CHAPTER IV

EVOLUTION, GROWTH AND DISTRIBUTION OF
RURAL SETTLEMENTS

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CHAPTER IV
EVOLUTION, GROWTH AND DISTRIBUTION OF
RURAL SETTLEMENTS

4.1 INTRODUCTION :-

Within any geographic territory, men in group with a particular form of
social organization and a particular level of technology, express a distinctive way
of life. Each region has its own geographical personality, which influences the
evolution and growth of human settlement. While categorizing culture, Julien
Huxley produced a model consisting of three components, i.e. mentifacts,
sociofacts and artifacts. The first includes religion, language, magic and folklore,
artistic traditions; the second includes those aspects of culture relating to link
between individuals and groups. At the individual level they include family
structure and child raring, and at the group level they include political and
educational systems. The third includes those aspects of culture relating to the
group’s links with its material environment.

The origin and development sequence of human culture exhibit four distinct
technical stages –

1. food gathering and hunting cultures
2. herding cultures
3. agricultural cultures and
4. urban cultures

These are linked by the three processes of human activity namely the
domestication of animals, the permanent cultivation of croplands, and trading of
goods. Settlements were, however, the prerequisites for agricultural as well as
urban cultures. A careful enquiry into the origin of rural settlement is essential to
understand its present cultural background it is very difficult to understand the
present structure of the rural settlements.

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The evolution and growth of rural settlements in Pravara basin is studied in the context of evolution and growth of settlements in Maharashtra. The study of evolution is related to the various social, cultural, political and economic conditions prevailing in the past. In the present study the origin of settlements and their spatial distribution has been studied in the following chronological order.

A. Ancient Period up to 1310 A.D.
   1. Stone age
   2. Aryan colonization
   3. Buddhist Period (500 BC to 325 BC)
   4. Hindu period (325 BC to 800 AD)
   5. Early medieval period (800 AD to 1310 AD)

B. Medieval Period from 1310 to 1818 AD
   1. Muslim period
   2. Maratha period

C. Modern Period from 1818 AD onwards
   1. British period – 1818 to 1947 AD
   2. Post – independence period – 1947 AD onwards

   According to Pittard, "India was never an unhabited land over which a flood of comparatively late civilization was to flow with the first races to occupy it". Archaeologically, the whole of India produces evidences of the occupancy by the early man. Sankalia rightly observes that the early man lived all along the banks of rivers, which flowed in very wide beds, high altitudes have been avoided, possibly because they were heavily forested or it was difficult to get water easily. Likewise, very low marsh areas near the river deltas or the sea coasts would not be preferred through the foothills near the sea.

   The various archaeological excavations have been undertaken in the different parts of Maharashtra, particularly in the river basins of Godavari,
Pravara, Bhima and Mula – Mutha. The excavations have also been undertaken near Nandurbar (Dhule), Jorve and Newasa (Ahmednagar), Bahal (Jalgaon), SONGAON and INAMGAON (Pune) areas of the state of Maharastra. The evidences clearly indicate the existence of human settlements in Pravara basin (excavations at Jorve and Newasa) during the stone age or pre – historical periods.

As human groups clustered in a particular landscape, the successes in inhabitation accumulated the technologies and such regions become culture hearths. Old cultural center lying within the longer zone of the fertile crescent or elevated site of the river bank. The houses were made of mud, dry leaves and bamboo matting. The houses were furnished with large and small storage jars and bowls. They were using pottery and trying to establish themselves on the riverbanks. The figures of animals and geometric designs were carved on the pottery. In the Neolithic period, village dwelling, crop domesticating, animal using and culture developing patterns matured. Walled settlement, language system, pounded earth construction, technology and forms in bronze metallurgy and pottery and other features are clearly shown in this period. During this period people have invented the improved seeds and began to produce surplus food. This is the first stage of firm human occupancy of land. Economically, these people were in pastoral cum hunting cum agricultural stage and lived in small villages on riverbanks about 4000 BC.

In regards to Indian context, the spread of Vedic culture co-existed with various settlement forms along with the three episodes from a geographical point of view.

1. The eastward carry of materials, technology and ideas derived from the Indus civilization during the 1500 BC.

2. The diffusion of Early Iron Age cultures in South Asia in the first millennium BC and
3. The expansion of Gangetic civilization after 500 BC.

The surface of the earth, as modified by human action is called the ‘Cultural Landscape’. The culture is people’s design for living. The contents of each culture includes systems of belief (ideology), social institutions (organization), industrial skills and tools (technology and material possession, resources).

One can observe the origin and evolution of rural settlements in the different historical periods.

4.2 Origin of Rural Settlements in Stone Age and Ancient Period :-

To study the origin of human settlements from the ancient period, one has to take into account the mythological literature, archaeological excavation, travel accounts of different people and historical legends. Ancient Indian literature is so varied and plentiful that it is very difficult to take the entire survey of this sources.

