

**RESEARCH ARTICLE :**

# Yield gap analysis in maize production in Karimnagar district Telangana

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**SUMMARY :** The term “yield gap” refers to “the difference between actual yields and potential yield.”. The purpose of the study was to investigate the key factors limiting maize productivity in Karimnagar district of Telangana in order to develop strategies to reduce the yield gaps. So, for the present study maize hybrid KNMH-131 was purposively. Purposive sampling technique was employed for collecting primary data from a sample of 30 progressive farmers and 30 normal farmers, so the total sample becomes 60 for the study. Thus, collected primary data was analysed with the help of yield gap analysis tables and production function analysis. The study revealed that the yield gap-I was observed to be -1.21 per cent and yield gap -II and yield gap-III were 3.97 and 23.13 per cent, respectively. Various yield gap indices in maize were worked out and the same are presented in Table 2. Various yield gap indices were worked out to know the untapped potential of maize in the farmers’ fields. The index of yield gap in maize was 21.92 per cent, the index of realized potential yield gap of normal farmers in maize was 78.07 per cent. The indices of realized potential farm yield presented in table indicated that the farmers, in general, were successful in exploiting the potential farm yield of normal farmers of maize to the extent of only 77.14 per cent. The analysis indicated the existence of a considerable percentage of untapped potential farm yields in maize. The production function analysis showed negative production elasticities for total labour (-0.083) and plant protection chemicals cost (-0.1499) which clearly indicates the excess usage of these inputs for progressive farmers. For the normal farmers plant protection chemicals cost and experience in farming resulted in negative results which indicates that the farmers need to know the current information on newly introduced pests and diseases and they have to take initiative measures for controlling the same.

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