

CHAPTER - II

SPATIAL DISTRIBUTION AND GROWTH CHARACTERISTICS
OF WEEKLY MARKET CENTRES

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PART - I : SPATIAL DISTRIBUTION

Introduction the study region and approach to present study has been discussed in the previous chapter. In this chapter an attempt has been made to study the spatial distribution and growth characteristics of weekly market centres in the study region. The present chapter is divided into two parts, Part I - deals with an appraisal of spatial distribution and Part II - is devoted to growth characteristics of weekly market centres.

2.1 INTRODUCTION :

The spatial distribution is an occurrence which occupies the portion of the earth's surface where the distribution is related to spatial arrangement of occurrences (Ambrose, 1969).

Geographers study the interaction between the man, resources and space. The pattern made by the distribution of people on the earth surface is something which is of fundamental relevance to almost any analysis of man and his activities. The geographers pay more attention to the point of view of measurement and interpretation of the facts of distributional phenomena. In the real world, where the nature of demand and the technology of production is constantly changing, the nature of resource base and its distributional impact on settlements and population distribution also changes. The localization of resources and the level of development distorts the uniform pattern of settlement distribution (Prasad, 1974). So, similarly does spatial variation in the quality of the land directly affects the location of agricultural production

and indirectly other types of economic activities particularly the localization of tertiary activities.

Periodic market centres are the periodic central places which served the needs of rural population periodically. They are the centres of distribution and collection of goods required for the rural population. Mostly, these market centres are fairly distributed in the agricultural area, where urbanization has not yet made its mark. In a country like India where the basic facilities and services are not provided efficiently; however, periodic market centres play an important role.

Concentration of intensive economic activity, agricultural activity and development of agrarian economic as well as development of industries are the important factors which distort the distribution of weekly market centres. The market centres and their distribution is influenced by various factors in which the social, economic and cultural aspects of the area also play an important role. Geographical factors like location, site and situation give rise to several weekly market centres and further develop them as rural service centres.

Among the various factors which influence the distribution of weekly market centres, the physiography of the area, types of agriculture, impact of irrigation, urbanization, industrialization, level of economic development, transport and communication facilities, distribution of settlements and other service facilities play significant role.

2.2 NATURE OF DISTRIBUTION :

There are three types of distributions, discrete, continuous and contingent. Discrete distribution is the result of an assemblage of different occurrences, a continuous distribution is found when occurrences are dependent while a contingent distribution develops where the magnitude of distribution is related to entire area or type.

In this chapter, an attempt has been made to study spatial distribution of weekly market centres and their relationship with various factors as well as the growth characteristics of weekly market centres.

The region under study is a developing agricultural area of Solapur district. Karmala tahsil covers an area of 1609.70 sq.kms and has a population of 165,714 persons according to 1981 census. Out of the total population nearly 90 percent population is living in rural settlements. There are 118 rural settlements and one urban centre in the study region. Out of these settlements only 18 settlements serve the area as weekly market centres. These market centres account for only 15.13 percent of the total settlements in the region under study (Fig.2.1).

2.3 INFLUENCING FACTORS IN THE DISTRIBUTION OF WEEKLY MARKET CENTRES :

There are various factors responsible for the origin, growth and distribution of weekly market centres. The physical

factors are very important in the location of weekly market centres. However, the social and economic factors also play an important role in determining whether a place should grow, develop and function as a market centre. Besides physical factors administrative importance, transportation nodes, political importance, and religious sites are the other important attributes, which jointly or individually attracts several functions and give rise to the weekly market centres. Exchange of goods and agricultural products and the provision of services are the important aspects for which market centres emerge. Among them, transportation network play a vital role in the rise and growth of market centres.

2.3.1 Relief and distribution of weekly market centres :

Relief plays an important role in the distribution of weekly market centres. The central upland track of the study area is the area where settlements, population and other service centres are distributed in a dispersed pattern. As well as the central upland of the region has a rough and undulating terrain where the land available for cultivation is limited. This hilly track is the most unfavourable part for the growth and development of market centres.

The Sina valley area in eastern study region is dotted densely by the occurrence of more number of the settlements and also most favourable for weekly market centres. But there is no high concentration of market centres in this area. Only 17

percent (3) weekly market centres are distributed in this area. Comparatively these are important market centres in size, nature and turnover, in study area. Among them, one is Karmala market centre with market yard and another Jeur and Kem with sub market yard.

It is interesting to note that river Bhima is a natural as well as administrative boundary of the study area in the west and southwest. The Bhima Valley characterised by the black soil, derived from the Deccan trap. The black soil is very fertile and does not require manuring for long period. Irrigation facilities developed due to plain region. Jowar, sugarcane, groundnut, chillis and pulses are the important crops. A considerable part of the cultivated land is under irrigation which has increased the agricultural productivity of the area. This region is also densely populated and served by well developed transportation network. Nearly 83 percent (15) markets of the tahsil are developed in this region. Among them only one, Jinti, with sub market yard is large centre (Fig.2.1).

Weekly market centres of Karmala tahsil are not evenly spaced. Out of the total 18 weekly market centres 2/3rd (12) are distributed in Jeur and Pomalwadi block of the study region (Fig.2.2). This region is developed through the improved agricultural practices because of the river Bhima and its fertile banks. The irrigation facilities and the network of state highway, major district roads and south central broadguage railway line etc. are

KARMALA TAHSIL
DISTRIBUTION OF WEEKLY MARKET CENTRES
.1981.

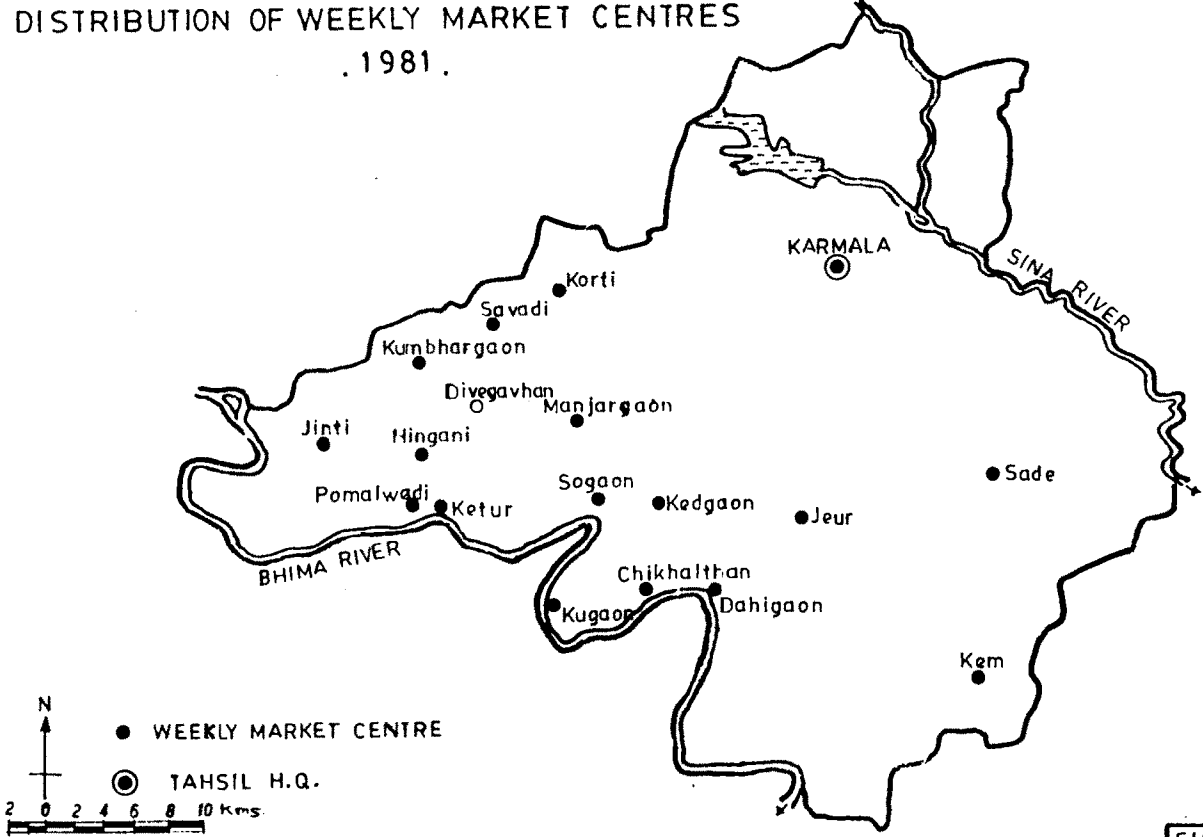


FIG 2.1

KARMALA TAHSIL
BLOCKWISE DISTRIBUTION
OF WEEKLY MARKET CENTRES
.1981.

