

REGIONAL ANALYSIS OF AGRICULTURAL PRODUCTIVITY DISTRICT SULTANPUR : A CASE STUDY

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India's two major problems of recent era are directly concerned with agriculture. The first one is to meet the growing demand for food and other agricultural produce by the increasing population. The second is to reduce the wide spread poverty in rural areas because it is inversely related to geographical product. Thus by increasing the level of agricultural productivity both purpose can be solved. The identification of productivity patterns and factors generating them can help to improve agricultural production through developmental programmes. Much emphasis be laid on removing constraints which adversely affect productivity in high potential areas.

Agricultural productivity of an area is influenced by a number of physical and socio-economic factors. "Agricultural productivity is thus a function of interplay of physical and cultural variables and it manifests itself through per hectare productivity and total of production.

This study is concerned with identification and interpretation of regional agricultural productivity pattern of Sultanpur Distt U.P. The low level of productivity and the recent concern with different aspects of agricultural productivity in India. Some studies suggests that Indian farmers are rational in their allcative decision, where as other maintain that the gap between actual and possible return to farming indicates in efficiency (Hopper W.D. 1965).

Productivity is not a synonym of fertility. It is generally used to express the strength of agricultural in a particular region to produce crops with regard to whether that is due to bounty of nature or to the efforts of man. On the other hand, fertility denotes the ability of soil to provide all the essential plant nutrients available for healthy plant growth. Agricultural productivity has also been defined as the ratio of the index of total agriculture output of the index of total input used in farm production (Shafi 1984). In recent years many attempts have been made to further define to connotation of agricultural productivity and considerable amount of literature exists on this subject (Horring, J. 1964)²

Several agricultural scientist and geographers had applied many different methods to know the measurement of agricultural productivity. Those are Kandle, Stamp, Shafi, Buck, Clark and Haiwell, Gangull, Deshpandey, Enedi, Jasbir Singh, Hussain and V.R. Singh etc.

Accordingly, a relative share of intensity and spread for each micro unit (district) has been computed to the macro unit (state) separately for the above three variables with the help of equation that have been derived. These methods concentrate on analyzing the general productivity of efficiency of land in the form of intensities. They do not throw and light on the relatives relationships of intensity and spread.

STUDY AREA:

The Sultanpur district is situated in the northern plain of Ganges and located at *India* country in the *Cities* place category with the **gps** coordinates of 26° 15' 53.1936" N and 82° 4' 21.7488" East covering an area of 2672.89 Sqkm. The river Gomati is the only main river flowing from South West to north east. The river is about 100 meters wide with a straight. The district is located on Faizabad and Ambedkar Nagar on the northern border of Sultanpur, Barabanki in the northwest, Jaunpur and Azamgarh in the east, Amethi in the west and district Pratapgarh in the south. River Gomti river flows in the district, in a natural way, the district is divided into two parts. Gomti River enters this district near north-west and enters Jaunpur, near the steep ray of south-east Dwarka. Apart from this, the Garbhiya Nala, Mazui Nala, Jamurya Nala, and Bhat Village Karkharva, Sobha Mahona etc. are lakes. The administrative district of Sultanpur district is five tahsils – Sadar, Bldirai, Jaysinghpur, Kadipur and Lumbuwa and 14 development blocks – Akhand Nagar, Dostpur, Karoudi Art, Kadipur, Motigrapur, Jaisinghpur, Kurhhar, Pratappur Kamacha, Lumbhwa, Bhadaiya, Dubepur, Dhapatganj, Kudwar and Bildirai.

The general slope of the is from west-north-west to east as evidenced by the direction in which Gomati flow. The area exhibits no remarkable physical variation. The relative relief is negligible and slope is more than 30

which vary from place to place. The region in which the district lies is formed of Pleistocene to sub-recent alluvial deposits of the rivers of the Indo-Gangetic system which have completely shrouded the old land surface to a depth of about a thousand feet, completely burying all past geological formation. The climate of the district, judged by a tropical or subtropical standard is mild temperature and healthy. The main source of rainfall is the summer monsoon which breaks by the third week of June. In round figures the average annual rainfall of the district is 984.6 mm of which more than 85% occurs during the rainy season from mid-June to mid-October.

Method and Classification:

In the present study the method advocated by Sapre and Deshpande has been adopted that is known as "Ranking coefficient method". The above method has been used to determine agricultural productivity patterns of Sultanpur District U.P. In the ranking coefficient method the component areal units are ranked according to per hectare yields of different crops and arithmetic average rank, called the ranking coefficient for each unit has been obtained. It is obvious that a component areal unit with relatively high yields will have low ranking coefficient, indicating a high agricultural productivity. The following table gives the pattern of agricultural productivity.

Table No.1
Agricultural Productivity

S.No.	Name of blocks	Productivity	S.No.	Name of blocks	Productivity
1.	Dhanpatganj	7.05	8.	Akhand Nagar	6.11
2.	Kurebhar	7.03	9.	Lambhua	7.24
3.	Jaisinghpur	6.18	10.	P.P. Kamaicha	6.91
4.	Kurwar	7.03	11.	Kadipur	6.91
5.	Dubeypur	7.18	12.	Baldirai	4.96
6.	Bhadaiyan	6.10	13.	Karaundi Kalan	6.20
7.	Dostpur	6.13	14.	Motigarapur	6.96

The above analysis is based on data received by District Sankhiki Patrika Year 2017-18

