



## Selected Attribute of Households and Social Pattern: A Case Study of Ravi River Basin in Himachal Pradesh, India

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**Abstract:** This paper is an attempt to analyse the social pattern of 87 villages located in Ravi River basin in Himachal Pradesh. These rural settlements totally depend upon particularly on primary activities and natural environment for their basic needs and income regeneration. The people of the present research area reside in the laps of nature. This study investigates nature and design of dwellings and social condition of these villages. Is geographical factors affects their household pattern? Where climatic conditions are very harsh due to mostly mountainous temperate climatic region? To answer these above following questions, field visit of the same area has been conducted. This research paper is descriptive in nature. Data were collected from the entire 87 villages through questionnaire, interviews, informal discussions and field observation. On the context of households, there were higher compositions of joint families rather than nuclear families. There is lack of adequate of social infrastructure such as education and health institutions. In this basin 83.68% surveyed Villages have educational facilities. The 77.76 % School's has Playground facility in Ravi River basin in Himachal Pradesh. In this basin only 43.39% Villages has Pucca Road facility due to dissected topography. It is found out from field work that only 27.87% surveyed Villages has Hospital or Dispensary facilities. In this basin about 71% people are involves in Agriculture/Horticulture activities and only 4.82 percent people are in government services. Only 11.11% people have various types of vehicles in this Basin. In this basin 92.40% people are engaged in primary and 7.46% people of this basin are engaged in tertiary activities. In this basin 45 percent houses are pucca, 38 percent mixed and 17 percent houses are kutcha type. In this basin 96.36% household have bathroom and toilet facilities. In Ravi basin 97.50% people belongs to Hindu Religion and 2.5 percent people of this basin have Muslim faith. In this basin 75.46 percent families have livestock in surveyed villages. The paper will be helpful in carrying out the further analysis and showing a way to improve existing socio-economic conditions and household pattern rural settlement in high Himalayan mountainous region in Himachal Pradesh.

**Keywords:** Social, Education, Sex Ratio, Surveyed, Facility.

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**Introduction:** At the time of formation of Himachal Pradesh in 1971, it was an economically backward rural area with poorly developed rural infrastructure such as rural roads, electricity, housing, transport, banking and market network due to its hilly and rugged mountainous terrain. Social conditions in the hilly rural area differ from the plain area. These areas are still using

traditional methods of agriculture due to small size of landholding and moreover, terrain not allowed to use machinery over there. Social characteristics also differed from rural to urban area as the farmers engaged in subsistence agriculture activities and the later one involved in non-agriculture activities, respectively. Agriculture plays an essential role in the process of economic development. Besides providing food it provides employment and savings to households. It reveals that subsistence agriculture is main source of income and economic development in rural areas. In Ravi River basin in Himachal Pradesh mostly people are residing in rural areas. They are totally depending upon natural surroundings environment for day-to-day survival. The present study area agricultural activities are the main source of their survival and occupation. Agricultural activities in this mountainous valley are controlled by the topographic features, soil and climatic condition. Mostly people engaged in agriculture activities in all the surveyed villages. Various social aspects influenced the location of the houses such as influence of casteism that the intermingling of residential houses of upper and lower castes was never allowed. The houses in many parts of these rural settlements never face west direction. The slanting of roof with traditional slate shingles expressed the climate condition of that rural settlement. The material used in the house construction depends on the climate, soil of a particular region and source of income of the family in these rural settlements. Therefore, rural settlements of areas of mountainous area bounded by the physical nature.

**Literature Review:** In 2005 **Prasad** concluded that the middlemen play a basic role in the weekly markets which results in lower prices paid to the tribal community. They thus earn ample profit of those produce when sold. The tribal community is the right owner of this profit but they are destitute of it because of the fact that the tribal's always remain indebted to the middlemen and are under compulsion to sell their products at a much lower price. To combat this problem it is absolutely necessary for the government to appoint authorized representatives in suitable areas for effective monitoring in respect of the transaction between the middle men and tribal community so that the tribal community gets a fair price of their produce. Unless this is ensured the concept of fair price to be paid to the tribal community by the middlemen will never materialized. In 2006 **Patil** had conducted a study on poverty mitigation among tribal's through horticulture that these tribal's grow only one crop of rice during raining season. However due to irregular rains their rice yields are very low, with the result they have to undergo semi starvation for part of the year. There is a wide spread poverty among tribal of this area. Lack of gainful employment is the main reason for their poverty. In 2006 **Lalrinliana** brought to light that the performance of SHGs in tribal development i.e. improvement in social and economic conditions of tribal people depends largely on the members participation and cohesion. In 2006 **Vasudevachary** had conducted a study on tribal development in Andhra Pradesh which revealed that for educational development in the tribal areas, government has implemented several educational programmes in the plan period. Of all the educational institutions, majority institutions were located in the scheduled areas only. The enrolment of schools is remarkable and due to certain reasons dropouts are also there but girl dropouts are more than that of the boys. The impact of the different educational programmes on their educational development was appreciable. In 2008 **Pathania** pointed out how the tribal's are in the phase of transition and are changing themselves as well as their practices related to marriage and family. In 2010 **Pradhan** says that education is the most effective instrument for ensuring equality of opportunity but the tribal people are lagging far behind non-tribal's due to one or more reasons. The problem associated with education of the tribal children in India is manifold, complex and inter-related. Factors like poverty, apathy of the parents and children, superstition and prejudice, lack of suitable teachers, alien language, inadequate facilities in the educational institutions and wastage and stagnation causes' major hindrance in the process of education in the tribal schools, school located in tribal areas and spread of tribal education. **Sharma** (2011) assessed agricultural diversification in the parts of Himachal Pradesh and concluded that it changing towards

fruit and vegetable crops especially in Shimla, Kullu, Solan and Lahul-Spiti districts. It started in the late-sixties and continued in the seventies and eighties. The process of crop diversification gained momentum in the nineties and has now encompassed many new areas in the low and mid hill district. **Kumar** (2012) evaluated notable variation under permanent pastures and net sown area. On the other side, other land categories had not shown significant change, the study on cropping pattern in Solan district over the period identifies that among food crops area under wheat and paddy has increased where as in case of barley and maize, it had declined considerably. Area under non-food crops has shown increased trend for cash crops. He also disclosed the fact shifting of area from food grains towards vegetables, fruits, spices are considerably high. On the whole, it pointed out that the farmers of the area are shifting towards commercial cropping. **Rahut and Scarf** (2012) emphasized the importance of rural livelihood diversification in the Himalayas. They found that rural households in the region derive a significant share of income from non-farm sources. On average, non-farm income accounts for about 58 per cent of total household income. Further the analysis has produced mixed evidence on the importance of gender. On the one hand, households with more women are more likely to diversify in high return non-farm activities. On the other hand, male-headed households seem to have better access to the non-farm sector in general. They suggested that raising the capacity of the poor to participate in the better-paid non-farm activities through investment in education will be effective only if the overall business environment is favorable and if the job creation is on the rise. Another study of **Gautam and Anderson** (2016) assessed the role of livelihood diversification in household well-being in Humla, a remote mountain district in west Nepal. They collected household data and prepared a composite household well-being index incorporating four components and 15 indicators, and measured the effect of diversification on it. They found a uniform pattern of diversification and analysis showed that well-being was not associated with diversification per se but rather on a households' involvement in 'high return sectors' such as trade or salaried job. Therefore, livelihood diversification was found to have a highly skewed effect leading to inequality of income and well-being. **Aghaghia** (2016) examined the implications of rapid transformation in Kinnaur district of Himachal Pradesh. He observed that the subsistence-based livelihood strategies such as pastoralism and cultivation of traditional crops have been replaced with a cash economy dominated by commercial monoculture apple production. The landscape of opportunity and prosperity will be temporary if Kinnaur continues with its extreme dependence on monoculture apple production. He suggested that livelihood diversification may provide important protection for Kinnauri prosperity. **Subedi** (2017) conducted study on two settlements namely Phalyak and Dhakarjong of Kagbeni VDC of Mustang district of Nepal. Data were collected from 50 households of the settlements as well as information has been collected through interviews, informal discussions and field observation between 2013 and 2015. The findings suggest that households in these settlements amidst shocks and stresses have diversified their livelihood options from being primarily dominated by agriculture and livestock raising in the past to apple farming (cash income), vegetable farming, external migration and tourism-based activities.

**Objectives of the study:** To analyze social aspects of Ravi River Basin in Himachal Pradesh.

**Data sources and Methodology:** The present study is based on secondary data as well as primary data. The study area and other maps were prepared with the help of Arc GIS software. This study was guided by the different methodology like quantitative as well as qualitative. For compilation, tabulation, mapping and analysis of data for cartographic techniques were pressed into service.

**Study Area:** The Ravi River Basin in Himachal Pradesh, Which lies in Kangra and Chamba districts of Himachal Pradesh, has been chosen for the present study. Geographically Ravi River (H.P.) Basin area is located between 32° 11' 30" to 33° 01' 5" North latitudes and 75°48' to 77°45' East Longitudes. The tract is mountainous, covered by the Dhauladhar and Pirpanjal ranges. The elevation varies from 559 meters to 5563 meters. On the other side the climate of the Ravi River

Catchment area may be described as moderate summer and very cold winter. The precipitation is received in both during rainy season and winter season, but in high altitude an area in winter season receives precipitation in the form of snow and in lower altitude area in the form of Rainfall from Monsoon winds as well as from Western Disturbance. The highest monthly temperature is experienced in June and lowest below  $0^{\circ}\text{C}$  in January. The Ravi River has a total of 5451 sq. Kms. Catchment area and their total lengths are about 158 Kms. in H.P. The Ravi River originates in Bara Bhawal area of the Multhan Tehsil of Kangra. This River rises at the elevation of 4300 mts on the southern side of the mid Himalayas. It flows through Bara Bhawal, Bara Bansu and Chamba District. It flows in forms of Rapids in its initial reaches with boulders seen scattered in the bed of the River. The Ravi River in this reach flows in a gorge with a River bed slope of 1:185 feet per mile, and is mostly fed by snow. It is called Ravi after meeting two tributaries Tantgari and Badal in Bara Bhawal area of Kangra District. The main tributaries of Ravi River are Badal, Tantgari, Budhil, Tundah Nala, Chirchind Nala, Nai, Batog Nala, Saho Nala, Baira and Siul etc. It left Himachal at Khairi and enters in Punjab (Fig.1.1).

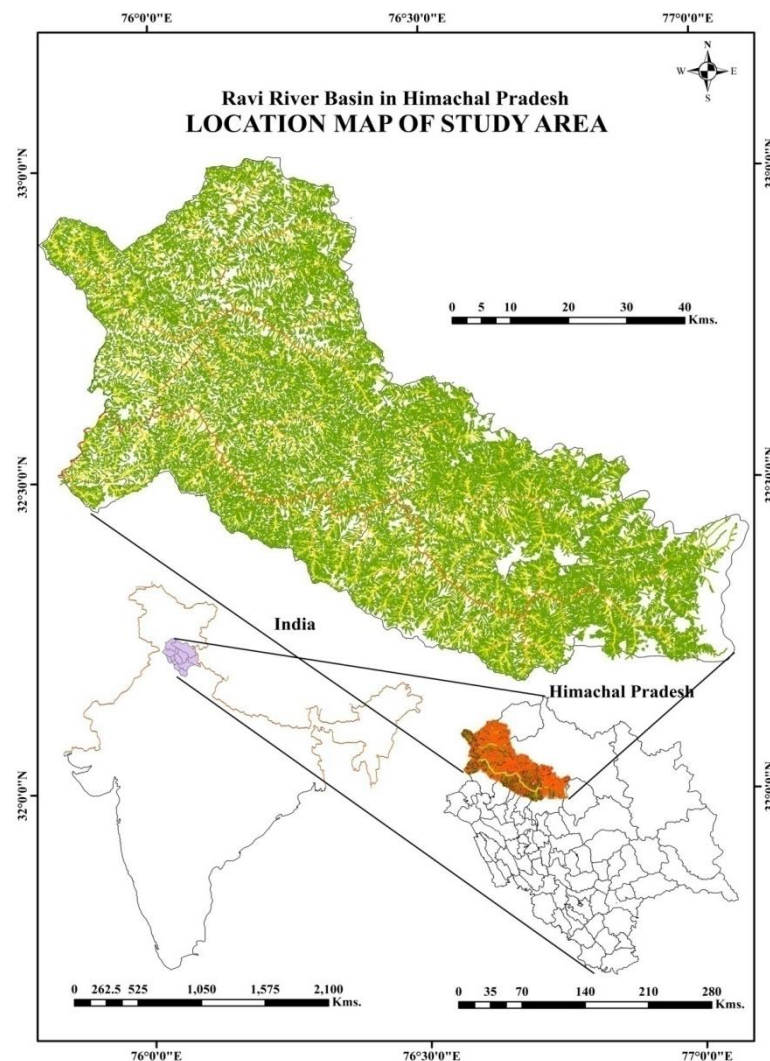


Figure 1.1

### Data Analysis:

For social analysis of this basin in H.P. 87 villages have been chosen out of 881 inhabitants villages of this Basin. The social analysis has been done tehsil wise on two components on village's information and personnel information's.

