

ANALYSIS OF DEVELOPMENT AND VILLAGE MORPHOLOGY: A SPATIO-TEMPORAL ANALYSIS

PRITAM SINGH^{a1} AND P. K. PARIHAR^b

^{ab}Department of Geography, University of Delhi, Delhi, India

ABSTRACT

The Paper deals with spatio-temporal analysis of historical development of the village and socio-spatial structure. Bundelkhand region of Uttar Pradesh has 4521 habitats villages. This study is based on 24 sample villages. All villages are classified into six development categoriesⁱ on the basis of twelve parameter and score system. The pattern of village development is based on last 30 years census data (1981 to 2001) and field survey held in 2011 and 2012. In this study, it is found that spatial structure/morphology of the village has changed.

KEYWORDS: Spatio-Temporal Analysis, Village Development, Census Data.

Regeneration of urban village space by the villagers themselves from the mid-1990s until today within Indian cities especially has attracted attention by academics, policy makers, and the media. The rapid build-up accompanied a substantial population increase, a transformed local economy, and the extreme densification of inhabited village space (Blache, 1922; Ahmad, 1962; Curry, 1964). Build-up of the traditional, inhabited space that accompanied this population increase then produced a geographical and social divide in the city, with the great majority of village populations possessing rural status, while the majority of the surrounding population officially urban residents (Coniff, 1981; Clout, 1981; Singh, 1955; Singh, 1980; Tiwari, 1982). The relationship between the village organizations and the government, particularly in the context of the continued regeneration of urban space in southern cities, has also attracted much attention. The legalistic framework has in particular been the object of study, although little has changed formally. There is now an abundance of socioeconomic data on villages, but without spatial dimension at the village level. This literature is given more detail in the following section, Morphology of the urban village in the literature, where the case for more in depth morphological analysis is made (Singh, 1966; Singh, 1966; Tiwari, 1982).

Development pattern of the rural settlements are related to development of village amenities like - education facility, medical facility and availability of drinking water, banking facility, transport and communication, electricity and other factors.



Figure: 1. Location of the Sample Villages.

This study is based on 24 sample villages, village locations are given in Figure 1. These villages are selected by stratified sampling after analyzing 1981 - 2001 village data and field survey.

Pattern of Village Development in 1981

In this study it is found that, according to 1981 census data, the only Pahari Bujurg village comes under first category category; its score is 46 out of 60. Pahari Bujurg is the head quarter of Pahari Block (Vikas Khand). There were three primary schools, two middle schools, one inter college, one community health centre, mother and child care centers and many private registered practisers. There were hand pump drinking water facilities available in 1981. Therefore, the village is a semi urban centre. There are many shops and facilities and the village is also connected with well paved road and major district road (MDR). One village is in second category which has scored 34 out of same (60) (Rewan in Mauranipur Block in Jhansi). In third

¹Corresponding author

category, there are two villages (AstaBamaur Block in Jhansi and LauleeTeeka Mau, Bisanda Block, Banda). Score of the villages were Asta (27), LauleeTeeka Mau (28). Eight villages were under fourth category (Asthaun, Baswari, Dongra Kalan, Luna, Meri, Rangoli, Silganand Talaur), five villages (Chand Pura, DevkaliMustkil, Hadaha Mafi, Karsan and Kolwan) under fifth category and seven villages (LadakaPurwa, Kayal, Byarjau, Bhatewara Kalan, Aruwara and Ajana) in sixth category (See table 4.1).

According to the study, disparities of development in the villages were high in 1981. Pahari Buzurg village in Chitrakoot district had 46 score (highest in 24 sample villages) and Ajanavillage in Lalitpur district had only 13 score (lowest in 24 sample villages). Four villages (Baidora, Kayal, Kolwanand LadakaPurwa) had no education facilities in 1981 and only Pahari Buzurg had Inter College. Six villages (Pahari Buzurg PHC and FWC, Asta MCW, Byarjau MCW, Luna FWC, Talaur and Rewan private doctors) had medical facilities. Only one village had (Pahari Buzurg) banking facility (see development category of villages in table 1).

Analysing the data of 1991 two villages were under first category (Pahari Buzurg(48) Chitrakoot district and Rewan (38) Jhansi district). Two villages were under second category (Asta (32) and Talaur (32) in Jhansidistrict). Two villages were in third category (Hadaha Mafi (26) and LauleeTeeka Mau (26) in Banda district). Eight villages were under fourth category (Silgan, Rangoli, Meri, Luna, Asthaun, Baswari, DevkaliMustkilandDongra Kalan). Five –five villages were under fifth and sixth category (see table 4.2).

Pattern of Village Development in 2001

Development features in 2001 is different from that of 1991. Villages were classified in six categories with equal numbers (four villages in each category). Pahari Buzurg, Rewan, Talaur and Astain first category, Hadaha Mafi, Karsan, Luna and LauleeTeeka Mau in second category, Asthaun, Baswari, Silgan and Rangoli under third category, Dongra Kalan, Bhatewara Kalan, DevkaliMustkil and Meri under category, Kolwan, Chand Pura, Byarjau and Aruwara under fifth category, Ajana, Baidora, LadakaPurwa and Kayal under sixth category.

Present Pattern of Village Development

Present pattern of the village development is evaluated with spotlight on the field experience and development process in reality, based on field data. The study also covers the demographic features, education, health, communication, information, transport, banking and other common facilities in the villages.

Land use pattern Sample Villages

Land use pattern of the villages in study area is not identical, it has variation mainly based on the physical and locational factors. Some villages are located on river bank (Kolwan, Baragaon Block in Jhansi district, Aruwara, Manikpur Block in Chitrakoot district) and some are located on the hill side (Pahari Buzurg, in Chitrakoot district, Silgan and Dongra Kalan in Lalitpur district). Few proxy indicators of this land use pattern in percent, settlements density and agricultural density (Person/Acre) of these villages are given in table 4.1. Mainly four type of land use is identified in rural settlements of the Bundelkhand which are forested land, waste land, settlements and agricultural land. Forested land which is mainly owned by gram panchayat of villages, therefore this land is not reserved for neither state nor central government. Wasteland is classified as land which is not used in either of the following categories like agriculture, settlements and as forest. Agricultural land is fertile, semi-fertile or suitable for agricultural purpose. Last one is settlements land, commonly used for building personal homes, temple, mosque etc. Five villages are located in plain have agricultural land above 90 percent (Asta, BhatewaraKalan, Ragauli, LauleeTeeka Mau andKarsan). In those villages most of the people are engaged in agricultural activities. The villages Asta, Bhatewara Kalan and LauleeTeeka Mau are dominated by landlords. On the other hand the village Karsan was founded by Srivastava; they are the landlords of village. They have around 90 percent land under their domination. The Rangoli is a Brahmin village, they are the landlord of the village. Eleven villages had agricultural land above 80 percent but below 90 percent (Talaur, Rewan, Meri, Luna, Hadaha Mafi, Dongra Kalan, Chand Pura, Byarjau, Baswari, Ajana and Asthaun). The villages Talaur and Luna are dominated by Thakurs. The Dongra Kalan is one of the oldest villages of the region; this village is dominated by the Bundela Thakur. They were the rulers and at present