In the Paleolithic period, man in Maharashtra was savage who lived in the drift of rivers or lakes. He ate roots, fruits, nuts and flesh. He used various kinds of implements like axes, arrows, spears. He was a mighty hunter and moving from one place to another in search of food. Archaeological evidences clearly show that the early stone-age settlements must have been in the Pravara basin. Availability of drinking water and fertile land seems to be the fundamental factor to locate the settlements along the banks of river Pravara. The people living in this part during Neolithic period were Gonds, Bhils, Katkari, Thakurs. Bhils and Thakurs community are still in existence in western part of Akole taluka in the Pravara basin. These people were driven to hills and forests by latter invaders. This period is followed by the Age of Metals. Copper and Bronze were used for tools and weapons. Aryans invaded the region and established firmly in the river valley at about 700 BC. According to Shri. R.G. Bhandarkar (1965), the Aryans have firmly established in this region during 350 BC. The literature referred to the Rigveds, Upanishad and Sutras indicate the site and situation of the settlements
and the economic conditions of the Aryans. Agasthi and several other sages have established their hermitages along the bank of river Pravara. Agasthi temple at Akole town on the bank of river Pravara shows the evidence of Aryan settlers in the basin.

4.3 Aryan Colonization :-

With the advent of the Aryans, the Hindu culture with its peculiar caste system, philosophy and religion developed in the larger part of India and Pravara basin is not an exception to this situation. In the Aryan period, agriculture was the main occupation of the people and agricultural operations consisted of ploughing, sowing, reaping and thrashing activities. Grain like rice, beans, sesame were grown. Gold, bronze, iron and lead were the important metals used for various purposes. Trades in terms of ‘Barter’ began to develop.

As regards the political organization of the Vedic Aryans, the basis was the patriarchal family (griha or kula) reared on a decisively monogamous foundation. The successive higher units were styled as grama and jana under the leadership of gramani, vispati and gops, respectively. There were six types of human habitations

1. Ghosa or gopa (cattle ranch)
2. Pali (a small barbarian settlement)
3. Durga (Fort)
4. Grama (Village)
5. Pattana (Town) and
6. Nagar (City).

The rural community was well organized and self sufficient unit. The village organization was based on decimal system. The rural society formed groups of 10, 20, 100 villages, the ruler of the each group being called Dasgrami, Satgrami and Adhipati, respectively. Thus, the Rigvedic Aryans were mostly scattered in villages. There were puris occasionally of considerable size and were
sometimes made of stone and mud (ayasi) and sometimes furnished with a wall. These ‘purs’ were ramparts for forts than cities and several as places of refuge. Houses, small forts and villages assembly halls are mentioned as an integral part of a village.

Above morphological structure of settlements have been created for specific purpose. These settlements were fortified and some settlements were situated along the riverbanks. They were developed as trade centers. Another peculiarity of Aryan settlements was that, settlements were divided according to ‘Varnas’. There was a temple at the center of the village. The superior caste people were near the central part followed by lower caste hierarchy. Lower caste people were always kept outside the villages.

4.4 The Settlements of Buddhist Period (C. 500 BC to 1200 AD) :

During this period, rural settlements were of compact type mainly along the trade routes and in river valleys. Defense from invaders and wild animals played major role for their nucleation. But the aboriginals established homesteads suited to their racial characteristics. In the neighbourhood of the inhabited site stood a patch of narrow village grove, a remnant of the primeval forest and beyond this was the wide expanse of cropped land, usually comprising millet fields. Each village had invariably a common pasture land for the cattle and also a considerable stretch of jungle to provide wood for building and fuel, perhaps owned in common by village community. Villages appear in those days, to have enjoyed a large share of autonomy under their headman, while class distinctions were not very strongly marked.

When the region was ruled by Buddhist Kings, the several changes occurred in the settlement form.
Hindu Period :-

The Mauryan Empire in the Deccan was followed by the rules of Satavahans having their capital at ‘Pratishthan’ i.e. at present Paithan. During this period, Maharashtra was divided into different parts. The Satavahana Kings (235 BC to 225 AD) have left many inscriptions in ‘Prakrit’. The Hala in ‘Gatha Saptashti’ has described the rural cultural landscape of this region. As regards to the religious condition of the people, both Hinduism and Buddhism flourished side by side. The Satvahan Kings have a typical administrative form in which the whole empire was divided into ‘Janapadas’ and ‘Aharas’. A Janapada consisted of a number of Aharas. An Ahara was divided into number of ‘Gramas’. Gramika was the incharge of ‘Grama’. The term ‘Nigama’ means a market place. Gramas were small rural settlements. According to Prof. Dubrewil, the entire Deccan was ruled by Vaktakas (Mahajan, 1970). They have ruled this part during 250 AD to 525 AD.

The Chalukyas were dominant in the Deccan during 600 AD to 750 AD. They constructed several temples and developed trade and the art of architecture flourished during this period. Rashtrakutas ruled Deccan from 753 AD to 795 AD. They have developed several caves and temples, during this period, village administration was carried out by the headman of the village, human life was well settled in the fertile areas of the river valleys, and most of the villages were fortified.

