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Preliminary studies  
of important crops

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PRELIMINARY STUDIES OF IMPORTANT  
CROPS IN THE BOMBAY DECCAN IN THE  
POST-WAR PERIOD

By

Rao Bahadur P. C. Patil, L. Ag., M. Sc.

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Department of Agriculture, Bombay

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BULLETIN No. 168 of 1932

RELIMINARY STUDIES OF IMPORTANT CROPS  
IN THE BOMBAY DECCAN IN THE  
POST-WAR PERIOD

BY

RAO BAHADUR P. C. PATIL, L.Ag., M.Sc. (Wis.)

*Professor of Agricultural Economics and Ag. Principal,  
College of Agriculture, Poona*

in collaboration with

T. G. SHIRNAME, B.Ag.

T. B. PAWAR, B.Ag.

K. M. SHAH, B.Ag.



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## NOTICE

Bulletin is published subject to the following reservation  
 Government of Bombay :—

Government do not accept responsibility for the  
 data used or for the assumptions made in valuing the  
 labour of the cultivator, his family members and his  
 tools or for the conclusions reached."

In opinion there is a possibility that this bulletin may  
 cause confusion of thought upon the obscure issue of  
 actual "costs" in the Bombay Presidency. The reader  
 bear in mind that the conclusions arrived at are based  
 on a selection of isolated examples, too few in the aggregate,  
 unrepresentative of seasons and too restricted in territorial  
 extent to permit of a scientific estimation of their  
 true significance to the Bombay Deccan. In most cases  
 from which the income is calculated, differ appreciably  
 from the standard yields adopted by the Department of  
 Agriculture for the purpose of preparing its forecast and  
 reports.

It is, however, the most vulnerable point in this bulletin  
 the method adopted for computing the cash equivalent of  
 labour. In Part I under (a) "methods of calculating  
 production," the author informs us that the labour of  
 the cultivator and his family members is charged at current rates  
 (for agricultural work) in the village. This may at first sight  
 appear to be a very plausible method, but I believe it conceals  
 a fundamental fallacy. In India there is no cash market for  
 the labour of the great majority of the agricultural population,  
 and the actual wage-standards of the small minority  
 who are employed, legitimately, in my opinion, be taken ready-made and  
 applied to the peasant population as a whole, regardless of  
 whether the gross income from agriculture can permit of such  
 standards. The author informs us that he has adopted  
 the actual wage-standards in his computation of costs pertaining  
 to the cultivation in the villages of Pimple and Wagoli,  
 plots 6B and 8B ; expressed in annas per day :

Kind of labour	Name of village	
	Pimple	Wagoli
.....	10	6
.....	4	3
.....	5	..
.....	7	5

In these circumstances it does not seem surprising that the author has arrived at

- (1) a loss of  $1\frac{3}{4}$  annas per acre in the case of Pimpla village, plot 6B, and
- (2) a loss of Rs. 10-12-7 per acre in the case of Wagoli village, plot 8B.

The peculiarity of peasant-labour is that there is no alternative market for the labour of the majority of the population, and hence the assumption of arbitrary wage-standards, like 10 annas per day, does not seem to be legitimate. In the master-industry of the country, the wage must be governed by the capacity of that industry to pay. This governing factor has not been recognized by the author. In the north-west of India, as well as in other parts of the country, the aggregate wage bill is fixed in terms of the produce, one-half or two-thirds, according to circumstances. This seems to give us a clue as to how peasant wages should be computed, and this procedure would appear to be more logical, at least for grain and kindred crops, than the arbitrary assumption of a 10-anna wage, merely because a small minority of the people have been fortunate enough to secure that wage.

At any rate it seems to be unsatisfying to the professional mind to be told that, in the Canal-Zone, the cost of producing an acre of *bajri* is Rs. 70 and that there is a loss of Rs. 4 on a crop of 900 lbs. of grain—*vide* Table X, page 101.

T. F. MAIN,

POONA, 18th May 1932.

