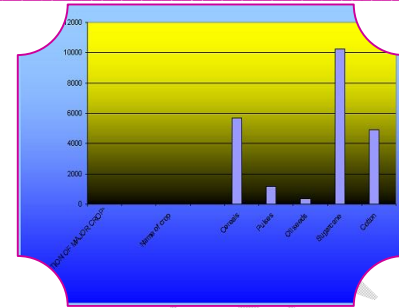_____

"GEOGRAPHICAL ANALYSIS OF FAIR CENTERS IN JALNA DISTRICT"

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ABSTRACT

Settlements often appear on maps as a dots, sometime dot pattern are often difficult to describe and they shows variation in distributional pattern. Obtaining distributional pattern of fair centres in the study region 'Nearest Neighbor Analysis' has been applied.

KEYWORDS: distributional pattern , central part , various published sources.

STUDY REGION

Jalna district is situated at the central part of the Maharashtra state of Republic of India and northern direction of Marathwada region specially district lies between $19^{0}01'$ North to $21^{0}03'$North latitudes and $75^{0}04'$ East to $76^{0}04'$ East Longitude.Jalna district erstwhile a part of Aurangabad district was formed on 1st May, 1981 by carving out Jalna, Bhokardan, Jafrabad and Ambad tahsil of Aurangabad district and Partur tahsil of Parbhani district. The boundaries of Jalna are adjacent to Parbhani and Buldhana on east, Aurangabad on west, Jalgaon on north and Beed on South. Jalna district covers an area of 7,627 sq.km which is 2.51 percent of the total state area. It has population of 19.48 lakh as per 2011 census. Recently Jalna district is divided into eight tahsil for administrations these are Jalna, Ambad, Bhokardan, Jafrabad, Badnapur, Partur, Mantha and Ghansawngi.

OBJECTIVE OF THE STUDY

The present research paper is an attempt to analyze the distributional pattern of fair centres in Jalna district.

DATA BASE AND METHODOLOGY

The Present research work is based on Primary data and secondary data. Primary data collected through intensive fieldwork, and secondary data obtained by various published sources. Hammond and Macullagh suggested formula which is used for present study.
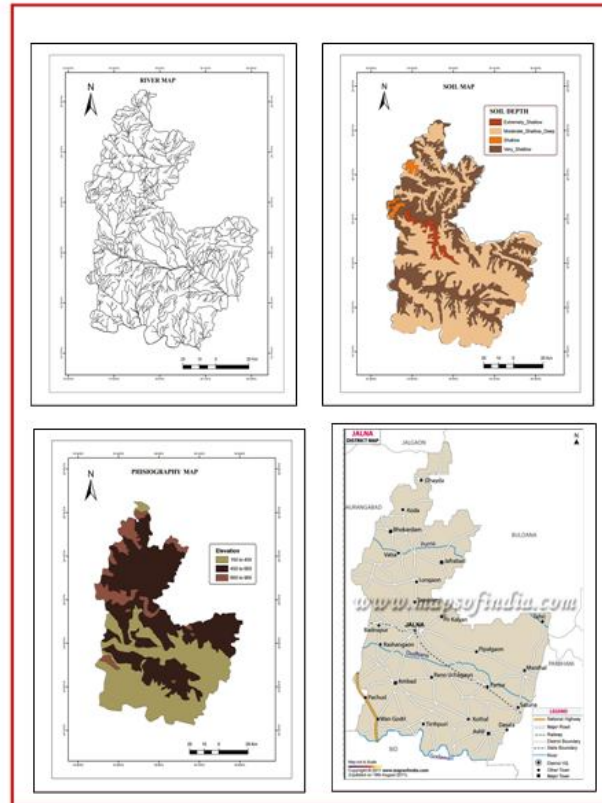
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Physical Profile of Study Region:-

Fig No.1.1

The method which is being used for find out the spatial distribution of fair centre is known as 'Nearest Neighbor Analysis'. It involves the comparison between the mean distance in an area of point from its nearest neighbor and the mean distance which could be expected in a random distributional pattern in the same area.

$$Rn = \frac{\bar{D}\,obs}{Dran}$$

Where,

$\bar{D}\,obs$ is the measured mean distance between the nearest neighbor point observed in a given area.

