



GOVERNMENT OF MAHARASHTRA

AGRICULTURAL CENSUS 1976-77

MAHARASHTRA STATE

REPORT

ON

INPUT SURVEY

PART I & II

DEPARTMENT OF AGRICULTURE

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P R E F A C E

As an integral part of the Agricultural Census Programme of 1976-77, an Input Survey was also carried out in Maharashtra State in a random sub-sample of 810 villages of the sample taken for Sample Agricultural Census. In each selected village, 20 operational holdings, equally distributed in 5 size groups, were randomly selected. The data of the inputs (i.e. variety of seed, fertilizers, organic manures and pesticides) used by each selected farmer in respect of six selected principal crops, namely, paddy, bajri, kharif jowar, cotton, rabi jowar and wheat, were collected. In addition, information in respect of multiple cropping, area water logged and saline lands, live-stock and agricultural implements possessed by the farmers was also collected.

The Deputy Commissioner (Agricultural Census) was responsible for planning, organising and controlling the field work of the survey. He was assisted by a small Agricultural Census Unit created in the Directorate of Agriculture, at Pune. For the first time, the electronic processing of the data was also undertaken by the Agricultural Census Unit. The technical guidance of the computer experts of the National Institute of Training in Industrial Engineering (NITIE), Powai, Bombay was fully taken for the development of computer programmes and the processing of the data. As a part of the Agricultural Census Unit, a Mechanical Tabulation Cell was created with the Deputy Director (Mechanical Tabulation) as the Officer-In-Charge to attend to the mechanical tabulation of the data. Two Research Officers were appointed to help the above officer in this work.

The preliminary part of the field work involving the preparation of the list of operational holdings for each selected village was carried out by the talathies (i.e. patwaries). The collection of actual Input Survey data was entrusted to the Block Statistical Assistants in Panchayat Samities. The fieldwork was carried out under the supervision of the District Statistical Officers of the Directorate of Economics and Statistics and the Statistical Officers and staff of the Department of Agriculture.

The results of the Input Survey for the State and regions are presented in this report. The report is divided into two parts. The first part contains seven chapters while the second part contains statistical tables 1 to 12 giving the estimates according to 5 size classes of holdings for the State and each region. The first three chapters of Part-I deal with the background information, organisational arrangements, concepts and definitions, etc. Chapter IV gives the findings of the Input Survey for the individual crops, while those for the six crops taken together are given in Chapter-V. The extent of multiple-cropping is discussed in the Chapter-VI, while the findings relating to live-stock and agricultural implements are summarised in Chapter-VII.

The results of the Input Survey show that, in 1976-77, there were 54 lakh holdings in the State with an operated area of 176 lakh ha. Of these, 49 lakh holdings grew one or more of the six principal crops under unirrigated conditions, their area being 117.3 lakh, ha. In case of these crops under irrigation, the number of growers was 13.5 lakh, their area being 14.5 lakh ha.

The total consumption of chemical fertilizers by the six crops was estimated at 4 lakh tonnes, 2.5 lakh tonnes by the crops grown in unirrigated conditions and 1.5 lakh tonnes by the irrigated crops. Hence the above crops under irrigation received nearly 40 per cent of the total quantity of fertilizers though their area was only 11 per cent of the total. Urea and fertilizer mixtures were the major fertilizers used forming 47 per cent and 44 per cent, respectively, of the total quantity of fertilizers. 80 per cent of these two chemical fertilizers were applied to the six principal crops in the holdings falling in the last three size groups.

The total quantity of organic manures used for the six principal crops was estimated at 2.8 lakh tonnes. The use of pesticides was on a low scale with hardly one-seventh of the holdings growing dry/irrigated crops getting the benefit.

The extent of multiple cropping in the State was relatively small. Thus out of the total net irrigated area of 19.35 lakh ha. in the State, one crop was raised to the extent of 68 per cent, 2 crops in 31 per cent and 3 crops in 0.5 per cent only. In case of dry crops, hardly 9 per cent of the area was cropped twice.

Nearly one fifth of the total area of 117.3 lakh ha. under the unirrigated six crops was under High Yielding Varieties Programme, while it was 40 per cent (out of 14.5 lakh ha.) in case of the irrigated crops.

