ESTIMATES OF AREA AND YIELD OF Principal Crops in India 1921=22

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Sesamum (til or jinjili)-lst (September), 2nd (October), Final (January), Supplementary (April). Groundnut-lst (October), Final (February).

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44. A Classified List of commodities that enter into the Inland (Rail and River-borne) Trade of India R1-13.

45. Hand-Book adopted for the registration of Rail-borne Trade of India showing (1) the limits of Railway lince in each province, (2) the officers by which the Rail-borne Trade of each province with external blocks should be registered, and (3) the officers to whom the returns should be supplied. As. 12.

40. A Classified List of the commodities that enter into the Land Frontier Trade of British India. R1-2.

Note .- [Those marked with an astariak (*) to be obtained from the Officer in charge, Bengal Secretariat Book Depoil.]



Vicio of certain principal crops from 1912-8 to 1921-22.

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village officers entrusted with the duty of collecting data for crcp reports were mostly accustomed to the Indian system, *i.e.*, the anna notation, the adoption of any other system would tend to confuse the estimate. Local Governments and Administrations were, therefore, permitted to adopt such scale of notation as might be suited to local conditions, the object being to secure that the returns should be in terms of a normal crop. But since the anna standard thus adopted would not possess any fixed or uniform value, it was laid down that in published forecasts the anna notation should not be used, the American notation being used in its stead, *i.e.*, 100 being taken to represent a normal crop and the estimated outturn being stated as a percentage of that crop, and the conversion of the anna estimate into the percentage estimate being made either by the district officer or by the provincial auth'rities.

When these three factors have been determined, they are multiplied into each other to arrive at the required quantitative estimate of outturn. Thus, if the area be 60,000 acres, the standard of normal outturn 500lbs per acre, and the percentage estimate 80, the required quantitative estimate would be $60,000 \times 500 \times \frac{80}{100} = 24,000,000$ lbs.

APPENDIX II

METHODS OF COLLECTING THE STATISTICS PROVINCE BY PROVINCE

The estimates prepared by the United Provinces include all the districts of the province Unit except Almora and Garhwal for which the required particulars are not available as no regular village papers are kept up by patwaris (village accountants) in these two districts. The area is taken from the crop statements based on field-to-field inspections, which are compiled by patwaris and checked by higher revenue officers. The estimates of the standard yield are based on the results ascertained from crop-cutting experiments conducted annually in selected districts. The standards, which are different for irrigated and unirrigated crops, are revised every five years on a consideration of the results of the crop-cutting experiments, and are applied to the condition of the crops reported by district officers and selected land-holders whose number exceeds six hundred.

In the Madras Presidency, the estimates relate to all the districts in which the respective Madras crops are grown. Approximately two-thirds of the cultivated land in the Presidency are (Total entit 32,636,00 Government or raiyatwari land, and have been carefully surveyed. All the village officers therein are appointed and controlled by Government officials. In the ordinary course of his work the village accountant sends every month to the Revenue Inspector (the officer in charge of a group of villages varying in number) a detailed statement of the sowings in his village. For those crops for which forecasts are prepared, the Revenue Inspector, who is himself a touring officer, reports to his Tahsildar* the area in his range under that crop, with his estimates of the average yield expressed in so many annas of the normal crop, when outturns are required. The Tahaildar consolidates all these figures and reports the total direct to the Director of Agriculture with, in the case of outturn, his estimated yield (also expressed in annas of the normal). The remaining third of the Presidency is camindars (consisting of large proprietary estates), of which only a part has been accurately surveyed, and for which somewhat similar returns are prepared and dealt with accordingly. In other cases where some sort of account is maintained in Zamindari and *whole inam*s villages, the Tahsildar or Deputy Tahsildar estimates the area and yield, as well as he can, from his own knowledge and from reports of the estate officials. The figures for these areas are included but shown separately under estimates in the reports sent by the Tahsildar to the Director of Agriculture. In the remaining cases, where estates have not been surveyed and where no sort of account is maintained at all, the estimating is done in the office of the Director of Agriculture with reference to previous year's final audited figures, the character of the season, and the figures of neighbouring Government areas. The States of Pudukkottai and Banganapalle send similar reports direct to the Director for cotton only. No other State in the Presidency prepares any crop forecast. Thus, for each forecast return, separate reports (242 for cotton and 210 for other crops) are received in the Director's office, where they are scrutinized and tabulated. More accurate figures of areas cultivated are obtainable at the end of the year after all the village accounts have been checked. These figures are published later in the provincial Season and Crop Report. The figures reported by Tahsildars in their final forecasts are checked by a comparison with the forecast reports and the Season and Crop Reports for previous years, and thus an attempt is made to rectify obviously inaccurate reporting. Standard rates of outturn have been determined for each crop on a consideration of the latest crop-cutting experiments, of the results on the Government farms, of the local knowledge of the Director of Agriculture and his Staff in comparing the yields from adjoining districts, and of the results of a comparison of the figures of yield with the figures of net export and the estimate of consumption. The Director checks the rate of yield reported by Tabsildars by estimates received from his subordinate officers and from non-officials interested in a particular crop.