A brief review of the socio – economic and political conditions prevailing in ancient period helps us to understand the regional character of the area. In the Pravara basin Newasa, Daigaon, Ghogargaon, Ranjangaon were the important settlements during the ancient period. It is also interesting to note that some of the place names were related to metals such as Sonai (Gold), Lohagaon (Iron), Chande, Chandegaon (Silver), Tamhhere (Copper). Village Toka seems to have
been in existence during 550 AD to 650 AD i.e. Chalukya period. It has enjoyed confluence site of Pravara and Godavari, the main perennial rivers of Maharashtra plateau.

4.5 The rural settlements of Medieval Period :-

Chalukya and Rashtrakut period was followed by the Yadava’s period. The first Maratha dynasty of Yadavas (1200 AD to 1310 AD) ruled Maharashtra with their capital at ‘Deogiri’. They built several temples in most of the villages with typical type of architecture known as ‘Hemadpanthi’ temples. Most of the villages which came into existence during this period enjoyed river side sites and most of the fertile and cleared area were occupied. This was the period of healthy horizontal expansion of settlements. Another main remarkable feature of this period was the establishment of strongholds, fortified villages, fortresses, etc. as the internecine war was a common thing.

4.6 The rural settlements of Muslim Period :-

After the conquest of Yadavas in 1318 AD, a Muslim Dynasty had ruled the area. The Bahamani sultans ruled the region up to 1490 AD. They constructed several forts and developed several trade centers. It was during the region of Akbar (1556 – 1605) that peace and stability were established and clan settlements were later crystallized. Moghals built mosques at several places. Very few settlements were developed during this period and some old settlements being converted to Islamic faith as well as changed the names of old settlements. In the Moghal period the collection of revenue was made by an Amildar or by Subhedar. The area was divided in many Subhas for the purpose of collection of revenues. Some of the places were developed as administrative headquarters and few as trade centers. Islamic rule stamped its impression on a sizable scale than any other pre-historic or historic rule on rural settlements in Pravara basin. Muslim place
names are comparatively more towards the source region of the Pravara than the lower parts of the basin (Fig. 4.1).

Table 4.1

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Village</th>
<th>Distance from the river Pravara (Km)</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Newasa</td>
<td>0</td>
<td>Early stone age</td>
</tr>
<tr>
<td>2</td>
<td>Ghogargaon</td>
<td>5</td>
<td>Early stone age</td>
</tr>
<tr>
<td>3</td>
<td>Ranjangaon</td>
<td>6</td>
<td>Early stone age</td>
</tr>
<tr>
<td>4</td>
<td>Daigaon</td>
<td>7</td>
<td>Early stone age</td>
</tr>
</tbody>
</table>

Table 4.2

Settlements during 2000 BC to 100 BC

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Village</th>
<th>Taluka</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sonasi</td>
<td>Sangamner</td>
<td>Pravara River</td>
</tr>
<tr>
<td>2</td>
<td>Lohgaon</td>
<td>Shrirampur</td>
<td>Pravara River</td>
</tr>
<tr>
<td>3</td>
<td>Songaon</td>
<td>Rahuri</td>
<td>Pravara River</td>
</tr>
<tr>
<td>4</td>
<td>Tambhere</td>
<td>Rahuri</td>
<td>Pravara River</td>
</tr>
<tr>
<td>5</td>
<td>Chandgaon</td>
<td>Rahuri</td>
<td>Pravara River</td>
</tr>
<tr>
<td>6</td>
<td>Sonai</td>
<td>Newasa</td>
<td>Mula River</td>
</tr>
<tr>
<td>7</td>
<td>Lohgaon</td>
<td>Newasa</td>
<td>Mula River</td>
</tr>
<tr>
<td>8</td>
<td>Chande</td>
<td>Newasa</td>
<td>Mula River</td>
</tr>
</tbody>
</table>
PRAVARA BASIN

SETTLEMENTS AS PER PERIOD OF EVOLUTION

2000 - 100 B.C.

973 1310 A.D.
YADAVAS PERIOD

1318 - 1759 A.D.
ISLAMIC POWER

Fig. No. 4.1
Table 4.3
Settlements during Yadava’s Period

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Village</th>
<th>Taluka</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kalegaon</td>
<td>Newasa</td>
<td>Pravara River</td>
</tr>
<tr>
<td>2</td>
<td>Gondegaon</td>
<td>Newasa</td>
<td>Pravara River</td>
</tr>
<tr>
<td>3</td>
<td>Harischandragad</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>4</td>
<td>Kotul</td>
<td>Akole</td>
<td>Mula River</td>
</tr>
<tr>
<td>5</td>
<td>Ratanwadi</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>6</td>
<td>Kalas</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>7</td>
<td>Konchi</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>8</td>
<td>Manoli</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>9</td>
<td>Rajapur</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>10</td>
<td>Thugaon</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>11</td>
<td>Velhale</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>12</td>
<td>Wadgaon</td>
<td>Akole</td>
<td>Pravara River</td>
</tr>
<tr>
<td>13</td>
<td>Sangvi</td>
<td>Shrirampur</td>
<td>Pravara River</td>
</tr>
<tr>
<td>14</td>
<td>Taklibhan</td>
<td>Shrirampur</td>
<td>Pravara River</td>
</tr>
<tr>
<td>15</td>
<td>Jawale Kadiag</td>
<td>Sangamner</td>
<td>Pravara River</td>
</tr>
<tr>
<td>16</td>
<td>Jorve</td>
<td>Sangamner</td>
<td>Pravara River</td>
</tr>
<tr>
<td>17</td>
<td>Sangamner</td>
<td>Sangamner</td>
<td>Pravara River</td>
</tr>
</tbody>
</table>