Village's information: For village's information components education institutes, playground facilities, status of education institutes, road facilities, hospital facilities, electricity, drinking water facilities and toilet facilities etc. are analyzed village wise.

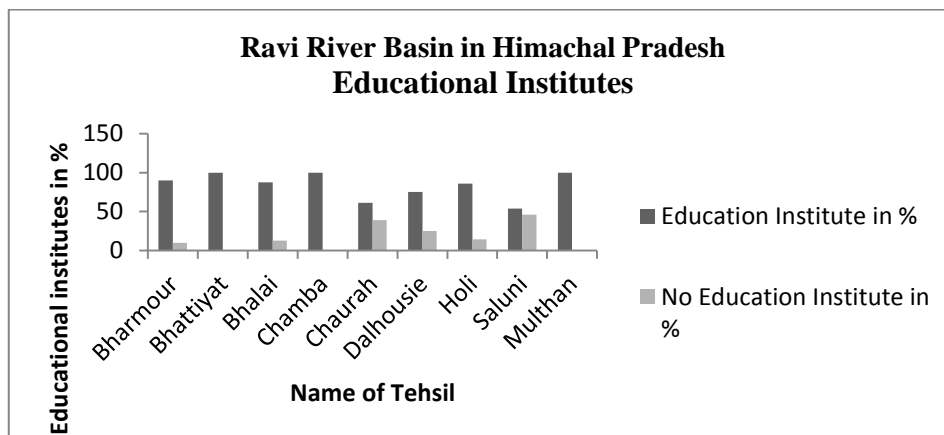
### Tehsil wise Educational Institutes

**Table 1.1**  
**Tehsil wise Educational Institutes**

Sr. No.	Name of Tehsil	Education Institute in %	No Education Institute in %
1	Bharmour	90	10
2	Bhattiyat	100	0
3	Bhalai	87.50	12.50
4	Chamba	100	0
5	Chaurah	61.11	38.89
6	Dalhousie	75	25
7	Holi	85.71	14.29
8	Saluni	53.84	46.16
9	Multhan	100	0
	Total	83.68	16.3

**Source:** Based on Field survey

In this basin 83.68% surveyed Villages have educational facilities, but on tehsil wise basis Bhattiyat, Chamba, and Multhan has 100% educational institutes in surveyed Village's. It is also found out that in Bharmour (90%), Bhalai (87.50%), Holi (85.71%), Chaurah (61.11%) and Saluni (53.84%) tehsil has educational institutes. It is also found out that Chaurah (38.89%), Dalhousie (25%), Saluni (46.16%), tehsil has no educational institutes which are above the average of basin and in Bhalai (12.50%), Bharmour (10%) and Holi (14.29%) tehsil there is no educational institutes which are below the average of basin (Table 1.1).



**Source:** Based on Field Survey

**Figure 1.2**  
**Playground Facility in Educational Institutes**

**Table 1.2**  
**Tehsil wise Playground Facility in Educational Institutes**

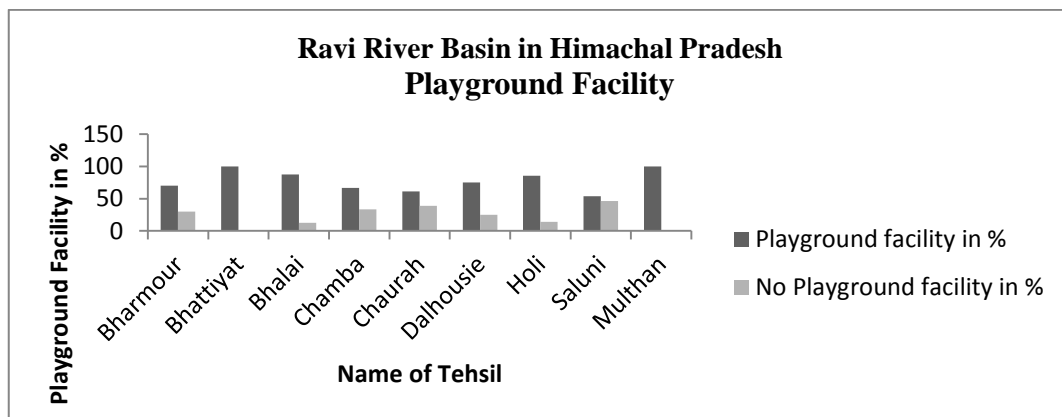
Sr. No.	Name of Tehsil	Playground facility in %	No Playground facility in %
1	Bharmour	70	30
2	Bhattiyat	100	0



3	Bhalai	87.50	12.50
4	Chamba	66.67	33.33
5	Chaurah	61.11	38.89
6	Dalhousie	75	25
7	Holi	85.71	14.29
8	Saluni	53.85	46.15
9	Multhan	100	0
	Total	77.76	22.24

**Source:** Based on Field Survey

In this basin 77.76% School's has Playground facility, and on tehsil wise basis Bhattiyat (100%), Multhan (100%), Bhalai (87.50%) and Holi (85.71%) tehsil has playground facility that are above the basin's average. It is also found out from field survey that in Dalhousie (75%), Bharmour (70%), Chamba (66.67%), Chaurah (61.11%) and Saluni (53.85%) tehsil the playground facility is below the average of basin. It is also found out from field work that 22.14% Village's has no playground facility, but on tehsil wise basis Saluni (46.15%), Chaurah (38.89%), Chamba (33.33%), Bharmour (30%) and Dalhousie (25%) tehsil has no playground facility is above the basin's average. It is also found out from field work that in Holi (14.29%), Bhalai (12.50%), and 0% in Bhattiyat and Multhan each are below the average of basin (Table 1.2).



**Source:** Based on Field Survey

**Figure: 1.3**

### Tehsil wise Status of Educational Institutes

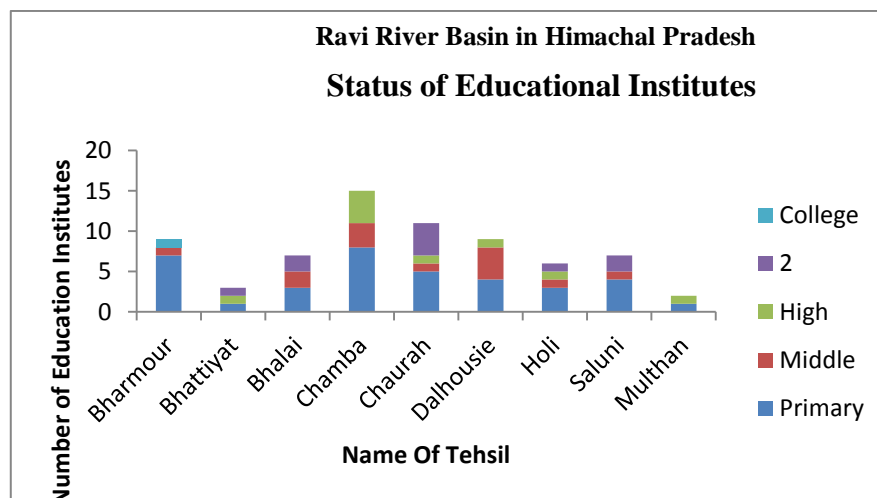
**Table 1.3**

#### Tehsil wise Educational Institutes

Sr. No.	Name of Tehsil	Primary	Middle	High	+2	College	Total
1	Bharmour	7	1	0	0	1	9
2	Bhattiyat	1	0	1	1	0	3
3	Bhalai	3	2	0	2	0	7
4	Chamba	8	3	4	0	0	15
5	Chaurah	5	1	1	4	0	11
6	Dalhousie	4	4	1	0	0	9
7	Holi	3	1	1	1	0	6
8	Saluni	4	1	0	2	0	7
9	Multhan	1	0	1	0	0	2
	Total	36	13	9	10	1	69

**Source:** Based on Field Survey

In this basin, there are total 69 educational institutes in 87 surveyed Village. It is found out from survey that there are 36 Primary Schools, but on Tehsil wise basis Chamba (8), Bharmour (7), Chaurah (5), Dalhousie (4), Saluni (4), Holi (3), Bhalai (3), Bhattiyat (1) and Multhan(1) tehsil has Primary Schools. It is also found out that there are 13 Middle Schools in 87 surveyed Village's but on tehsil wise basis Dalhousie(4), Chamba (3), Bhalai (2) and one each in Chaurah, Holi and Saluni tehsil. Moreover there are only 9 High Schools in 87 surveyed Villages of this basin but on tehsil wise basis only Chamba tehsil has 5 High Schools and one each in Bhattiyat, Chaurah, Dalhousie, Multhan and Holi tehsil. It is also found out that there are ten +2 Schools in surveyed villages and out of this 4 in Chaurah, two each in Bhalai and Saluni, and one each in Bhattiyat and Holi tehsil. In this basin there is only one College in 87 surveyed Villages and, it is located in Bari Village of Bharmour tehsil (Table 1.3).



**Source:** Based on Field Survey

**Figure 1.4**

### Tehsil wise Road Facility in Surveyed Villages

**Table 1.4**

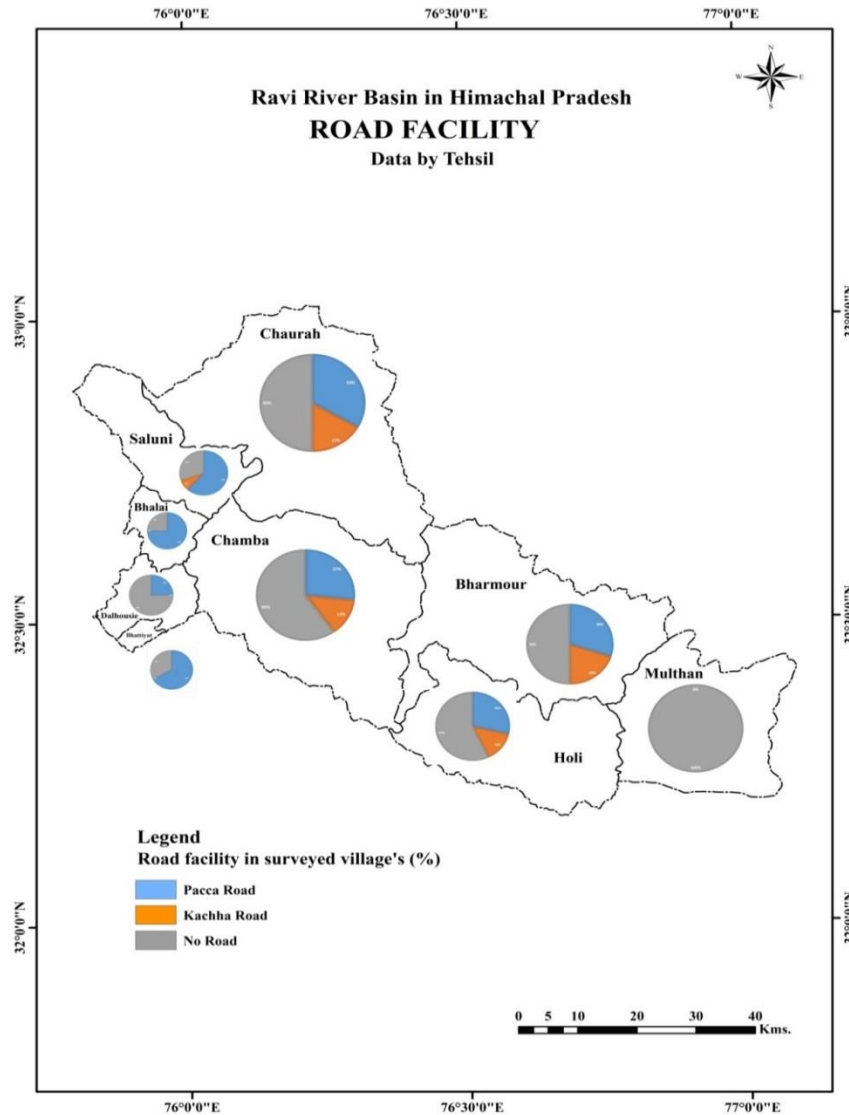
#### Tehsil wise Road Facility

Sr. No.	Name of Tehsil	Pacca Road in %	Kachha Road in %	No Road in %	Average distance from Road
1	Bharmour	30%	20%	50%	2 K.M.
2	Bhattiyat	67%	0%	33%	1 K.M.
3	Bhalai	75%	0%	25%	1K.M
4	Chamba	26.67%	13.33%	60%	5K.M
5	Chaurah	33.33%	16.67%	50%	2K.M.
6	Dalhousie	25%	0%	75%	1.78K.M
7	Holi	28.57%	14.29%	57.14%	4.63K.M
8	Saluni	61.54%	7.69%	30.77%	1.63K.M
9	Multhan	0%	0%	100%	
	Total	43.39%	9%	47.61%	

**Source:** Based on Field Survey

In this basin 43.39% Villages has Pacca Road facility, but on tehsil wise basis Bhalai (75%), Bhattiyat (67%), and Saluni (61.54%) tehsil has Pacca Road facility are above the basin's average.

It is also found out that Chaurah (33.33%), Bharmour (30%), Holi (28.57%), Chamba (26.67%), Dalhousie (25%), and Multhan (0%) has Pacca Road facility which is below the average of basin. It is found out from field work that this basin has average 9% Kachha Road facility, but on Tehsil wise basis Bharmour (20%), Chaurah (16.67%), Holi (14.29%), and Chamba (13.33%) tehsil has Kachha Road facility are above the basin's average. It is also found out that in Saluni (7.69%), Bhattiyat (0%), Bhalai (0%), Dalhousie (0%) and Multhan (0%) tehsil the Kachha Road facilities are below the average of this basin (Table 1.4).



