennial grass weed (<i>Ischaemum pilosum</i>).
Linseed	An oil seed (<i>Linum usitatissimum</i>).
Lucerne	Alfalfa (<i>Medicago sativa</i>).
Matki	The kidney bean (<i>Phaseolus aconitifolius</i>).
Mondha	Undeveloped bajri crop which is threshed under bullocks' feet.
Mosambi	A fruit (<i>Citrus aurantium</i>).
Mug	Green gram (<i>Phaseolus mungo</i>).
Mula	Radish (<i>Raphanus sativus</i>).
Nachni, Nagli or Ragi	A millet (<i>Eleusine coracana</i>).
Niger	An oil seed (<i>Guizotia abyssynica</i>).
Nilva	A variety of kharif jowar grown in the Deccan, more for fodder.
Onion	(<i>Allium cepa</i>).
Paddy	Unhusked rice (<i>Oryza sativa</i>).
Pan	The betel vine (<i>Piper belle</i>).
Papayya.....	A fruit tree (<i>Carica papaya</i>).
Pavta	See Kadva.
Peas.....	<i>Pisum sativum</i> .
Ragi.....	See Nagli.
Rala	Italian millet (<i>Setaria italica</i>).
Safflower	An oil seed (<i>Carthamus tinctorius</i>).
San or Tag.....	Sann hemp: a leguminous crop grown either for green manuring or as a fibre crop (<i>Crotalaria juncea</i>).
Shalu	Rabi or winter jowar.
Sugarcane	<i>Saccharum officinarum</i> .
Tag	See San.
Til	An oil seed (<i>Sesamum indicum</i>).
Tur	A pulse (<i>Cajanus indicus</i>).
Udid	A pulse (<i>Phaseolus radiatus</i>).
Val	A pulse (<i>Dolichos lablab</i>).
Vari	A millet (<i>Panicum miliacum</i>).
Vayangan (bhat)	Hot weather rice.
Wheat	<i>Triticum sp.</i>

- Farat** A plank (harrow) to cover seeds after sowing.
Fawada A spade.
Gadinad A Kanarese word for transition tract in the Dharwar District.
Ghamela An iron basket.
Gurhal A shed where gul boiling is done. It also means the operation of harvesting cane and making gul.
Inam A grant of land wholly or partially free of assessment.
Jirayat Rain-fed ; not artificially irrigated.
Kachha (road) Unmetalled road ; cart track.
Kadbi Jowar straw.
Kadta Deduction in the actual weight or fixed price of any commodity sold.
Karal (land) Sticky impervious clay.
Kashya Underground stems of weeds.
Kharif (season) Monsoon (season).
Khatedar Occupant of land.
Khoti A variety of tenure in the Konkan.
Khurpi A weeding hook.
Koyata A heavy sickle.
Kudali Pick-axe.
Kurayat (land) Land on the higher level at the foot of the hills in the Konkan.
Mallad A narrow strip of land of a width of fifteen to twenty miles to the east of Konkan. Western part of Dharwar District is included in this strip. It is a tract of more rainfall than the transition tract and Desh tract.
Mal (land) Thin land growing grazing grass.
Mala (land) Low lying rich soil suitable for growing late varieties of rice in Konkan.
Man unit Average amount of work accomplished by one man in a day (of about 10 hours).
Mandai A market.
Maval The tract called Mallad as described above in Belgaum is called Maval in Poona and the Konkani talukas of the Nasik District.
Mhote Leather or iron vessel for lifting water from a well.
Moghad A kind of seed-drill.
Mukadam A supervisor or bailiff.
Murum Light stony soil.