Table 4.4
Settlement during Islamic period
(Delhi Sultan, Bahamansah, Nizamshahi, Mughals)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Taluka</th>
<th>Names of the settlements</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Rahuri</td>
<td>1. Taklimiya, 2. Taharabad</td>
</tr>
</tbody>
</table>
4.7 Settlements in Maratha Period

Chhatrapati Shivaji Maharaj established ‘Balutedari’ systems in the villages, which made the rural settlements self-sufficient. During this period, it is observed that several periodic market places and fairs were developed, which had given rise to new settlements in the area. Most of the fairs were arranged in the winter and summer seasons so that the road and cart tracks could be used for the movements of goods and people. All these social and economic conditions were responsible for the development of several new settlements in the Basin.

4.8 Settlements in British Period

The modern period of modern history begins from 1818, when the sovereign state came directly under the British rule. After the revolution of 1857, British people firmly established their rule in almost all the parts of India. The British rule changed the political and economical status of the country. During the British period establishment and extension of railways, roads and construction of dams brought considerable changes in local trade and transport system and agricultural land use of the rural India. The concept of safety, security and travel were also changed. New commodity appeared in the market, method of cultivation and cropping pattern changed. All these factors had increased the demand for goods and services. The social and economic interaction between the places increased (Deshmukh – 1979). Administrative reforms had brought inter-dependence of villages. Several new market places have emerged in the basin.

4.9 Settlements in Post – Independence Period

After the Independence (1947) the main guiding principle of the Indian government was to transform India’s rural life. Improvement of technology, development of irrigation facilities, means of transportation and communication, green revolution, education and growth of population brought several changes in
rural life of our country. The Pravara Basin has also experienced these changes and several new places have emerged during this period, no doubt these new settlements are the parts of the old settlements. The old large size settlements have been bifurcated into various new settlements and dispersion took place particularly in the lower part of the basin.

Geographers describe that the settlements are visible expression of the relative importance attached to different aspects of life and the varying ways of perceiving reality. These are the physical expression of the genre de vie. Man makes choice to make space according to his cultural values, so variations in habitations in response to environment stimuli. He consciously or unconsciously, through settlements relates, himself and his way of life to the prevailing environment. Thus settlements become physical embodiments of an ideal environment. Concluding the salient features of the origin of the rural settlements in the Pravara basin through different historical periods most of the settlements have developed on the riverbanks. Some of them have developed as the places of religious or administrative importance. While some of them have developed as the places of strategic importance. During the modern period, many settlements have developed on transport routes as market places or rural service centers.

4.10 Etymology of Place Names of Rural Settlements :-

Like living beings rural settlements are identified by some name allotted to them most of the times by inhabitants or sometimes by outsider. Bunhes (1920) thinks that, 'Place from the past, the variety and density of which depends upon the density of population and nature of distribution of settlements, as well as the length of time during which country has been occupied. The processes of settlement and nature of terrain generally effect on it. So that ecological diversity, cultural perceptions and dialectical wealth interacting in combination produces variety of place names. It is obvious that the place names reflect culture, culture
area, cultural landscape, cultural history and cultural ecology. Mitchell has rightly observed that examination and mapping of the place names themselves will aid in establishing, broadly between region and region as well as within one region in more detail, the time and the sequence of settlements.

The study of place names is of great help in the geographical analysis because as the names bear identifiable association with the physical and cultural characteristics of the region and serve as a source of information about geographical surroundings. Ivan rightly suggests that to the extent that one succeeds in interpreting them and this is being done with increasing success – name also gives information about their content and form to the geographer to know nature as well as mankind, which helps reconstructing sequence of occupancy of settlements.

The place names, which are often influenced by former geographical environments are important source of information and their study stands to historical geography in somewhat the same relation as the study of fossils to geology. As it is a major item in any cultural landscape it deserves close scrutiny for the complex uncharted interrelationship, which exists to other phases of the cultural indissolubly linked to its past and irrevocably the foundation of its future.

The two broad groups in which place names can be divided are :-

A. Place names associated with natural environments

B. Place names associated with cultural elements

The settlements which have names epitomizing various natural origins may further be grouped into :-

1. Geological
2. Topographical
3. Hydrological
4. Vegetations (Flora and Fauna)
The settlements, which have names epitomizing various cultural origins may further be grouped into –

1. Occupation
2. Caste
3. Religion
4. Rulers / Individuals
5. Size
6. Process of settlement, etc.

A. Natural Environment :-

The study of place names in the Pravara basin shows that the place names are connected with natural features like land forms having suffix garh, dara (valley), ghati (narrow valley), mal (higher land). Some minor features such as soil, stream meander and bank site are responsible for lending their names to the villages in the plains and plateau area of the basin. Like the landforms, water features and place names seem to be in direct co-relationship. A village with plenty of water, scarcity of water and salinity of water named with these characteristics.