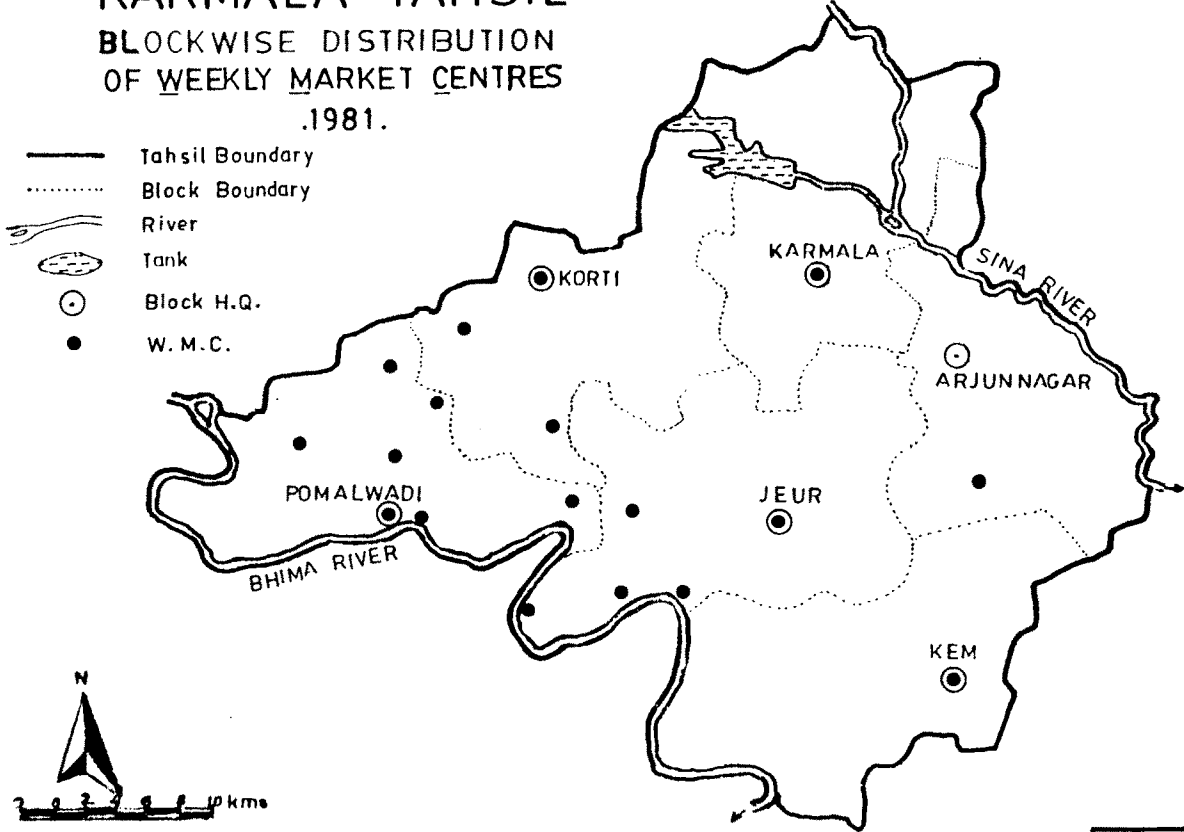


FIG.2.2

also equally important in the development of the region. The administrative block, namely, Korti which is along the northern part of study region give rise to three weekly market centres. The remaining three blocks, namely Karmala, Kem and Arjunnagar have only one market centre in each. Karmala and Kem weekly market centres are important because of the location of market yard and sub market yard respectively.

2.4 DISTRIBUTION OF WEEKLY MARKET CENTRES

(DIFFERENT POPULATION SIZE GROUPS) :

The distribution of weekly market centres by different size group study shows (Fig.2.3), that a concentration of larger number of weekly market centres is in a small size group. The smaller size groups of market centres below the population of 2000 includes 10 market centres and accounts for 55.50 percent of total market centres. Another group having a range of 2001 to 4000 population includes 5 market centres and accounts for 27.8 percent of total market centres. The third group (4001 to 7000) has two (2) market (Sade and Kem) centres which account for 11.2 percent of the total weekly market centres (Table 2.1).

The next higher group above 7000 has 1 market centre which accounts for 5.5 percent of total weekly market centres. It includes only Karmala centre.

The small size and medium size market centres are rural weekly market centres in their character. However, the large

size weekly market centre (above 7000 population) is urban market centre, namely Karmala, a tahsil headquarter.

TABLE 2.1 : Distribution of weekly market centres by different population size groups (1981).

Population size group		Number of Market centres	Percentage of market centres
<hr/>			
<	1000	6	33.30
1001 -	2000	4	22.20
2001 -	3000	4	22.20
3001 -	4000	1	5.60
4001 -	5000	1	5.60
5001 -	6000	-	-
6001 -	7000	1	5.60
>	7001	1	5.50
<hr/>			
Total		18	100.00
<hr/>			

SOURCE : Compiled by the Author.

It is very interesting to note that, the concentration of small size market centres is observed along the river side. Out of the total market centres of the study region 33.33 percent of market centres are agglomerated along the river Bhima in South Western front of the region (Fig.2.3). The analysis reveals that small size market centres are more in number as compared to large size market centres. This indicates that small size market centres are significant in this rural landscape, which caters the needs for peasant community adjacent to their location.

KARMALA TAHSIL
DISTRIBUTION OF WEEKLY MARKET CENTRES WITH
POPULATION SIZE 1981

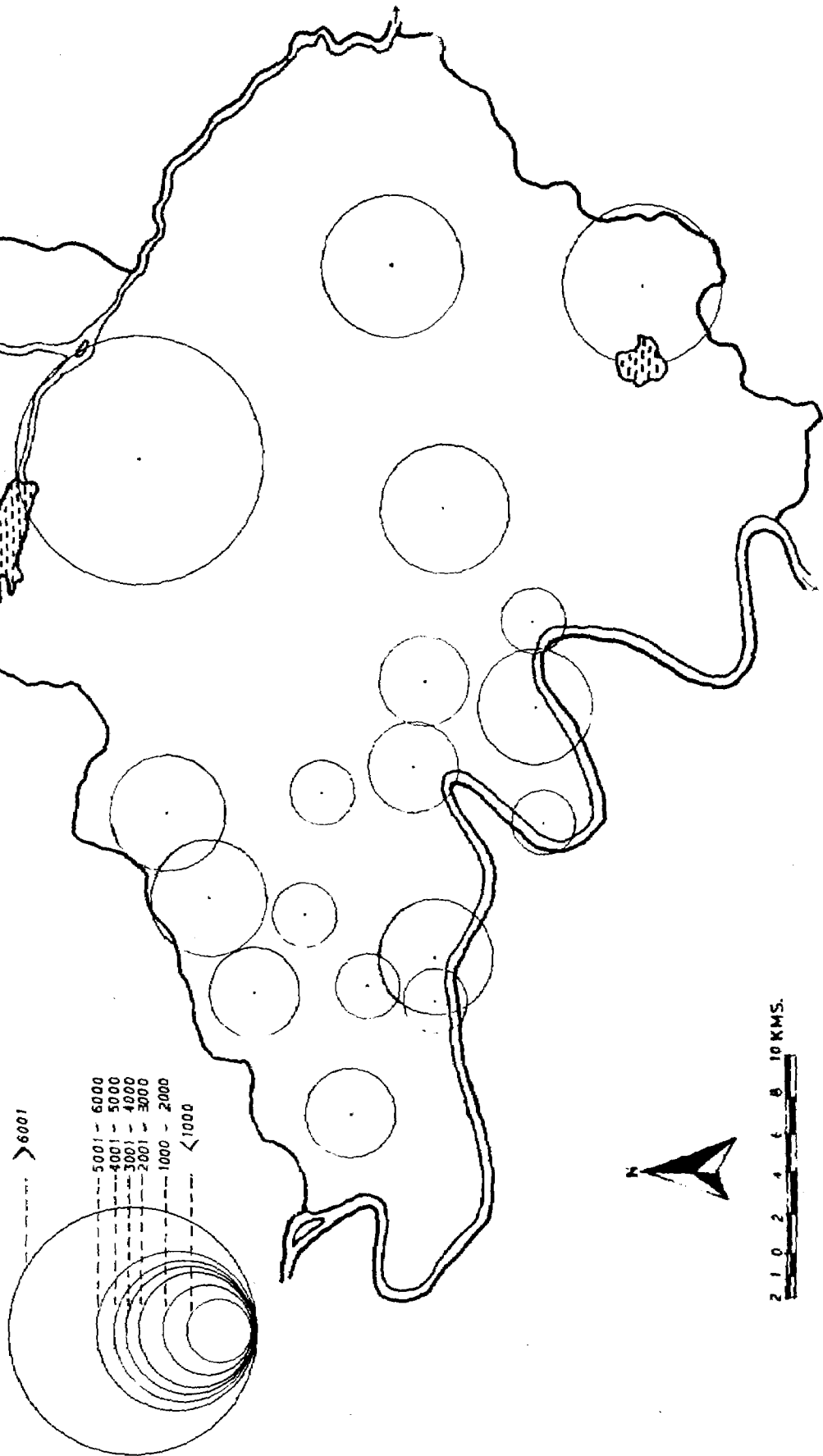


FIG. 2.3

2.5 CORELATION BETWEEN SETTLEMENTS, POPULATION
AND DISTRIBUTION OF WEEKLY MARKET CENTRES :

As the weekly market centres tend to grow and to provide the daily needs and the services to the surrounding settlements and population of area. It would be more appropriate to study the distribution of market centres in relation to area, settlements and population.

