STATUS OF HUMAN HEALTH IN A TRIBAL AREA OF GUJARAT

Vijayata* and Niladri Ranjan Dash**
Email: n_r_dash@yahoo.com

Abstract

Health is one of the important indicators of development. An attempt has been made in the present paper to analyze the status of health among the population living in the eastern hilly areas of Gujarat. A few sample villages of Kavant taluka of Vadodara district have been studied. The terrain of the study area is hilly and undulating with a moderate to warm climate. The status of health among the target population has been analysed in the context of both physical and cultural environments of the area, which includes physiography, housing condition, awareness, access to productive assets and a host of social parameters. The study is based on both secondary and primary sources of data. Primary data has been generated at household level using structured schedules, randomly administered in the study villages. The study makes significant revelations pertaining to the association of human health with different elements of the human milieu.

Introduction

According to Human Development Report 2011 (22-23), "Human development outcomes are a function of economic growth, social policies and poverty reduction strategies". The overall HDI of India as reported (2007-08) is 0.47, with the Kerala state at the highest position (0.79), followed by Delhi, Himachal Pradesh, Gujarat, Karnataka. The lowest HDI is reported from the northern states of the country. Despite a higher ranking of the State in the Indian Union, the prevalence of three health problems that cause considerable mortality in younger segment of its population are, fever, Acute Respiratory Infection (ARI) and diarrhea. More than one third (37%) of women in Gujarat are undernourished. According to the National Family Health Survey, about three-fifth (59%) of the Gujarat population lives in the rural areas (NFHS – Gujarat, 1998-99) and nutritional deficiency is particularly serious among women in the rural areas and among the women in the disadvantaged socio-economic groups. On an average, 46 per cent of women in Gujarat have some degree of anemia. Iodine deficiency disorders are also a serious problem among the rural and Scheduled Tribe (ST) households, and households with a low standard of living. Prevalence of Tuberculosis (TB), Asthma, Malaria and Jaundice is common in the State. Jaundice is higher in the rural areas than in the urban areas and more among the males than the females (NFHS – Gujarat, 1998-99).

For the purpose of the present study, Kavant *taluka* of Vadodara district of the State has been selected. The *taluka* is located in the south-eastern part of the district and is mostly characterized by hilly and undulating

topography, with a higher density of vegetation cover. The *taluka* with 92.5 per cent of ST population in the total *taluka* population (2001) has a predominance of the Bhil and Rathwa tribes in its population.

Studies pertaining to the tribal areas of south Rajasthan have revealed that the incidence of Malaria has high correlation with the geo-ecology of the area. Areas with heavy rainfall, water-logged rice fields and vegetation with thick canopies provide favorable condition for the growth and survival of the mosquitoes and transmission of malaria (Mathur and Pareek, 1998, 111-123). An attempt is made here to study the relationship of spatial characteristics of the study area with the prevalence of major diseases. The basic intend is to evaluate the role of physical and social characteristics in the prevalence of diseases.

Database and Methodology

The study is based on both primary and secondary sources of data. The secondary sources of data include, Census of India and NHFS publications. Primary information pertaining to demographic, economic, social, cultural and psychological aspects of the target population is generated through the use of structured household schedules, personal observation, and conversation with the elderly persons of the study villages. For the purpose of the study, seven villages, viz. Hanf, Hamirpura, Dhaniwada, Kadipani, Samalvant, Gojaria and Navelja of Kavant *taluka* were studied. The household schedules were administered to thirty households selected randomly from every village. The data generated through primary investigation at the household level have been classified by the land-size holding with an intention to unravel intra-community variations. The investigators have tried to minutely observe the attitude, practices towards hygiene, level of awareness about diseases and their prevention, remedial measures adopted by the population and medical care facilities available in the vicinity. The elderly, including the females were also consulted in groups in every village regarding these aspects.

Study Area

Kavant is a hilly and forested *taluka* of Vadodara district, located in its eastern side. It shares a common boundary with the state of Madhya Pradesh in its northeastern side and Maharashtra in its southern side (Fig. I). While the State as a whole has 1,861,000 hectares or 9.76 per cent of forest cover, Kavant *taluka* has 16,830.1 hectares or 27.69 per cent of such cover (State of Forestry Report of India, 2005 and Census of India, 2001). The *taluka* is drained by three rivers; Hiren in the north, Men in the central part and Narmada in the south.