The estimated numbers of cattle and buffaloes owned by the farmers were 166 lakh and 37 lakh respectively. The corresponding estimates per 100 households were 298 and 67 and per 100 ha. of operated area were 83 and 18. Similar estimates in respect of agricultural implements and machinery owned by the farmers were also obtained and discussed in more detail in Chapter-VII.

The report contains the details of the above and other findings of the Input Survey for the State and regions. I trust that these results (presented according to size class of holdings) for Maharashtra State, would be of considerable utility not only to the Government departments, but also to the extension and research workers in the field of agriculture, economists and others associated with agricultural planning and development.

The Block Statistical Assistants (of the Panchayat Samities) and the talathies who were entrusted with the responsibility of collection of basic data did a good job, taking into consideration that they had to attend to this work in addition to their normal duties. The higher officers in the Zilla Parishads right from the Chief Executive Officers down to the Block Development Officers, the District Statistical Officers, the Statistical Officers and supervisors of the Agriculture Department, gave necessary support while the statistical officers and staff supervised the field work also to the extent possible. I would like to express my thanks to all these officers and staff.

Shri V. G. Sharma, Deputy Commissioner (Agricultural Census) was responsible for the successful planning and organisation of the Input Survey and also the preparation of the detailed report on the Input Survey. Prof. S. K. Singh and Shri A. D. Raut, computer experts of the NITIE, took a deep personal interest and gave valuable guidance in the development of the computer programmes and in the processing of the data on the electronic computer. Shri N. P. Joshi, as Deputy Director of Mechanical Tabulation Unit, had put in commendable efforts in rendering requisite help in the development of computer programmes, in attending to the actual processing of the data on the computer and in the finalisation of the draft report. I would like to place on record my appreciation of the services rendered by all these officers and other staff.

I would like to express my gratitude to the officers of the Agricultural Census Division, Government of India, New Delhi for their guidance and help in the conduct of the Input Survey.

N. RAGHUNATHAN, I.A.S.,
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Maharashtra, Bombay-32.

Bombay,
28th May 1980

CONTENTS

PART-I

CHAPTER-I

INTRODUCTION

<i>Paragraph No.</i>		<i>Page</i>
1.2	Decision regarding conduct of the Input Survey	1
1.4	Objects	1
1.5	Scope	1
1.6	Reference year	2
1.7	Methodology	2
1.12	Concepts and Definitions	3
1.13	Administrative Divisions of the State	4
1.14	Agro-climatic zones	4
1.15	Contents of the Report	4

CHAPTER-II

ORGANISATION

2.4	Arrangements for the survey	5
2.9	Field work	6
2.15	Output tables and estimation procedure	7
2.16	Arrangements for processing of data	7

CHAPTER-III

BACKGROUND INFORMATION RELATING TO THE RESULTS OF THE INPUT SURVEY

3.2	Efforts made to popularise the use of Inputs	9
3.3	Limitations of the findings	9
3.7	Availability of data for processing	10
3.8	Classification of fertilizer mixtures	10
3.9	Estimated total number of holdings	10

CHAPTER-IV

PRESENTATION OF RESULTS

4.1	State and regional estimates	12
4.2	Important regions growing each crop	12
4.3	Estimates in terms of percentages	12
4.5	Estimates presented on crop oriented basis	12
4.6	Number of "crop growers" and "crop holdings" used synonymously	13
4.7	Non-additivity of the number of irrigated and unirrigated holdings	13
4.8	Rate of application of inputs	13

DISCUSSION OF RESULTS

4.9	Consumption of fertilizers and organic manures—present position	13
-----	---	----

CONSUMPTION OF FERTILIZERS

4.12	State level findings	14
4.13	Fertilizer consumption relating to irrigated and unirrigated crops	15
4.14	Size class-wise consumption of the chemical fertilizers	15
4.15	Consumption of organic manures	16
4.16	Quantity of organic manures applied to irrigated and dry crops	18
4.17	Size class-wise consumption of farm yard manures	18
4.18	Regional estimates of consumption of fertilizers and organic manures	18