An attempt is made to study the blockwise distribution of market centres along with average number of settlements and population served by market centre.

TABLE 2.2 : Blockwise distribution of weekly market centres, average - area served, number of settlements served and average population served by a market centre.

Name of Block	Average area served in km ²	Number of weekly market centres	Average settlements served	Average population served
Karmala	337.85	1	29	43,426
Arjunnagar	202.72	1	17	21,639
Kem	272.89	1	15	26,816
Jeur	61.90	5	4	6,246
Pomalwadi	32.04	7	3	2,891
Korti	87.48	3	6	7,455
Region	89.43	18	6.6	9,206.33

SOURCE : Compiled by the Author.

The analytical study of the Table 2.2 shows that within the Karmala block only one market centre serve the average area of 337.85 km^2 , average settlements of 29 and population of 43426. Therefore, the maximum size of population is served in this block. Whereas the minimum population is served i.e. 2891 by a market centre within the Pomalwadi block. This block having 7 market centres and average area served by a centre is 32.04 km^2 . The study region having 18 market centres which serves average area of 89.43 km^2 , average settlements of 7 and average population of 9206.

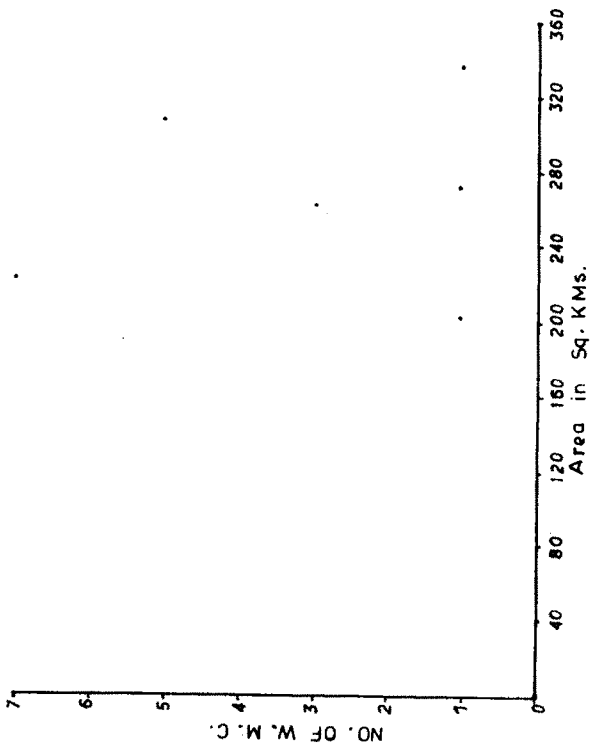
The relationship of number of market centres and area of block is shown in Fig.2.4-A. The correlation between these two variables indicates negative correlationship, where $r = -0.87$.

The market centres and their distribution when studied with the assumptions in the mind that the number of market centres would be more in areas where the number of rural settlements is greater. When it has been tested within the study region (Fig. 2.4-B) the result seems perfect positive correlation, where $r = 3.45$.

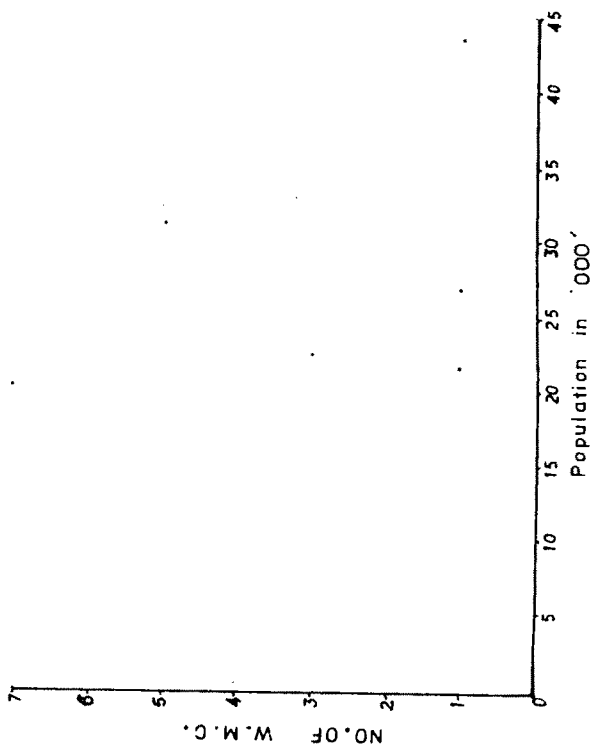
The relationship of number of market centres and population is shown in Fig.2.4-C. The correlation between these two variables indicates negative relationship, where $r = 0.80$.

KARMALA TAHSIL (Co-relations of Variables)

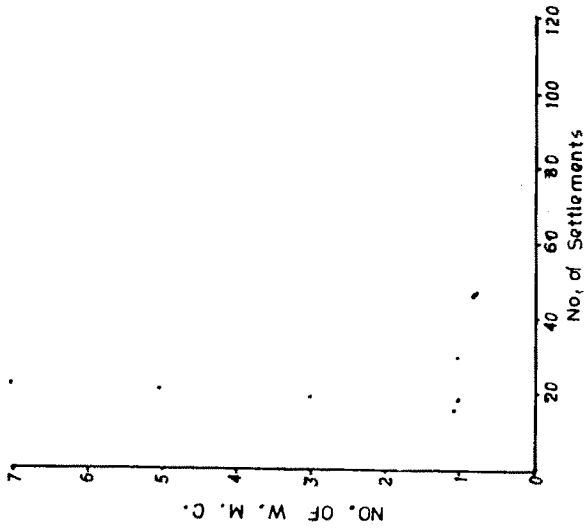
(A) AREA OF BLOCK & NO.OF WEEKLY MARKET CENTRES. $\gamma = -0.87$



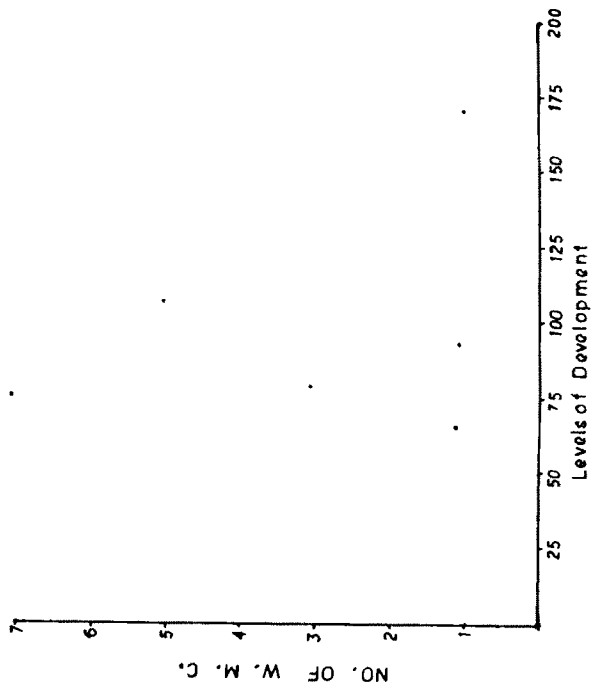
(C) POPULATION & NO OF W.M.C. $\gamma = -0.80$



(B) NO. OF SETTLEMENTS & NO.OF WEEKLY MARKET CENTRES $\gamma = 3.45$



(D) LEVELS OF DEVELOPMENT & W.M.C. $\gamma = -0.0005$



W.M.C. = WEEKLY MARKET CENTRES

2.6 LEVELS OF DEVELOPMENT AND DISTRIBUTION
OF WEEKLY MARKET CENTRES :

In order to find out the relationship between the levels of development and distribution of weekly market centres within the study region, the levels of development were calculated for each of the block with the help of certain indices. These indices were then correlated with the frequency of weekly market centres. The following variables (agro-socio-economic indices) were considered for determining the levels of development.

TABLE 2.3 : Agro-socio-economic indices.

Sr.No.	Particulars
1	Percentage of land under irrigation
2	Percentage of land under cultivation
3	Percentage of tertiary population
4	Percentage of dispensaries
5	Percentage of highschoools
6	Percentage of literacy
7	Percentage of post offices
8	Percentage of electrification
9	Percentage of motor cycles

The method adopted to determine the levels of development involves, two stages. First, the determination of the level of development of each block in terms of a discrete variables and second, the intigration of the values obtained to give a composite index of development, taking all variables into account.