III. MISCELLANEOUS

Annawari	Crop estimate in terms of annas (one anna being one-sixteenth of a rupee).
Adat	Commission or brokerage.
Bagayat (land)	Garden land.
Bagwan	Professional grower and dealer in fruits.
Balutedar	Village artizans.
Bandhara	A small embankment across a stream for irrigation purposes.
Barad	Light brown soil often strewn with boulders and mixed with lime nodules.
Bardan	Packing material.
Batta	Small percentage deduction in favour of purchaser.
Bazar-Kasar	Discount deducted by the purchaser for paying cash without enjoying the period allowed by the market custom.
Belhe	Wide ploughing.
Bhils	Backward people of an aboriginal tribe.
Bhoos	Any powdered fodder.
Bhusa	Husk or chaff.
Bullock unit	Average amount of work accomplished by one bullock in one day (of about 10 hours).
Bund	A dam, a field embankment.
Cultivating holding	All the land cultivated by the farmer whether owned or taken on lease.
Deccan	Tract of the Bombay Presidency comprising Ahmednagar, Nasik, Poona, Satara and Sholapur Districts.
Dalal	Commission agent or broker.
Dalali	Commission or brokerage.
Dankya	A curved beam harrow.
Desh	The Desh tract comprises the eastern parts of Belgaum, Satara, Poona and Nasik Districts, together with the whole of Ahmednagar, Sholapur, Bijapur and almost the whole of Dharwar District.
Deshi	Native to the country; Indigenous.
Dhamni	A riding cart.
Dhara	A permanent tenure in a khoti village.
Dharekari	A permanent tenant in a khoti village rent payable by whom is limited to the survey assessment.
Dharmadaya	Deductions made for charities in marketing of produce.
District	Revenue division or a collectorate.
Dusota	Second crop.

BIBLIOGRAPHY

BOOKS

- ADAMS, R. L.—Farm Management, 1921.
 APP, FRANK.—Farm Economics, 1924.
 MERRIL, K. Bennet.—Farm Cost Studies in U.S.A., 1928.
 ORWIN, C. S.—Farming Costs, 1921.
 TAYLOR, H. C.—Outlines of Agricultural Economics, 1922 and 1928.
 WARREN, G. F.—Farm Management, 1921.
 CURRIER LENNES AND MERRIL.—Farm Cost Accounting, 1924.

BULLETINS AND CIRCULARS

- Bulletin Nos. 109 and 146, U.S.A.
 Bulletin No. 277 : Cost of Producing Field Crops, Illinois.
 Bulletin No. 109 : The Crops of the Bombay Presidency, their
 Geography and Statistics.
 California Circular 29.
 Report on the Cost of Production of Maize in 1921-22, Orange Free
 State.
 Statistical Atlas of the Bombay Presidency.

Nada	Thick rope for the mhote.
Nala	A watercourse ; stream.
Panjrapol	A refuge home for cattle.
Pathar.....	Table land.
Proprietary holding	Land owned by an occupant.
Rab	Seed bed prepared by burning rab materials such as cowdung, branches of trees etc.
Rayat.....	A cultivator.
Rayatwari	A land tenure in which land is held by the holder from Government on condition of payment of land assessment as fixed by Government.
Rabi (season)	Winter (season).
Rahu	Paddy sprouted for sowing.
Ravi	A gang of usually 12 men and 8 bullocks employed in harvesting sugarcane and making gul.
Saldar or salkari	An agricultural labourer engaged for the year.
Saral	Inferior paddy obtained by rethrasing rice straw.
Sarmad	Bajri straw.
Savkar	A money-lender.
Sondor	Small rope used for the <i>mhote</i> .
Shikari	A hunter.
Taccavi	An advance made by Government to cultivators for agricultural purposes.
Taluka	Local revenue division of a district.
Vadhididhi	The system of borrowing seeds on condition to return at harvest time one and half times the quantity taken.
Varkas (land)	Soil on the slope of hills. It is shallow and poor in nature and is only suitable to grow hill millets.
Yerinad	A Kanarese word for Desh tract.

ABBREVIATIONS

F.Y.M.	=	Farmyard manure.
L.F.C.	=	Local-fund cess.
Rs.	=	Rupees.
a.	=	Annas.
p.	=	Pies.
A.	=	Acres.
g.	=	Gunthas.

SERVANTS OF INDIA SOCIETY'S LIBRARY
POONA 4.

1. Books taken from the Library may not be retained for more than a fortnight.
2. Borrowers will be held strictly responsible for any damage done to books while the books are in their possession.

CHECKED
2303-04