The estimates for the Bombay Presidency include all British districts and States where Bombay and Sind the respective crops are grown to any extent. In the British districts of the Presidency proper the area under different crops is ascertained in the first instance by village officers and recorded in village returns, which are checked by circle inspectors and other revenue officers, and compiled by the former for their circles and then for the taluka.** The taluka figures are totalled up for each district in the office of the Director of Agriculture of the province. For Sind this work is done by local officers, and the Director receives district-by-district figures. The information received is for villages for which regular statistics are available, the proportion of reporting area being 91.4 per cent in the Presidency proper and 99.6 per cent is Sind. From 1909-10, however, estimates for the non-reporting areas have been made so far as possible and included in the table. In the case of Indian States the acreage is estimated on the best local data available. The approximate numerical strength of the reporting agency is 188 in the Destination of the second 23 in the Indian States. is 188 in the Presidency proper, 60 in Sind, and 33 in the Indian States. No standard of yield has yet been fixed. Local estimates of crop condition are converted to quantitative figures on the basis of a formula showing the average yield of crops, which has been adopted provisionally. This formula is now being revised, the revision being based on the ascertainment of actual yield in different parts of the Presidency by careful local enquiry by officers of the Provincial Agricultural Department, who are tabulating the results and comparing them for the purpose. The unit of area in the formula is the district, and irrigated and unirrigated crops are separately dealt with. Each year's estimate of the condition of crops is prepared by the mamlaidarst (or makalkarist where the taluka is sub-divided) from notes which they make and from reports from village accountants and circle inspectors. The estimate is sent direct to the Director of Agriculture, who, in the light of the general prospects of

- A revenue or police officer in charge of a sub-division of a taluk
- Entire villages granted rent-free

(Total cultivated 28,118,000 BICS. acres)

Note-The cultivated area shown in the margin represents the average Lot area actually sown with all crops in each province during the three years ending 1920-21 • A sub-divisional officer • A sub-division of a district under the management of a tashildar

[†] The chief revenue and police officer in charge of a taluk

the season, makes the quantitative calculations. For Sind there are no formulæ, and all the necessary information is obtained from the district officers in the form of estimates on the basis, of twelve annas for a normal crop, together with quantitative equivalents gathered from general experience. For Indian States condition estimates are obtained, and the formulæ for adjoining British districts are applied.

The estimates for Bihar and Orissa relate to all the districts of the province where the respective crops are grown. Survey and settlement operations have been completed in all the districts except two, and in these districts the settlement figures serve as a check on the estimates of acreage based on the information furnished by the police. In the absence of any revenue agency in the province, the figures are based mainly on rough approximate estimates made by district officers, and are more or less conjectural. The district officers obtain information from the sub-divisional officers through the agency of the police. In the district of Sambalpur, the acreages under crops are revised annually by the Laud Records staff by field-to-field inspection. The system of making crop-cutting tests, as in other provinces, over a series of arcas and seasons for the ascertainment of standards of yield has been in force in the districts of this province for some thirty years, but sufficiently trustworthy figures of yield have not yet been obtained from these tests to enable Government to accept them as standards. The estimates, therefore, of yield given in the forecasts are based on standards adopted provisionally by the Provincial Department of Agriculture on the basis of information obtained from other sources.