According to 2001 census, the total population of Kavant *taluka* was 170,524, of which 4,195 (2.4%) belonged to the Scheduled Caste (SC) and 157,738 (92.5%) to the ST groups. Out of the selected sample villages, Dhaniwada, Gojariya, Hanf and Navelja are predominantly ST villages, without any SC population, while Hamirpur, Samalvant and Kadipani villages have both SC and ST population.

The 33.4 per cent level of literacy in the *taluka* is much below the State (69.9%) and District (70.8%) level average literacy rates. The total literates of Kavant *taluka* are 46,365 persons, of which 32,339 (69.7%) are males and

14,026 are females (30.2%). It is indicative of the fact that, while around three-fifth of the males in the *taluka* had attained literacy, their female counterparts lagged much behind with a meager less than one-third literacy rate. Besides, both the segments in the *taluka* compare very poorly with their counterparts in the State (80.6% and 58%) and the District (80% and 60.7%) in terms of literacy attainment.

Chhota Udepur is the nearest town located between 30-50 kms. away from the study villages. There are seven PHCs in the *taluka*, of which two PHCs are located in the sample villages of Kadipani and Samalwant. The other villages are almost five to ten kms. away from the nearest PHC.

Figure – I: Location of Kavant *Taluka*

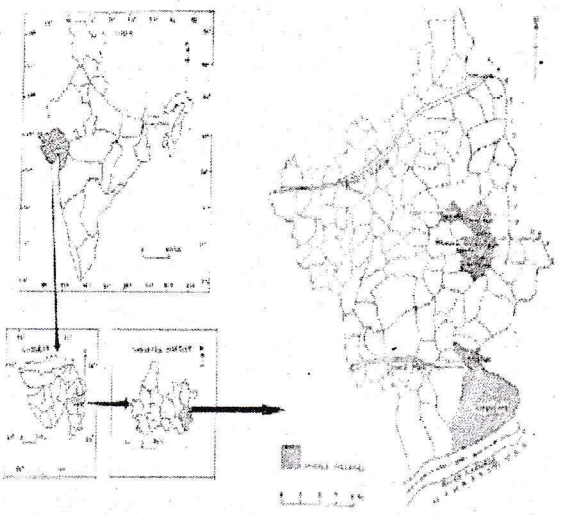

Table – 1: Characteristics of the Sample Villages

Information	Kavant *Taluka*	Dhaniwada (%)	Gojaria (%)	Hanf (%)	Hamirpura (%)	Kadipani (%)	Navelja (%)	Samalvant (%)
Total Population	170,524	1092 (0.6)	1,029(0.6)	2,345(1.3)	852(0.4)	1,888(1.1)	1,663(0.9)	1,813(1.0)
Total Households	-	197	184	419	152	390	294	277
Surveyed Households	-	30(15.2)	30(16.3)	30(7.1)	30(19.3)	30(7.6)	30(10.2)	30(10)
Scheduled Caste Population	4,195	0	0	0	19(0.45)	63(1.5)	0	37(0.8)
Scheduled Tribe Population	157,738	1092(0.6)	1,029(0.6)	2,340(1.4)	793(0.5)	1,185(0.7)	1,6639(1.0)	1776(1.1)
Total Literates	46,365	309(0.6)	161(0.3)	144(0.3)	1750(0.3)	941(2.0)	473(1.0)	181(0.3)
Males Literates	32,339(69.0)	236(0.7)	1320.4(0.4)	128(0.3)	132(0.4)	586(1.8)	361(1.1)	161(0.4)
Females Literates	14,026(30)	73(0.5)	29(0.2)	16(0.1)	43(0.3)	355(2.5)	112(0.7)	20(0.1)
Distance from Nearest Town (kms.)	Chhota Udepur	Chhota Udepur (27)	Chhota Udepur (32)	Chhota Udepur (49)	Chhota Udepur (32)	Chhota Udepur (46)	Chhota Udepur (32)	Chhota Udepur (30)
PHC (kms.)	7	PHC(<5)	PHC(10+)	PHC(10+)	PHC(<5)	PHC	PHC(<5)	PHC
Forest Cover (in Hectares)	16,830.1 (27.69%)	Nil	46.1 (11.08%)	3,420.1 (84.56%)	48.4 (12.46%)	84.5 (31.87%)	Nil	Nil