Source: Based on Field Survey

**Figure 1.5**

### Hospital /Dispensary Facility in Surveyed Villages

**Table 1.5**

#### Tehsil wise Hospital Facility

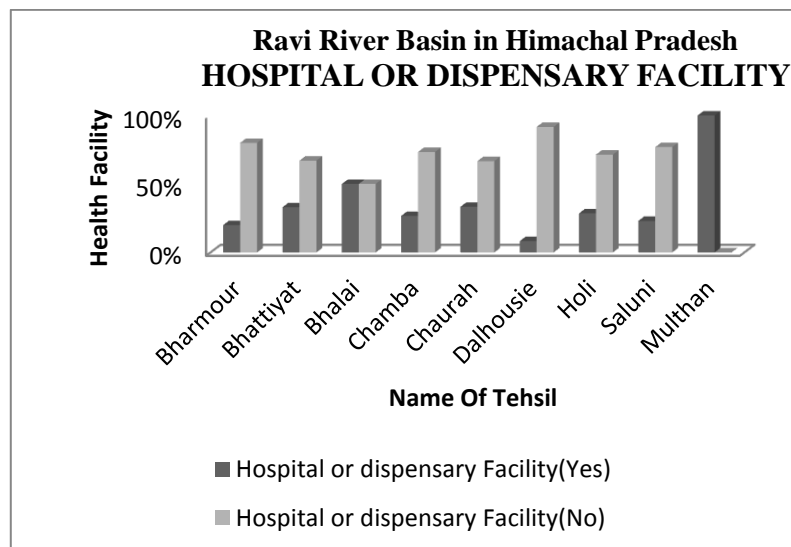
Sr. No.	Name of Tehsil	Hospital or dispensary Facility(Yes)	Hospital or dispensary Facility (No)	Average Distance From Dispensary
1	Bharmour	20%	80%	2.5 K.M.
2	Bhattiyat	33%	67%	1.75 K,M.



3	Bhalai	50%	50%	2 K.M.
4	Chamba	26.67%	73.33%	5 K.M.
5	Chaurah	33.33%	66.67%	3.5 K.M.
6	Dalhousie	8.33%	91.67%	2.27 K.M.
7	Holi	28.57%	71.43%	4.8 K.M.
8	Saluni	23.07%	76.93%	3.35 K.M.
9	Multhan	100%	0%	0 K.M.
	Total	27.87%	72.13%	3.15K.M.

**Source:** Based on Field Survey

It is found out from field work that only 27.87% Villages has Hospital or Dispensary facilities, but on tehsil level Multhan (100%), Bhalai (50%), Bhattiyat(33%), Holi (28.57%), tehsil has Hospital or Dispensary facility which is above the average of this basin. It is also finding out that Chamba(26.67%), Saluni(23.07%), Bharmour(20%) and Dalhousie(8.33%) tehsil has a Hospital or Dispensary facility which is below the average of basin. It is found out from field work of 87 surveyed Village's that 72.13% Village's has no facility of Hospital or Dispensary, but on tehsil level Dalhousie(91.67%), Bharmour(80%), Saluni(76.93%), Chamba(73.33%), are above the average of basin. It is also found out from field work that Holi (71.43%), Bhattiyat (67%), Chaurah (66.67%), Bhalai (50%) and Multhan (0%) tehsil has no Hospital or Dispensary facility (Table 1.5).



**Source:** Based on Field Survey

**Figure 1.6**  
**Sex Ratio of Population**

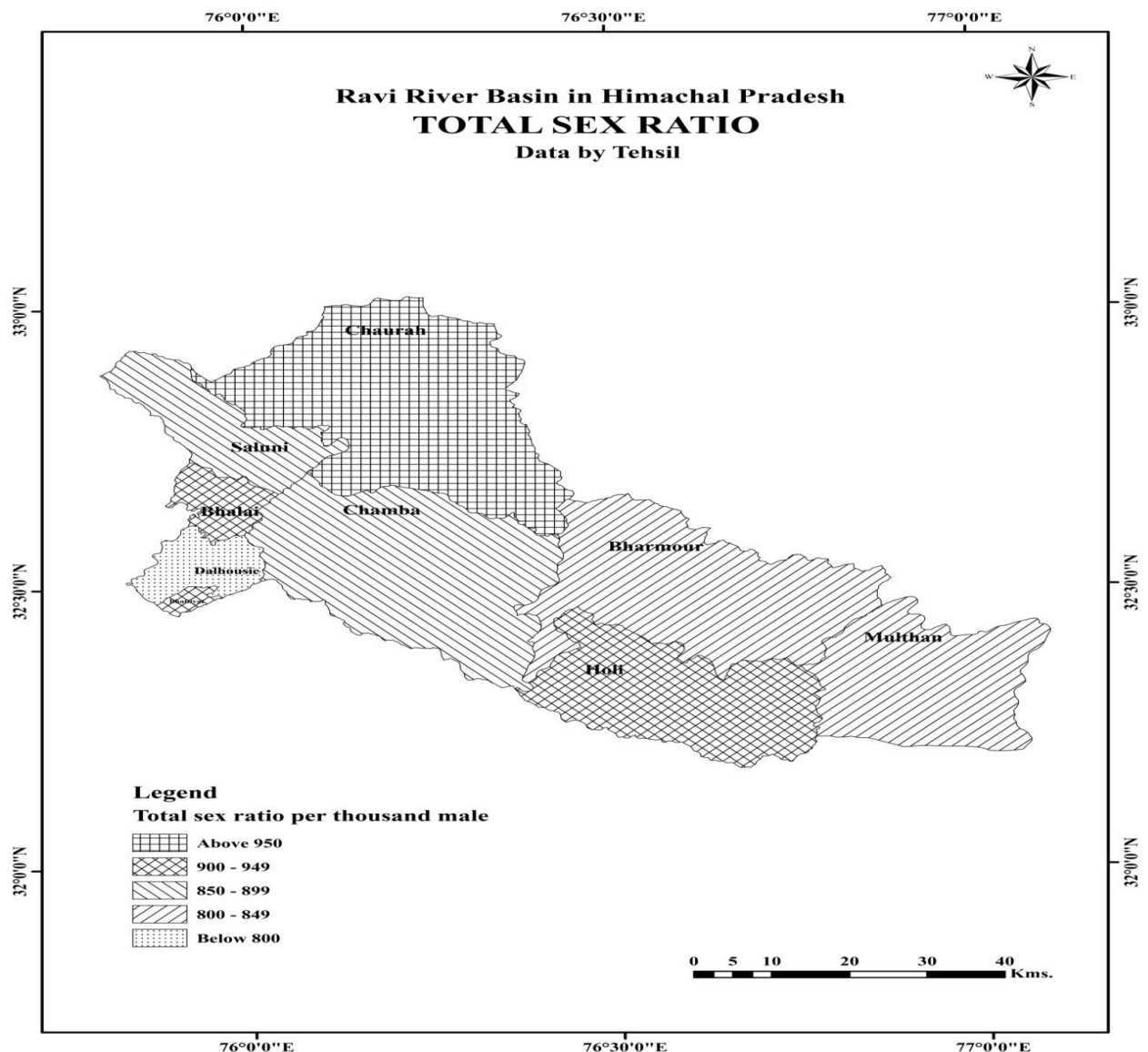
**Table 1.6**  
**Tehsil wise Sex Ratio of Population**

Sr. No.	Name of Tehsil	Total SexRatio	Sex Ratio 0-6	Overall sex Ratio
1	Bharmour	837	875	840
2	Bhattiyat	931	2000	1000
3	Bhalai	942	1750	1006
4	Chamba	897	1000	907
5	Chaurah	994	1263	1020
6	Dalhousie	761	1454	812
7	Holi	938	1105	957
8	Saluni	859	1066	881

9	Multhan	836	1075	955
	Total	888	1287	931

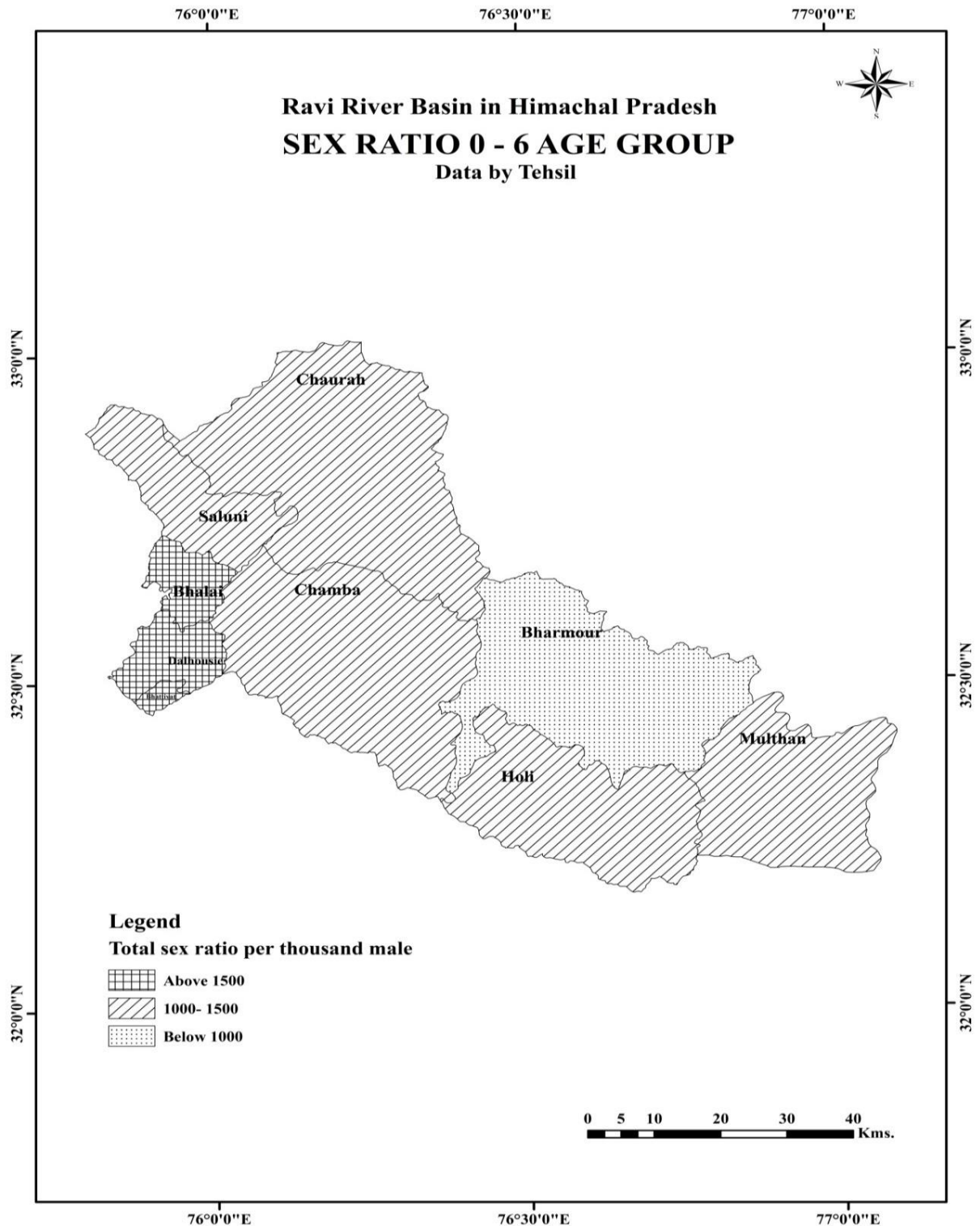
**Source:** Based on Field Survey

It is analyzed from field work that overall sex ratio of Ravi basin in Himachal Pradesh is about 931 but on tehsil wise Bhattiyat, Bhalai and in Chaurah, the sex ratio are over 1000. It is also found out that in Bharmour, Chamba, and Dalhousie, the sex ratio is very less. In respect of 0-6 Child age group, the sex ratio is about 1287, but on tehsil wise the Bharmour tehsil has only 875, in other tehsils the sex ratio are over 1000. It is also found out that the total sex ratio in this basin is 888 per thousand male, but on tehsil wise Bharmour, Multhan, Saluni and Dalhousie have sex ratio below the average of this basin and in other tehsil the sex ratio is above the average of this basin in Himachal Pradesh (Table 1.6).