The estimates for Bengal relate to all the districts of the Presidency where the respective cultivated crops are grown. In the absence of any revenue agency in the province, the figures are 24,200,000 based mainly on rough approximate estimates made by District Officers, and are more or less conjectural. The district officers obtain information from the sub-divisional officers through the agency of the police. The quantitative estimates of yield formerly given in the forecasts were based on standards provisionally adopted. The standards have now been revised on the basis of the results obtained from crop-cutting experiments conducted over a series of areas and seasons.

The estimates for the Punjab relate to all the British districts in which the respective cultivated crops are grown. As regards Indian States of the province, reports on wheat and cotton 22,157,000 are furnished by all the States in which these two crops are grown to any considerable extent, No estimates for any other crop are prepared by any State. The figures of area for all the British districts up to 1912-13 were based on actual measurements by the village revenue Estimates of yield were recorded by district officers after personal enquiry from staff. tahsildars and leading agriculturists. The total number of agriculturists consulted by the district officers and tahsildars amounts to several thousands. From 1913-14, however, this method is followed only in districts in which the respective crops are grown to a considerable extent. For other districts the Provincial Director of Land Records prepares conventional forecasts based on the actual average area figures for the previous five years and an assumed average outfurn as determined by him to meet the character of the harvest.

The estimates for the Central Provinces and Berar relate to all the British districts of the ar province in which the respective crops reported on are grown. As regards Indian States cultivated of the province, reports on wheat, rice, and linseed only are furnished by ten States. 23,354,000 No information is available from the other two States. The figures of acreage for cotton, acsamum, rice, and sugarcane are estimates based on reports furnished by the local officials of the Land Records staff. The figures for wheat and linseed represent the actual areas sown with these crops as disclosed by field-to-field inspection by patwaris.* The reporting agency consists of 235 revenue inspectors with, on an average, 22 patwaris working under each inspector. Each *labsil* t has usually 4 revenue inspectors. Standards of outturn were framed for each crop from the results of crop-cutting experiments on selected fields under the supervision of responsible and selected officials during the years 1884-85 to 1887-88. These standards have been revised from time to time on the basis of the results of crop-cutting experiments since made. In the year 1920-21 the substitution of anna estimates for American notation was introduced in accordance with the wishes of the Board of Agriculture, who in 1919, decided that it would be better to abandon all attempts to impress on the reporting agency what is meant by the expression "normal crop" and secondly, that the use of American notation in which 100 is meant to signify a normal crop should be discontinued. The Board considered that in the long run better statistics would be obtained if the reporting agency were allowed to follow its traditional method of reporting the crop in the anna notation. All deductions based on the standards are made by the provincial Director of Land Records and Settlements from the year's figures furnished by the District Officers, who are supposed to bear in mind the standards when estimating the yield of the season.

The estimates for Barma relate to all the districts of the province in which the respective cultivated crops reported on are grown. The figures for the districts in which the crops are grown to a 15,023,000 considerable extent are based on regular reports, furnished by District Officers, while those for the remaining districts are based on rough estimates prepared by the Commissioner of Settlements and Land Records. For the districts from which regular reports are received, the figures of area are obtained from the assessment rolls prepared by revenue surveyors. The original information about the yield is obtained from township officers, inspectors of Land Records, and from the more important of the Land Revenue subordinate officers. In this way the estimate of each district is based on the information furnished by some thirty or more persons. The figures of both area and yield are tabulated by the Superintendent of Land Records and checked by the Distric: Officers. The Commissioner of Settlements and Land Records compares the estimated yield with a standard representing the normal yield, which was fixed after an extensive series of experimental crop-cuttings by Settlement Officers.

ar and Orissa stal coltivated area 14,527,000 acres)

Paujab (Total

Bengal

(Total

Bres ACT (D)

area aores)

Central Provincesa and Borar (Total srea 6.:TU»)

Torms (Total 8rca NCION)