Table No.2
Levels of Agricultural Productivity

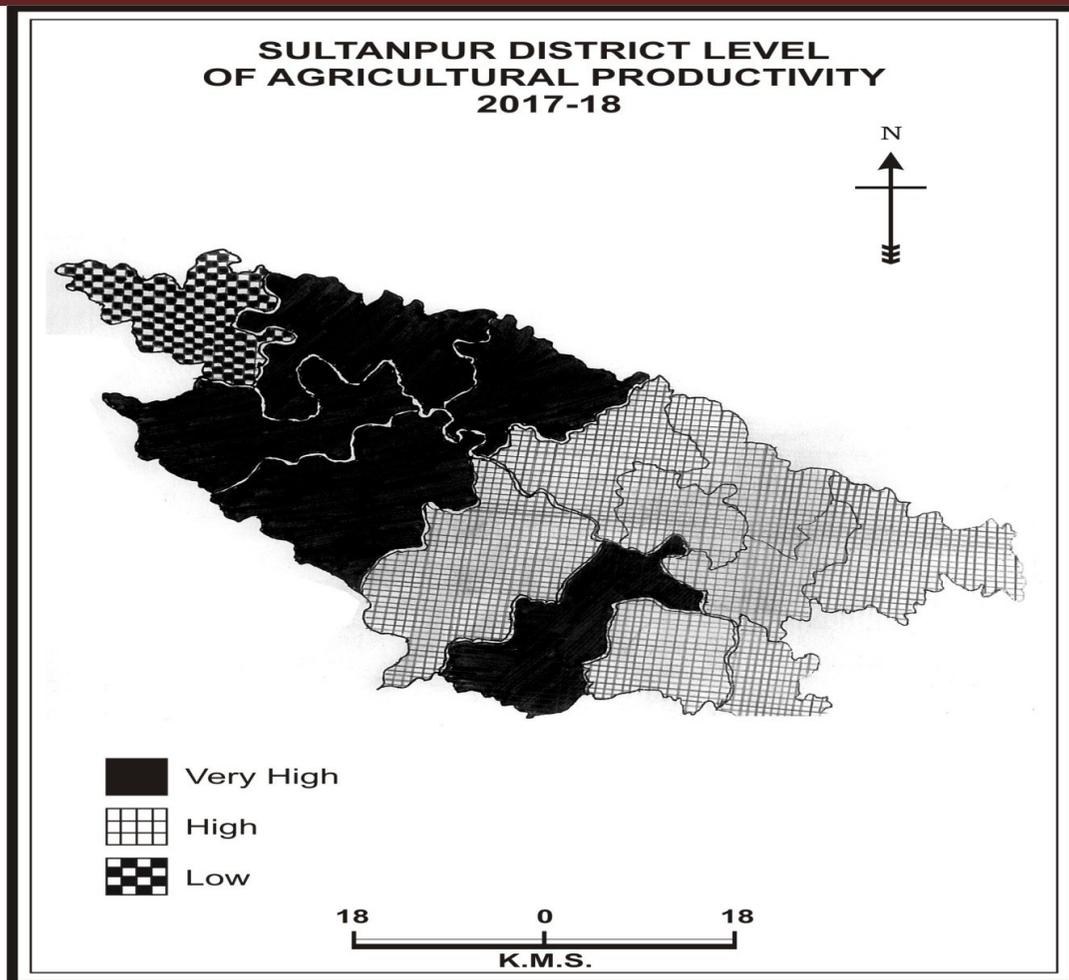
Levels	Index of Cropping Intensity	No. of Blocks	Name of the Blocks
Very High	7<	5	Dhanpatganj, Kurebhar, Kurwa, Dubeypur and Lambhua
High	6-7	8	Jaisinghpur, Bhadaiya, Dostpur, Akhandnagar, P.P. Kamaicha, kadipur, Karaundi Kalan, Motigarapur
Low	5-6	1	Baldirai

(i) Very High Agricultural Productivity Index:

According to the above table it is evident that 5 blocks of the district are fallen under the very high category. These are Dhanpatganj, Kurebhar, Kurwar, Dubeypur and Lambhua. These blocks are highly productive because of availability of fertile land and development of means of irrigation. In the above blocks there are very high agricultural productivity index (7<).

(ii) High Agricultural Productivity Index:

The high agricultural productivity stretch mainly in Bhadar, Sangrampur, Jaisinghpur, Bhadaiyan, Dostpur, Akhandnagar, P.P. Kamaicha and Kadipur blocks of the district having high agricultural productivity index (6-7). These blocks have good and fertile alluvium soil. There has been good development of water network. Cultivators of these areas have their own means of irrigation. The farmers of areal units are careful in adopting recent techniques in agriculture. All are acquainted with modern agricultural innovation. Therefore yields per hectare are high and crops are grown on the large parts of agricultural land.

**Fig-1****(iii) Low Agricultural Productivity Index:**

Only one blocks of the district underline in this category . This blocks is Baldirai. This block do not have such physical conditions as above two categories have Generally soils of the areal units are not productive larger parts of the units are provided with usar and Alkaline soil. After hard work farmer do not get considerable products. Administration of district is careful in improving soils of the district. Therefore these blocks have medium fertility.

CONCLUSION

It may be concluded that whole blocks can not be said as most under developed and agriculture has not reached at the threshold take of position. About 60% blocks of the study area are agriculturally most developed. These are of fertile landed blocks traditional agriculture is changing fastly. Even than some of the block have still adopted old traditional agricultural methods. Now there has been some improvement in recent years. About 40% blocks of the study are suffering from alkalinity and salt affection. It is main cause on account of low productivity. Canal irrigation and individual tube wells have a very good network in the area but without improvement in the soil, no attempts would be beneficial it can be concluded that there is a possibility for the increasing agricultural productivity.

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