Economic Characteristics

The main economic activity of the people of the selected villages is agriculture. Most of the villagers are cultivators, in which the proportion of male cultivators was higher than the female cultivators. Land holding size is a very important indicator of socio-economic condition. There is large variation in land holding among the households of the villages. Most of the villagers have very small pieces of land. In all the seven sample villages, the land size holding is small, limited to less than three acres of land. A perusal of Table – 2 reveals the decrease in the number of households with the increase in the size of land in all the sample villages. This is an indication of the poor socio-economic condition of the population which ought to have adverse effect on their health status.

People in the study villages are generally engaged in more than one type of occupations, of which one is the primary or main occupation and others are subsidiary. During the survey, both main and subsidiary occupations of people were recorded separately. For majority of the people, agriculture remains the main work, while subsidiary work includes agricultural labour, construction labour work in the neighbouring urban areas, business and shop keeping etcetera. People get engaged in agriculture related occupations in the surveyed villages for about eight months in a year and for four months they are engaged in labour work. It is observed that in the sample villages mostly people without access to agricultural land, particularly of Kadipani and Dahaniwada villages are engaged in labour work. A perusal of Table - 3 indicates that in all the seven villages under study, between 50-100 per cent people engage in agricultural activities during the cultivation season and do labour work in the off season.

In the surveyed villages there are only three to four households which have permanently migrated from the native villages to Rajasthan, Kathiawad, Daboi etc. as migrant labourers, particularly as construction workers.

Table- 2: Percentage of Households by Land Size Holdings

Land Size (In Acres)	Dhaniwada	Gojariya	Hanf	Hamirpur	Kadipani	Navelja	Samalvant
Landless	2 (6.6)	0	0	0	7 (23.3)	0	0
0.01-1.00	7 (23.3)	5 (16.6)	5 (16.6)	10 (33.3)	8 (26.6)	5 (16.6)	10 (33.3)
1.01-2.00	6 (20.0)	5 (16.6)	6 (20.0)	8 (26.6)	4 (13.3)	5 (16.6)	5 (20.0)
2.01-3.00	4 (13.3)	4 (13.3)	6 (20.0)	8 (26.6)	2 (6.6)	5 (16.6)	15 (16.6)
3.01-4.00	3 (10.0)	3 (10.0)	3 (10.0)	3 (10.0)	6 (20.0)	5 (16.6)	5 (16.6)
4.01-5.00	3 (10.0)	6 (20.0)	6 (20.0)	1 (3.3)	2 (6.6)	5 (16.6)	4 (10.0)
Above 5.01	5 (16.6)	7 (23.3)	4 (13.3)	-	5 (3.3)	5 (16.6)	1 (3.3)
Total	30	30	30	30	30	30	210

