

SOME ECONOMIC FACTORS AND POPULATION PRESSURE IN CROP OUTPUT GROWTH IN GUJARAT: AN INTER-DISTRICT ANALYSIS*

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THIS paper attempts to identify the major factors, — such as distribution of land-holdings, pattern of land ownership, rainfall, irrigated area, pumping sets, oil engines and working cattle and mechanical power, fertiliser use and intensity of cropping — associated with inter-district differentials in the growth of crop output and per acre yield. It also examines the effect of population pressure on the crop output-growth and its components i.e. area, per acre yield and cropping pattern, and estimates the crop output-growth and its components for the period 1949-50 to 1968-69.¹

Data on some of the factors are available only either at a point of time or for periods which do not cover the whole period under analysis. Therefore, the factors associated with the differentials in yield-growth have been examined on the basis of cross section. However, the conclusions derived from the cross section analysis could equally

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¹ The data relating to area, production, rainfall, distribution of fertiliser, farm harvest prices, and land utilisation are taken from published and unpublished reports: *Statistics of Area, Production and Yield per acre of Principal Crops, Agricultural Statistics of Gujarat State and Season and Crop Reports*, by the Directorate of Agriculture, Gujarat. The number of cultivators and cultivated area in different farm sizes are collected from *Hand Book of Basic Statistics of Gujarat State*, 1963, whereas the number of working cattle, tractors, oil engines and electrical engine pumps for 1966, are drawn from *Quarterly Bulletin of Economics and Statistics*, Vol. IX, No. 1, January-March 1969, Bureau of Economics and Statistics, Govt. of Gujarat. The density of population, rural literacy, agricultural workers have been taken from *Census of India, 1961, Gujarat State, Vol. V, Part III, Household Economic Tables*.

The data of Bulsar district have been adjusted with Surat, as the former formed part of the latter till 1962-63. Similarly, Gandhinagar district data have been adjusted in equal proportion to Mehsana and Ahmedabad districts.