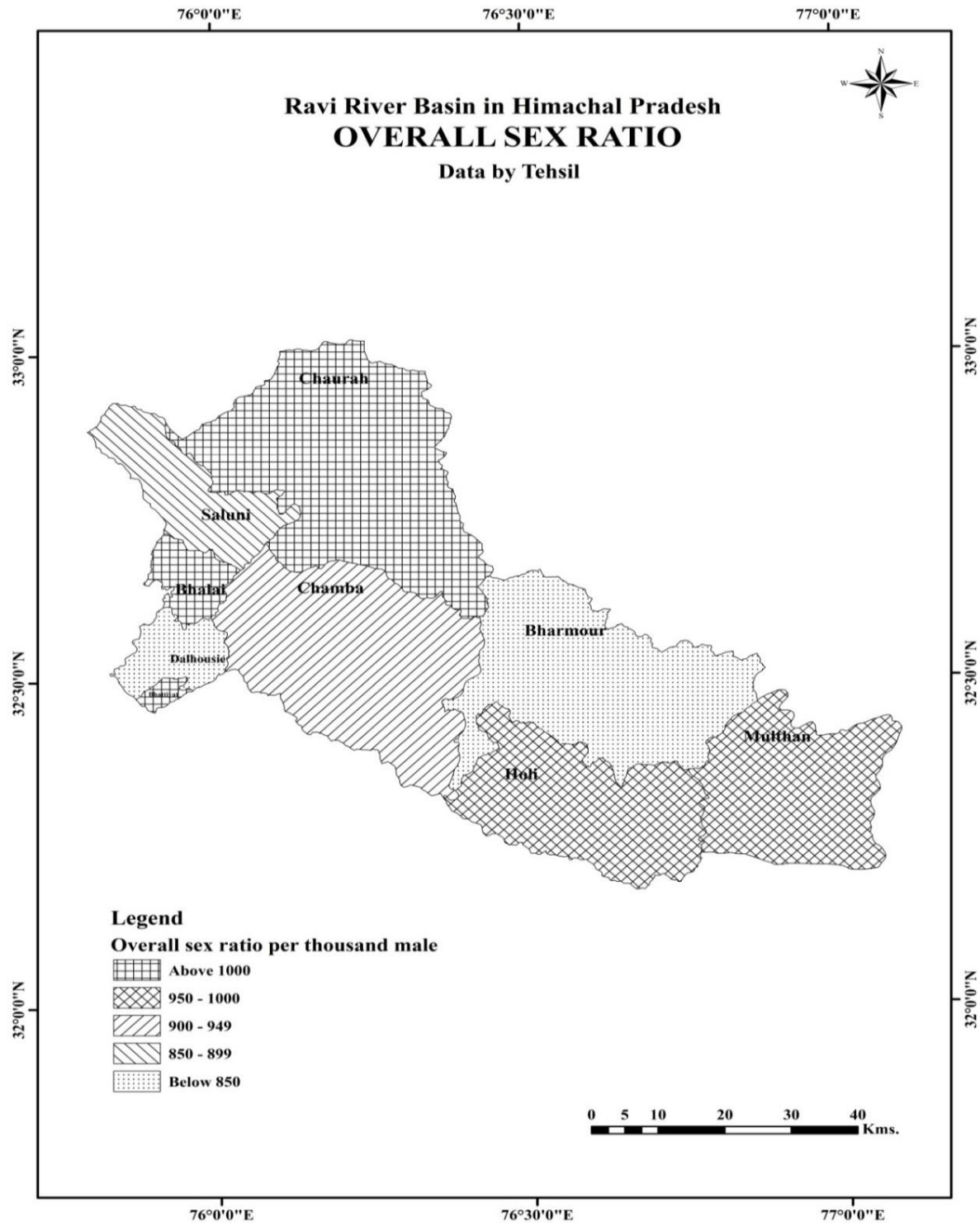
**Source:** Based on Field Survey

**Figure 1.7**



Source: Based on Field Survey

Figure 1.8



Source: Based on Field Survey

Figure 1.9

## Size of Households

**Table 1.7**  
**Tehsil wise Size of Households**

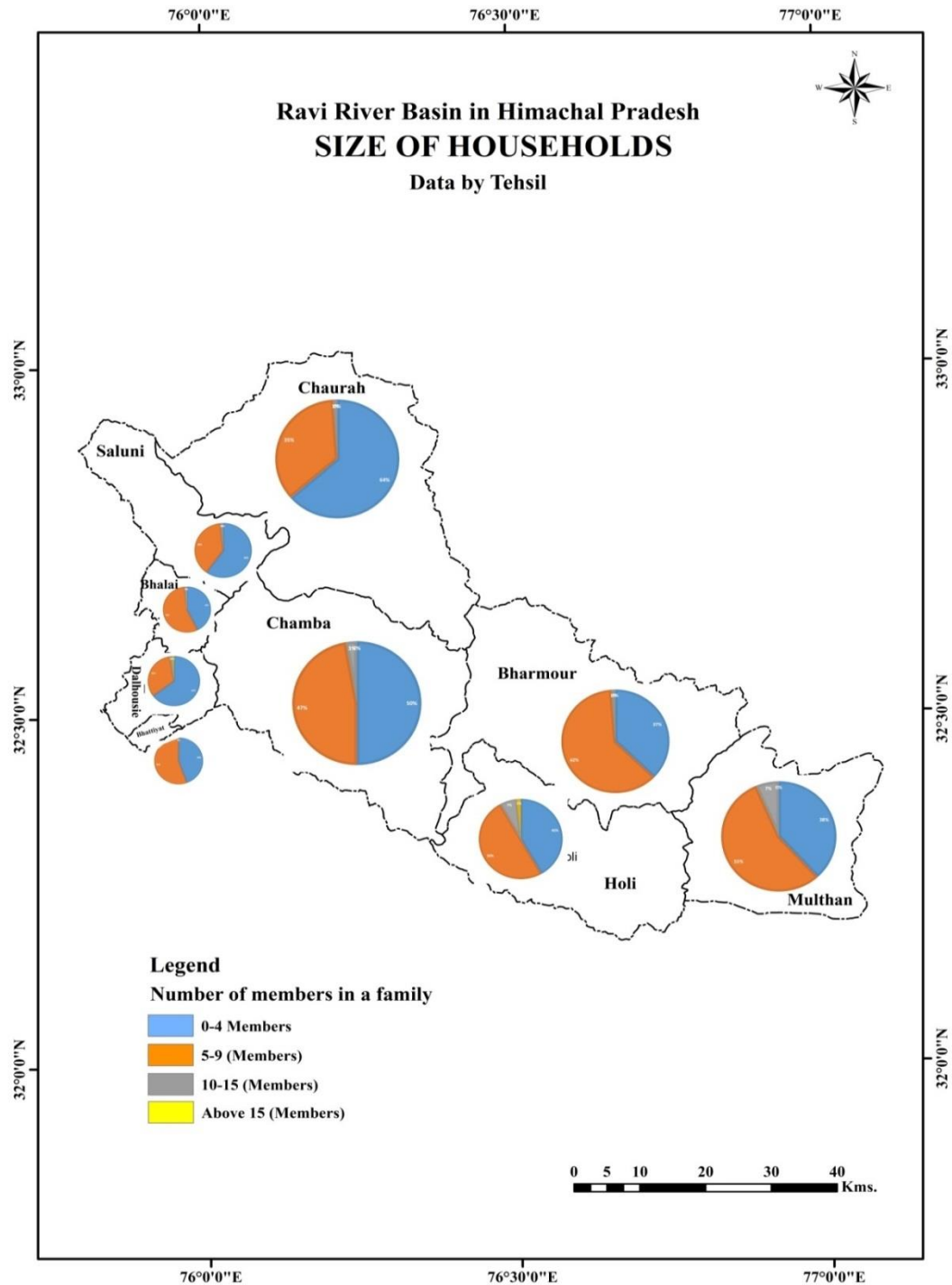
Sr. No.	Tehsil	0-4 Members	5-9 (Members)	10-15 (Members)	Above 15 (Members)
1	Bharmour	37.18%	61.54%	1.28%	0%
2	Bhattiyat	44.44%	55.56%	0%	0%
3	Bhalai	42.62%	55.74%	1.64%	0%
4	Chamba	50%	47.22%	2.78%	0%
5	Chaurah	62.92%	34.84%	1.12%	0%
6	Dalhousie	64.52%	32.26%	1.61%	1.12%
7	Holi	42.37%	50.85%	6.78%	1.61%
8	Saluni	60%	38.33%	1.67%	0%
9	Multhan	38.18%	55.34%	6.48%	0%
	Total	49.14%	47.96%	2.60%	0.30%

**Source:** Based on Field Survey

It is found out from respondents that about 50% families of Ravi River basin in H.P. are nuclear. It is also found out that the Tribal areas like Bharmour and Holi has less nuclearfamily, but in Chaurah, Dalhousie, Saluni has more nuclear families. It is also found out that Bhattiyat, Bhalai and Chamba tehsils have below 50% nuclear families. It is observed that only 2 families have more than 15 members in Chaurah and Dalhousie. In Ravi River basin in H.P. only 2.60% household has 10 to 15 members.

It is also found out from field work that about 47% households have 5 to 9 member's families in Ravi River basin. In Bharmour Tehsil about 62% households have 5 to 9 members in family, but in Chaurah and Dalhousie there are below basin's average and Bhattiyat, Bhalai, Chamba and Holi has over basin's average (Table 1.7).





Source: Based on Field Survey

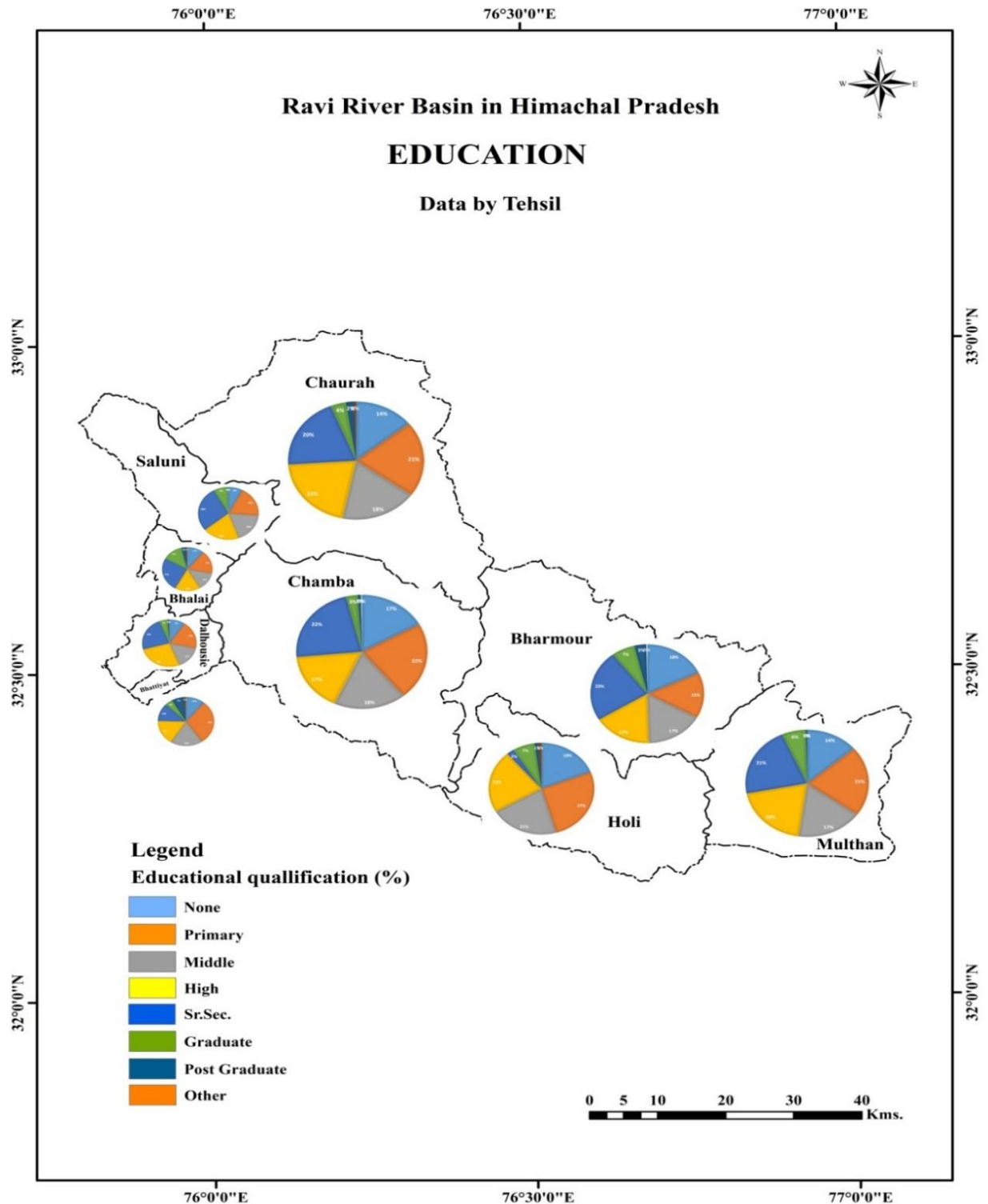
**Figure 1.10**

**Education of Family Members****Table 1.8****Tehsil wise Education of Family Member**

<b>Sr. No.</b>	<b>Tehsil</b>	<b>None</b>	<b>Primary</b>	<b>Middle</b>	<b>High</b>	<b>Senior secondary</b>	<b>Graduate</b>	<b>Post Graduate</b>	<b>Others</b>
1	Bharmour	18%	15%	16.66%	16.66%	23.43%	6.77%	3.39%	0.26%
2	Bhattiyat	11%	29.41%	18.84%	16.47%	11.76%	4.71%	7.05%	1.18%
3	Bhalai	11%	17.28%	13.60%	16.54%	25%	13.24%	2.94%	1.10%
4	Chamba	17%	22.18%	17.99%	16.74%	22.59%	2.93%	0.84%	0.21%
5	Chaurah	15%	21.97%	19.44%	21.97%	21.13%	3.94%	1.97%	0.56%
6	Dalhousie	9.47%	18.93%	15.64%	26.75%	23.05%	4.94%	0.82%	0.41%
7	Holi	16%	22.22%	17.92%	18.64%	1.92%	5.73%	1.08%	0.72%
8	Saluni	8%	19.33%	18.91%	20.59%	28.99%	7.98%	0.42%	0%
9	Multhan	15%	23.21%	18.93%	21.56%	23.33%	6.95%	0.40%	0%
	Total	13.38%	21.06%	17.55%	19.55%	20.13%	6.35%	2.10%	0.56%

**Source:** Based on Field Survey

In Ravi River basin in H.P. about 13% people are illiterate, but on Tehsil wise, Bharmour (18%), Chamba (17%), Chaurah (15%), Holi (16%) and Multhan tehsil have more illiterate than average of Ravi River basin and Saluni (8%), Bhattiyat (11%), Dalhousie (9.47%) are below the average of this basin. It is also observed that only 2.10% people are post Graduate Degree holders and only 0.56% people of basin have acquired other education except traditional skills. It is also found out that about 38.61% people are under Matric and 19.55% people are matriculate in this basin. It is also observed that 20.13% people are +2 pass and only 6.35% people are Graduate in this basin (Table 1.8).