they are representing in the Member of Parliament and Member of Legislature Assembly. Two brothers having around 80 percent land of the village. While the Baswari, Byarjau, Asthaun and Rewan villages are not dominated by one caste, they are having combination of two or three castes with almost having equal population share, the Rewan village which had three major castes (Ahir, Ahirwar, Kushwaha), Byarjau (Ahir, Kushwaha), Baswari (Kurmi and Muslims) and Asthaun (Muslim, Lodha, Brahmins and Kumhars) different caste combination. On the other hand the villages Meri, Ajana, Chand Pura and Hadaha Mafi are dominated by Ahirs (Yadav), they are not the landlord but occupy maximum land of villages with having their proportional sharing. Ahirs dominate the village in term of population without having dominancy in land ownership.

Other villages (Silgan, Aruwara, Baidora, Kayal, Kolwan, Pahari Buzurg, LadakaPurwa and Devkali) had less than 80 percent of the total agricultural land. These villages are located near the river, hill and Plateau. While the villages Kayal, LadakaPurwa and Chand Pura have lowest land under the agricultural uses. In those villages there is no upper caste; most of the village population is belonging from the labour class, those worked near towns as labourers.

Aruwarais located in hills making river side. There is no chance for development of new agricultural land. Pahari Buzurg is a semi-town village and urban centre, also located near Hills (Pahari). Kolwan had same geographical location with Hills and River bank. Silgan is located on Plateau and near Lalitpur town (Municipal Body), therefore land of the village is non-agricultural and is converted into settlements land and urban land.

Average forested land in sample villages was found to be 2.53 percent. Aruwara (6.69), Devkali (6.67) and Pahari Buzurg (4.73) had highest land under forest. These villages are located near river or hills (Aruwara, Devkali, Kolwan and Pahari Buzurg). Those villages located near town, had forested land (Silgan, Meri, Luna and LadakaPurwa) below 1 percent of the total.

Highest land covered by buildup area was found in Ladaka Purwa (40.09), Pahari Buzurg (24.94),

Devkali (21.11) and Luna (16.83) follow respectively. These villages are located near towns or semi-towns. Lowest was in Asta (2.38), Bhatewara Kalan (3.4), Rangoli (3.62) etc. Average settlements land in sample villages was found to be 8.64 percent (see table 4.5). Waste land was found in the villages are located near hills, plateau and rivers, like Silgan (22.66), Kayal (15.06), Kolwan (13.44), Dongra Kalan (13.28), Aruwara (11.16), Asthaun (11.16). Average waste land in sample villages was found to be 5.64 percent (see table 4.5). Lowest waste land was found in LadakaPurwa (0), Asts (0) and LauleeTeeka Mau (0.67). LadakaPurwa is an urban village, therefore maximum land is used for settlements. Asta is one of the famous agricultural villages having maximum land under agriculture. This village uses hybrid seeds and grow two crops in year. LauleeTeeka Mau is an agricultural village but it is drought prone.

Settlements density is calculated with the help of total settlements area (Acre) of the village and total population of the village. It is measured in person/acre. Highest settlements density of the sample villages was found in Devkali Mustkil (28.31). This village is located in bad land area of the region near Yamuna River. Meri is an urban village. Settlements density of the villages was, viz; Meri (26.5), Rangauli (25.28) and Asta (23.8). Average settlements density of the sample village was found 20.75 and the lowest was in Chand Pura (12.92) and Karsan (13.67) see table 4.5.

Agricultural density of the sample villages is calculated taking total population of the village and agricultural land of the village in acre. The unit of the density is person/acre. Highest agricultural density was found in Kayal (8.15), Devkali (8.02), Aruwara (4.76) and Pahari Buzurg (3.43). Kalyal, Devkali, Aruwara and Pahari Buzurg villages had lowest land for agriculture. Kayal, Devkali and Aruwara villages have no landlord; most people are of labour category in other villages, ruled by landlords. The most population of these villages comprises of are Dalits and Pichhadi Jati (Backward caste). Pahari Buzurg is a semi-urban centre. Some people of the nearby villages are migrants, there fore population of the village is highest in all sample village.

Table: 1 Land Use Patter in Sample Villages

Village	Categ ories	Forested Land in Percent	Waste Land in Percent	Settlements Land in Percent	Agricultural Land in Percent	Settlements Density Person/Acre	Agricultural Density Person/Acre
Asta	I	1.11	0.00	2.38	96.50	23.80	1.83
Pahari	I	4.74	5.94	24.94	68.35	19.39	3.43
Rewan	I	2.42	2.52	12.06	84.99	20.68	1.51
Talaur	I	1.81	3.69	7.38	88.12	25.35	2.12
Hadha Mafi	II	1.59	1.5	10.6	87	19.42	2.34
Karsan	II	1.11	2.24	6.7	90.9	13.67	1.01
LaaleeTeeka Mau	II	1.21	0.86	3.87	94.03	26.5	1.68
Luna	II	0.68	0.78	16.83	82.38	17.78	1.59
Asthaun	III	1.55	11.05	5.52	81.86	20.10	1.34
Baswari	III	1.36	0.91	11.61	86.11	17.17	2.28
Ragauli	III	2.67	2.58	3.62	93.11	25.28	1.37
Silgan	III	0.84	22.66	8.5	67.98	24.75	3.09
Bhatewara Kalan	IV	1.32	0.81	3.4	94.46	23.96	2.85
Devkali	IV	6.67	2.22	21.11	74.44	28.31	8.02
Dongra Kalan	IV	1.29	13.28	4.8	80.44	20.54	1.23
Meri	IV	0.11	2.35	10.57	86.95	26.2	3.18
Aruwara	V	6.69	11.16	15.17	66.94	21.02	4.76
Byarjau	V	1.13	5.11	7.38	85.36	16	1.36
Chand Pura	V	1.16	5.03	10.9	82.89	12.92	1.68
Kolwan	V	1.84	13.44	5.8	79.83	17.14	1.26
Ajan	VI	3.84	3.20	11.21	81.73	20.85	2.86
Baidora	VI	2.67	14.00	6.00	78.00	20.33	1.56
Kayal	VI	1.62	15.06	27.1	57.22	17.22	8.15
LadakaPurwa	VI	0.67	0	40.09	59.39	19.66	3.98
Average		2.53	5.64	8.64	82.62	20.75	1.73

