



# STUDIES ON CROP COMBINATION IN DIARA LAND BHAGALPUR

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## ABSTRACT

Crop combination technique provides a base for agricultural regionalization. It is a statistical method by which share of area under different crops and its proportion to the total area sown under different crops are ranked in an ascending order to understand and analyse the cropping pattern and diversification of crops in a given area unit at a given point of time. It is beneficial for planning and development of agriculture. Therefore government should take a keen interest to develop agriculture by agricultural land use planning. In the present paper crop combination are identified for years 2011 for comprehensive and clear understanding of the changing cropping pattern in Bhagalpur Diara.

**Keywords :** *Crop combination, activities, production, and cultural etc.*

## Introduction :

Agriculture geography is the vital branch of geography deals with study of spatial variations in agricultural activities, production, physical and cultural factors controlling its spatial distribution. Agriculture is the most important human activity. Knowledge of agriculture is useful to improve structure and management of agriculture.

Crop combination is an important aspect of agricultural geography helps in understanding the cropping pattern in a region. This technique delineates the agricultural regions based on the

acreage statistics. The percentage of total harvested cropland occupied by each crop is taken into consideration. The concept of monoculture that is producing or growing single crop in a field at a time, which will occupy 100% share hardly exist in any geographical region, as growing multiple crops enables to cultivate crops throughout the year irrespective of season. The spatial distribution of crops in a region is useful to adopt the policies to increase the production, to introduce irrigation schemes, to develop transport system for better accessibility. Crop combination is of great significance in understanding and analysing the cropping pattern and crop concentration in any particular area for the development of agricultural sector. There are different methods applied in the delineation of crop combination regions. Weaver (1954) statistical technique is used to establish the crop combination and assessing the changing cropping pattern.

### **CROP COMBINATION :**

Crop combination has recently been accepted as one of the important topological characteristics of agriculture. This concept is a scientific derive to study the existing spatial relationship of crops in association with each other in agricultural geography and land utilization such study is necessary in order to have a more complex structure of agricultural regions. A number of meso and micro level studies have been made in India as well as in other countries of the world on this issue. The importance of such study is extended to the regions of subsistence farming with low degree of Specialization in agriculture particularly where numerous crops are grown, some of them being of similar of complementary character. Such study reveals the pervasive way in which apparently minor differences in physical conditions have caused variation in agricultural responses. An idea of the crop combination is essential to an adequate understanding of the geography of the individual crop that holds variable position within them which is also an integrative reality that demands definition and distributions analysis. Such knowledge of region is a essential for construction of more compels structure of valid agricultural regions. The general motion of crop combination regions appears to be valid as it makes possible the establishment of areas differentiated on the basis of regional dominance of crops, that are specially related and occur together in varying hot The pattern and regional diversification of crop-combination deserves close investigation in order to understand the extent of human response to the complex of the whole

environment within the specific set of conditions. This requires collection of cultivated: crops data at the smallest possible level so that maximum diversities may be traced and understood.

### **Crop Combination Regions:**

On the basis of the study area has been divided into crop combination regions. The researcher is of the view that if one, two or more crops together contribute more than 75% of the crops are, they may constitute one combination of crop or mono crop.

#### **(1) Wheat-Maize-Region:**

It is a two-crop combination region only these two crops cover three-fourth cropland of the Panchayats. Maize is more dominating crop (First ranking) than wheat (Second ranking). The percentage of wheat lands varies between 3-50 percent whereas Maize Areas do not exceed 5-85 percent in these Panchayats. Other crops remain the third ranking crop in most of these Panchayats but Sankarpur Diara, Bihpur, Gopalpur Dimha, Rani Diara, Karchia, and Olapur Parasbana. Gram is the third ranking crop. There is difference in fourth ranking crop in Jairampur gram in Tintanga Karari Gram and in Chak Rami other crops in Sultanganj; wheat, Maize pulses and other crops in Marjafari Wheat. Maize fruit and vegetables and pulses, in Khawaspur Maize, wheat pulses. Fruits and their crops and Gram are forth ranking crops.

#### **(ii) Maize-Wheat-Region:**

Ramuchaki Makanpur and Amapur Diaru Panchayats comprise this region. These Panchayats have 49.85 per cent of cropped area under maize crop, which is the first ranking crop. In these two Panchayats the second rank is taken by wheat which shares 2-25 percent cropped area. There is no third-ranking crop in this region.

#### **(iii) Wheat-Maize-Pulses Region:**

Jairampur, Shahabad Gangapur Bihpur, and Birbanna Panchayats come is first ranking crop followed by wheat. Pulses crops having a good share or cropped are in Sultanganj, Ajmeripur, Bria, Ramuchak makanpur, Ismailpur Diara, Gopalpur Diara, Lachlumipur Bhatta, Aphia pachgachia, and Ramuchal makanpur crop.

**(iv) Wheat-Maize Fruit and Vegetables Region :**

This crop combination region characterise the Panchayats of Shahabad gangapur, Jairampur, Chak Rami, Bihpur, BishunpurNuruddinpur, Mirjafari Parbatta Diara, Tintanga Karia, and Sabour. Wheat is the first raking crop in these Panchayats although individually wheat occupies second rank and Fruit and vegetables are third crop in Sultanganj, *etc* while other crops are important Birbanna, Khawaspur, Ajmeripur Bria, Bishunpur Nuruddinpur, and Parbatta Diara

**(v) Wheat-Maize other Crop Region:**

Chak Rami, Bishunpur Nuruddinpur, Parbatta Diara, Sultanganj, Sabour, Birbanna and Olapur Parasbana Panchayats come under this crop combination Maize is the first ranking crop followed by wheat. Other crops having a good share or cropped area in Tintanga Karari, Rani Diara and Gopalpur Dimha constituted as third ranking crop.

**(vi) Maize-Wheat-Oilseed Crop Region :**

Only Shankarpur Nankhar and Sultanganj Panchayats fall under this region these have 24-34 per cent of its area maize crops which is the first ranking crop. The second rank is taken by wheat. Oilseeds forming a broad group and covering 5-10 per cent area is the third ranking crop. In this Panchayat fruits and vegetables, other crops pulses are also important crops.

**CONCLUSION :**

To sum up the discussion about making of crop and crop combination regions one may arrive ill the following conclusion. Wheat and maize are two important crops of the study area as well as of every Panchayats. Other crops taken together constitute the third ranking crops all over the study area. Wheat and pulses are the third ranking in some Panchayats. While fruits and vegetables play important role in the economy of study area. Thus the area under study has multi crop combination.

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