



## **Spatio-Temporal Analysis of Crop Combination -A Case Study of Karimnagar District, Telangana**

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**Abstract:** The present study is an attempt to identify the crop combination regions in Karimnagar district in Telangana state for its better landuse planning. The Karimnagar district lies between 17° 50'' and 19° 05'' Northern latitudes and 78° 29'' and 80° 22'' Eastern longitudes. It covers an area of 11,823 km<sup>2</sup> and administratively the district is divided into 57 mandals. Karimnagar district is bounded by Warangal and Medak districts in the South, Nizamabad district in the West, Chhattisgarh state in the north-east and Adilabad district in the North directions. Karimnagar, the administrative headquarters of the Karimnagar District, is situated 160 km north east of Hyderabad in Telangana. Karimnagar has a population of 38,11,738 as per 2011 census. The district has a population density of 322 inhabitants per square kilometer. Its population growth rate over the decade 2001-2011 was 9.16%. Karimnagar has a sex ratio of 1009 females for every 1000 males and a literacy rate of 64.87%. Karimnagar is a prominent agricultural center in the state. Vast agricultural areas of Karimnagar district are watered by the Godavari River. The data regarding major ten crops were obtained for year 2002 and 2012 at mandal level from secondary sources. The data collected were then converted into percentage. Weaver's crop combination technique was applied to compute crop combination regions.

**Keywords:** *Agriculture, Ranking crops, rice, maize, groundnut, sugarcane, cotton.*

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