Source: Based on Field Survey

Figure 1.11

## Occupation of Family Members

**Table 1.9**  
**Tehsil wise Occupation of Family Members**

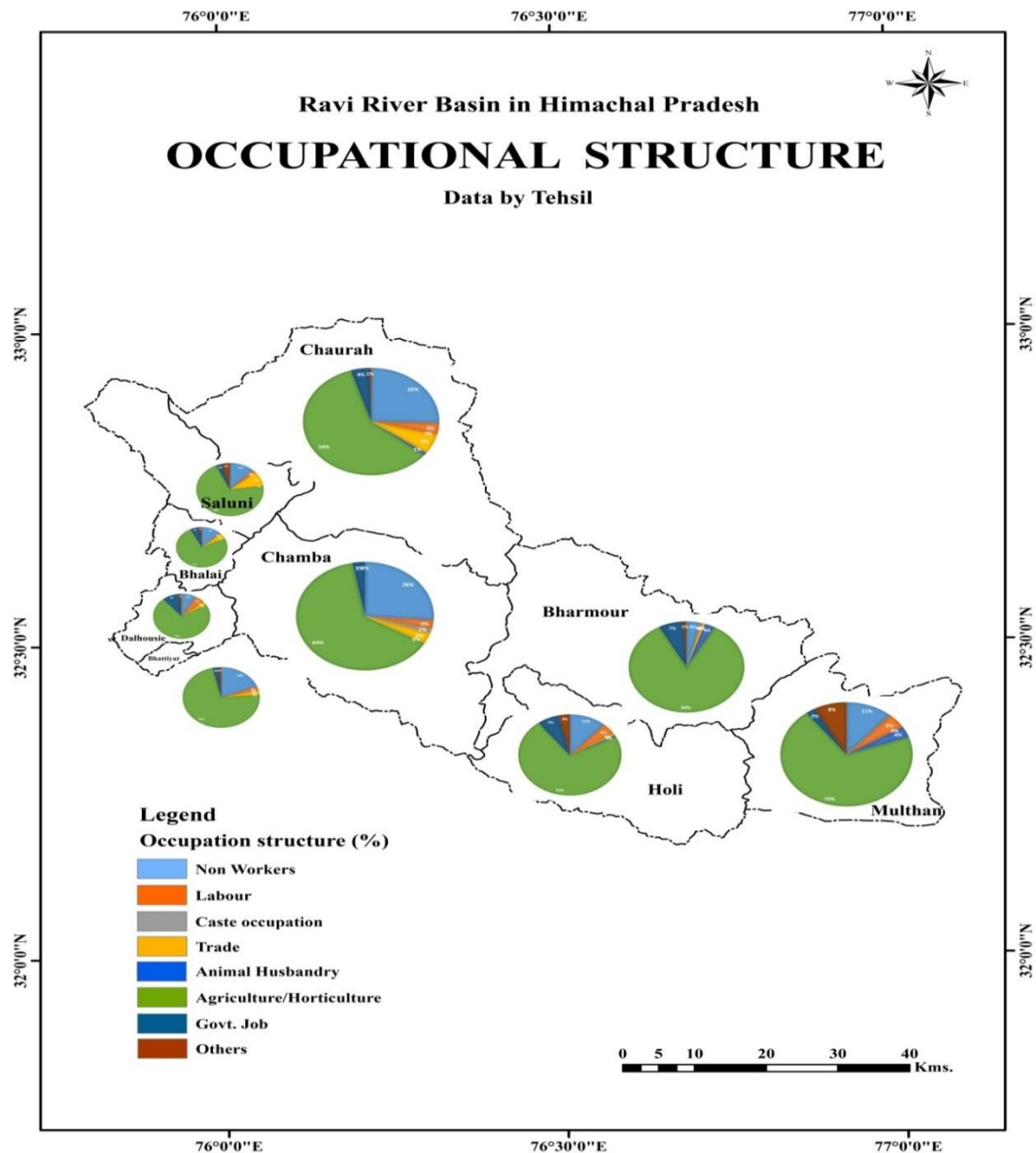
Sr.No	Name of Tehsil	Non Workers/unemployed	Labour	Caste occupation	Trade	Animal Husbandry	Agriculture/Horticulture	Govt. Job	Others
1	Bharmour	3.91%	0.52%	0%	0.78%	2.86%	84.11%	6.77%	1.05%
2	Bhattiyat	18.82%	2.35%	0%	2.35%	0%	72.94%	2.35%	1.18%
3	Bhalai	12.13%	1.10%	0%	4.04%	0%	75%	5.51%	1.84%
4	Chamba	26.15%	2.72%	1.26%	3.14%	0%	63.81%	2.93%	0%
5	Chaurah	25.35%	3.66%	0%	5.92%	0.85%	59.44%	4.23%	0.56%
6	Dalhousie	8.23%	5.76%	0%	2.47%	0%	72.43%	9.47%	1.65%
7	Holi	11.47%	4.66%	0%	0.72%	0.72%	72.04%	6.81%	3.58%
8	Saluni	11.76%	2.10%	0%	8.82%	0%	70.59%	2.94%	3.78%
9	Multhan	11.37%	4.76%	0%	0%	3.46%	70.05%	2.36%	8%
	Total	14.36%	3.10%	0.14%	3.14%	0.87%	71.16%	4.82%	2.41%

**Source:** Based on Field Survey

In this basin about 71% people are involves in Agriculture/Horticulture activities. On tehsil basis about 84% in Bharmour, 73% in Bhattiyat, 75% in Bhalai, 72.43% inDalhousie, 72% in Holi , 70.59% in Saluni, 70.05% in Multhan, 63.81% in Chamba, and 59.44% in Chaurah people are engaged in agriculture and horticulture activities. It is also observed that about 0.87% people are involved in Animal Husbandry activities, but on tehsil basis about 3.46% in Multhan, 2.86% in Bharmour, 0.83% in Chaurah and 0.72% in Holi due to Gadhi tribal area.

In Ravi basin in H.P 4.82% people are in Govt. job, on tehsil wise Dalhousie (9.47%), Holi (6.81%), Bharmour (6.77%) and Bhalai (5.51%) are above the average and in Chaurah (4.23%), Multhan (2.36%) Bhattiyat (2.35%), Chamba (2.93%), and Saluni (2.94%) are below the average of this basin.It is also pointed out that 3.14% people of this basin are involved in trade activities and only 1.71% people are in other activities.

It is also found out that 14.36% people of this basin are non-worker, but on tehsil wise Chamba (26.15%), Chaurah (25.35%) and Bhattiyat (18.84%) are above the average and Bhalai (12.13%), Holi (11.47%), Saluni (11.76%), Multhan (11.37%), Dalhousie (8.23%) and Bharmour (3.91%) are below the average. It is also observed that 0.14% people of Jangi village are involved in caste occupation. It is also found out that total 3.10% people are involved in labour works in basin area and only 0.52% people of Bharmour are engaged in same activity (Table 1.9).



Source: Based on Field Survey

Figure 1.12

### Means of Transport

Table 1.10

#### Tehsil wise Means of Transport

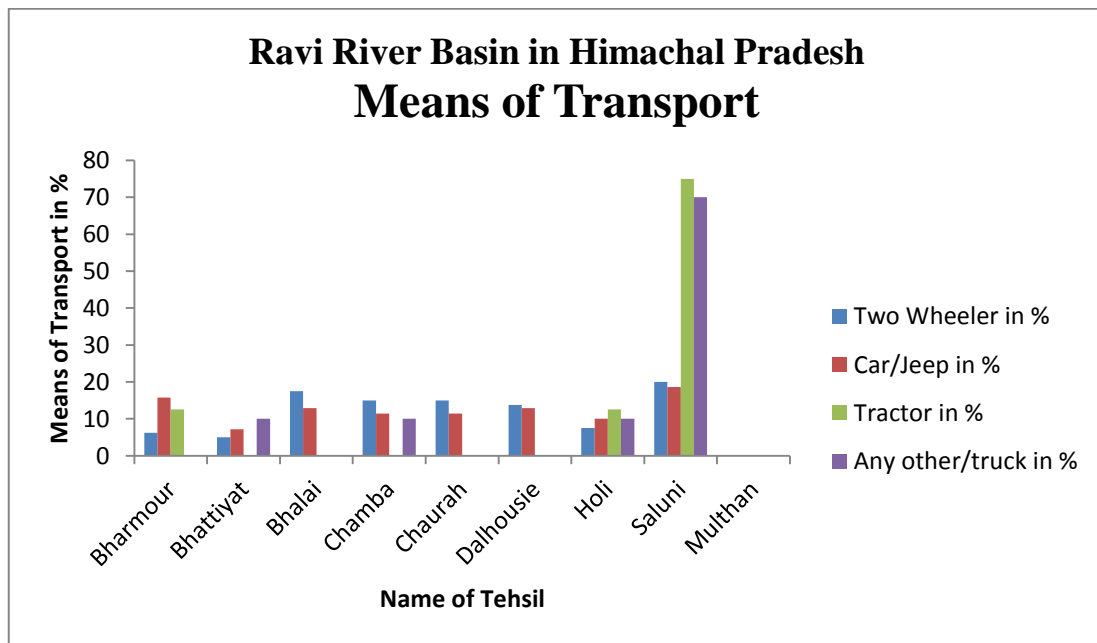
Sr. No.	Tehsil	Two Wheeler in %	Car/Jeep in %	Tractor in %	Any other/truck in %
1	Bharmour	6.25	15.71	12.5	0
2	Bhattiyat	5	7.14	0	10
3	Bhalai	17.5	12.86	0	0
4	Chamba	15	11.43	0	10
5	Chaurah	15	11.43	0	0
6	Dalhousie	13.75	12.86	0	0
7	Holi	7.5	10	12.5	10



8	Saluni	20	18.57	75	70
9	Multhan	0	0	0	0
	Total	11.11	11.11	11.11	11.11

**Source:** Based on Field Survey

In this basin 11.11% people have various types of vehicles. The 11.11% people have two wheel vehicles, but on tehsil level Saluni (20%), Bhalai (17.5%), Chamba (15%), Chaurah (15%) and Dalhousie (13.75%) tehsil's people have two wheel vehicles which are above the basin average. It is observed from field work that in Holi (7.5%), Bharmour (6.25%), Bhattiyat (5%) and Multhan (0%) tehsil's people have two wheel vehicles are below the average of basin. It is observed from field survey that 11.11% people of this basin have Car or Jeep. But on tehsil level Saluni(18.57%), Bharmour(15.71%), Bhalai and Dalhousie both have 12.86% each and Chamba and Chaurah tehsil both have 11.43% people have a Car or Jeep. It is also observed that Holi (10%), Bhattiyat(7.14%) and Multhan (0%) tehsil's people have car or jeep are below the average of basin. It is also found out from field survey of 87 Villages of 9 tehsils that Saluni, Bharmour and Holi tehsils people have tractor vehicles but in other tehsil's people have no tractor Vehicle. It is also found out that Saluni, Holi, Chamba and Bhattiyat tehsils People have other type of vehicles but in other tehsils like Bharmour, Multhan, Chaurah, Bhalai and Dalhousie people have no other type of vehicle (Table 1.10).