Source: Based on Filed Survey; September – November 2011

Spatial Structure and Historical Expansion of Villages

Spatial Structure and history of the villages is paramount in a research. Spatial structure is related to the location and distribution of the caste in the village. The basic purpose of this study is to find the reason of underdevelopment and development at inter and intra-village level. Every village has a unique spatial structure and history, characterized by the old and dominating caste in the past and now modified by the present prime castes of the villages. The study is focusses on the six case study villages. These villages are representative villages of the region/category and these represent all the six category of development (hierarchy) and in

addition represent the geographical locations as well, like, in the mountain side, small (Kolwan) and large (Dongra Kalan) villages with category V and IV; near town, caste based and category II (Karsan), category I and distant from town (Rewan), category III and underdeveloped village (Baswari) and lowest developed village near town (Ajana) which is a category VI village. The detailed study of these villages is given below:

Rewan: Category I Village

Rewan is a category I village, located in Mauranipur Block (Vikas Khand) of Jhansi District of Uttar Pradesh. This village is considered to be developed. The score value (development index) of the

village was 34 in 1981 and is considered as a second category village. In 1991 village had achieved some advanced facilities and services and entered in category I with development index of 41. Even in the 2001 the village had same score. The village has some higher facilities as like three Inter Colleges, PHC and drinking water facilities, population growth rate, communication facilities and transport system. The village scores 49 development index.

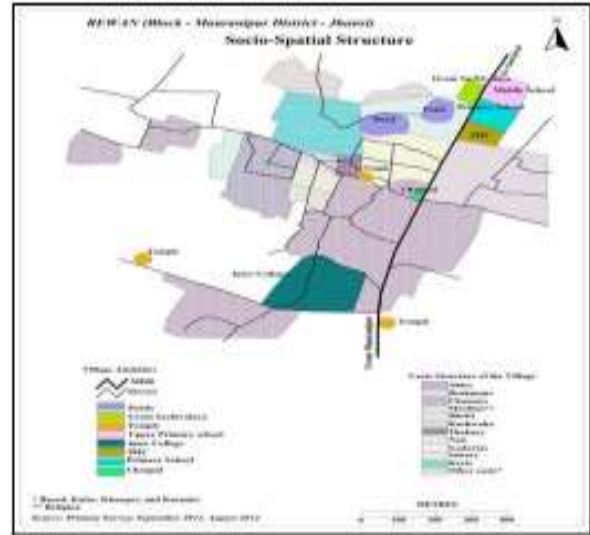
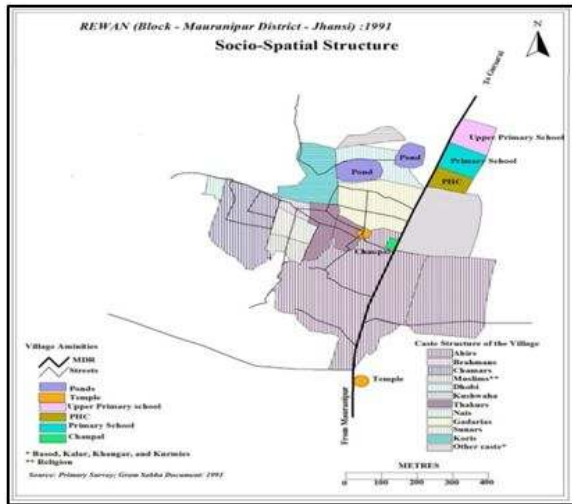
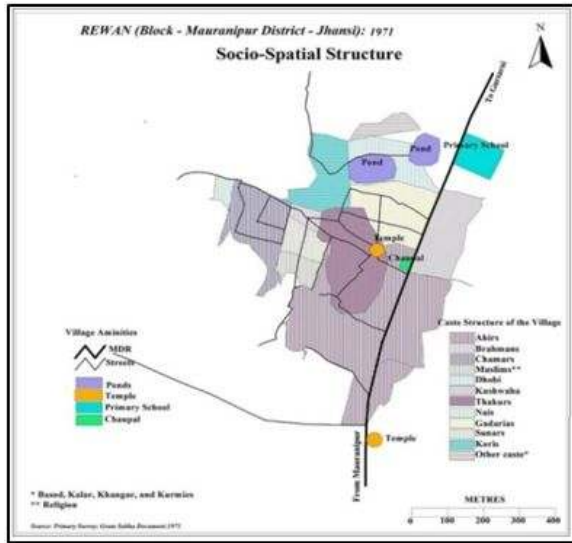


Figure: 2 Socio-Spatial Structures (1971, 1991 and 2011-12) of Rewan Village in Mauzanpur Block, Jhansi District

The history of the village dates back to the 11th century. Jay Singh Candela was the king of Jejabhukti. Alha Udal was the great warrior of the region. The village got its name Rewan in the 19th century, earlier it was known as Garh. At that time village was dominated by warrior category Thakurs (Bundela and Chandela). According to the villagers, the village was ruled by Chatrasal Bundela of Chattarpur princely and his under taking kings of Charkhari. Bundela Thakurs of the village dominated other communities and castes in the village like Ahir and Kushawaha who were farmers, Ahirwars (Chamars) worked as helpers like Dhobis, Nais, Dhemers, Sunars, Khateeks, Balmiki in the Jajmani system. They offered services to Thakurs of the village. Brahmins of the village came from Mauzanpur for Vedic activities and teaching but in the 19th centuries they resided as permanent settlers in the village.

