

Research Note

Analysis of Total Factor Productivity Growth in Food Crops of Gujarat

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Productivity is a necessary element in growth since the improvement in productivity can lessen the overall burden on the poor. This study aims to examine the Total Factor Productivity (TFP) growth in eight food crops of Gujarat utilising the input-output data from 1981-82 to 1998-99. Tornquist Theil Index, superior to other indices, was used for computing total output index, total input index and the total factor productivity index. A continuous increase in the productivity of all the crops under study was reported during 1960-61 to 1999-2000. However, an increase in acreage during the same period was noticed only in case of wheat, paddy, maize, tur and gram.

Bajra crop registered a very high growth rate of TFP indicating technological change. Moderate technological change was found in case of wheat, maize and pulse crops. Policy attention needs to be paid to strengthen the sources, which have positive impact on TFP. The institutional infrastructure plays an important role not only in providing physical input but also in inducing technical change. For this, an increase in investment on research and input use efficiency are also necessary.

Introduction

Farming in India is characterized by wide differences in output and productivity growth performance between states and regions. The productivity growth in the Indian agricultural sector is highly essential, if agricultural output is to grow at a rapid and sustainable rate to meet the growing demands for food and raw materials, because the scope of increasing net cultivated area in the country is meagre. It is therefore, imperative that India has to depend upon improvements in the productive efficiency of factors as an important source of growth. Though the productivity as a source of growth has been an important theme of analytical enquiry in economics all along, it gained a quantitative edge in recent years. The term productivity is used with reference to efficiency in production of land, labour and capital separately or together. The improvement in productivity can lessen the overall burden on the poor. Thus, productivity is a necessary element in growth.

The current concern is that the earliest productivity gains from the green revolution have already been, by and large, reaped and the future growth in production can only be input based in many regions of the country (Kumar and Rosegrant, 1994).

Due research attention to input-output analysis in total factor productivity framework for food crops in Gujarat has been lacking. In view of the above, the present study was undertaken.

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