**Source:** Based on Field Survey

**Figure 1.13**

### Major Source of Income of Households

**Table 1.11**

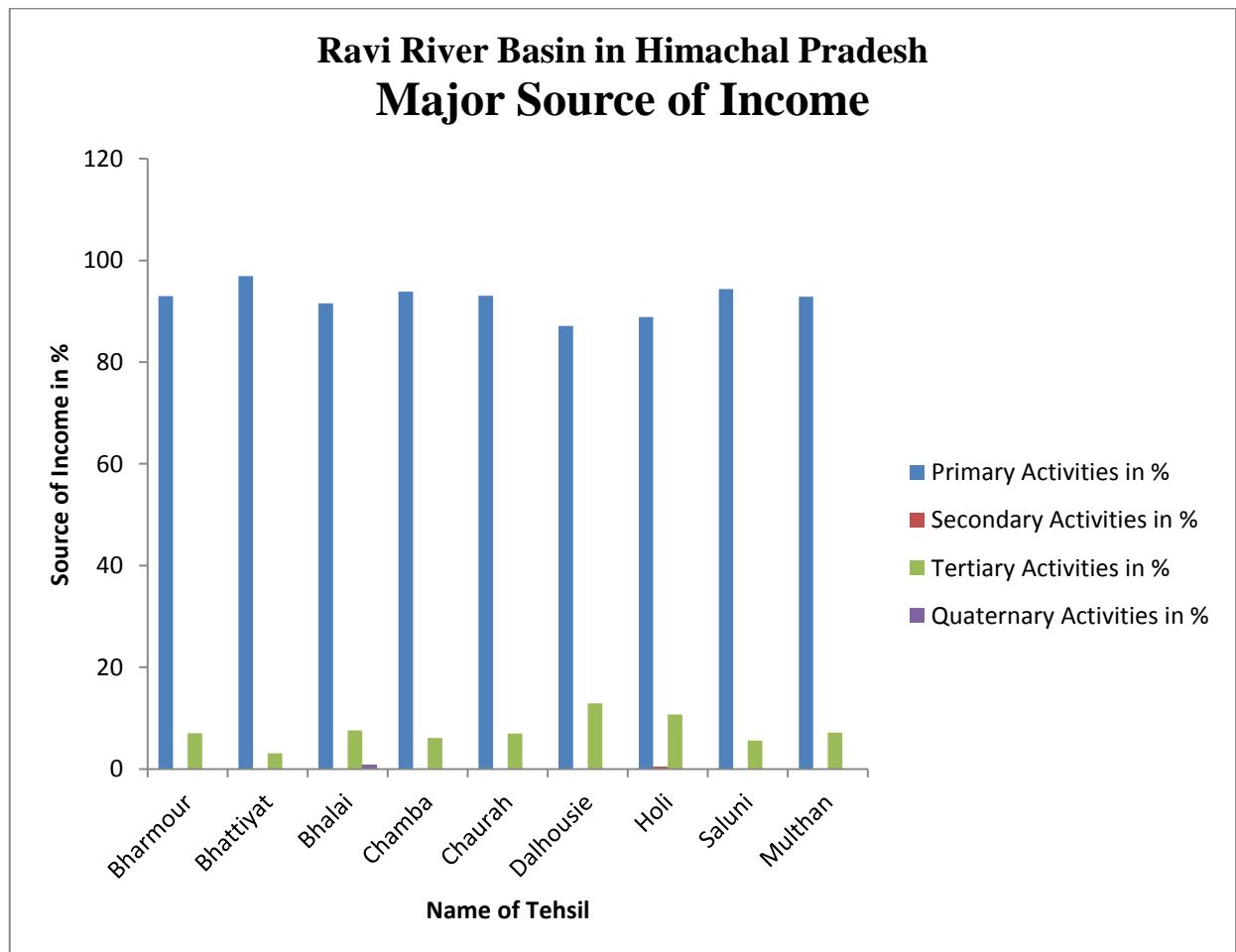
#### Tehsil wise People Involvement in Different Activities

Sr.No.	Tehsil	Primary Activities in %	Secondary Activities in %	Tertiary Activities in %	Quaternary Activities in %
1	Bharmour	93	0	7	0
2	Bhattiyat	96.92	0	3.08	0
3	Bhalai	91.52	0	7.59	0.89
4	Chamba	93.88	0	6.12	0
5	Chaurah	93.04	0	6.96	0

6	Dalhousie	87.13	0	12.87	0
7	Holi	88.84	0.45	10.71	0
8	Saluni	94.38	0	5.62	0
9	Multhan	92.86	0	7.14	0
	Total	92.40	0.05	7.46	0.09

**Source:** Based on Field Survey

In this basin 92.40% people are engaged in primary activities, but on tehsil wise Bhattiyat (96.92%), Saluni (94.38%), Chamba (93.88%), Chaurah (93.04%), Bharmour (93%), Multhan (92.86%), Bhalai (91.52%), Holi (88.84%) and in Dalhousie (87.13%) people are engaged in primary activities. It is also foundout that only 0.05% people of this basin are engaged in secondary activities and they are found in Holi tehsil only. It is observed that 7.46% people of this basin are engaged in tertiary activities and on tehsil wise Dalhousie (12.87%), Holi (10.71), Bhalai (7.59%) and Multhan (7.14%) people are above average and Bharmour (7%), Chaurah (6.96%), Chamba (6.12%) ,Saluni (5.62%) and Bhattiyat (3.08%) are below the basin average. It is also observed that only 0.11% people are engaged in quaternary activities and they are only available in Bhalai sub tehsil, but in other tehsils persons engaged in quaternary activities are not available (Table 1.11).



**Source:** Based on Field Survey

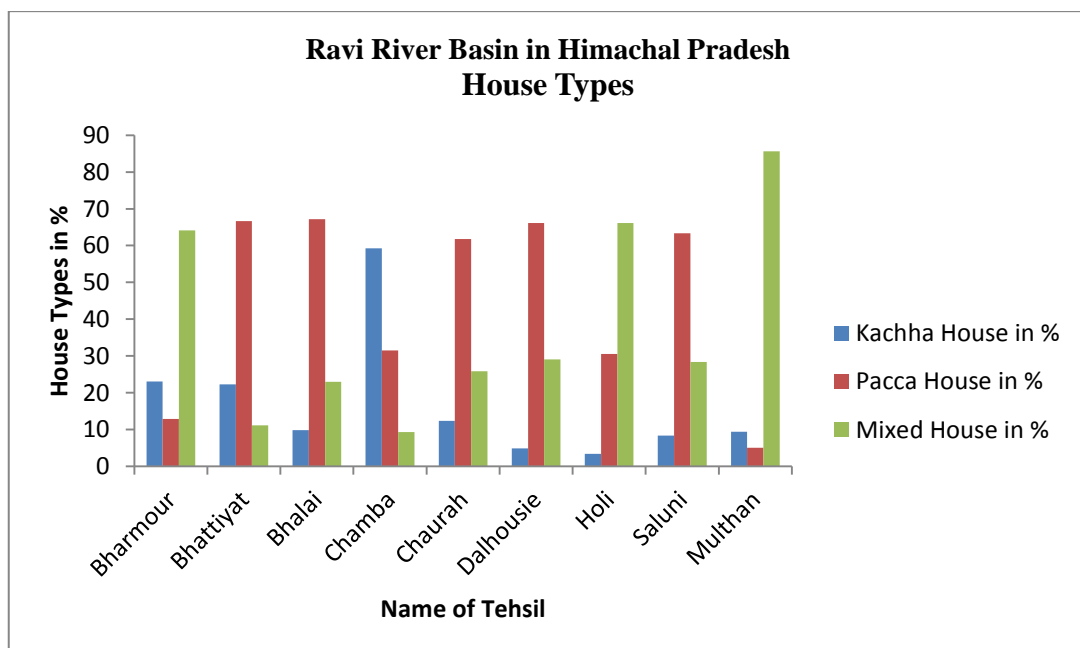
**Figure 1.14**

**House Type of Households****Table 1.12****Tehsil wise Structure of Household**

Sr. No.	Tehsil	Kachha House in %	Pacca House in %	Mixed House in %
1	Bharmour	23.08	12.82	64.10
2	Bhattiyat	22.22	66.67	11.11
3	Bhalai	9.84	67.21	22.95
4	Chamba	59.26	31.48	9.26
5	Chaurah	12.36	61.80	25.84
6	Dalhousie	4.84	66.13	29.03
7	Holi	3.39	30.51	66.10
8	Saluni	8.33	63.33	28.34
9	Multhan	9.33	5	85.67
	Total	16.96	44.55	38.49

**Source:** Based on Field Survey

In this basin about 45% houses are pacca, but on tehsil wise basis Bhattiyat, Bhalai and Dalhousie have 2/3 houses are pacca. It is also found out that Saluni and Chaurah tehsil has 63.33% and 61.80% pacca houses respectively. It is observed that Holi, Bharmour and Multhan Tehsil have 30.51%, 12.82% and 5% pacca houses respectively. It is observed from field work survey analysis that in Ravi River basin about 38% houses are mixed types. It is also observed that Bharmour, Holi and Multhan Tribal tehsils have maximum mixed type of houses due to temperate type of Climatic conditions. It is also observed that other tehsils like Bhattiyat, Bhalai, Dalhousie, Chamba, Chaurah and Saluni of Ravi River basin have the mixed type of houses, below the average of basin. In this basin about 17% houses are kacha types, but on tehsil wise Chamba has 59.26% kacha houses. It is also observed that Bharmour and Bhattiyat have 23.08% and 22.22% kacha respectively, but in other Tehsil like Bhalai, Chaurah, Dalhousie, Holi, Multhan and Saluni the house are below the basin's average of kacha houses (Table 1.12).

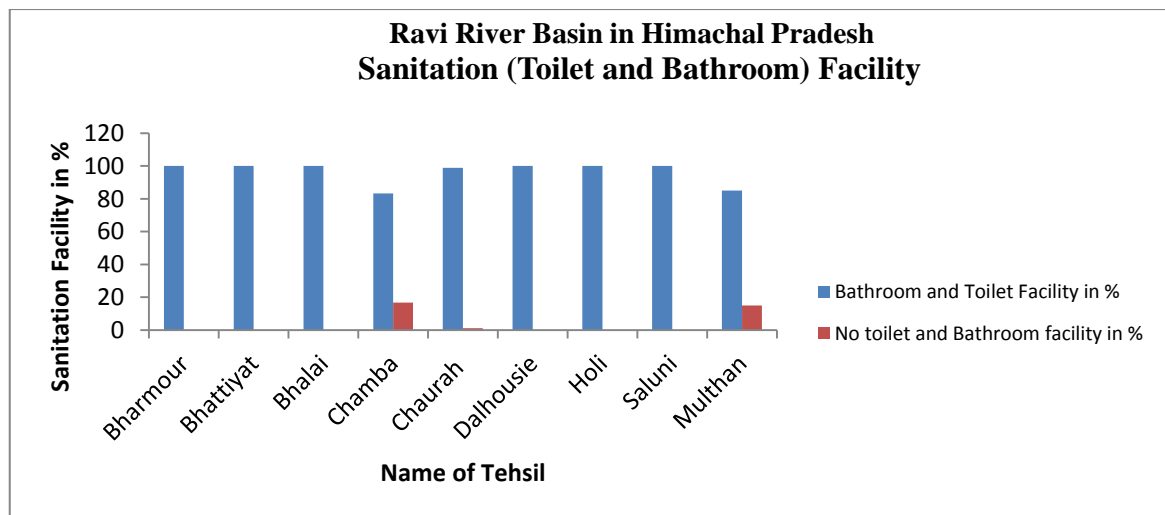
**Source:** Based on Field Survey

**Figure 1.15****Sanitation (Bathroom and Toilet) Facility in Households****Table 1.13****Tehsil wise Sanitation Facility**

Sr. No.	Name of Tehsil	Bathroom and Toilet Facility in %	No toilet and Bathroom facility in %
1	Bharmour	100	0
2	Bhattiyat	100	0
3	Bhalai	100	0
4	Chamba	83.33	16.67
5	Chaurah	98.88	1.12
6	Dalhousie	100	0
7	Holi	100	0
8	Saluni	100	0
9	Multhan	85	15
	Total	96.36	3.64

**Source:** Based on Field Survey

In this basin 96.36% household have bathroom and toilet facilities. It is observed that Bharmour, Bhattiyat, Bhalai, Dalhousie, Holi and Saluni has 100% bathroom and toilet facilities, but Chamba, Multhan and Chaurah tehsils have 83.33%, 85% and 98.88% toilet and bathroom facilities respectively. It is also found out that only three tehsil Chamba, Multhan and Chaurah have 16.67%, 15% and 1.12% respectively (Table 1.13).

