

## Dynamic growth and decomposition analysis of major pulses in Rajasthan

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**ABSTRACT** : The pulse crop, an important source of nutrition and income for millions around the world, is cultivated over 58 million hectares in developing countries and another three million hectares in developed countries. Nearly 15% of the global crop enters world trade. India is the biggest producer, as well as the largest consumer and importer of pulses. Globally India contributes one fourth of the total pulses production. To assess the present trends in growth and instability and the share of area and yield in production of major pulses such as gram (Bengal Gram), moong (Green Gram), moth (Moth Bean) and urad (Black Gram) in Rajasthan the present study was undertaken. Secondary data covering the period from 1994-95 to 2014-15 were used. The entire period was sub-divided into two i.e. Period I (1994-95 to 2004-05) and Period II (2005-06 to 2014-15) of ten years each. The component analysis model was used for decomposition analysis. The area, production and productivity growth rates were positive during the overall period. This may be mainly due to good and high quality of seed and increase in area under pulses in Rajasthan in Period II. Production growth rates were negative for all the pulses except moong crop. On the other hand production growth rates were positive and significant for total pulses (8.95%) as well as important pulses during the Period II. Though, the growth in productivity of pulses crops was positive and non-significant in period under study but it was only 1.20 per cent per annum. Instability in area, production and productivity of pulse crops was also high during the Period I compared to Period II. The results of decomposition analysis showed that among the three effects i.e., area effect, yield effect and interaction effect, the area effect was found to contribute more to the change in the production of pulse crops during Period I (1994-95 to 2004-05), whereas the yield effect contributed more to the change in the production of pulse crops during Period II and at overall Period. The decomposition analysis further showed that the growth in production of total pulses in all the three periods was mainly due to yield effect contributing 99.2% in Period I, 107.1% in Period II and 125.1% in overall Period. Thus, there is an urgent need to increase the pulses production through technological intervention to meet the requirement of growing population in the country.

**Key Words:** Dynamic growth, instability, pulses, decomposition.