The Historical expansion of the village is given in figure 4.12. In 1971 village structure was based on the Jajmani System. Thakurs dominated and ruled the village. They were the landlords and politically influential. All castes and communities of the village work under Thakur's rules and regulations. After 1970 landholding act was established by Uttar Pradesh Government under which, land of the Thakurs was redistributed among Ahirs, Kushwaha, Ahirwars and other castes. The Thakurs were left with land ranging from 18 to 25 acres. Thakurs of the village left the village to avail better facilities and services and moved

to nearby towns like Bhopal, Sagar, Jhansi and Mauranipur.

Brahmins in the village comprised of a small number. They had good education and thus left the village for better opportunity in urban areas. The structure of the village kept on changing. The historical structure of the village is given in maps 1971, 1991 and 2012 (see figure 4.12). All maps are based on field survey, villagers' information, mental map of the senior citizens of the village and Gram Sabha Documents provided by the Gram Panchayat.

The social structure of the village in 2011-12 is different from that of 1971 and 1991. In 1971 village structure was based on Prof. Kashi Nath Singh's (1968) model of "Jajmani System". Thakurs and Brahmins captured the core of the village. They dominated the village and village structure was influenced by their domination. Thakurs were the founder of the village but problems like family, land dispute, increasing population, lack of opportunities in employment, forced them to leave the village, Ahirs and Kushwaha are dominating and social structure of the village has slowly changed. Population of Ahir's increased considerably after they purchased land and houses of the Thakurs.

In the map of 1971 (Figure 2), spatial structure of village shows facilities and caste morphology. Thakurs were dominating in the village. Ahirs and Kushwaha were farmers. They worked in the field owned by Thakur. But by 1991, Ahir dominated the village and owned land thus they were no more dependent on Thakur's land. Ahirwars (Chamars) were landless agricultural labourers in 1971 to 1991 and even at present, a very few households of Ahirwar caste are in the take off stage of development, those who got into government services. Other castes of the village did not experience a much comfortable condition. They are facing water scarcity in the farmlands, lack of information regarding agricultural technology, development programmes and schemes. Amenities of the village were very less in 1971, there was only one primary school but by 1991 one upper primary school and one PHC was established. Streets of the village were made by bricks. By 2011-12 three Inter Colleges, one Convent School, primary, upper primary schools, Aganwari centres and PHC were made available. Streets of the village concrete and cemented (CC). Drinking water facility of the village was not good in 1971 but in

1991 there were 35 government hand pumps and in 2011-12 water supply facility is available, but the number of ponds has decreased. There were two temples in 1971 and 1991. One was on the road side and the other at the centre of the village, but, in 2011-12 new temples were built on the outskirts of the village. Spatial structure of the village has been modified from time to time in case of caste and amenities. Composition of caste and religion also changed from time to time. Structure of the village is also influenced by modern innovations, like MDR (Major District Road), Schools (Upper Primary and Inter College), PHC and road connectivity from farmlands.

According to the study, Rewan is the most developed village of the region and farmers of the village are labourious. They work in their fields and a high competition is seen between the Kushwaha and Ahirs in agricultural development.

Karsan: Category II Village

Karsa village dates back to the 20th century. This village also existed in the 12th century, at the time of Chandelaking Jay Singh and the great warrior Alha-Udal known as Garhi. But the village was destroyed by Prathiwiraj Chauhan and Muhamad Gauri. In the 20th century this village was resettled by Shrivastava caste, fore father of Vijay Karan. Now Udaykaran, son of Vijaykaran is the landlord of the village. He is lived in Orai (District Headquarter of Jalaun) town, 2 kilometres from the village. He had 200 acre land and started a degree college in the village (B. A., B. Com., B. Sc. and B. Ed., courses). Srivastavas left the village 20 years back, but their houses are still there in the village. Village has two main castes Gadaria (Pals) and Nats (Nagars).

Gadarias is the largest caste of the village. These people work as agricultural labourer and belong to OBCs community. Nats (Nagars) is a schedule caste community; they are labours who work in agricultural land and urban centre (1.5 kms from the village Orai Headquarter of Jalaun District). Spatial structure of the village has not experienced much change for the past fifty years. Shrivastavashadhouses in the center of the village but left the village in 1993. There are two households of Thakurs, but they do not have any dominance in the village. The largest and the politically influential community in the village is of the Gadarias (Pals). Gram Pradhan of the village belongs to the

Gadaria caste. Their houses are made up of bricks and cement, with their back along the road in the village. Nats (Nagars) is the second dominating caste, they have got benefits of reservation in government services and people of this caste are working in government sector like, police, teaching and others. They live along the front side of the road in the village. Other castes like Ahirwar (Chamars), Jamadar, Kalar, Patawa are very small in number and have fewer numbers of households. Center of the village has been occupied by the Thakur's and the Srivastavs. There is small temple in centre of the village, with one Pujari (Brahmis) living in the temple. Ahirwars and Jamadar living in south east of the village, they are poor and their economic life depends on the Gadarias and Nats. Caste conflict in the village had occurred many times between the Nats and the Gadarias.

Spatial Structure of the village is affected by adding new amenities, population and availability of natural resources. In this village there were three ponds in 1971, one large and two small. However by 1991 only small ponds were left by 2011-12, just one pond was found at the back of the village (see figure 4.3). Streets of the village are built by bricks, concrete and cement (CC), but in 1971 and 1991, none of the streets were paved. There were no schools in 1971 but in 1991 one primary school and by 2011-12, one primary school, one upper primary school and by one Degree College affiliated to Bundelkhand University, Jhansi were established. Development of the village has increased after 1991. The detailed spatial structure of the village in 1971, 1991 and 2011-12 is shown in Figure 3. According to the study village shows positive development last decade. People of the village work hard to increase their crop production.

Baswari: Category III Village

Baswari is a village of Hamirpur district in Muskara block. It is 34 kms away from RathNagarPalikaParisad. Village was IV category in 1981 and 1991 but in 2001, it entered in category III. In 1981 it had a development index of 24 and in 1991; it increased by only one point and reached 25. In 2001 it grew up by one point and entered in category III. But in 2011-12 the village scored 43 points in development index and raised to category I.