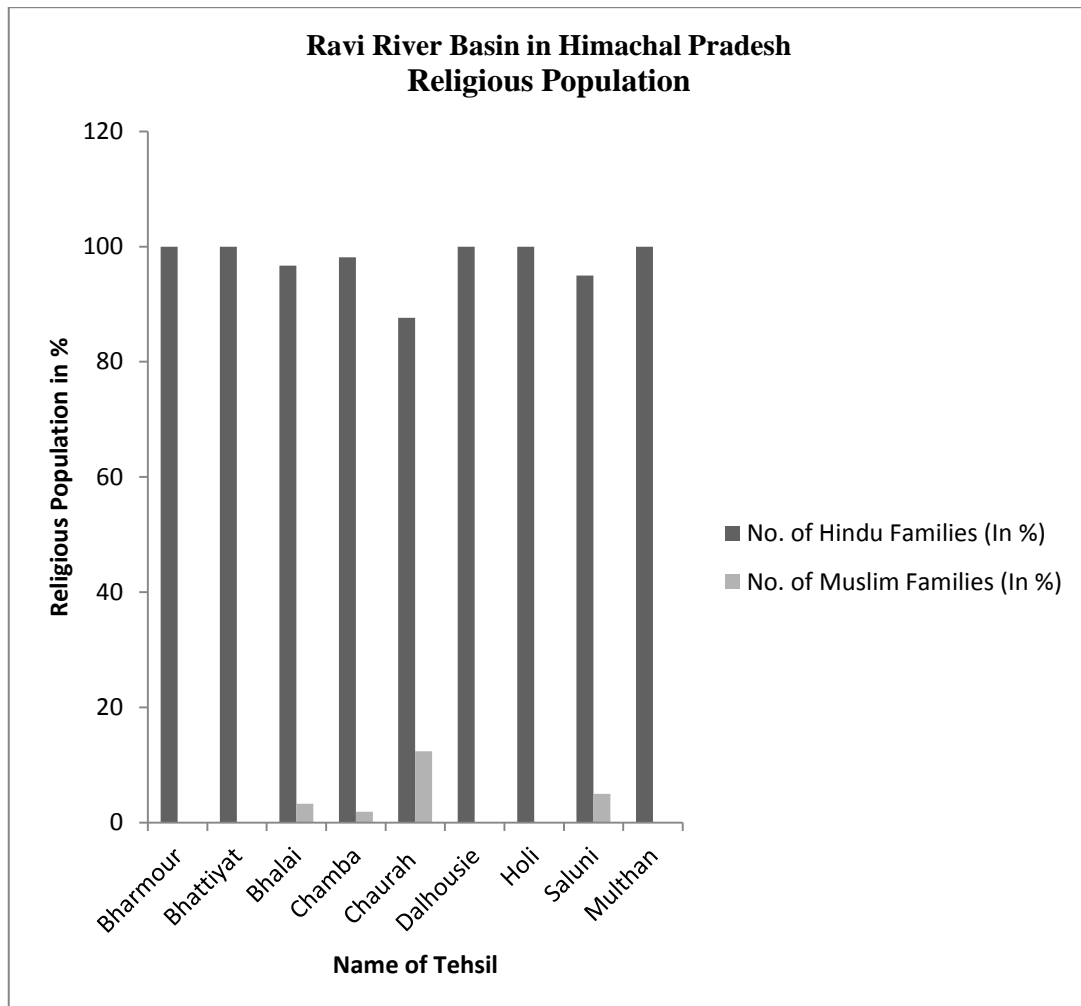
**Source:** Based on Field Survey**Figure 1.16****Religious Composition****Table 1.14****Tehsil wise Religious Population**

Sr. No	Name of Tehsil	No. of Hindu Families (in %)	No. of Muslim Families (in %)
1	Bharmour	100	0
2	Bhattiyat	100	0

3	Bhalai	96.72	3.28
4	Chamba	98.15	1.85
5	Chaurah	87.64	12.36
6	Dalhousie	100	0
7	Holi	100	0
8	Saluni	95	5
9	Multhan	100	0
	Total	97.50	2.50

**Source:** Based on Field Survey

In Ravi basin 97.50% people belongs to Hindu Religion, but on tehsil wise basis in Bharmour, Bhattiyat, Dalhousie, Multhan and Holi 100% surveyed households belongs to Hindu Religion and in Bhalai, Chamba, Chaurah and Saluni 96.72%, 98.15%, 87.64%, and 95% respectively are Hindu Religion people. It is also found out that in this basin 2.50% people belongs to Muslim Religion and on tehsil wise Chaurah, Saluni, Bhalai and Chamba there are 12.36%, 5% ,3.28% and 1.85% respectively are Muslim people, but Bharmour, Bhattiyat, Dalhousie, Multhan and Holi tehsil has no Muslim population (Table 1.14).



**Source:** Based on Field Survey

**Figure 1.17**

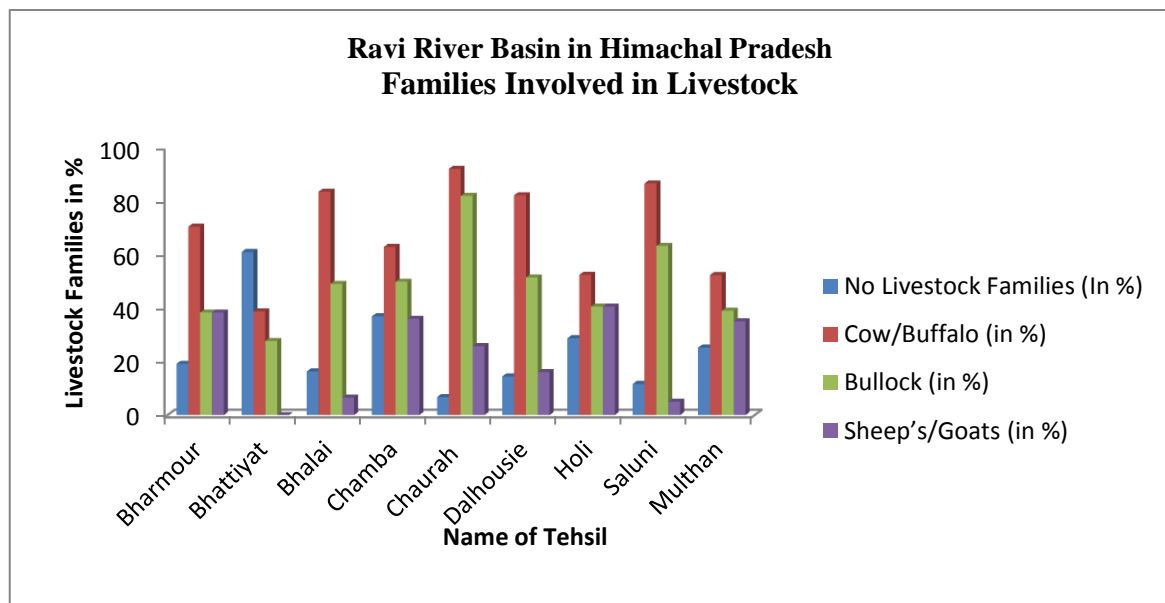


**Families Involves in Livestock****Table 1.15****Tehsil wise Family's Involvement in Livestock**

Sr. No.	Name of Tehsil	No Livestock Families(in %)	Cow/Buffalo (in %)	Bullock (in %)	Sheep's/Goats (in %)
1	Bharmour	19.23	70.51	38.46	38.46
2	Bhattiyat	61.11	38.89	27.78	0
3	Bhalai	16.39	83.60	49.18	6.56
4	Chamba	37.04	62.96	50	36.11
5	Chaurah	6.74	92.13	82.02	25.84
6	Dalhousie	14.52	82.26	51.61	16.13
7	Holi	28.81	52.54	40.68	40.68
8	Saluni	11.67	86.67	63.33	5
9	Multhan	25.30	52.50	39.14	35.14
	Total	24.54	69.11	49.13	22.65

**Source:** Based on Field Survey

In this basin 24.54% families have no livestock, but on Tehsil wise basis Bharmour (19.23%), Bhattiyat (61.11%), Bhalai (16.39%), Chamba (37.04%), Chaurah (6.74 %), Dalhousie (14.52%), Holi (28.81%), Saluni (11.67%) and Multhan (25.30%) have no livestock families. It is also found out that in this basin 69.11% families have Milk cattle's, but on tehsil wise Chaurah (92.13%), Saluni (86.67%), Bhalai (83.60%), Dalhousie (82.26%) have milk cattle families which is above the basin's average and Bharmour (70.51%), Chamba (62.96%), Holi (52.54%), Bhattiyat (38.89%) and Multhan (52.50%) have below the basin's average of milk cattle families. It is found out from field work that in this basin about 49% families have bullock because it is the main source of ploughing of agriculture due to dissected topography. It is also found out that Chaurah (82.02%), Saluni (63.33%), Dalhousie (51.61%) bullock families are above the basin's average and Chamba (50%), Bhalai (49.18%), Holi (40.68%), Multhan (39.14%), Bharmour (38.46%) and Bhattiyat (27.78%) tehsil have bullock families which is below the basin's average.

**Source:** Based on Field Survey**Figure 1.18**

It is also analyzed that in this basin 22.65% families are involved in rearing of sheep and goats but on tehsil wise Holi (40.68%), Bharmour (38.46%), Chamba (36.11%), Multhan (35.14%), Chaurah (25.84%) families are involved in rearing of sheep and goats which above the average of basin due to availability of grassland of high altitude. It is also found that Bhattiyat tehsil has no families involves in rearing of sheep and goats, but in tehsil like Dalhousie (16.13%), Bhalai (6.56%) and Saluni (5%) families are involved which is below the average of basin (Table 1.15).

### Caste Composition

**Table 1.16**

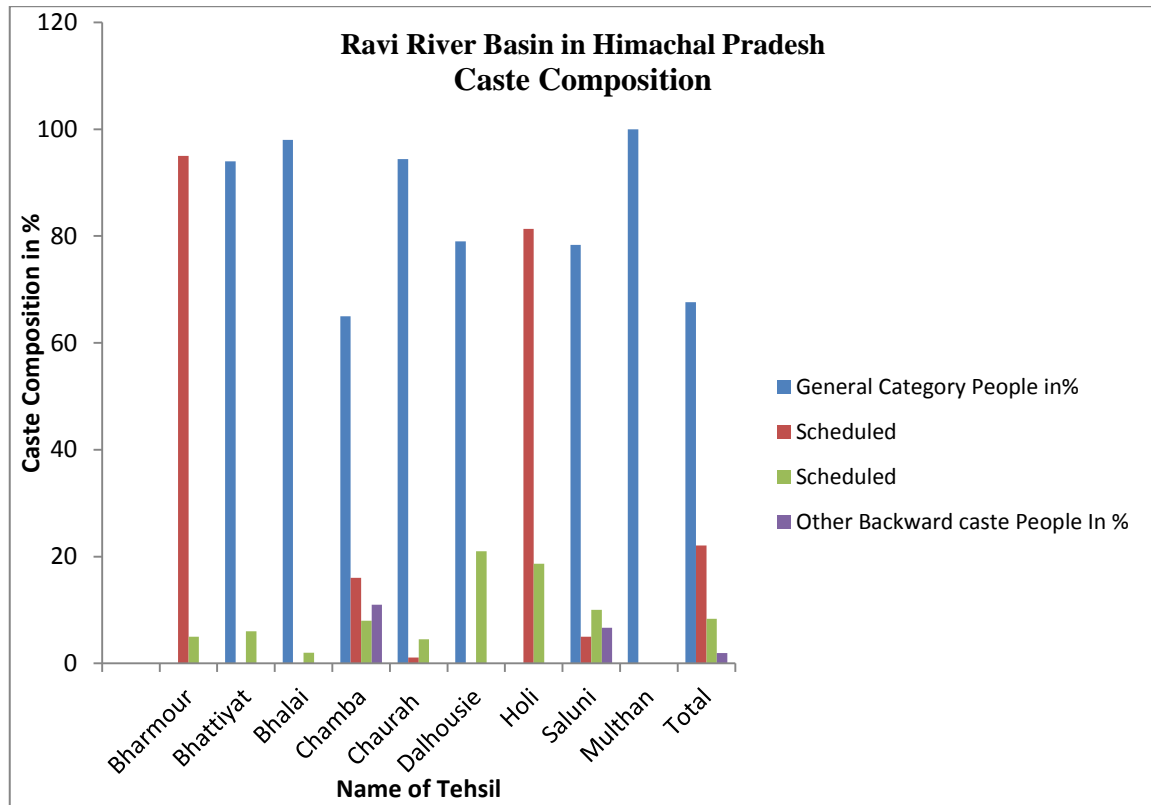
#### Tehsil wise Caste Composition

Sr. No.	Name of Tehsil	General Category People in%	ScheduledTribe People in%	Scheduled Caste People in %	Other Backward caste People in %
1	Bharmour	0	95	5	0
2	Bhattiyat	94	0	6	0
3	Bhalai	98	0	2	0
4	Chamba	65	16	8	11
5	Chaurah	94.38	1.12	4.49	0
6	Dalhousie	79	0	21	0
7	Holi	0	81.35	18.65	0
8	Saluni	78.33	5	10	6.67
9	Multhan	100	0	0	0
	Total	67.64	22.05	8.35	1.96

**Source:** Based on Field Survey

The 56.52% people belongs to the General category in surveyed area, but on tehsil wise basis Bhalai (98%), Chaurah (94.38%), Bhattiyat (94%), Dalhousie (79%), (Saluni (78.33%), Chamba (65%) and in Bharmour and Holi tehsil has 0% general category population. It is also found out that 33.16% population of this basin belongs to Scheduled Tribe, but on tehsil basis Bharmour(95%), and Holi(81.35%) tehsils people belongs to Scheduled tribe. It is also found out that Chamba (16%), Saluni (5%), Chaurah (1.12%) and 0% Scheduled tribe population each in Bhattiyat, Bhalai, Multhan and Dalhousie tehsil.

It is also found out from field work that 8.35% population of this basin belongs to Scheduled Caste, but on tehsil wise Dalhousie (21%), Holi (18.65%) and Saluni (10%) are above the average of basin. It is also found out from field work that Chamba (8%), Bhattiyat (6%), Bharmour (5%), Bhalai (2%) and Multhan (0%) tehsil's population belongs to Scheduled Caste population which is below the average of basin. In this basin about 1.96% population belongs to Other Backward Caste. It is also observed that in Chamba (11%), Saluni (6.67%) and 0% in other tehsils of this basin (Table 1.16).