Place names after flora and fauna covers most of the basin. These villages are after the names of trees, flowers and crops and speak about the type of vegetation during occupation. Some place names after birds and animals have lent their names to villages on plateau and plains.

B. Place names associated with cultural elements :-

Many cultural factors separately or jointly are reflected through place names and may easily be correlated with the period and culture, through which they must have evolved. Place names in many instances depict the occupation of the people living in the village. They are also associated with caste elements, predominating at present or in the past in a village. Some villages are named after tribes in the
basin. Religion stands behind many place names. Gods and deities have also found their names in many villages.

Some villages named after individuals, may be rulers, important persons or saints. In the basin genetic terms suggest the size of settlements i.e. vadi, khede, gaon, nagar. Place names do reveal process of settlements by Aryans, Muslims, Marathas and other cultural groups during the various periods.

There are many settlements, which could not be put under any of the groups identified as above. These names of multifarious origin are grouped under ‘miscellaneous’ category.

Table 4.5
Place names associated with Natural Elements

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Natural Elements</th>
<th>Place Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Landforms : Plateau, valley, hill, mal, rock, etc.</td>
<td>Nandur Pathar, Kanhoor Pathar, Karjure Pathar, Sarola Pathar, Warundi Pathar, Malegaon Pathar, Hivergaon Pathar, Bhokadari, Abitkhind, Ekdare, Wadgari, Bhandardara, Wadgaon Darya, Ghatghar, Dongargaon, Dongarwadi, Malewadi, Murme, Malevadgaon, Daradgaon, Khadke, Khadakwadi, Guha, Katalpur, Katalvede, Khandarmal</td>
</tr>
<tr>
<td>2</td>
<td>Water features : River, Streams and their confluences, water availability or scarcity, salinity, etc.</td>
<td>Pravara Sangam, Sangamner, Mokal Ohal, Gangapur, Ramdoh, Panaswadi, Panegaon, Tale, Panodi, Nipani Nimgaon, Kharegaon, KhareKarjune, Kharegaon, Kharwandi</td>
</tr>
<tr>
<td>3</td>
<td>Vegetation : Trees, Flowers, Grass, Crops, etc.</td>
<td>Nimbalk, Nimbus, Chinchvihire, Chinchale, Jamboli, Jambale, Jambhula, Chincholi, Pimpalgaon, Umbare, Pimpi, Babhulgaon, Nimba, Gahimbo, Behapur, Borgaon, Chinchban, Hivare, Gahimb, Babhulkede, Kautha, Palaspur, Wadgaon, Jamgaon, Kalam, Kamalpur, Tandulner, Tanduwadi, Nachanativ, Kuranwadi</td>
</tr>
<tr>
<td>4</td>
<td>Animals and Birds</td>
<td>Waghdari, Waghapur, Waghacha Aakhada, Ghodegaon, Mhaisgaon, Kholewadi, Kholyachiwadi, Undirgaon, Ghorpadwadi, Margaon</td>
</tr>
<tr>
<td>Sr. No.</td>
<td>Cultural Environment</td>
<td>Place Names</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Caste</td>
<td>Bhramangaon, Brahmani, Malewadi, Gujarwadi, Gopalpur, Patharwade, Dhangarwadi, Malichinchore, Wanjarwadi, Kasare, Loharwadi, Lohare, Thakarwadi, Kumbharwadi, Vaiduwadi</td>
</tr>
<tr>
<td>2</td>
<td>Gods / Deities</td>
<td>Ganeshwadi, Deosade, Bhagwatipur, Wadala Bahiroba, Mhalaspimpalgaon, Shani Shinganapur, Mahalaxmi Hivare, Moryachinchore, Mhasoba Zap, Dhokeshwar Takli</td>
</tr>
<tr>
<td>3</td>
<td>Individuals</td>
<td>Rampur, Hanmantpur, Trimbakpur</td>
</tr>
<tr>
<td>4</td>
<td>Size (Genetic Terms) : Wadi, Khede, Pur, Gaon</td>
<td>Ghanegaon, Kanadgaon, Mahegaon, Tisgaon, Sawargaon, Chedgaon, Ghidegaon, Sirasgaon, Musalwadi, Sonewadi, Talegaon, Kesapur, Trimbakpur, Chandrapur, Tilapur, Lohagaon, Varkhede, etc. Most of the villages have ‘gaon’ suffix</td>
</tr>
<tr>
<td>5</td>
<td>Religion</td>
<td>Taharabad, Taklimiya, Fatyabad, Imampur, Salabatpur, Sultanpur, Fattepur, Rahimpur, etc.</td>
</tr>
</tbody>
</table>
### Table 4.7

