# Impact assessment of MAU technologies of cotton, soybean and tur on farmers economy in Marathwada region of Maharashtra

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## **ABSTRACT**

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Marathwada Agricultural University was established with objectives like teaching, research and extension. Many times question arised that what is benefit of the Agricultural University to the farmers in the region? Keeping this view in mind an attempt was made to study economic impact of MAU technology in respect of cotton, soybean and tur crops. A sizable sample of cultivators of MAU technology adopter were selected, so as to make the total sample of 40 each for cotton, soybean and tur. Total sample size 120. A sizable sample of non-adopters for comparison was also studied, partial budget technique was used along with the estimation of incremental benefit due to application of MAU technologies in respective crop. The results of the study indicate that the application of MAU technology in cotton, soybean and tur was resulted in per ha incremental benefit of Rs.9930.31, Rs.4728.89 and Rs.4665.74, respectively. MAU crop production technologies of cotton, soybean and tur crops had positive economic impact on the economy of the farmers in the region of Marathwada. Region may be benefited by Rs.595.82 crores by cotton technologies, Rs.94.57 crores by soybean technologies and Rs.77.92 crores by tur technologies generated by the M.A.U., Parbhani and its area adoption, in the region as whole. The MAU Parbhani through the generation of improved agricultural crop production technologies contributed by Rs.768.37 crores annually to the agricultural economy of the Marathwada region.

### INTRODUCTION

In India, Maharashtra State is having important place in production of agricultural commodities. In Maharashtra cotton is major fibre crop, tur or pigeonpea is pulse crop and soybean is major oil cum pulse crop. Marathwada region is drought prone region having these three crop i.e. cotton, tur and soybean grown on large area. All these crops are taken as a rainfed crop. The area under cotton in Maharashtra is 31 lakh hectares and production is 26.9 lakh tonnes with average productivity of 147 kg/ha. The textile industry provides large employment to farm marketing and processing sectors. While soybean has established itself as a rich source of protein. In Marathwada, it is a main rainfed crop in kharif season. The area under the crop in Marathwada region was 9.82 lakh ha and production of 9.52 lakh tonnes. The productivity of soybean in Marathwada is 9.69 q/ha. Pigeonpea or Tur is the second most widely grown legume in India. The area of the tur crop for Marathwada region is 4.12 lakh ha and production is 0.22 lakh tones having productivity 0.53 q/ha.

These three crops viz., cotton, soybean

and tur or pigeonpea are the important crops of the region and the farmers economy depends largely on these crops. Marathwada Agricultural University (MAU) had done research on various crops, farmers problems regarding agriculture. In this context, study was carried out to know the economic impact of MAU technology in respect of cotton, soybean and tur crops.

#### **METHODOLOGY**

Parbhani district selected was purposively. Based on maximum area under crops two talukas viz., Basmat and Selu were selected. From each taluka five villages were selected on the basis of maximum area under selected crops. A sizable sample of cultivators of MAU technology adopter were selected, so as to make the total sample of 40 each for cotton, soybean and tur. Total sample size 120. A sizable sample of non-adopters for comparison was also studied. The partial budget technique was used along with the estimation of incremental benefit due to application of MAU technologies in respective crops. Data was collected for agricultural year 2006-2007.

Key words: Cotton, Soybean, Tur, MAU technology, Economic impact, Partial budget technique

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