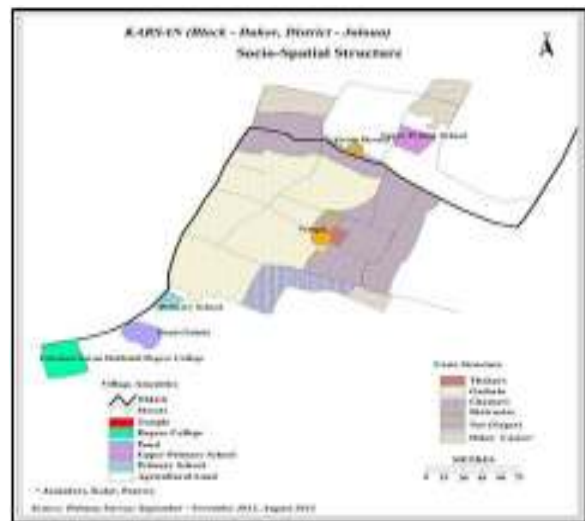
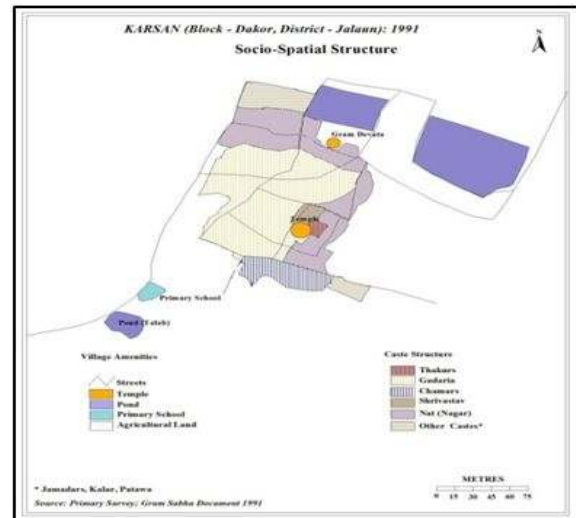
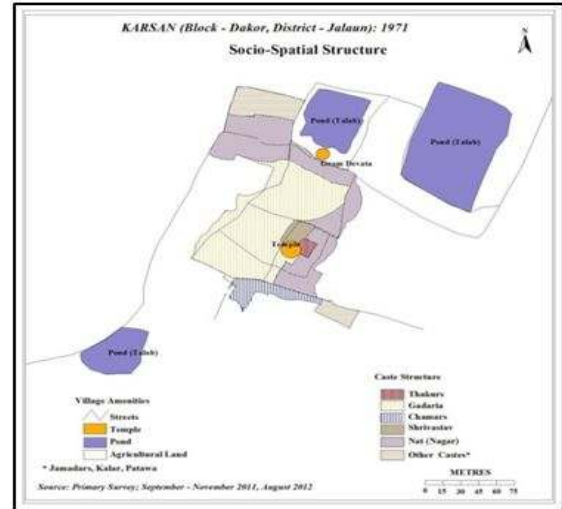


Figure: 3 Socio-Spatial Structures (1971, 1991 and 2011-12) of Karsan Village in Dakor Block, Jalaun District

History of the village is very interesting. The village was established in 13th century by Lodha Rajputs (Lodhi Rajput). This fighting category belonged to CharkhariRajshahi. LodhaRajputs are dominating caste of the village; they are the landlords and work in the government services like Indian Army, UP Police and the paramilitary forces. Villagers were also involved in the freedom movement of India in 1857 in Jhansi, (which was a princely state) and other movements of national interest.

Spatial Structure of the village was based on Jajmani System in 1971. Dhodha Rajputs were dominating and they occupied the core of the village. Brahmins of the village were superior to the Lodhas and other caste like agricultural labourers and Ahirwars (Chamars). Towards the east side of the village, Ahirs surrounded the Lodha. They were dependent on the agricultural work and their major occupation was grazing of animals like cow and buffalo. Involved in the production of milk earlier but they now are working as agriculturalists. Muslims lived on the market side of the village. In 1971, there was no canal for irrigation and rain was the only source of water of irrigation. Village streets were not paved, Major District Road (MDR) which connected tehsil and district headquarters was 35 kms away from the village. This MDR was then converted into State Highway (SH). Muskara is block headquarter. It is only 3 kms away from the SH. There are girls and boys inter colleges. 1971, village had only one primary school at the centre of the village but in 1991 the primary school was shifted towards the road side. In 1998 one PHC and one upper primary school was also established. There are two temples; one is at the centre of the village and the second outside the village. Another temple was under construction in 2012. Weekly market facility is available in the village. This market provides goods of daily use. There is a Panchayat Ghar was constructed in 2003 at the centre of the village near the houses of the Lodhas and the Ahirs. PHC was opened in 2003, but there is not a single doctor. However, a nurse is available at the weekends.

Spatial structure of the village has kept on changing from time to time which can be clearly seen in the maps of 1971, 1991 and 2012 (see Figure 4) of the village. Population growth of the village was high from 1991 to 2001. Village expansion is surrounding the village homogeneously. Major expansion of the village is towards the south west of the village and minimum is

towards the left side of the road, as it is covered by canal and often faces the problem of water logging.

Cropping pattern of the village is based on water availability. In 1971 the villagers were growing barley, gram and red lentil in Rabi season and in the Kharif season they grew millets, pulses like black lentil and green gram, but after availing canals as a source of irrigation their cropping pattern got change. Now people of the village have started cultivating of paddy, sunflower and maize in Kharif season and wheat and sugarcane in Rabi season. Villagers' believe this is due to development programme and policies of centre and state government. There are 80 houses built by Indira Awas Yojana under central policy and 50 houses built by Kashiram Awas Yojana, under the state government policy.

In spite of caste conflict there has been a balance of power. Population of Lodhas is 15 percent of the village and Ahirs (13 percent), Kushwaha (5 percent), Chamars (12 percent) and other castes like Dhobis, Kurmies and Brahmins are three to five percent of the total population. Thus, the overall progress of the village is based on the co-ordination among the various castes, which in turn also effects the agricultural development and creates a healthy environment.