Source: Based on Field Survey

Figure 1.19

### Age Composition

Table 1.17

#### Tehsil wise Age Composition

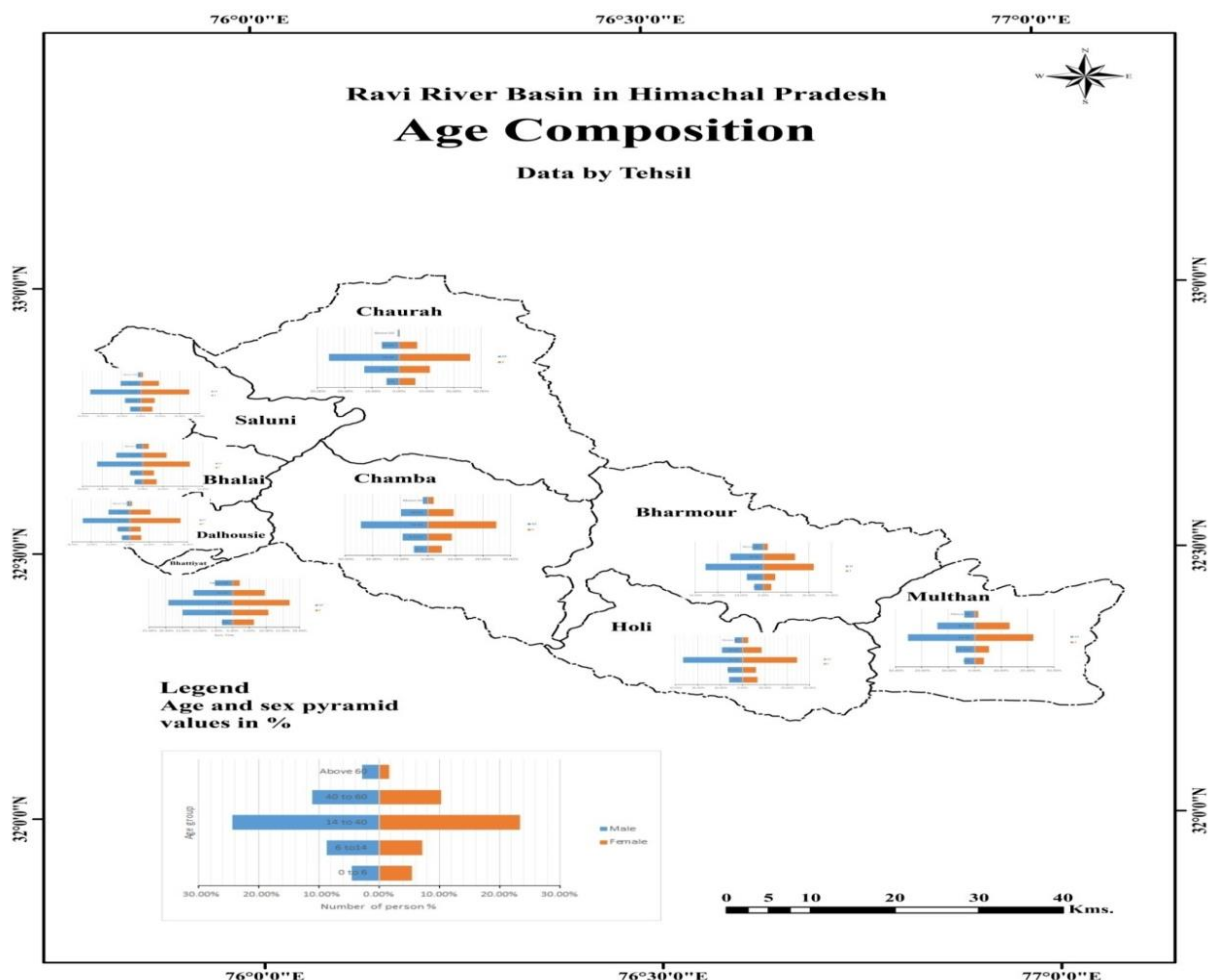
Sr. No.	Name of Tehsil	0-6		6-14		14-40		40-60		Above 60	
		M	F	M	F	M	F	M	F	M	F
1	Bharmour	3.98%	3.48%	7.21%	5.22%	25.37%	22.14%	14.43%	13.93%	4.77%	1.99%
2	Bhattiyat	3.19%	6.38%	14.89%	10.63%	19.14%	17.02%	11.70%	9.57%	5.31%	2.12%
3	Bhalai	3.94%	6.90%	6.25%	5.59%	22.69%	23.35%	13.15%	11.84%	3.28%	2.96%
4	Chamba	5.04%	5.04%	9.12%	8.73%	24.27%	24.85%	9.70%	9.36%	1.74%	2.13%
5	Chaurah	4.65%	5.88%	12.74%	11.27%	25.73%	25.98%	6.37%	6.61%	0.49%	0.24%
6	Dalhousie	4.07%	5.92%	6.29%	5.55%	24.44%	26.29%	11.11%	10.74%	1.48%	1.11%
7	Holi	6.01%	6.64%	6.64%	6.01%	26.58%	24.36%	9.17%	8.54%	3.48%	2.53%
8	Saluni	5.57%	5.94%	8.17%	7.06%	26.02%	24.90%	10.40%	9.29%	1.48%	1.11%
9	Multhan	3.95%	3.45%	7.20%	5.42%	25.23%	22.15%	14.11%	13.21%	3.95%	1.33%
	Total	4.49%	5.51%	8.72%	7.28%	24.42%	23.45%	11.13%	10.34%	2.89%	1.72%

Source: Based on Field Survey

In Ravi River basin 10% population belongs to 0-6 age group and it is good to see the analysis of field survey that female child population are more than male child. On tehsil wise basis it is found out that in Bharmour, Saluni and Multhan the female child population is less than male, but in Bhattiyat, Bhalai, Chaurah, Dalhousie and Holi tehsil, the female population is more than male population and in Chamba tehsil both sex population is equal. The overall 6-14 age group population in this basin is 16% and on tehsil wise basis it is 12.43% in Bharmour, 11.84% in Bhalai, 11.84% in Dalhousie, 12.65% in Holi, 15.23% in Saluni and 12.62% in Multhan tehsil which is below the

average of basin and 25.52% in Bhattiyat, 24.01% in Chaurah and 17.85% in Chamba tehsil above the average of basin.

47.87% population of this basin belongs to 14-40 age group and on tehsil wise it is 47.51% in Bharmour, 36.16% in Bhattiyat, 46.04% in Bhalai and 47.38% in Multhan tehsil are below the average of basin and 49.07% in Chamba, 51.71% in Chaurah, 50.73% in Dalhousie, 50.94% in Holi and 50.92% in Saluni are above the average of basin. The overall 40-60 age group population of this basin is 21.47% and on tehsil wise it is 28.36% in Bharmour, 24.99% in Bhalai, 21.85% in Dalhousie and 27.32% in Multhan tehsil which is above the average of basin and it is 21.27% in Bhattiyat, 19.06% in Chamba, 19.69% in Saluni, 12.98% in Chaurah and 17.71% in Holi tehsil are below the average of basin. The overall 4.61% population of this basin belongs to above 60 age group population and on tehsil wise it is 6.76% in Bharmour, 7.43% in Bhattiyat, 6.24% in Bhalai, 6.01% in Holi and 5.28% in Multhan tehsil that is above the average of basin and it is 3.87% in Chamba, 0.73% in Chaurah, 2.59% each in Dalhousie and Saluni which is below the average of basin (Table 1.17).



Source: Based on Field Survey

Figure 1.20

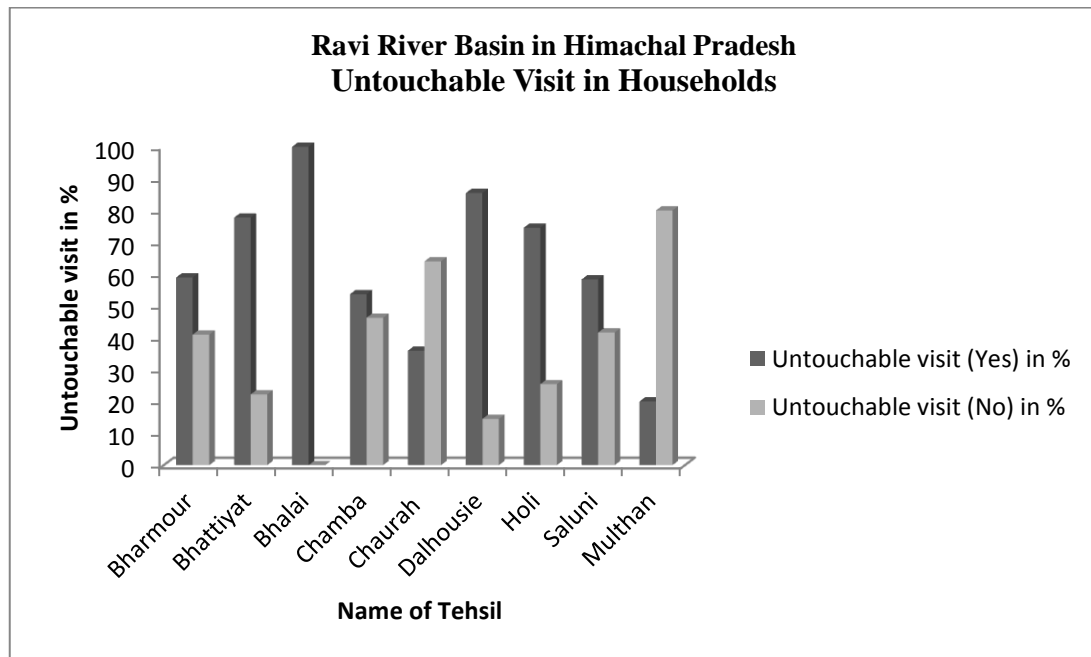
**Untouchable Visit in Households****Table 1.18****Tehsil wise Untouchable Visit**

Sr. No.	Name of Tehsil	Untouchable visit(Yes) in %	Untouchable visit(No) in %
1	Bharmour	58.97	41.03
2	Bhattiyat	77.78	22.22
3	Bhalai	100	0
4	Chamba	53.70	46.30
5	Chaurah	35.96	64.04
6	Dalhousie	85.48	14.52
7	Holi	74.58	25.42
8	Saluni	58.33	41.67
9	Multhan	20	80
	Total	62.76	37.24

**Source:** Based on Field Survey

In this Basin about 62.76% People said that untouchable people visit occasionally in their houses, but on tehsil wise Bhalai (100%), Dalhousie (85.48%), Holi (74.58%) and Bhattiyat (77.78%) are above the basin's average. It is also found out that in Bharmour (58.97%), Saluni (58.33%), Chamba(53.70%), Chaurah(35.96%) and Multhan(20%) tehsil Peoples said that untouchable people visit their houses occasionally which is below the average of basin.

In this basin about 37.24% People said that untouchable people do not visit their houses, but on tehsil basis Multhan (80%), Chaurah (64.04%), Chamba (46.30%), Saluni (41.67%) and Bharmour (41.03%) are above the average of basin. It is also found out from field work that in Holi (25.42%), Bhattiyat (22.22%), Dalhousie (14.52%) and Bhalai (0%) tehsils People said that untouchable do not visit their houses which is below the average of basin (Table 1.18).

**Source:** Based on Field Survey**Figure 1.21**



### **Conclusion and Recommendation:**

Ever since the dawn of human civilization, especially in rural settlement man has thriving for more development in their rural setup. This thrust of continuous development has many times to cover several hurdles in the progressive both of such rural environment. The present study area showed the changes occurred in the rural settlement in mountainous environment which has feebly developed infrastructure, meager resources, harsh climatic conditions and rugged terrain for proper rural development. The study area highlighted changes occurred in rural nature of dwelling, demographic aspects, basic amenities, livelihood and social set up in spite of tough life in rural settlement in mountainous environment. Ravi and its tributaries are perennial streams, which are the main lifeline for livelihood of rural settlement. From the data analysis, it was found that 45 percent houses are pucca, 38 percent of the houses are semi-pucca and remaining 17 percent houses are Kuccha houses in Ravi River Basin in Himachal Pradesh. About 62.76% People said that untouchable people visit occasionally in their houses.

Ownership is the state of exclusive rights and control over property. During field visit it was found that most of the villages were male dominated society. Life is hard in the hilly rural areas but the people of these areas very hard working that reflects positive picture. Every household involved in agriculture although it was limited to self-consumption due to small-size holdings and traditional methods of farming. It is vital to implement appropriate programs, schemes and projects for the development of these areas as these were lack in infrastructural facilities. There should be introduction of new methods of agriculture, animal husbandry, provide seeds for horticulture purpose and financial support should be given for fish farming as it can enhance the earning of the people. There is lack of proper transportation and roads in Ravi River basin in Himachal Pradesh and during rainy season villagers face problem of over flow of rainy water that damaged and destroying the kuccha roads. This is a need of the hour government should introduce projects to improve the living condition of the inhabitants. Physical infrastructure and human resources should be provided there for betterment of social infrastructure. Government should introduce awareness programmes at village level of self-employment and give incentives and awareness to start fish farming and horticulture and taking care of them. Training should be given to the people of the villages so that they taking interest in agriculture diversification.

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