The estimates for Assam relate to all the districts in which the respective crops reported on Assam are grown to any extent, excluding some of the unimportant hill districts in certain cases. The information is received from District Officers, who in their turn obtain figures from the district Land Records staffs in the case of the temporarily-settled areas, and from zamindars in the case of the permanently-settled portion of Goalpara, with the exception in the latter district of jute the estimate for which is compiled by the village choukidars panchayats. In the permanently settled part of Sylhet the figures for jute are those submitted after actual inspection by the village choukidari panchayats, while for all other crops except tea estimates have been framed by the District Officer from the actual areas in the surveyed parts being applied to the rest of the district. The figures for tea are obtained in all cases from the garden managers. The figures are checked only in the temporarily-settled tracts by the circle Sub-Deputy Collectors; in the permanently-settled districts of Sylhet and Goalpara there is no valid check at all. The estimates of outturn are based on the normal yield obtained from the results of eropcutting experiments.

39

The estimates for the North-West Frontier Province relate to all the districts of the North-West Frontier Province province in which the respective crops reported on are grown, including the Tochi agency (Total cultivated area in the case of wheat, cotton, and sugarcane, and the Kurram agoncy in the case of wheat 1,070,000 acros) and cotton. The figures of area are based on actual measurements made by the patwaris in their field-to-field inspection at each harvest. They are further checked by higher revenue officers. The estimates of the standard yield are based principally on data derived from a large number of crop-cutting experiments made during the progress of settlement operations. They were framed for each assessment circle, which is the unit of area, and separately for lands irrigated by canals, by wells, for alluvial (sailab) lands, and for lands entirely dependent on rain. The standards are applied to the estimates of condition of crops received from the District Officers, who frame their estimates in consultation with local agriculturists. The exact number of agriculturists consulted by the district officers is not available, but it must necessarily be several hundreds.

The estimates for Ajmer-Merwara relate to the whole of the district. So far as khalsa,* Ajmer-Merwara jagir,† and minor istamrarit villages are concerned, the patwari is responsible for making (Total field-to-field inspections of every village in his circle at each harvest. These inspections commence on 1st September for the antumn harvest and on 1st February for the spring harvest. The patwars notes down the results of his local inquiries and inspections in his field book. A certain percentage of the entries made by the patwars is checked and corrected, when necessary, by the girdawar or kanungo**, who also inspects the crops at each harvest. The tabeil officers further test a certain number of entries, and the sub-divisional officer also makes a general inspection of crops at each harvest. As soon as the inspection of the harvest is complete, an abstract statement of area and outturn is compiled separat for each girdawar's circle and tahsil, and these statements are then consolidated fo three sub-divisions in the district office. An assumed normal outturn per acta for crop has been fixed at settlement. Crop estimates are annually made by the revenue office. and the results recorded. These sets of figures give a useful check on the outturn estimates made by the patwaris. The exact area sown in the sub-divisions is obtained from the abstract statements. In the large islamrari estates the preparation of the field books is done by the estate officials. These field books contain fairly accurate information in regard to wheat, the outturn of which in maunds is generally appraised for the purpose of payment of the cultivators' rent; but as regards cotton and sesamum the figures are conjectural, as no crop-cutting experiments are made, the rents being charged in cash. The Government agency does not supervise the collection of figures in large islamrari estates.

The estimates for rice furnished by Coorg are based on the results of annual crop Coorg inspections and experiments. Crop inspections are made by each shanlog (1) for his circle under (Total the supervision of the parpattigar and the detailed particulars entered in the crop inspection area 142,000 acres) registers and summarised in the crop abstracts, the totals of which are compiled in the office of the Deputy Director, Land Records and Agriculture. About 50 crop experiments are conducted annually by subordinates of the Revenue Department and subcdure (2) (labsildure) and also a few by the Deputy Director of Land Records and Agriculture, in whose office the estimates of yield, given in the forecast, are calculated on the basis of the average for the province.

In the Central India States estimates are framed for wheat and cotton. The methods Central India differ with the different States. In most States the acreage returns are prepared by takeils from the field measurements of the patwaris and then compiled for the whole State. In some cases the outturn estimates are similarly compiled after check on the spot by the higher revenue officials in consultation with the cultivators; in others they are merely an approximation from the screage figures; in a few States fields are selected in the different circles as bearing an average yield, the crop is cut and weighed, the outturn for the circle is calculated from the result, and the totals of the circles form the return for the State. Finally, each Political Agent compiles the returns of the States in his political charge into an Agency return, each of which is shown separately in the return for Central India.