**Talukawise Distribution of Place Names**

<table>
<thead>
<tr>
<th>A. Physical Elements</th>
<th>Nagar</th>
<th>Rahuri</th>
<th>Shrirampur</th>
<th>Newasa</th>
<th>Parner</th>
<th>Akole</th>
<th>Sangamner</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Landforms: Plateau, Valley, Hill, Mal, Rock</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>10</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>2 Water Features: River, Streams, Water availability, Scarcity, Salinity</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>3 Vegetation: Trees, Flowers, Grass, Crops</td>
<td>1</td>
<td>12</td>
<td>4</td>
<td>13</td>
<td>5</td>
<td>19</td>
<td>15</td>
<td>69</td>
</tr>
<tr>
<td>4 Animals and Birds</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

#### B. Cultural Environment

| 1 Caste | - | 3 | - | 6 | 1 | 3 | 2 | 15 |
| 2 Gods / Deities | - | 1 | 1 | 7 | 2 | - | - | 11 |
| 3 Ruler / Individual | - | 1 | 1 | - | - | - | - | 02 |
| 4 Size: (Genetic terms) Wadi, Khede, Pur, Gaon | 1 | 23 | 22 | 55 | 16 | 47 | 61 | 225 |
| 5 Religion | 2 | 2 | 1 | 6 | - | 1 | 4 | 16 |
| 6 | 6 | 51 | 30 | 96 | 30 | 85 | 93 | 391 |

The above analysis of place names can be considered as a source material for studies in the field of historical geography and indicates the evolution, time, site and situation of rural settlements in the basin. Etymology of place name study needs more documentary evidences of biological domestication, archaeology, local language, traditions and social customs. In the Pravara basin, it is observed
that the place names of rural settlements gives suggestions and hints about the origin of villages, since they are mostly either associated with physical elements or cultural environment. This etymology of place names gives valuable information to this branch and it may be used to fabricate, elaborate the various aspects of human beings as well as geographical in the past.

4.11 Distribution of Settlements :-

"Place orientation and geographic correlations are the primary prerequisites to adequate understanding, natural and cultural landmarks" (A.H. Mayer, 1954). This is true in case of settlements, since settlements bear a definite relationship between space at large and space involved, in between various units of settlements.

Distribution of settlements is influenced by nature of relief, agricultural productivity, availability of water, accessibility, etc. The impact of these factors is clearly visible in the distribution of settlements in Pravara basin.

Altitudinal Zones and Distribution of Settlements by Population Size :-

Altitudinally study region varies from below 1750 feet to above 3000 feet. On the basis of the altitude the region can be broadly divided in the three physiographic divisions as follows.

1. Valley region with altitude less than 2000 feet
2. Plateau region with altitude varying between 2000 feet to 2500 feet
3. Hilly region with altitude more than 2500 feet

Distribution of settlements according to population size in these three physiographic divisions varies significantly (Table 4.8). Of the total settlements
within the region (671) 47% of the settlements lie within the valley region, about 29.8% in plateau region and 23.2% lie in the hilly region.

Out of the total settlements in the region about 49.3% settlements are small, each with population less than 1000 persons. About 41.5% of the settlements are of medium size, each with population between 1000 to 3000 persons and 5.5% are large, each with population of more than 3000 to 5000 persons, while 3.8% of the settlements are urban places each with population of more than 5000 persons. This clearly shows that suitability of the region in respect of soil fertility, water availability and agricultural prosperity influenced the distribution of settlements by population size (Fig. 4.2).

In the altitudinal zone ranging from 2000 to 2500 feet the proportion of small villages was 49.5%, which is equal to the average for the region. The proportion of medium sized villages in the plateau region is higher than the average for the basin. But the proportion of large villages is low i.e. about 4.5%.

The hilly region shows the impact of altitude on the distribution of settlements more emphatically. In this hilly portion about 67% are small settlements, which is significantly higher than the average for the basin. The proportion of medium sized villages in this region is significantly lower than the average for the basin. And most glaring disparity is in the proportion of large and very large villages in the hilly region i.e. 3.1% and 0.9% large and very large villages respectively.
PRAVARA BASIN


- Below 1000: Small
- 1000 - 3000: Medium
- 3000 - 5000: Large Villages
- Above 5000: Urban Places

Fig. 4.2

< 2000'
2000' - 2500'
> 2500'

1 1 4 Miles.
Amount of Rainfall and Distribution of Settlements according to size:-

In Pravara basin the amount of annual rainfall varies from less than 500 mm to more than 600 mm. So broadly region can be divided into three zones on basis of amount of normal annual rainfall as below.