The co-efficient of development of a block in terms of single variable is calculated by the following equation.

$$CDI = \frac{P_i}{PI} \times 100 \quad \dots I$$

Where, CDI = is the co-efficient of development
for variable 'i',

P_i = is the percentage of variable 'i'
in the areal unit, and

PI = is mean percentage of variable 'i'
in the entire study region.

When the development indices of selected variables for each unit sum up and divided by number of selected variables, we get the composite index of development. The composite index of development has been computed by the following equation.

$$CID = \frac{CD_{i1} + CD_{i2} + CD_{i3} + CD_{i4} + \dots CD_{in}}{N} \quad \dots II$$

Where, CID = is composite index of development

N = is the number of variables

Levels of development were calculated for six blocks of the tahsil on the basis of above methodology. The composite development indices so obtained are given in the Table 2.4.

TABLE 2.4 : Composite index of development.

Sr.No.	Name of the Block	CDI	CID
1	Karmala	1558.21	173.13
2	Arjunnagar	594.85	66.09
3	Kem	858.93	95.44
4	Jeur	991.58	110.18
5	Pomalwadi	686.07	76.23
6	Korti	712.49	79.17

SOURCE : Compiled by the Author.

The composite indices of development for all blocks have been grouped into four levels of development as, poor, low, moderate and high levels of development. The regional levels of development have been depicted in Fig.2.5.

2.7 SPATIAL ANALYSIS OF LEVELS OF DEVELOPMENT :

The spatial analysis of the levels of development shows that only one block which is located in the northern part of study region has high level of development. Only one weekly

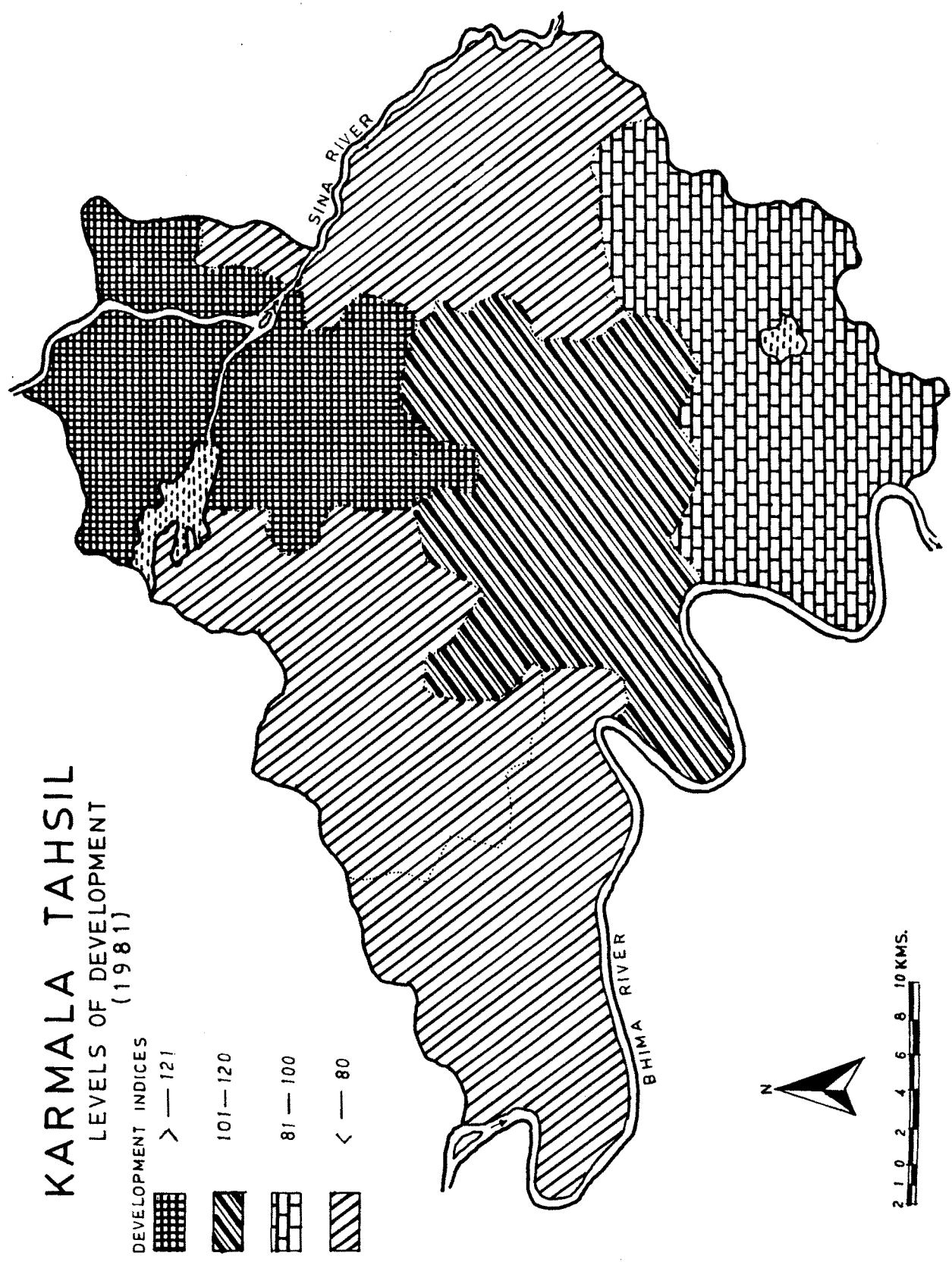


FIG 75

market centre with market yard is located in the highly developed Karmala block where population of weekly market centre is 43,426. Although, only one market is located in this block, it is a regional market centre with economic, administrative and commercial command over the area.

Moderate level of the development is found in the Jeur block of study area which covers 19.2 percent of the total area and containing 27.7 percent of the total weekly market centres. Out of the total weekly market centres 5 weekly market centres are distributed in this moderate developed area.

The southern part of the study region covering one block namely Kem with 17 percent of the total area is low developed. Nearly 5.6 percent of the total weekly market centres are concentrated in this part. Most of the area is covered with rough topography.

Three blocks namely Arjunnagar, Pomalwadi and Korti of the study area, have poor economic and agricultural development. They cover 42.8 percent of the total area and contain 61.1 percent of the total weekly market centres. These three blocks of the study region have poor level of development, where 11 weekly market centres are distributed.

It is observed that market centres closely spaced and relatively smaller in size are found in the areas with low and poorly level of development. In contrast, the areas with higher

level of development comprises the market centres which are larger in size and widely spaced.

The relationship between the level of development and number of weekly market centres indicates negative correlation, where $r = 0.0005$. Fig.2.5-D shows the relationship between these two variables.

2.8 SPATIAL PATTERN OF DISTRIBUTION OF WEEKLY MARKET CENTRES :

Here, an attempt has been made to study the existing pattern of distribution of weekly market centres. To study the distribution of market centres, the technique of N - N (Nearest - Neighbour) analysis is applied. The spatial pattern of weekly market centres is characterized by their uneven distribution. There are clusters of weekly market centres in some parts ; while in others they are sparsely distributed.

The statistical technique called the 'Nearest-Neighbour Analysis' developed by plant ecologists (Clark and Evans, 1954) has been used to analyse the spatial distributional pattern of weekly market centres. This technique shows that the degree to which any observed distribution of points deviate from random distribution. Many geographers have been studied the pattern of settlement distribution. In this regard, the work of Dacey (1962), Brush (1963), and Reddy (1970) is worth mentioning.

The technique of nearest neighbour analysis is very useful in the study of point pattern in the given area. It is calculated by following equations.

$$R = \frac{\bar{D}_{obs}}{\bar{D}_{ran}} \quad \dots \quad I)$$

Where, \bar{D}_{obs} = is the measured mean distance between nearest neighbour point observed in a given area

\bar{D}_{ran} = is the expected mean distance from a similar number of points randomly distributed in the same area

"R" = is the nearest neighbour index

$$\bar{D}_{ran} = \frac{1}{2 \sqrt{N/A}} \quad \dots \quad II)$$

Where, N = is the number of weekly market centres in the study region

A = is the area of spatial unit

$$\text{Hence, } R = \frac{\bar{D}_{obs}}{1 + (2 \sqrt{N/A})}$$

With the help of this formula, the values of distribution have been calculated for each block. Since, the study area bears

a visible contrast in the density, pattern and spacing of weekly market centres, the entire region is divided into 6 blocks for the purpose of calculating 'R' values. In such a situation different 'R' values will be obtained, and which give different results. It is observed that 'R' value for the entire region has shows the proximity to uniform distribution of weekly market centres.