The estimates for wheat and cotton furnished by the States in Rajputana are generally Rajputaus defective in consequence of the absence of figures for unsurveyed areas and privileged tenures in man7 cases.

- * Khales villages are those which pay full revenue to Government
- † Land granted revenue-free on condition of military service or as a charitable endowment I A tenure which, though the revenue is assigned, is charged with a permanently fixed quit rent ** Circle inspector
- A revenue officer in charge of a sub-division of a taluk
- (1) Village accountant (2) Revenue officer in charge of a taluk

(Total cultivated 6,692,000

B.P.**

BCTCd)

cultivated 293,000 neres)

entivated.

Hyderabad

\$C765)

The estimates for the Hyderabad State relate to all the districts of the State (Total cultivated including non-Government area, such as Jagurs, etc. Raiyatwari tenure prevails in the area 21,551,000 including non-Government area, such as few districts, the area is surveyed and settled State and with the exception of some parts of a few districts, the area is surveyed and settled. Patwaris or village accountants, who are hereditary office-bearers, furnish to the taluq office figures regarding area under principal crops. The tahsildars who are touring officers check these figures by a field-to-field inspection during their tours and send reports of their talugs to the District CoHector or first talugdar as he is called in the State. The figures for each district after being consolidated in the District Office are sent to the Director of Statistics of the State who finally checks and consolidates them. The estimates of standard yields of crops are based only on conjectures, which are generally misleading. As a result, the reported outturn is generally low. Instructions are, however, being issued by the authorities of the State for conducting crop-cutting experiments and it is hoped that in future the returns will show approximately correct estimates. Sixteen annas represent a normal crop.

ly sere (Total 8 668 встев)

Baroda (Tota)

The estimates furnished by the Mysore State relate to all the districts of the State in which the respective crops are grown. As regards area the information is based on the cultivated entries made by the shanbog (village accountant) in his crop inspection book and checked 6,020,000 by the higher revenue officers. The outturn is noted by the shanbog in terms of annas (16 annas being taken for a normal or 100 per cent crop) from which the total yield is determined by reference to the standard normal outturn per acre fixed for each taluk. The figures are finally scrutinized and consolidated in the Revenue Commissioner's office.

The figures are furnished to the Director of Agriculture by the Revenue Heads of each taluka (Vahivatdar). These are prepared in villages by the village clerks (Talatis) from cultivated the form recording crops grown in every survey number. These entries are checked by the area 2,870,000 acres) inspecting officers. The outturn is usually returned as so many annas in the rupee and also as so many lbs. of 40 tolas per bigha. The crop returns are finally consolidated and checked in the office of the Director of Agriculture. With regard to the standard yields per acre, these are not yet separately ascertained as pertaining to Baroda territories. Whenever a reference to these becomes necessary those ascertained for the contiguous British territory, with which Baroda territory is closely interlaced, are utilised.

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Represents average for two years ending 1920-21

40

APPENDIX III

DATES PRESCRIBED FOR THE ISSUE OF THE ALL-INDIA (FORECASTS OF CROPS BY THE COMMERCIAL INTELLIGENCE DEPARTMENT, INDIA

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RICE-										•	*	
lst f	orecast	•	•	•	•	•	•	•	•	•	. October	20
2nd		•	•	•	•	٠	• •	•	•	•	. December	20
Fina	l "	•	•	٠	•	•	•	•	•	•	. February	20
WHEAT-												
Tat f	orecast		•	•						•	. January	31
200 . 2nd		,			-		•			•	March	15.
• 3rd	ور		•		•	•	•	•	•		. Anril	20
⊿th					•		•	•		•	. May	30
Fing	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-				•	•	•			. August	10
¥ 100	· ·))	•	•	•	•	•	•	•	•	-		
COTTON-	')									•	
lst i	forecast	•	•	٠		•		•	•	•	August	15
2nd		•	•	•		•		٠	•	•	. October	15
3rd	. 11			•		•		•	•	•	. December	15
Fins	1	•	•					•	•	•	. February	15
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APPENDIX IV

