Productivity analysis of crops grown under different farming systems of Kashmir

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ABSTRACT

This study examined the production and productivity of various crops grown in different farming systems in district Pulwama of Kashmir valley, as a case study. Data for the study were collected from farm households surveyed across the study area while the trends in area and productivity levels of various crops were used to analyze data. The agro-ecological conditions of the area have the potential for cultivating fruits and vegetables together with cereals which keep diversity in cropping system and make balance in agro-ecosystem. Results indicated that the 14 per cent area was decline from last two decades (1989-2009). The average yield of rice was 50 quintals/ha, maize 28.54 quintals/ha, mustard 8 quintals/ha, pea (green pods) 80 quintals/ha and potato 152.41 quintals/ha were recorded in the study area. The study further recommends that the extension services should strengthen in the area with improved technologies to boost the production level of overall crops.

Key words: Productivity, Farming system

Introduction

Agriculture is the main stay of the national economy, and about 70 per cent of the population derives its livelihood from the agriculture and related sectors. In Jammu and Kashmir state 80 per cent population is dependent on agriculture as main source of livelihood (Nehvi and Wani, 2008). The net cropped area has been decreasing, due to urbanization, industrialization and reprioritization of agricultural crops due to changing food habits, market prices, globalization and increased human population needing better housing and living standards (Tomar et al., 2006). Thus, resulting in overall decline in cropped area and crop production as well and the possibility of getting additional land under cultivation is very remote. This stresses a need to produce more from less land. Therefore, the only alternative is to increase crop productivity and put together with more optimal utilization of natural resources (Singh, 2001).

Agriculture development largely depends on the improved technology used by the farmers. Low production and productivity of various crops grown under the conditions of Kashmir valley are due to non-adoption of improved technologies in the farming practices. Various crops grown under varied conditions, since by increasing the productivity of crops in the valley, can restore food security to a greater extent. The agro-ecological conditions are quite feasible for enhancing and diversifying livelihood options through cultivating cash generating crops like vegetables, spices, fruits etc. Cultivating these crops not only restores environment but pave a way for food security.

In an economy where resources are scarce and

opportunities for improved technology are lacking, productivity estimates will be able to show that, there are possibilities of raising productivity by improving efficiency without increasing resource base or developing improved technology. It could be said that the productivity efficiency for crop production is still low, for below expectations. In the light of the foregoing, this study therefore, examined the productivity of various crops grown in agriculture subdivision Tral as a case study. The issues of determining crop productivity are crucial. Therefore, food security issues are becoming a prime concern, so the study was undertaken to discuss the productivity and production of various crops grown under different farming systems of Kashmir.

MATERIALS AND METHODS

The present study area is located in South Kashmir of J & K state. In district Pulwama, Agriculture subdivision Tral was selected purposively, as the investigators are working in the Department of Agriculture Production in the same area. The Agriculture sub-division Tral is spread over an area of about one thousand square kilometers. Ten villages were selected for the study, since the villages have maximum area under agricultural crops. Primary data were gathered from 80 farmers through well structured interview schedule and the secondary data were collected from district statistical and evaluation officer, Pulwama.

RESULTS AND DISCUSSION

The results obtained from the present study as well as relevant discussion have been presented under