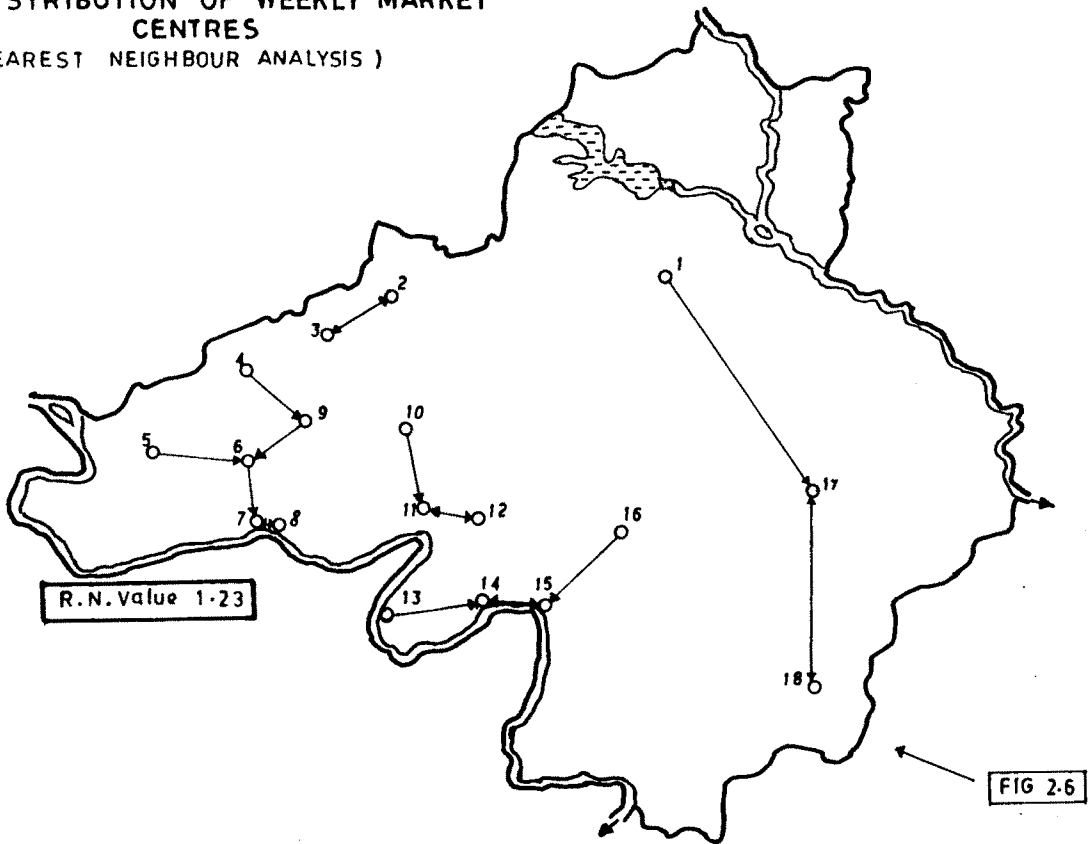
The pattern of distribution has been studied by considering the revised 'R' value scale given in Table 2.5.

TABLE 2.5 : Revised 'R' value scale (Nearest neighbour analysis).

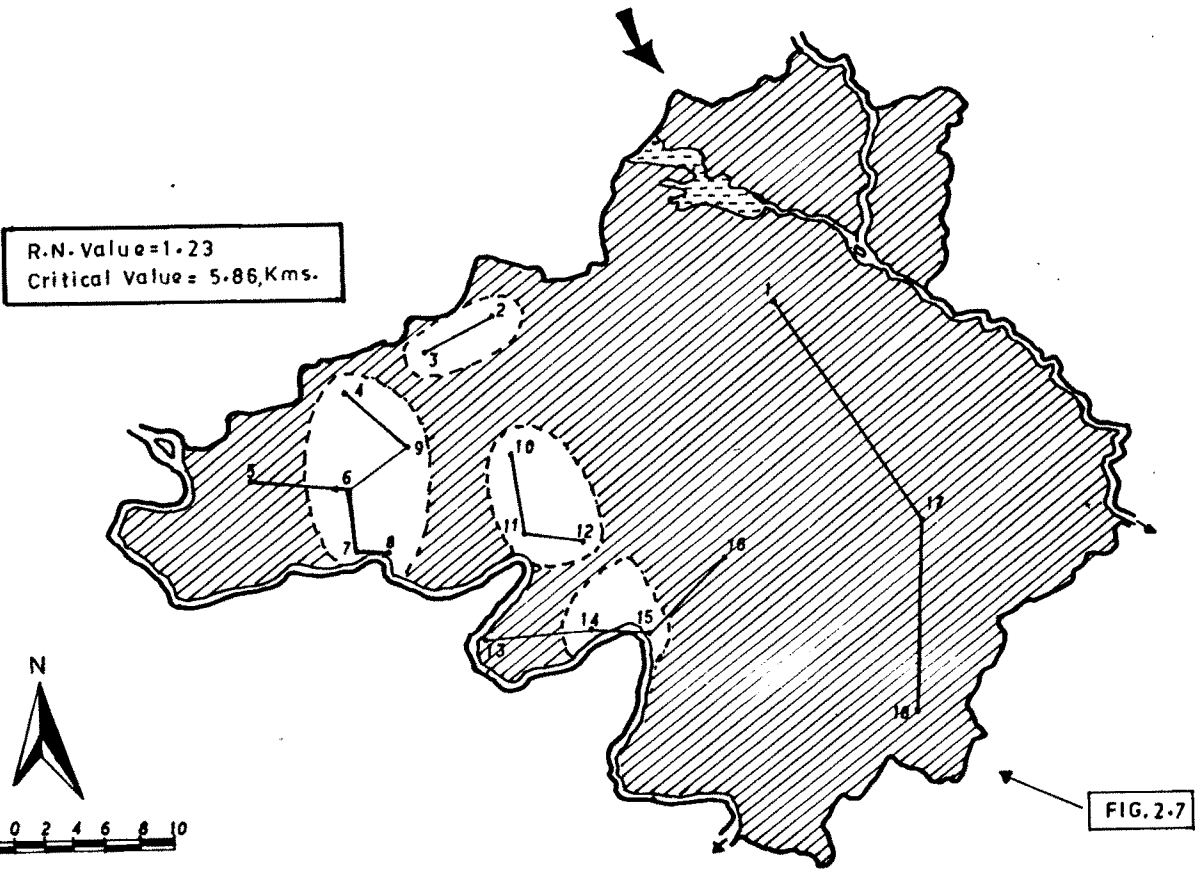
Sr.No.	'R' value	Description
1	0.00 to 0.15	Absolute clustering
2	0.16 to 0.50	Linear clustering
3	0.51 to 0.80	Clustered grouping
4	0.81 to 1.20	Random distribution
5	1.21 to 1.40	Near to uniform
6	Above 1.40	Uniform

'R' value for entire region has been calculated according to blockwise and shown in Fig.2.6.

KARMALA TAHSIL
SPATIAL DISTRIBUTION OF WEEKLY MARKET
CENTRES
(NEAREST NEIGHBOUR ANALYSIS)



ASSOCIATION OF WEEKLY MARKETS CONCENTRATION 1981



Spatial Analysis :

With the help of Nearest Neighbour Technique the values have been obtained for all the blocks.

In the study area, nearly 21 percent area is covered by Karmala block where the distribution of market centres is uniform ($r = 1.74$). It is also observed that uniform distribution of weekly market centres is found in Arjunnagar and Kem block which covers an area of 13 and 17% respectively.

Near to uniform distribution is found in Jeur and Pomalwadi blocks which covers area of 19 and 14%. Whereas random distribution is observed in the Korti block which covers area of 16 percent of the study region.

2.9 DEGREE OF CONCENTRATION :

In general, a close distribution is considered to be a concentration and a wide distribution as dispersion. It is easy to distinguish them if they are found in extreme cases, however, it is rather difficult to differentiate in marginal cases (Reddy, 1970). The concentration of weekly market centres is determined by a simple procedure, where distribution in a region contains a number of discrete concentration. They can be grouped together if they are related to each other. They are considered to be related, if the distance of separation between the continuous concentration across their nearest settlements is less than the observed distance (critical distance).

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The region under investigation has near to uniform distribution of weekly market centres where the degree of randomness is 1.22 and the critical value of 5.86 kilometers (Fig.2.7).

The study region has four concentration groups of market centres. Out of these four groups, Pomalwadi block (group) indicates the highest number of weekly market centres. In this concentration group 5 weekly market centres viz. Ketur, Pomalwadi, Divegavhan, Hingani and Kumbhargaon are included. Two concentration groups (Korti and Chikhalthan) includes two weekly market centres in each, whereas one concentration (Sogaon) group includes three weekly market centres. Korti concentration group includes two weekly market centres i.e. Korti and Savadi. Chikhalthan concentration group includes two weekly market centres like Chikhalthan and Dahigaon. The Sogaon concentration group includes three weekly market centres namely Kedgaon from Jeur block, Sogaon from Pomalwadi block and Manjargaon from Korti block.

Out of the total weekly market centres six are not associated with any concentration group in the study area. These centres are Karmala, Sade, Kem, Jeur, Kugaon and Jinti and found in complete isolation (Fig.2.7).