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SEASONS OF SOWING AND HARVESTING OF THE CROPS AND THE TRACTS WHERE THEY ARE MAINLY GROWN

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•	, Sea	SON OF	WHERE MAINLY GROWN				
Скор	Sowing	Harvesting .	British Provinces.	Indian States*			
Rice Winter (a) Autumn Summer	May to August May and June January and February	December and January September May and June	Bengal, Madras, Bombay and Sind, United Provinces, Bihar and Orissa, Punjab, Burma, Central Provinces, Berar, Assam, North- West Frontier Province, Ajmer- Merwara, Delhi, Coorg, and Maupur Pargana.	Mysore, Madras States, Central India States, Raj- putana States, Punjab States, Kashmir, Hydera- bad, Baroda, Bombay States and Contral Pro- vinces States.			
Wheet— (<i>Rahi</i> or spring crop)	October to December	Mareli to May	Bengal, Madras, Bombay and Sind, United Provinces, Bihar and Orissa, Punjab, Barma, Central Provinces, Berar, North- West Frontier Province, Ajmer- Merwara, Delhi, and Manpur Pargana.	Mysore, Central India States, Rajputana States, Punjab States, Kashmir, Hyderahad, Baroda, Cen- tral Provinces States and Bombay States.			
Sagarcane (8) 🥲	February to May	November to January	Bengal, Madras, Bombay and Sind, United Provinces, Bihar and Orissa, Punjab, Burma, Central Provinces, Berar, Assam, North-West Frontier Province, and Delhi.	Myeore, Madras States, Central India States, Rajputana States, Punjal, States, Kashmir, Baroda, Hydersbad and Bombay States.			
Ten Cotton(c)	Seeds sown between November and March and seedlings planted ont when at least 6 months old.	May to December in Northern India and January to December in South India.	Bengal, Madras, United Provinces, Bibar and Orissa, Punjab, Barma, and Assam.	Travancore (Madras) and Tripura (Bengal)			
Early	} March to Angust	October to April	Bengal, Madras, Bombay and Sind, United Provinces, Bihar and Orissa, Punjab, Barma, Central Provinces, Berar, Assam, North-West Frontier Province, Ajmer-Merwara, Delhi, Coorg, and Manpur Pargana.	Mysore, Madras States, Central India States, Rajputana States, Punjab States, Kashmir, Hydera- bad, Baroda, United Pro- vinces State (Rampur), Bengal State (Tripura)			
Jato- (Autamn crop) Linneed-	Mareli to May	August and September	Bengal, Bihar and Orissa and Assam.	and Bombay States.			
Rays and Mustarl-	August to October	January to April	Bengal, Madras, Bombay, United Provinces, Bibar and Orissa, Punjab, Contral Provinces, Berar, and Assam.	Mysore, Madras States, Central India States, Rajputana States, Ponjab States, and Kashuir, Hyderabad, Bombay States and Central Provinces States.			
(Aabi or spring crop)	Ditto	Ditto	Bengal, Madras, Bombay and Sind, United Provinces, Bihar and Oriasa, Punjab, Burma, Centrai Provinces, Berar, Assam, North-West Frontier Province, Ajmer-Merwara, and Delhi.	Mysore, Central India States, Rajputana States, Punjab States, Kashmir, Hydorabad, Baroda and Bombay States.			
rrop (d)	May to July January and February	October to December May to July	Bengal, Madras, Bombay and Sind, United Provinces, Bihar and Orissa, Punjab, Borma, Central Provinces, Borar, Assam, North-West Frontier Province, and Ajmer-Merwars.	Mysore, Madras States, Central India States, Rajputana States, Punjab States, and Kashmir, Baroda, Hyderabad and Bombay States.			
Groundaut(r)	May to August .	November to January	Madras, Bombay, United Pro- vinces, Bihar and Orissa, Burma, Contral Provinces and Berar.	Mysore, Madras State (Banganapalli), Central India States, Hyderabad			
Indigo(f)	February to July .	August to November	Bengal, Madras, Bombay, Sind, United Provinces, Bibar, and	and Bombay States. Rajputana, Punjab States, Hyderabad and Bombay			
Coffee .	Rainy senson	October to January	Orissa, and Punjab. Madras and Coorg	States. Mysore, Madras States (Travancore and Cochin).			
Rubber			Borma, Madras, Assam, Coorg and Bengal.	Mysore, Madras States (Travancore and Cochin).			