1. Central part of the river Pravara and Mula valley, which receives less than 500 mm rainfall.

2. Eastern part of the basin, which receives between 500 to 600 mm of annual rainfall.

3. Western hilly region, which receives relatively heavy rainfall i.e. more than 600 mm per annum.

Of the total settlements (671) in the basin, about 32.4% are found in the region, which receives more than 600 mm of rainfall. While in areas receiving medium and low rainfall, their proportions are also roughly equal to that in the heavy rainfall region. So, it is clear that the amount of annual rainfall, which influences availability of water and in turn suitability of the region for agriculture and hence for human settlements is an important factor influencing the distribution of settlements (Table 4.8, Fig. 4.3).
### Table 4.8

**Distribution of Settlements by Population Size (1991)**

<table>
<thead>
<tr>
<th></th>
<th>Small size</th>
<th>Medium size</th>
<th>Large size</th>
<th>Urban places</th>
<th>Region</th>
<th>Settlements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;1000</td>
<td>1000-3000</td>
<td>3000-5000</td>
<td>&gt;5000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. Altitude Zone</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;2000 feet</td>
<td>42</td>
<td>46</td>
<td>6</td>
<td>6</td>
<td>47</td>
<td>316</td>
</tr>
<tr>
<td>2000 – 2500</td>
<td>49.5</td>
<td>44</td>
<td>4.5</td>
<td>2</td>
<td>29</td>
<td>199</td>
</tr>
<tr>
<td>&gt;2500</td>
<td>67</td>
<td>29</td>
<td>3.1</td>
<td>0.9</td>
<td>23.2</td>
<td>156</td>
</tr>
<tr>
<td>Settlements</td>
<td>331</td>
<td>278</td>
<td>37</td>
<td>25</td>
<td></td>
<td>671</td>
</tr>
<tr>
<td><strong>2. Rainfall Zone</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;500 mm</td>
<td>35</td>
<td>51.1</td>
<td>8.1</td>
<td>5.8</td>
<td>32.6</td>
<td>219</td>
</tr>
<tr>
<td>500 – 600 mm</td>
<td>43.2</td>
<td>47.6</td>
<td>4.9</td>
<td>4.3</td>
<td>35.0</td>
<td>235</td>
</tr>
<tr>
<td>&gt; 600</td>
<td>70.3</td>
<td>25</td>
<td>3.5</td>
<td>1.2</td>
<td>32.4</td>
<td>217</td>
</tr>
<tr>
<td>Settlements</td>
<td>331</td>
<td>278</td>
<td>37</td>
<td>25</td>
<td></td>
<td>671</td>
</tr>
<tr>
<td><strong>3. Proportion of net sown area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;60%</td>
<td>67</td>
<td>27</td>
<td>4</td>
<td>2</td>
<td>25.3</td>
<td>170</td>
</tr>
<tr>
<td>60 – 70%</td>
<td>44</td>
<td>49</td>
<td>6</td>
<td>2</td>
<td>31.3</td>
<td>210</td>
</tr>
<tr>
<td>&gt; 70%</td>
<td>43</td>
<td>44</td>
<td>6.5</td>
<td>6.5</td>
<td>43.4</td>
<td>291</td>
</tr>
<tr>
<td>Settlements</td>
<td>331</td>
<td>278</td>
<td>37</td>
<td>25</td>
<td></td>
<td>671</td>
</tr>
<tr>
<td><strong>4. Proportion of net irrigated area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 10%</td>
<td>57</td>
<td>39</td>
<td>3</td>
<td>1</td>
<td>50.7</td>
<td>340</td>
</tr>
<tr>
<td>10 – 20%</td>
<td>43</td>
<td>48</td>
<td>6</td>
<td>3</td>
<td>26.0</td>
<td>174</td>
</tr>
<tr>
<td>&gt; 20%</td>
<td>39</td>
<td>39</td>
<td>11.3</td>
<td>10.7</td>
<td>23.3</td>
<td>157</td>
</tr>
<tr>
<td>Settlements</td>
<td>331</td>
<td>278</td>
<td>37</td>
<td>25</td>
<td></td>
<td>671</td>
</tr>
</tbody>
</table>
PRAVARA BASIN


- Below 1000: Small
- 1000 - 3000: Medium
- 3000 - 5000: Large Villages
- Above 5000: Urban Places

Fig. 4.3
Proportion of net sown area to total geographical area and distribution of settlements by population size:

On the basis of proportion of net sown area to total geographical area the region is divided into three zones i.e. western hilly, central plateau and valley or plain area.

1. The western hilly zone where proportion of net sown area to total geographical area is less than 60%.

2. Central plateau and valley region where proportion of net sown area to total geographical area is between 60% and 70%.

3. Eastern valley and plain region where proportion of net sown area to total geographical area is more than 70%.

Out of the total number of settlements in the basin, 38% settlements lie in the western hilly region, while central region has about 33.7% and the eastern region has 28.3%. This indicates that the western hilly portion, where due to undulating nature of relief, land available for cultivation is low, has most numerous settlements. The picture becomes still more clear when the population sizes of settlements are taken into consideration. In the western hilly portion about 67% settlements are small each with population of less than 1000, while medium and large size settlements are low. This means in the western hilly region, though the settlements are most numerous, the dominant size is that of small settlements. So much so that of the total small settlements in the basin 35% are found in this region.