PART - II : GROWTH CHARACTERISTICS

2.10 INTRODUCTION :

While studying the growth and development of weekly market centres in any area, it is essential to study its regional growth character of general population as well as the population of a weekly market centres. Change in the population within the area has always affect the overall growth character of the region. Dynamics of population is a interwoven phenomena, which reflects the social and economic change in the region.

2.11 REGIONAL GROWTH CHARACTERISTICS :

The growth of population in any area is influenced by various factors, which includes soil condition, development of agriculture, growth of agro-based industries, growth of urbanization, job opportunities and development of transport facilities. All these factors influence the growth of population.

Looking into the growth of the settlements in the area under study, it is observed that after independent within the period of two decades, rural settlements have not increased, the total numbers of settlement (96) remained constant within a period of ten years (1961 to 1971). In the same period the rate of population growth was 18.04 percent for the entire region. In the next decade (1971-1981) 22 rural settlements were added and the number has increased upto 118. In the same period (1971-81) overall growth rate has decreased upto 9.39 percent for the

region. The spatial variations in the growth rate has given uneven distribution in the area.

During the decade 1961-1971 the highest growth rate of population is found in the Karmala block, where urban centre is located. On the other hand, other two blocks namely Korti and Arjunnagar, where urbanization is totally absent, still the rate of growth found to be high. It is felt that, this high rate of growth in these two blocks must be because of more agricultural practices, which have added additional agricultural workers in these two blocks. Very low growth rate is found in Kem, Jeur and Pomalwadi blocks of the study area (Table 2.6). These blocks have low growth rate inspite of their economic and agriculture prosperity.

TABLE 2.6 : Growth of total population of the blocks of study region (1961-1981).

Sr. No.	Block Name	Population of 1961	Population of 1971	Growth in percentage	Population of 1981	Growth in percentage
1	Karmala	30,651	36,897	20.37	43,426	17.70
2	Arjunnagar	16,375	19,859	21.28	21,639	8.96
3	Kem	22,126	25,928	17.18	26,816	3.42
4	Jeur	24,764	28,259	14.12	31,229	10.51
5	Pomalwadi	16,768	19,457	16.04	20,240	4.02
6	Korti	17,661	21,093	19.43	22,364	6.03
<hr/>						
Karmala Tahsil		128,345	151,493	18.04	165,714	9.39

SOURCE : Compiled by Author.

The growth character of the region during the decade 1971-1981 gives a unsatisfactory picture of the overall growth. Very high rate of growth is found in Karmala block (17.70). Jeur block stands second in the growth rate (10.51). A very low growth rate i.e. 3.42 is found in Kem block.

After studying the general growth rate of population of the study region, it is essential to know the rate of growth of population of weekly market centres and their spatial variation. In the entire study area average growth rate of population of weekly market centres is + 27.16 and + 0.98 percent respectively for the decade 1961-1971 and 1971-1981. Within the same period there is remarkable variation in the growth rate of population of weekly market centres in the blocks of Karmala tahsil (Table 2.7).

During the decade 1961-1971, very high rate of growth is found in Korti block, a most prosperous block of the study area. High rate of growth is also found in Jeur, Pomalwadi and Arjunnagar blocks. All these blocks are essentially rural in character and most of the population is being served for their daily necessities and services by weekly market centres. Naturally, rural weekly markets have developed at a higher rate in the area (Fig.2.8).

Low rate of growth is found in Karmala block of the study area, where higher urbanization and accessibility have decreased the scope for weekly market centres.

The negative rate of growth is found in the Kem block of study region, where the Wangi market centre, reduced its

importance and lost its existence as weekly market, which in turn has reduced rate of growth.

TABLE 2.7 : Blockwise growth of population of weekly market centres (1961-1981).

Sr. No.	Block name	Population of 1961	Population of 1971	Growth in percentage	Population of 1981	Growth in percentage
1	Karmala	13,096	14,051	+ 7.29	16,729	+ 19.06
2	Arjunnagar	2,901	3,517	+ 21.23	4,209	+ 16.67
3	Kem	9,367	6,345	- 47.63	6,726	+ 6.00
4	Jeur	5,417	9,974	+ 84.12	9,119	- 9.38
5	Pomalwadi	6,100	10,671	+ 74.93	8,786	- 21.45
6	Korti	2,969	6,115	+105.96	5,602	- 9.15
Karmala Tahsil		39,850	50,673	+ 27.16	51,171	+ 00.98

SOURCE : Compiled by the Author.

In the next decade (1971-1981) a transformed pattern of the growth rate of population of weekly market centres is observed. High growth rate (+ 19.06) is found in Karmala block of the study area, where higher urbanization and accessibility have decreased the importance of the Karmala (Rural) and Ghargaon rural weekly market centres which lost their market status and only one Karmala (Urban) weekly market centre flourished which serve the daily

KARMALA TAHSIL

BLOCKWISE GROWTH OF POPULATION OF WEEKLY MARKET CENTRES 1961-1971

GROWTH IN PERCENTAGE

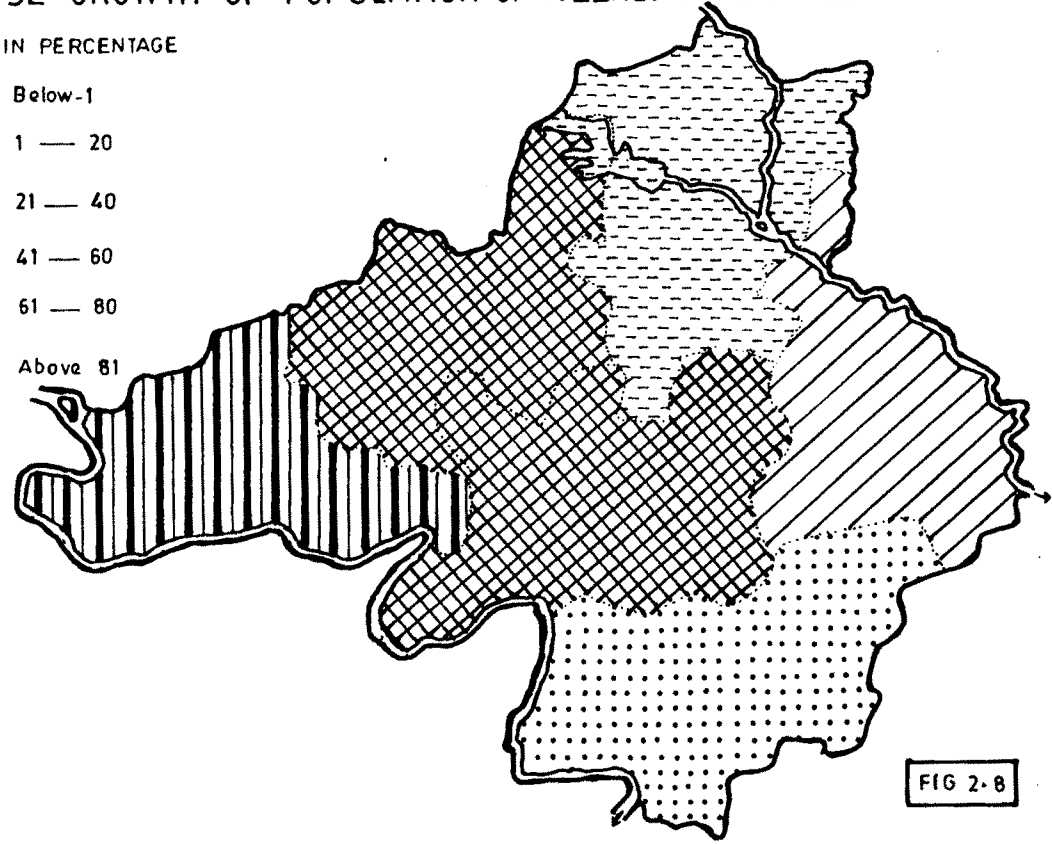
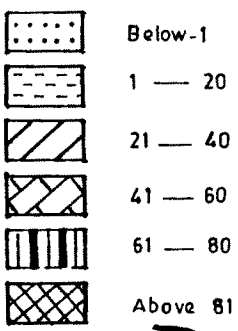