Director of Agriculture



## PREFACE

The present investigation in the cost of production of crops originated in the complaints of the sugarcane growers on the Deccan Canals when the price of *gul* and the incomes from sugarcane cultivation began falling after the World-War boom. During the World-War and soon afterwards the price of *gul* rose. In the year 1920 the price of *gul* rose as high as Rs. 45 to Rs. 55 per *palla*. From 1921, prices began declining and in the year 1923-24 the price of *gul* fell to Rs. 23 per *palla*, while the cost of production was still mounting up. The study in the costs of production of sugarcane and other crops near Poona was, therefore, undertaken to ascertain the facts. It should, however, be borne in mind that this investigation was made when the costs of production were high and the prices of farm products low. The results obtained and the conclusions arrived at hold good under the conditions obtaining during that particular period, and should not be confounded with those obtainable during a normal period.

The investigation was commenced in the year 1925 and was carried out during 1925-28; and the results are embodied in the present bulletin. Part I discusses the general situation of agriculture in the post-war period and describes the methods of calculating costs of production. Parts II and III present the actual results of the investigations.

The total area dealt with in the bulletin comes to 190 acres and 34 gunthas. Investigation in Part II was conducted with the assistance of Mr. T. G. Shirname, B.Ag. in 1925-26 and Mr. T. B. Pawar, B.Ag. in 1926-27 and 1927-28. The plots under observation were regularly visited by them once, oftener twice a week, and detailed information recorded on the spot. The field work for Part III was carried out with the assistance of Agricultural Teachers in Agricultural Bias Schools—Messrs. S. L. Dumbre, G. A. Sankpal and K. T. Patil. These teachers, after passing from the Vernacular Training College and gaining several years' experience as teachers in the village schools, had spent one year at the Agricultural School, Loni. Before entrusting the cost study work to them they were coached up in the methods of crop study and were supplied with detailed instructions. Being on the spot the teachers could visit the farms almost every day. They submitted weekly diaries with returns in the prescribed forms. The returns were duly checked and doubtful points cleared up by correspondence. Agricultural

teachers are expected to teach local crops and interest the students in agricultural business. The agency of Agricultural Bias School Teachers was found suitable as they were interested in such investigations. I visited all the centres of investigation as often as I could.

The material collected by the different investigators was worked up for editing with the help of my collaborators Messrs. T. G. Shirname, T. B. Pawar and K. M. Shah.

This is the first attempt in India, at any rate in the Bombay Presidency, to find out the detailed costs of production of crops. The author makes no claim to perfection in the methods of study he has used nor to any general applicability of the conclusions to which the facts ascertained lead him with regard to the particular farms and localities investigated during the abnormal (i.e. post-war) period. It is, however, hoped that the investigations here reported will be useful in tackling some of the problems that every day confront farmers and agricultural officers and will serve as a stimulus for further similar studies covering larger areas with the result that we shall ultimately be in possession of well-authenticated facts about the economics of Indian agriculture.

If the publication of the results of these preliminary investigations does nothing more than to invite the attention of farmers and economists to the important subject of crop production and to lead them to suggest improvements in the methods of cultivation and also of investigation, the author will have reason to be gratified with his effort.

My thanks are due to my collaborators, the farmers who cooperated in the investigation and other persons who supplied information regarding rainfall, wages, prices, etc. I can never forget the help of Dr. H. H. Mann, D.Sc., who had helped in planning the work in 1925. Mr. T. F. Main, B.Sc., O.B., Director of Agriculture, made several valuable suggestions. My thanks are due to both. When this work was nearly ready for the press I had an opportunity to show the same to Dr. H. Taylor, Ph.D., once a Professor of Agricultural Economics in the Wisconsin University and now the Head of Agricultural Economics Section of the United States of America, who happened to be in Poona. I am obliged to him for the trouble he took in going through the manuscript.

College of Agriculture, Poona, }  
May 1932.

P. C. PATIL.

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