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(a) In Madras, the seasons vary greatly. The first crop is sown between April and October and the second crop between September and March. The first crop is harvested between September and March and the Second crop between January and May
(b) In Madras the harvest takes place between December and May
(c) In parts of Southern India, sowing continues till December and Marresting till July
(d) In parts of Southern India, sowing continues till September or October and harvesting till March or April
(e) In Madras, there is an irrighted crop which is sown in February-March and hervested in July-August
(f) In Madras, there is an irrighted crop which is sown in December-January and harvested in March-April

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Pages	1 B20N	
American notation	Methods of collecting statistics	
Anna estimato	Mixed crop, treatment of	
Area-	Mustard (see Rope and Mustard)	
Bajra (Pennisetum typhoideum) . 21	Normal crop, definition of	
Barley (Nordeum vulgare) 22.30	Normal yield per noro • • • • 33, 30	
Castor seed (Ricinus communis)	Percentage estimate	
Collee (collea Arabica)	Rainfall— 28	
Cotton (Gossypium sp.)	Monte and actual	
Gram (Cicer arietinum)	Rape and Musterd-	
Groundnut (Arachis hypogea) 4, 8, 20	Area	
Indigo (Indigofera Sumatrana and I.	Yield	
Jowar (Serahum pulgare)	Rice-	
Jute (Corchorus en.)	Area $25, 8, 13, 20$	
Linserd (Linum weilatissimum) . • . 3.8.17.31	Yield • • • •	
Maira (Zen mana)	Rubber- 4, 8, 21	
Pare and Mustard (Brassica sp.) 3. 8. 19. 32	ib.	
$E_{ice} \left(O_{\pi} u_{\pi} a_{\pi} a_{\pi} a_{\pi} a_{\pi} a_{\pi} \right) \qquad $	Season, leading features of	
Pubbon (Hanag Legeiliansia) A 8 21	Seasons of harvesting of crops	
Number (Stranger indiane)	1. of soming of crobs	
Summan (Scotlanum affairanum) 9 9 15 90	Area	
Sugarcane (Daccharum ojicinarum) 2, 0, 10, 33	Yield	
$\frac{1}{2} = \frac{1}{2} \left(\frac{1}{2} + 1$	Source and scope of the estimates	、
in ment (Ariticum sativum)	Standard normal outturn • • • 30	
Area of crops, now ascertained . 35, 37-40	Sugarcane- 9 \$ 15 92	
	Aren	
Yield		
Barley-	Area	
Area	Tield	
Castor coel	Wheat-	
Area	Area 2, 8, 14, 20	
Yield	Theid .	
Chart showing the condition of monsoon	Yield	
Charts illustrating the growth of pro-	Puyler 22, 50	
duction of crops frontispiece	Contonaved 27	
Coffee -	Castor neta	
Yield		
Cotton-	Cotton 26	
Area	Gran AN 20	~~ . ,
Net exports		
Yield		
Crops-where mainly grown	ີ່ JOWAT	ł
Crop-cutting experiments 35		
Dates of publication of forecasts	Linseed	
Gram-		
Area	Rape and mustard 8, 8, 18, 32	
Yield	Rice ,	
Area 4.8.20	Rubber	
Yield	Susamum	1
Indian notation	Bugaicane	1
Indigo	Tea	I.
Area	Wheat	r
Yield	Yield per acre-	
Area	Coffee , , , , 11	
Yield 23	Groundnut 10	,
Jute-	Indigo 11	
Area	Jute	,
Vield	Normal	
Linseed	Rape and mustard	.•
Area	Rice 9)
Maize	Rubber	
Area	Sugareano - 9	, ,
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Yield ib.	Tea	,

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