SUMMARY OF FINDINGS RELATING TO CROPWISE USE OF INPUTS

		<i>Crop—Paddy</i>					
<i>Paragraph No.</i>							<i>Page</i>
4.19	Introduction	..	..	..	..	..	18
<i>State level findings</i>							
4.22	Number of holdings growing the crop	..	..	..	..	..	19
4.23	Average area under paddy per holding	..	..	..	..	..	19
4.24	Number of holdings receiving inputs	..	..	..	..	..	20
4.25	Use of inputs according to size classes of holdings	..	..	..	..	..	20
4.27	Extent of cultivation of High Yielding Varieties	..	..	..	..	..	21
4.28	Relative extent of use of inputs	..	..	..	..	..	22
4.29	Extent of use of inputs according to size classes of holdings	..	..	..	..	..	22
<i>Regionwise findings</i>							
4.34	Number of paddy growers in each region	..	..	..	..	..	25
4.35	Number of paddy holdings according to size classes	..	..	..	..	..	25
4.36	Number of paddy growers using different inputs	..	..	..	..	..	26
4.37	Use of inputs according to size classes of holdings	..	..	..	..	..	27
4.43	Extent of cultivation of High Yielding Varieties	..	..	..	..	..	29
4.45	Relative importance of inputs used in the regions	..	..	..	..	..	30
4.46	Use of major inputs according to size classes of holdings	..	..	..	..	..	31
<i>Crop—Bajri</i>							
4.52	Introduction	..	..	..	..	..	33
<i>State level findings</i>							
4.56	Number of holdings growing the crop	..	..	..	..	..	34
4.57	Average area under bajri per holding	..	..	..	..	..	35
4.58	Number of farmers applying inputs	..	..	..	..	..	35
4.59	Use of inputs according to size classes of holdings	..	..	..	..	..	36
4.60	Extent of cultivation of Hybrid Varieties	..	..	..	..	..	36
4.61	Relative importance of the inputs used	..	..	..	..	..	37
4.62	Extent of use of major inputs according to size classes of holdings	..	..	..	..	..	37
<i>Regionwise findings</i>							
4.67	Number of bajri growers	..	..	..	..	..	38
4.68	Number of bajri holdings according to size classes	..	..	..	..	..	39
4.69	Number of holdings receiving inputs	..	..	..	..	..	39
4.73	Extent of cultivation under Hybrid Varieties	..	..	..	..	..	40
4.75	Extent of use of inputs	..	..	..	..	..	41
<i>Crop—Kharif jowar</i>							
4.77	Introduction	..	..	..	..	..	42
<i>State Level findings</i>							
4.81	Number of holdings growing the crop	..	..	..	..	..	43
4.82	Average area under kharif jowar per holding	..	..	..	..	..	43
4.83	Number of holdings receiving inputs	..	..	..	..	..	44
4.84	Extent of cultivation of Hybrid Varieties	..	..	..	..	..	45
4.85	Relative extent of use of inputs	..	..	..	..	..	46
4.86	Extent of use of major inputs according to size classes of holdings	..	..	..	..	..	46

v

Regionwise findings

<i>Paragraph No.</i>		<i>Page</i>
4.91	Number of Kharif jowar growers in each region	48
4.92	Number of Kharif jowar growing holdings according to size classes	49
4.93	Number of farmers using inputs	49
4.98	Extent of cultivation of Hybrid Varieties	52
4.99	Size class-wise distribution of area under Hybrid and other Varieties	52
4.100	Extent of use of inputs	53

Crop—Cotton

4.105	Introduction	55
-------	----------------------	----

State level findings

4.107	Number of holdings growing the crop	55
4.109	Average area under cotton per holding	56
4.110	Number of holdings receiving inputs	56
4.111	Use of major inputs according to size classes of holdings	57
4.112	Extent of cultivation of Hybrid Varieties	58
4.113	Relative extent of use of inputs	58
4.114	Extent of use of major inputs according to size class of holdings	59

Regionwise findings

4.118	Number of cotton growers	61
4.120	Number of holdings receiving inputs	62
4.121	Use of inputs in regions according to size classes of holdings	62
4.123	Extent of cultivation of Hybrid Varieties	63
4.124	Extent of use of inputs in the regions	64

