



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.,
Agricultural Census Commissioner
and Secretary to Government of
Maharashtra, Bombay-32.

Bombay,
28th May 1980

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