Dongra Kalan: Category IV Village

Dongra Kalan is a category IV village and the most populated in the six villages. Development index of the village was 25 in 1981, 23 in 1991 and 25 in 2001. But in 2011-12 village got 37 points. Village category was IV till 2001 but it jumped to category I in 2011-12. This is a historical village, ruled by Bundela Rajputs in 12th century. The ancient name of the village was Lohagarh, (a fort of Iron). Jai Singh a Chandela Rajput was the owner of the fort in the 12th century (Gracious time of Alaha and Udal). After the 13th century, the village lost its historic importance and it came into limelight only in the first movement of freedom of 1857. Lohagarh fort was broken by the British army in 1857. Many Bundela Thakurs were killed and the village got dispersed. Spatial structure of the village was based on Jajmani System. In 1971, Bundela Thakur and Brahmins lived in the centre, the most secure part of the village situated towards the hill side. North West part was occupied by Kushwaha, who lived in Thakurs' land and working in their land and depended on their mercy. The road side along the east

was covered by Ahirwars (Chamars). They are landless agricultural labourers and worked in Ahir, Kushwaha and Thakur's land. Chamars(Ahirwars) community though generally backward have well qualified people who are source of motivation their community.

small hill area. (Yellow shading colour in map 4) But 2011-12 this area has decreased and small hill area has increased. It means that there has been an illegal mining of stone and concrete. Thakur population has decreased in the village and Kushawahas, Ahirs, Ahirwars (Chamars), Kurmies and Muslims population has increased. Kushawahas, Ahirs and Ahirwars are in approximate equal ratio in the village.

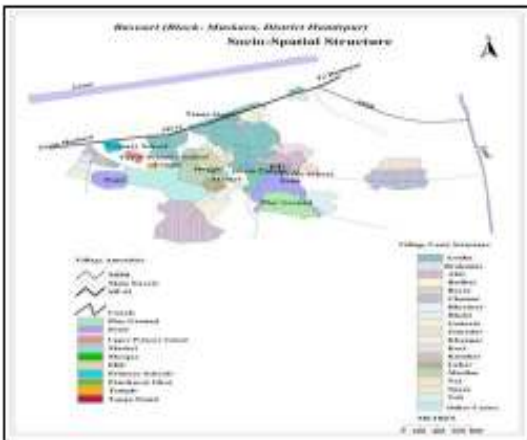
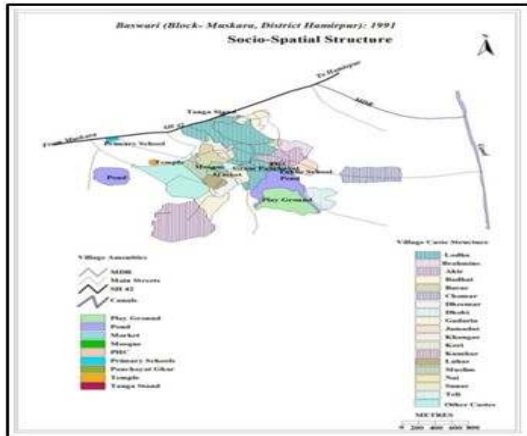
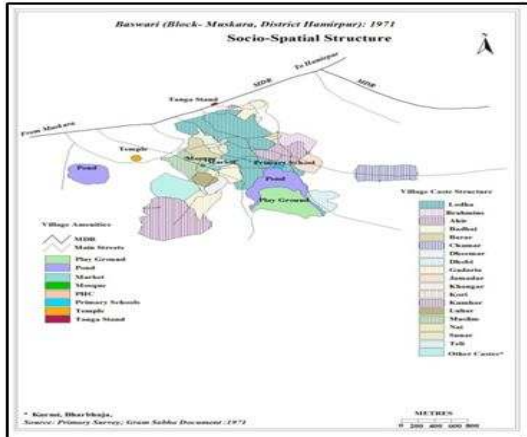


Figure 4 Socio-Spatial Structures (1971, 1991 and 2011-12) of Baswari Hamirpur District

Socio-spatial structure of the village has been changing from time to time. In 1971 and 1991, high hill area (green shadow colour in map 4) was larger than

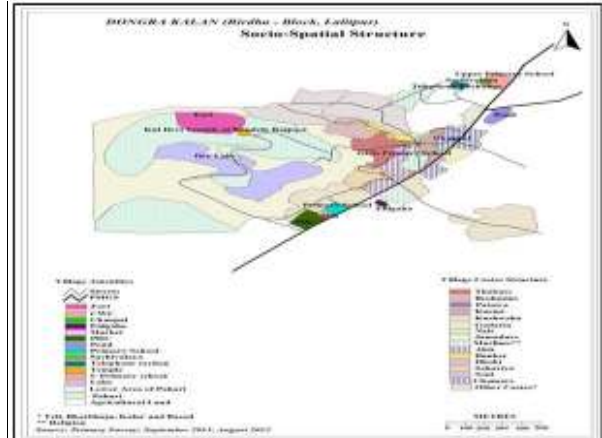
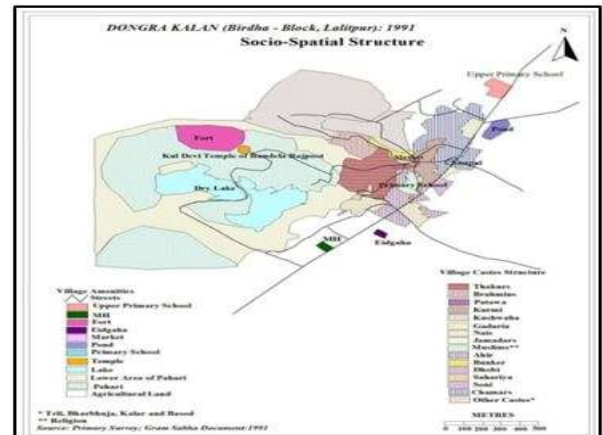
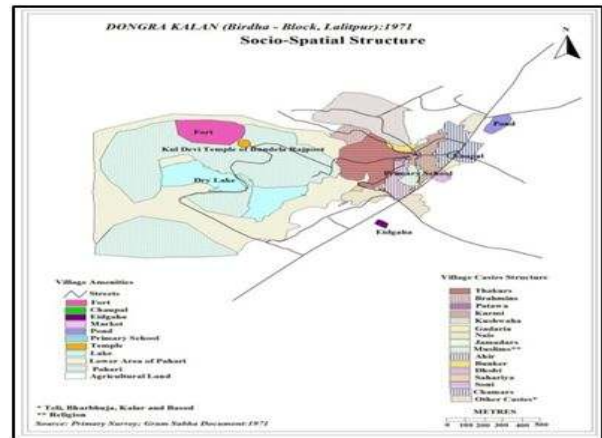


Figure 5 Socio-Spatial Structures (1971, 1991 and 2011-12) of Dongra Kalan(Jhansi District)

Village morphology has kept on changing and there has been an increase in population of the backward and schedule castes. Amenities of the village have also increased from time to time. In 1971, there was only one primary school, no PHC, MH, Upper Primary School (UPS) and girls Primary School. Social and economic amenities have also increased. In 1991, there was a MH and dispensary but in 2011-12 there was just one PHC with 50 beds and one UPS, one Primary School for girls, village sachvalaya, telephone exchange and a large water tank for supplying drinking water. Temporal analysis of village morphology is shown in figure no. 4.5., showing the location of the amenities. After 2001 concrete and cement paved streets, connected to NH 25 with PMGSY was made in the village. Establishment of 100 hand pumps, electric pump and electrification of the village was also done. Spatial growth of the village increased towards road side and towards the east of the village. People have started making their houses in their fields, along the village side. Though village is secure inside, some thieves and dacoits are found outside the village who are often indulged in loots and crime, thereby forcing people to live in small and congested streets.