In the central plateau and valley region where proportion of net sown area to total geographical area is between 60% and 70%, small and medium sized settlements are roughly of equal importance (43% and 49% respectively). This shows that the medium sized settlements is the dominant type in this region.
The eastern valley and plain region, which accounts for 28% of the total settlements in the Pravara basin have low proportion of small settlements. The most dominant type here is that of medium and large sized settlements, which accounts for 55% of the total settlements in eastern valley region.

The foregoing discussion shows that the proportion of net sown area to total geographical area has a direct bearing on distribution of settlements by population size. So that the dominant type in the western hilly region with low proportion of net sown area to total geographical area was small sized settlements. In the central plateau and valley region where proportion of net sown area varies between 60% and 70% the dominant type was medium sized settlements. In the eastern valley and plain region where more than 70% net sown area the dominant types are those of medium and large sized settlements (Fig. 4.4).

Proportion of irrigated area to net sown area and distribution of settlements by population size :-

On the basis of proportion of irrigated area to net sown area in 1991 the basin can be divided into three regions.

1. North eastern part of the valley, which is plain area and where the proportion is more than 20%.

2. Central part of the valley considering of the part of the valley and plateau where proportion varying between 10% and 20% respectively.

3. Western and southern hilly regions where this proportion is less than 10%.

In the north eastern part of the valley medium and large size settlements account for about 78% of the total settlements but the proportion
PRAVARA BASIN


- Below 1000: Small
- 1000 - 3000: Medium
- 3000 - 5000: Large Villages
- Above 5000: Urban Places

< 60%
60 - 70%
> 70%

Fig. 4.4
PRAVARA BASIN

Distribution of Settlements According to Population Size (1991) and Proportion of Net Irrigated Area to Net Sown Area.
of small sized villages of the basin was only 21.8%. The dominant types found here are those medium and large sized settlements.

Of the total number of settlements in the basin 26% are located in central part and out of the total number of settlements in the region, 41% are medium sized (Fig. 4.5).

The western and southern hilly regions with less than 10% of the area under irrigation have 50% of the settlements. Because of low proportion of area under irrigation the dominant type here is that of small sized settlements, each with population less than 1000.

**Distance from major routes of transportation and distribution of settlements by population size :-**

On the basis of distance from the railway routes or a state highway the settlements were grouped into three categories as follows.

1. Those lying within 5 Km from a major transport route.
2. Those lying within 5 to 10 Km from a major transport route.
3. Those lying beyond 10 Km from a major transport route.

Of the total number of settlements in the basin about 81% found to be within 5 Km from a transport route. And about 47.7% were small and 42.1% were medium sized. About 17.3% were found to be between 5 to 10 Km from a major transport route and only about 1.7% of the settlements lie beyond 10 Km from a major transport route. So network of transportation particularly in middle and eastern part is good and most of the settlements have connected by district road or state highways in the basin, but the hilly area is still has to be connected by transportation route (Fig. 4.6).
PRAVARA BASIN


Fig. 4.6
PRAVARA BASIN
Distribution of Settlements According to Population Size (1991) and Population Density (Per Sq.Kms.)

Fig. 4.7
PRAVARA BASIN


- Below 1000: Small
- 1000 - 3000: Medium
- 3000 - 5000: Large Villages
- Above 5000: Urban Places

Fig. 4-8.
4.12 Correlation Analysis :-

For examining the influence of some of selected variables on distribution of settlements in the Pravara basin correlation technique was used. The hypothesis was the distribution of settlements is related to physical and socio-economic factors in the basin.

A correlation matrix of 10 variables has been prepared. The variables are as follows.

X1  - Medium size of the settlements
X2  - Mean altitude
X3  - Mean annual rainfall
X4  - Proportion of net sown area to total geographical area
X5  - Proportion of net irrigated area to net sown area
X6  - Population density (1991)
X7  - Rate of population growth (1981 – 91)
X8  - Density of settlements per 100 Km² area
X9  - Average area per village (Km²)
X10 - Accessibility

<table>
<thead>
<tr>
<th>Variables</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
<th>X9</th>
<th>X10</th>
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<tr>
<td>X1</td>
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<tr>
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<td>X6</td>
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<td>X7</td>
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<td>.30</td>
<td>.37</td>
<td>.10</td>
<td>.25</td>
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</tbody>
</table>
Correlation Analysis:-

Medium size of settlements shows a positive relationship with mean annual rainfall (0.586), in the region which forms a part of the rain shadow area, so mean annual rainfall is a factor influencing on the mean size of settlements in the basin. Variations in mean size of settlements are also affected by certain economic factors, such as proportion of net sown area to total geographical area, proportion of irrigated area to net sown area and accessibility. This is shown by the fact that all these variables give positive and significant values of coefficients of correlation with variations in medium size of settlements. As expected the medium size of settlements is larger in areas, which are economically better off. This economic prosperity is reflected in certain social factors such as density of population and growth of population. The values of coefficients of correlation with these on the one hand and medium size of settlements are positive on the other hand and significant. It is obviously that the physiographically and socio – economically better off areas have settlement density more and average area per village is small.

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