PREFACE

The assessment of agricultural productivity in the national planning is of due importance and can never be overlooked in a country where economy is developing in all sectors. This aspect of agriculture is important also where the man-land ratio is acute, and each hectare of cultivable land is required to support a certain number of persons, in the era of 'Green Revolution' in order to attain self-sufficiency in food production. As a result of many studies in the field of productivity measurement the relationship between gross/net output and factor input has arose as the optimal concept for comparison and identification of crop productivity levels either in terms value of output per hectare, per agricultural worker and persons supporting capacity i.e., nutritional levels 'in-time' or 'in-space'. Therefore, it has been attempted to compute productivity levels both in time and space by different angles i.e., yield index basis, in terms of nutrition available per person in relation to cropped land (Standard Nutrition Unit), output per hectare in terms of prevailing prices and output per agricultural worker engaged in farming for three different points of time 1950-51, 1960-61 and 1970-71. An attempt has also
been made to develop an input output relationship considering a number of independent variables (inputs), which may cause variations in field productivity (output) in terms of Standard Nutrition Unit. The analysis has yielded significant results for conclusion and suggestions.

The work comprises three parts. The first describes the physical setting of Uttar Pradesh and consists of three chapters namely, structure and relief, climate and soils. Part II attempts to give an account on the concepts and methodological frame for productivity measurement in agriculture in the Chapters IV and V respectively. The Chapter VI under Part III, the analytical frame of this thesis describes the general agricultural conditions i.e., the problems and prospects regarding to agriculture in the State. The Chapter VII deals with the regional differences in food crops productivity, their extents of variation and growth dimensions in different parts assessed through different productivity evaluating methods in Uttar Pradesh. The Chapter VIII examines the major sources of irrigation, extent and intensity of area under irrigation in each district. The description of different resources utilized in agriculture is given in Chapter IX which embodied
broadly the area planted under high-yielding varieties programme, distribution and consumption levels of fertilizers, use of farm implements and machinery and advancement of agricultural credit to the farmers. To establish cause and effect i.e., input output type of relationship has been attempted in Chapter XI.

The sources of information available to the writer to undertake this work may be grouped under two broad heads: (a) published books, reports and articles, and (b) statistical records (published and unpublished) of various State's Government Departments, especially the Directorate of Agriculture, Chief Engineer of Irrigation, Directorate of Planning, Secretary, Board of Revenue, Office of the Agricultural Census, and Registrar, Co-operative Banks.

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