$\bar{D}\,ran$ is the expected mean distance for a similar number of points distributed in the same
Rn= is the nearest neighbor index.

$$\bar{D}\,ran = \frac{1}{2\sqrt{\dfrac{N}{A}}}$$

Where,
N=is the number of market centre in the study region.
A=is area of study region/spatial unit below.
Hence,

$$Rn = \frac{\bar{D}\,obs}{1 \div \left(2\sqrt{\dfrac{N}{A}}\right)}$$

It can be expressed in a simplified from as below.

$$Rn = 2\bar{D}\,obs\sqrt{\frac{N}{A}} \qquad \text{or} \quad Rn = 2$$

The formula produced by the nearest neighbor analysis produces a figure expressed as Rn (the nearest neighbor index) which measure the extent to which the pattern is clustered, random and regular.

Clustered : Rn=All the dots are close to the same point.

Random : Rn=1.0 there is no pattern.

Regular : Rn=2.15 there is a perfectly.

Uniform pattern where each dots is equidots from its neighbors.
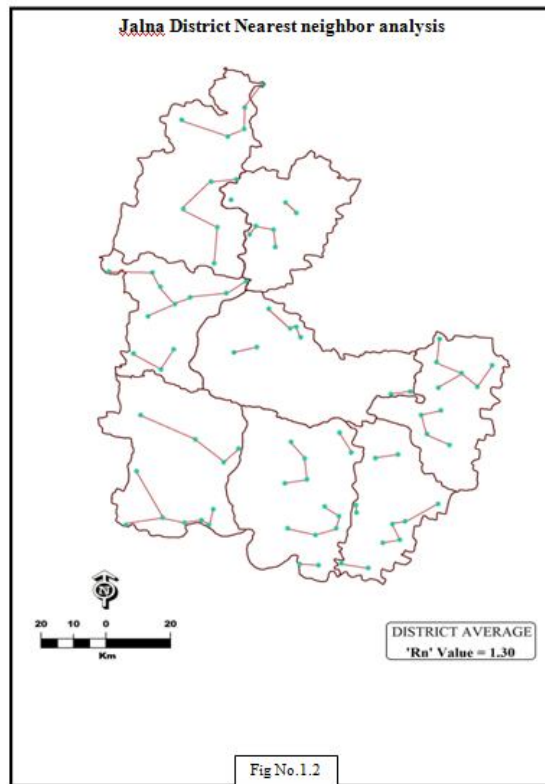
Source: **Compiled By Researcher.**

In the present study 81 fair centre from eight tahsil have calculated with the help of nearest neighbor method. Distance is calculated in two different places an attempt has been made to analyze that which pattern is suitable (clustered, random, regular). The 'Rn' value at tahsil level also calculated.

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Distributional Pattern of fair centres

Different 'Rn' values obtained in order to find out the under-relation of the fair centres with other fair centres. Rn values result has shown in the table 1.1 and position of various tahsil have been marked on the Rn value scale.

Table 1.1
Nearest Neighbor Statistics of Fair Centers

Sr.No	Tahsil	Dobs km	Dran km	Rn
1	Jalna	0.60	6.18	0.60
2	Badnapur	6.54	4.23	1.54
3	Bhokardan	9.03	5.49	1.69
4	Jafrabad	3.71	5.26	0.70
5	Ambad	8.54	5.01	1.70
6	Ghansavangi	6.15	4.64	1.32
7	Partur	4.63	4.17	1.11
8	Mantha	7.01	4.41	1.60
	Region	**6.38**	**4.88**	**1.30**

Source: Compiled by Researcher

The above analysis shows that the fair centres have shown uneven distribution in eight tahsil. Here the degree of randomness is 1.30 in entire study region. Jalna and Jafrabad tahsil is found near to random pattern having the range of 0.50 to 1.00. While Ghansavangi and Partur tahsil shows regular pattern in random manner, having the range 1.00 to 1.50. The fair centres in Ambad (1.70), Bhokardan (1.69) , Mantha (1.60) and Badnapur (1.54) tahsil having 'Rn' values above 1.50 has regular uniform pattern.

In the study region the spacing of fair centres is uneven because the transport and communication facility for every tahsil are not same. In the central part of the study region here transport and communication facilities distributed in well manner. Northern and eastern part of the study region has inadequate facilities which prevent the people to reach their destination (fair centres).whereas southern part of the study

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JALNA DISTRICT

'Rn' Values Scale of Fair Centres

Source: Compiled By Researcher

region adequate facility of transport and communication, this area of study area also rich in agricultural activities.

CONCLUSION;

The above analysis shows huge variations have seen at district level. The highest value has seen at Ambad tahsil and lowest value has seen in Jalna tahsil. Other tahsil shows little changes in Rn values.

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