Crop—Rabi jowar

4.128	Introduction	67
-------	----------------------	----

State level findings

4.130	Number of holdings growing the crop	68
4.131	Average area under rabi jowar per holding	68
4.132	Number of holdings receiving inputs	69
4.133	Use of major inputs according to size classes of holdings	69
4.134	Extent of cultivation of Hybrid Varieties	70
4.135	Relative extent of use of inputs	71

Regionwise findings

4.138	Number of rabi jowar growers in regions	72
4.140	Number of rabi jowar growers using different inputs	73
4.141	Use of inputs according to size classes of holdings	73
4.142	Extent of cultivation of Hybrid Varieties	74
4.143	Size class-wise distribution of the area under rabi-jowar	74
4.144	Relative importance of inputs used in regions	75

Crop—Wheat

4.146	Introduction	77
-------	----------------------	----

State level findings

4.147	Number of farmers growing wheat	78
4.148	Average area under wheat per holding	78
4.149	Number of holdings receiving inputs	79
4.150	Use of inputs according to size classes of holdings	79
4.151	Use of High Yielding Varieties (H.Y.V.)	80
4.152	Use of inputs	81
4.153	Use of inputs according to size classes of holdings	81

Regionwise findings

<i>Paragraph No.</i>		<i>Page</i>
4.158	Number of wheat growers	83
4.159	Number of holdings according to size groups	84
4.160	Number of holdings receiving inputs	84
4.161	Use of inputs according to size groups	85
4.166	Extent of cultivation of High Yielding Varieties	88
4.167	Area under H.Y.V. according to size classes of holdings	89
4.168	Extent of use of inputs	90
4.169	Use of inputs according to size classes of holdings	91

ESTIMATES RELATING TO SIX PRINCIPAL CROPS (TAKEN TOGETHER)

Based on Gross Area

4.174	Comparative estimates of gross area under principal crops applied with inputs ..	93
4.178	Estimated rates of application of major inputs	93
4.183	Consistency of Input Survey statistics	95
4.189	Comparison of Input Survey estimates with those of the 26th round of N.S.S.O. ..	96

CHAPTER-V

ESTIMATES RELATING TO THE USE OF INPUTS FOR THE SIX PRINCIPAL CROPS (TAKEN TOGETHER)—BASED ON THE NET NUMBER OF HOLDINGS AND AREA

5.2	Chemical fertilizers	98
5.8	Organic manures	99
5.15	Pesticides	100

CHAPTER-VI

MULTIPLE CROPPING AND AREA AFFECTED BY WATER LOGGING AND SALINITY

6.1	Introduction	102
6.2	Information collected in the Input Survey	102
6.3	Extent of multiple cropping	102
6.4	Intensity of cropping	103
6.6	Area affected by water logging and salinity	104

CHAPTER-VII

ESTIMATES OF LIVE-STOCK, AGRICULTURAL IMPLEMENTS AND MACHINERY

State level findings

7.2	Cattle	106
7.5	Buffaloes	107
7.7	Distribution of live-stock according to size classes	108

Regionwise Comments.

7.11	Number of live-stock per 100 households	109
7.12	Number of live-stock per 100 ha. of operated area	109
7.14	Agricultural Implements and Machinery	110
7.15	Number of implements per 100 households	110
7.20	Estimates per 100 ha. of operated area	111
7.22	Size class distribution of agricultural implements, etc. owned by cultivating households ..	111

ANNEXURES

Annexure I	Sampling procedure used in the Input Survey	112
Annexure II	Statement giving number of villages selected for the Input Survey in each district.	113
Annexure III	Estimation procedure for input characteristics	114

APPENDICES

Appendix I	Table Numbers : 1 to 13	115 to 126
Appendix II	Map of Maharashtra State showing boundaries of the six regions	127
Appendix III	Diagram : Crop-wise consumption of chemical fertilizers	129
Appendix IV	Diagram : Percentage consumption of chemical fertilizers by principal crops ..	131
Appendix V	Diagram : Crop-wise consumption of organic manures	133