The village has a very old fort. That was a symbol of power and is known as Lohagarh. There is a temple of Kuldevi of Bundela Rajputs, another ancient Lord Shiva temple in market side of the village, which was made in the 12th century by Chandela Rajputs. Another temple is of gram devta, which is located on the slope of the hill. Being a hilly area the village is well secured. Thakurs houses are situated towards the hill side (see Figure 5). Thakurs (rich family) left the village after 1980 and they are now living in Lalitpur though their domination is effective at the present time. They choose the gram pradhan according to their own will.

Kolwan: Category V Village:

Kolwan is a small and category V village according to census data of 2001. Development History of the village is not too old. This village was established in 19th century by Yadavas (Ahirs). The village was established with 12 households, five houses were of the Yadavas and the other seven were of the Chamars (Ahirwars), Brahmins, Nais and Dhobi. Village is situated in the highland area, in middle of Betwa River in small Hills (see figure 4.6). In 20 - 30 years or first

decade of the 20th century, the village expanded towards the Betwa side and small hill area towards the east.

The village has very small agricultural land. Maximum land of the village is covered by forest and hills. 20 years back river betwa was the only source of irrigation, but at present, a small canal comes from Betwa. Cropping pattern of the village in 1971 was based on rainfall. If rain was good or above average, then people used to grow wheat, gram and red gram in Ravi season and millets, maize and green gram in Kharif season. Cropping pattern of the village has been changed after canal irrigation. They are growing Paddy, green gram black gram in kharif season and wheat, sugarcane, gram, red gram and potato are being cultivated. Soyabean is one of the popular crops of the village, which is influence by the government policy. Village was also affected by flood in the monsoon season but the problem was solved by the by the canal (that came from the river Betwa).

Spatial structure of the village was based on Jajmani System in 1971. But in 1991 due to the growth of population it started breaking. Now Ahirs are dominating in the village. They are the founder and the landlords, they occupy 85 percent land and their population is 57 percent of the village. They occupied core area of the village, but migrated to the roadside later. They also build their houses on the outer side of the village near their land. Ahirwars (Chamars) help in the agricultural activities of the Yadavas (Ahirs). The Ahirwars are landless and their houses are on the roadside and situated outside of the village towards the east (Figure 6).

Brahmins of the village live on the northern side of the village. Nais live close to the Brahmins and the Ahirs, because they work in their Jajmans houses as household labourers. Gadarias live on the outskirts, near farmland. They also work in agriculture and have very small land.

After 2001 village amenities have increased Primary school was opened in 2000 and Upper Primary school in 2008; paved road by PMGSY was built in 2004. Thus the villagers shifted to the roadside. UPS was built outside, near the houses of Gadarias and Ahirwars (Chamars). Ahirs have their houses outside near the UPS (see map 2001-12 in Figure no. 6).

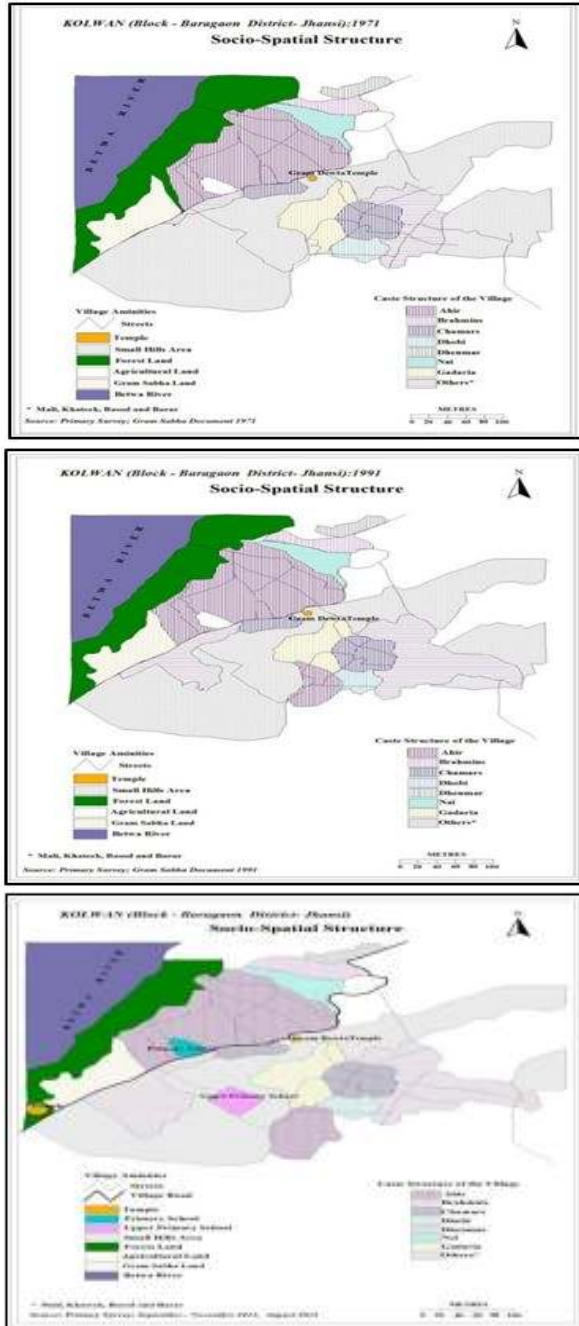


Figure: 6 Socio-Spatial Structures (1971, 1991 and 2011-12) of Kolwan Village (Jhansi District)

Ajana: Category VI Village

Ajana is a very small village and comes in category VI. It is only 3 kms away from Maharoni tehsil and block headquarters of Lalitpur district. This is the most backward village near to town. It scored 13 in the development index of 1981, 15 in 1991 and 15 in 2001. Total population of the village in 2011-12 was 940 and 172 households. Village was established by the

Ahirs (Yadava) before the sixth generation of the village, in the first decade of 20th century.