FIG 2.8

BLOCKWISE GROWTH OF POPULATION OF WEEKLY MARKET CENTRES 1971-1981

GROWTH IN PERCENTAGE

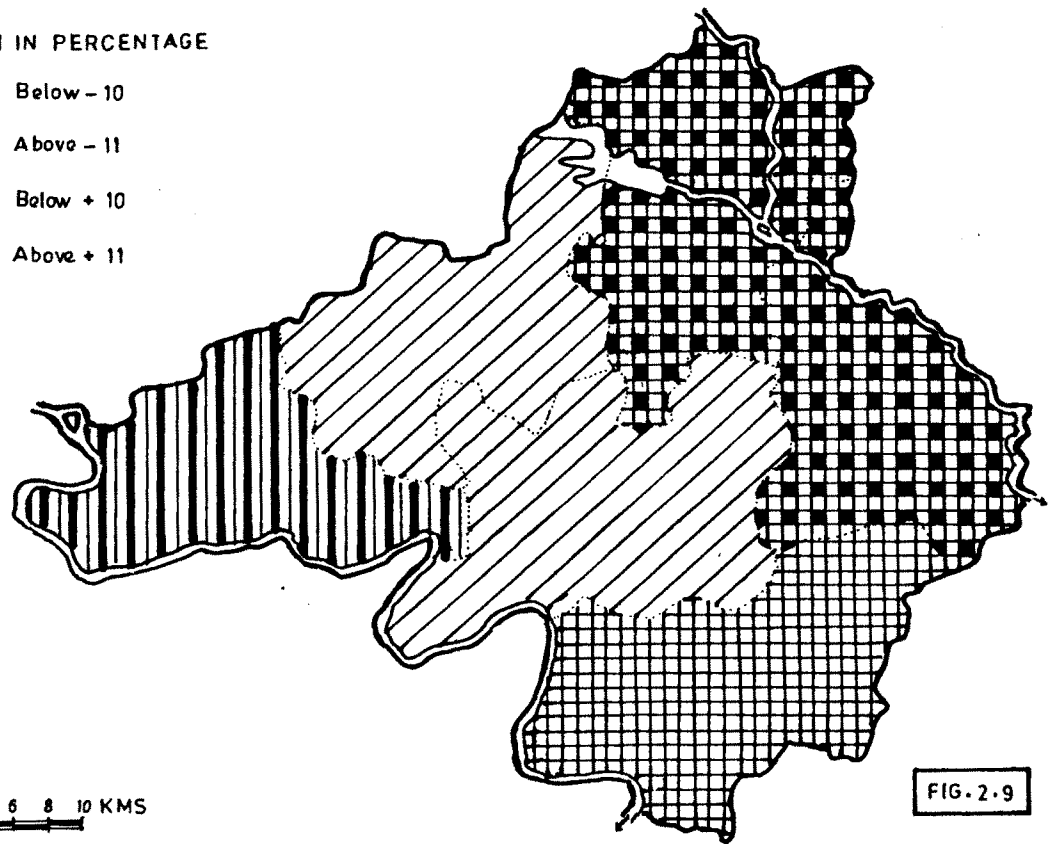
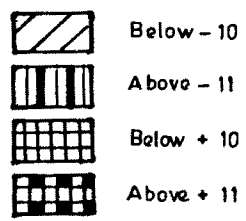
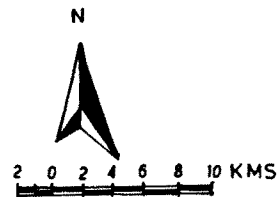


FIG. 2.9



necessities and provides services to the surrounding rural area and population.

The moderate growth rate (+ 6 to + 16%) is observed in Kem and Arjunnagar blocks. A negative growth rate (-9 to -21) is found in Jeur, Pomalwadi and Korti blocks of the study region, because of the fullflaged village status to small wadi type settlements which are previously under the administration of that market centres. Therefore, in the decade 1981, these blocks indicates negative growth rate of population of weekly market centres (Fig.2.9). Out of all these blocks Jeur, Pomalwadi and Korti are the agriculturally prosperous blocks of the study region.

Market centres are nodel points in the surrounding area and their growth depends on the conditions of the surrounding area. It is observed that more growth of market centres is dominantly found in Jeur, Pomalwadi and Korti blocks of the study region.

2.12 GROWTH IN NUMBER OF WEEKLY MARKET CENTRES :

In India where 76.27 percent (1981) of the population lives in villages and the economy has an agrarian base, the rural weekly market centres play a significant role in the development of rural landscape. The weekly market centres are the centres of collection and distribution of agricultural surpluses; consumers goods and allied services. More over they

are the nodes in general fabric of settlements through which the overall development of the region takes place and the regional development is reflected in the mirrors of weekly market centres.

TABLE 2.8 : Blockwise growth of weekly market centres.

Sr. No.	Block Name	No. of W. markets in 1961	No. of W. markets in 1971	Growth in per-centage	No. of W. markets in 1981	Growth in per-centage
1	Karmala	3	1	- 200	1	00
2	Arjunnagar	1	1	00	1	00
3	Kem	2	1	- 100	1	00
4	Jeur	2	6	+ 200	5	- 20
5	Pomalwadi	3	6	+ 100	7	+ 16.6
6	Korti	1	3	+ 200	3	00
<hr/>						
Karmala tahsil		12	18	+ 33.3	18	00

SOURCE : Compiled by Author.

Weekly market centres are very important economic institutions. They are acting as a central places and serves the needs of rural population. In the study area, it is seen that, areas where, density of population is moderate and low, and dominance of the rural population is more the number of weekly markets are

also more. The economically prosperous blocks where urban centre is near, the number of weekly markets are comparatively less (Table 2.8).

In the entire study region there were 12 weekly market centres in 1961 and the number of markets increased upto 18 in 1971. In the next decade (1971-1981) the number remains constant.

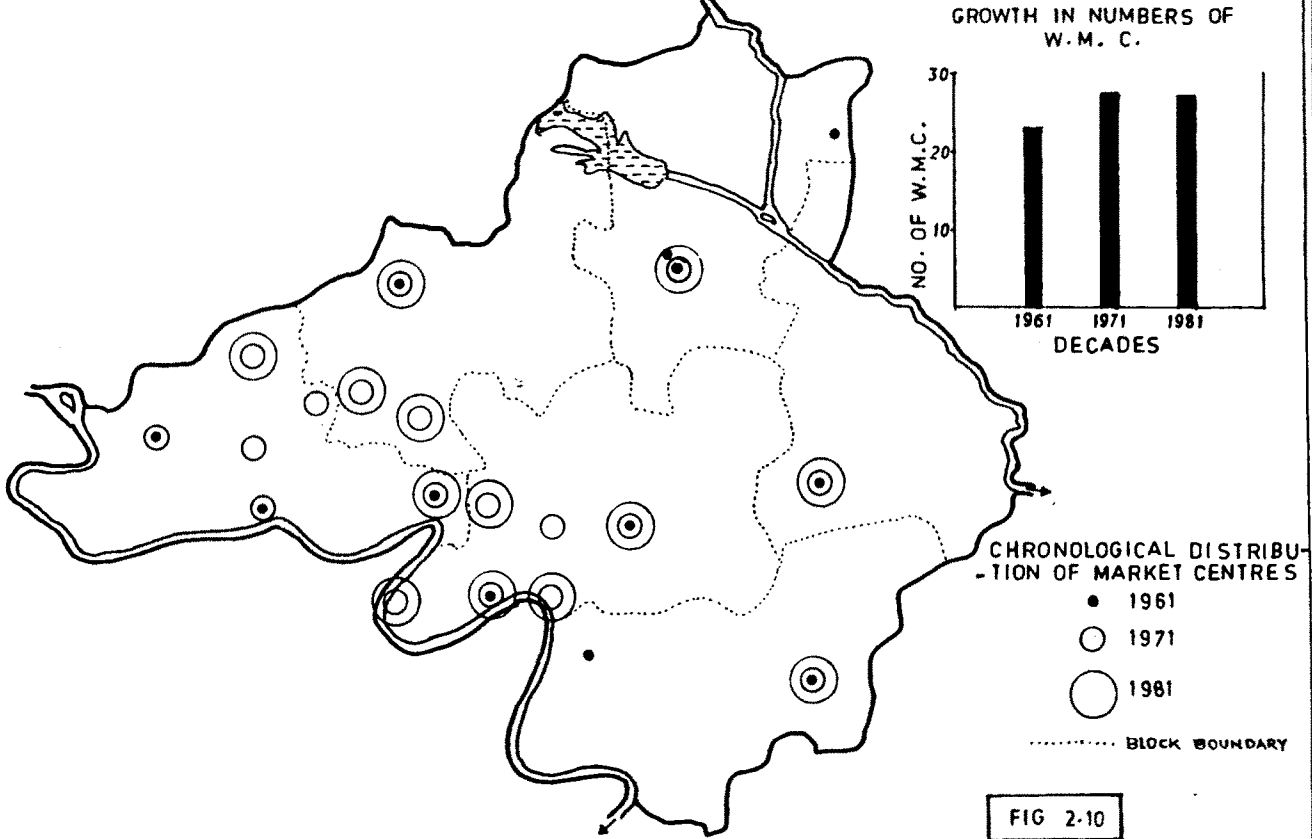
The highest rate of growth is observed in Pomalwadi block. During 1961 to 1981, the number of weekly market centres has increased from 3 to 7. In Jeur, Pomalwadi and Korti blocks of the study area shows very high growth rate during the decade 1961-1971. But in the next decade only Pomalwadi block indicates comparatively low growth rate and Jeur block shows negative growth rate.

The overall picture of growth in the number of weekly market centres shows that during the first decade 1961-71, weekly market centres have been increased in number from 12 to 18; but in the next decade not a single weekly market centre has been added in the study region. The decadewise growth in the number of weekly market centres in the study region is shown in Fig.2.10.

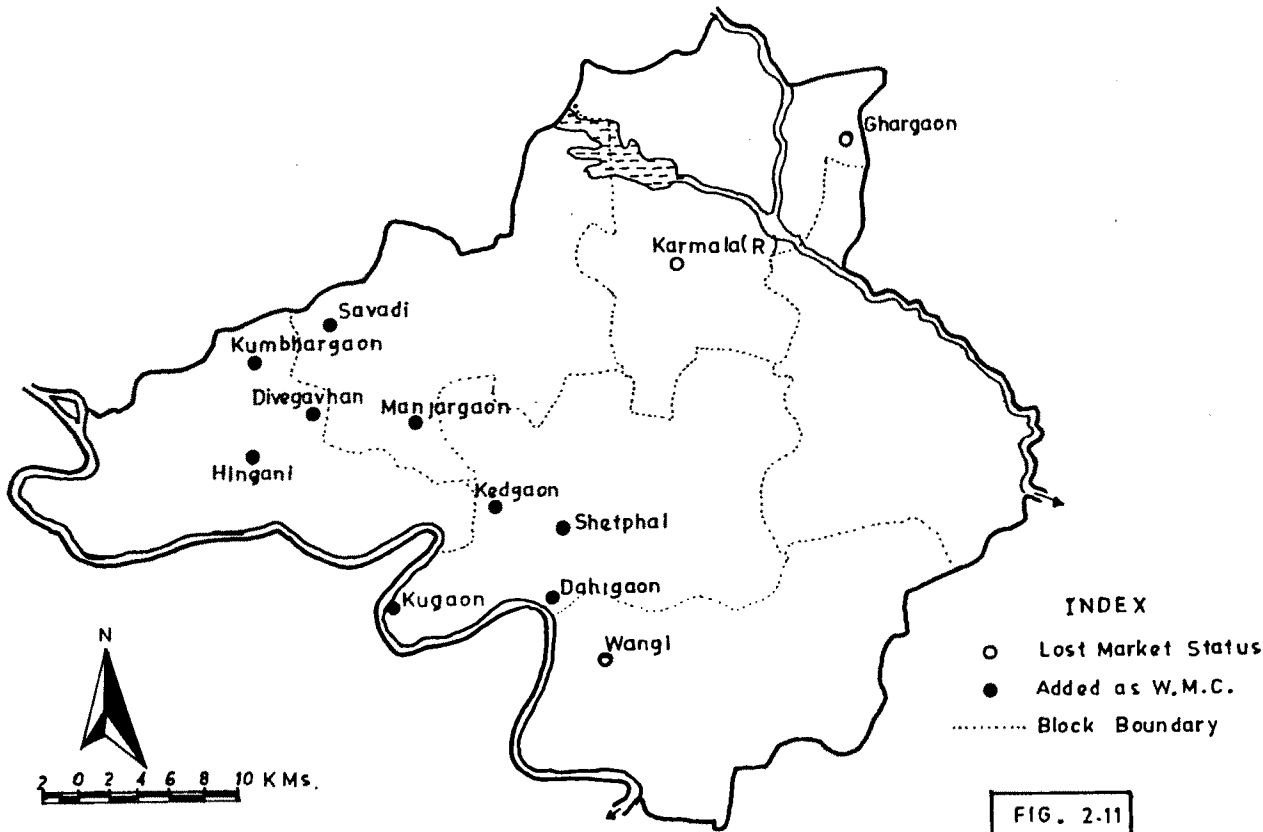
2.13 SPATIAL VARIATION IN GROWTH RATE OF WEEKLY MARKET CENTRES :

Growth rate of weekly market centres shows considerable variation in the spatial structure. During the decade 1961-1971

KARMALA TAHSIL
CHRONOLOGICAL DISTRIBUTION OF MARKET CENTRES 1961-1981



GAINS AND LOSSES OF WEEKLY MARKET CENTRES 1971



out of the total 12 weekly markets only one, namely Ghargaon shows decrease (-5.3) in population growth which has lost its importance as a weekly market centre. The remaining weekly market centres can be classified according to different growth rates, 3 weekly market centres show a low growth rate, below 15%. 4 weekly market centres have a growth rate between the 15 to 20%; 2 weekly market centres indicate higher growth rate (20 to 25%) and two weekly market centres have a highest growth rate (25%), (Table 2.9).

From Table 2.9, it is clear that nearly 58.3% weekly market centres have a growth rate less than 20% and 33.33% weekly market centres have a growth rate between 20 to 25% and above 25% as well as 8.33% weekly market centres have decrease their growth rates in the decade 1961-1971.

During the decade 1971-81 nearly 6 market centres have a growth rate below 15% and 3 weekly market centres shows a growth rate from 15 to 20%. Out of the 18 weekly market centres 8 weekly market centres indicate decrease in population. Out of 8 weekly market centres 5 weekly market centres namely Pomalwadi (-120.8), Sogaon (-20.4), Jinti (141.00), Hingani (-16.3) and Kumbhargao (-29.4) of Pomalwadi block shows a decrease in population and 2 market centres from Jeur block namely Chikhalthan (-2.5) and Kugaon (-11.3), as well as one market centre from Korti block namely Korti (-31.5) shows decrease in population.

TABLE 2.9 : Growth in number of weekly market centres in each Category (blockwise).

Sr. No.	Blocks	Year	Number of W.M.C. in each category					Total
			I	II	III	IV	V	
1	Karmala	1961-71	-	-	1	1	1	3
		1971-81	-	1	-	-	-	1
2	Arjunnagar	1961-71	-	-	1	-	-	1
		1971-81	-	1	-	-	-	1
3	Kem	1961-71	-	2	-	-	-	2
		1971-81	1	-	-	-	-	1
4	Jeur	1961-71	2	-	-	-	-	2
		1971-81	3	1	-	-	2	6
5	Pomalwadi	1961-71	1	1	-	1	-	3
		1971-81	1	-	-	-	5	6
6	Korti	1961-71	-	1	-	-	-	1
		1971-81	1	-	1	-	1	3
Karmala Tahsil		1961-71	3	4	2	2	1	12
		1971-81	6	3	1	-	8	18

SOURCE : Compiled by the Author.

Category - I Below 15%, II 15 to 20%, III 20 to 25%,
IV Above 25%, V Decrease.

From the view point of spatial character of growth, it is observed that lower growth rate is found in Jeur and Pomalwadi blocks of the study region. Out of the total weekly market centres in this I category 100% weekly market centres are in this two blocks during 1961-1971 decade; and these two blocks also show more numbers of weekly market centres in the same category during 1971-1981 decade (66.70%).

Higher growth rate of weekly market centres is found in Karmala and Pomalwadi blocks for very few markets. Pomalwadi and Karmala block have one in each weekly market centre with high growth rate during 1961-71 decade.

In the study region 6 new weekly market centres emerged during 1961-1971 decade. In the study area from 1961 to 1981 several new rural weekly market centres have emerged on the landscape, at the same time many markets have lost their importance as market status, due to various factors.

Some of the weekly market centres have lost their importance during the decade 1961-1971. Three weekly market centres, namely, Karmala (R) and Ghargaon from Karmala block and Wangi from Kem block have lost their importance, because of their proximity to Karmala urban centre and up gradation of wadies into village status settlement respectively. At the same time Kugaon, Kedgaon, Shetphal and Dahigaon from Jeur block, Divegavhan, Hingani and Kumbhargaon from Pomelwadi block and Majargaon, Savadi from Korti block have developed as weekly market centres (Fig.2.11).

In Jeur block only one weekly market centre namely Shetphal has lost its importance due to the close proximity of Chikhaithan and Dahigaon weekly market centre in 1971-81 decade. In Pomalwadi block one newly market centre has emerged on the landscape.

Summarizing the characteristics of the distribution of weekly market centres it seems that out of various factors physiography, agriculture, transport and irrigation are the important factors, which influence the distribution of weekly market centres. Economic development which is a combined effect of above and several other factors also play an important role in the distribution of weekly market centres, their size, distance and number.

The distribution of weekly market centres indicated that small size weekly market centres are more in number as compared to large size weekly market centres. The spatial pattern of distribution of weekly market centres is characterized by their uneven distribution. There are uniform of weekly market centres in some parts while in others they are sparsely distributed.

It is also observed that weekly market centres are widely spaced and relatively large in size and are found in areas of high and moderate level of development and high density of population. At the other end of the scale, in

areas of poor level of development they are more closely spaced and their size is relatively smaller.

The spatial distribution of weekly market centres which is influenced by above factors shows that the distribution in large area is nearer to uniform.

The regional growth character of general population as well as the population of a market centre is essential for the study of growth characteristic of weekly market centre. Change in the population in the area has always affected the overall growth character of the weekly market centre and the region.

It is observed that, in 1971-81 decade the more growth of weekly market centres is dominantly found in Jeur, Pomalwadi and Korti blocks of the study region.

It is also found that some of the weekly market centres have lost their importance during the decade 1961-1971 and some have developed on the landscape in 1971-81 decade.

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