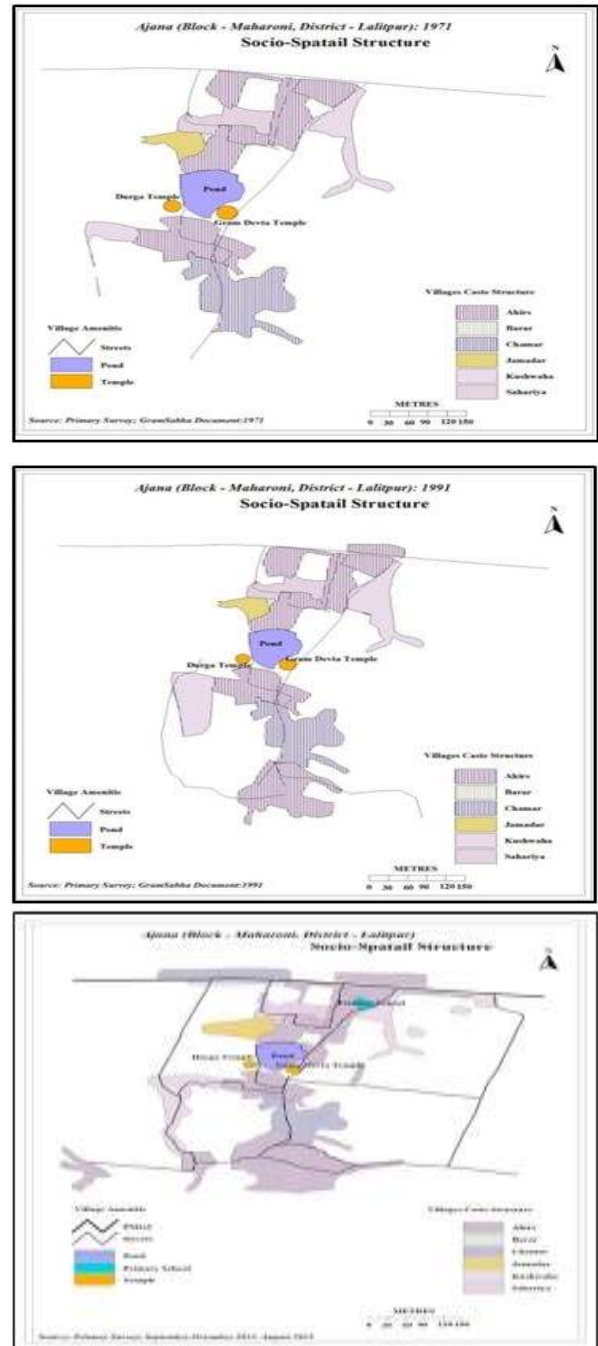


Figure: 7 Socio-Spatial Structures (1971, 1991 and 2011-12) of Ajana Village Lalitpur District

This village is the most backward village in the region. In 1971 there were no proper streets and houses too were not systematic. Village has extended towards the north and the south directions. In the center of the village, there is an old pond and an old temple. Another

temple devoted to Durga was built in 1965. Gram Devta temple is one of the oldest spot of the village.

Yadavas (Ahirs) are dominating caste of the village. They comprise more than 35 percent of the total village population largest and followed by Kushwahas and Ahirwars. They have equal households and are owners of very small land. Sahariya (tribal people) is one of the major castes of the village, comprising of 30 households. They are landless and agricultural labourers. There are only six castes: Yadava (Ahirs), Ahirwaras (Chamars), Kushawahas. Sahariyas, Barar and Jamadars. (Detailed village spatial structure is shown in Figure 7). Sahariyas are very poor and uneducated. Not even a single person is educated. Even the other castes of the village are not much educated. There was no school upto 2005. Upper Primary School is 1 kms away from the village. All streets are not paved, though some are built by stone and cement.

CONCLUSION

Development of a village depends on many factors, like population, population composition, caste composition, village morphology, site, natural resource, social and economic amenities, education profile of the villagers and distance from the town. According to the census 1981, in the sample villages (based on 2001 census analyses of 24 villages), only one village (Pahari Bujurg) comes in category I, one village in category II (Rewan), two villages in category III (Asta, LauleeTeeka Mau), eight villages in category IV (Asthau, Baswari, DongraKalna, Luna, Meri, Silgan, Rangauli and Talaur), five villages in category V (Kolwan, Hadaha Mafi, DevkaliMustkil, Chandpura) and seven villages in category VI (Ajana, Aruwara, Bhatewara Kalan, Byarjau, Kayal, Baidora and Ladaka Purwa). By 1991, village development scenario had changed, two villages were in category I (Pahari Bujurg and Rewan), two villages in category II (Asta and Talaur), three villages in category III (Hadaha Mafi, LauleeTeeka Mau and Rangauli), seven villages in category IV (Silgan, Meri, Luna, Dongra Kalan, DevkaliMustkil, Baswari and Asthau), five villages in category V (Bhatewara Kalan, Byarjau, Karsan, Kolwan and Chandpur) and five villages in category VI (Ajana, Aruwara, LadakaPurwa, Baidaura and Kayal). In 2001, four villages were in each category and in 2011-12 ten villages are in category I, seven in category II, six in category III and only one village is in category

IV. None of the one village is in V or in VI categories. All villages have at least one primary school. Besides, drinking water facility, paved streets and paved all season roads were made to connect the village to the town. All villages are connected with mobile phone service, but 23 out of the 24 sample villages do not have any internet facility. Twenty villages are facilitated with Direct To Home and all the villages have television with doordarshan channel.

Spatial structure/morphology of the village has changed. It changed from rectangular to linear pattern along road side. Agricultural castes shifted towards the road side. Because of mechanization of agriculture, it becomes easier for the tractors to enter the field from the roads, thus increasing the productivity and the yield. The people leave the core of the village and build their houses near farmlands or the outside of the village.

Caste dominant has slowly diminished in some villages, though it is still present and increasing in some small villages. In these small villages the dominant caste comprises more than 30 percent of the total population of the village. The purity and pollution concept of the caste is present in the village society, though the distance between the castes has decreased slowly.

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