Figure – II: Percentage of Households by Land Size Holdings

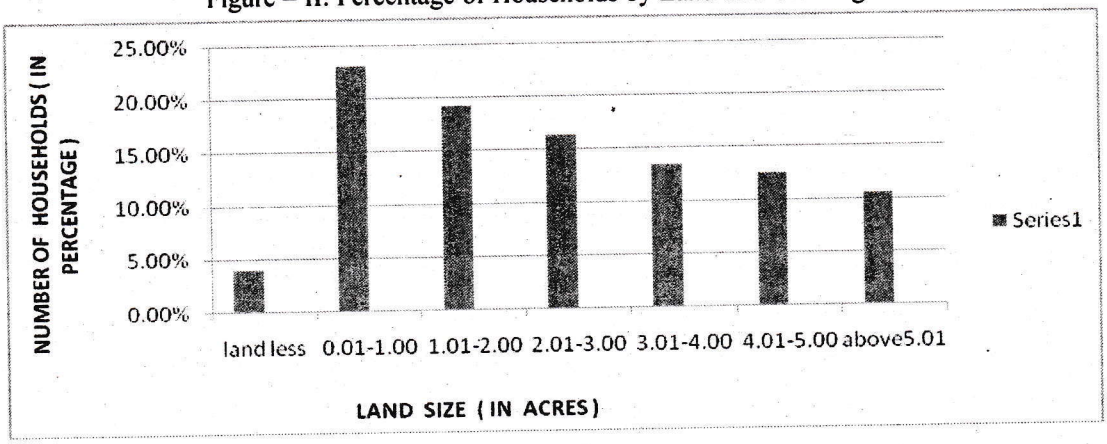

Table - 3

Work Participation by Land Size Holdings

Size	Number and Percentage of Population																				
	Dhaniwada			Gojariya			Hanf			Hamirpura			Kadipani			Navalja			Samalvant		
res)	P	M	S	P	M	S	P	M	S	P	M	S	P	M	S	P	M	S	P	M	S
less	8	-	2 (25)	-	-	-	-	-	-	-	-	-	34	-	8 (23)	-	-	-	-	-	-
1.0	40	22 (55)	1 (2)	22	18 (81)	16 (72)	21	10 (47)	8 (38)	48	28 (58)	21 (43)	41	35 (85)	35 (85)	22	13 (59)	8 (36)	64	35 (54)	31 (48)
2.0	30	22 (73)	22 (73)	28	12 (42)	12 (42)	32	18 (56)	14 (43)	37	14 (37)	9 (24)	27	14 (51)	12 (44)	37	12 (32)	12 (32)	42	20 (47)	22 (52)
3.0	21	15 (71)	15 (71)	23	11 (47)	15 (65)	27	19 (70)	14 (51)	53	35 (66)	20 (37)	12	5 (41)	5 (41)	22	9 (40)	2 (9)	32	21 (65)	18 (56)
4.0	15	11 (73)	4 (26)	16	3 (18)	9 (56)	20	10 (50)	9 (45)	19	10 (52)	6 (31)	40	22 (55)	22 (55)	37	16 (44)	15 (40)	37	22 (59)	16 (43)
5.0	19	11 (57)	11 (57)	35	17 (48)	17 (48)	46	24 (52)	24 (52)	5	2 (40)	2 (40)	15	4 (26)	2 (13)	36	16 (53)	16 (44)	31	20 (64)	15 (48)
ve 1	32	14 (43)	10 (31)	36	19 (52)	22 (61)	57	25 (43)	25 (43)	-	-	--	5	5 (100)	5 (100)	30	18	16	24	9 (37)	9 (37)

P: Total Population, **M:** Main Work (Agriculture), **S:** Subsidiary Work (Labour, Agricultural Labourer, Business, Shop Keeping).

Literacy is one of the most important aspects of development in general and human development in particular. According to the 2001 Census, female literacy compares very poorly with male literacy in the sample villages. Only in the villages of Kadipani and Navelja female literacy is relatively better. From the Table - 4, it is observed that, percentage of literates varies between 30-50 per cent in Dhaniwada, between 32-65 per cent in Gojariya, between 13-45 per cent in Hanf, between 18-52 per cent in Hamirpur, between 13-47 per cent in Kadipani, between 32-80 per cent in Navelja and between 12-34 per cent in Samaltvant. Literacy rates by and large vary between 30-50 per cent in the sample villages and as the land size holding increases the share of literates increases in the total population. This may be due to better economic condition.

Table – 4 Number and Percentage of Literates by Land Size Holdings in Sample Villages

	Dhaniwada		Gojariya		Hanf		Hamirpur		Kadipani		Navelja		Samaltvant	
Land Size in acres)	T.P	L (%)	T.P	L	T.P	L	T.P	L	T.P	L	T.P	L	TP	L
Landless	8	4 (50.0)	-	-	-	-	-	-	34	16 (47.0)	-	-	-	-
0.01-1.0	40	16 (40.0)	22	10 (45.4)	21	7 (33.3)	48	9 (18.75)	41	9 (21.9)	22	8 (36.3)	64	21 (32.8)
1.01-2.0	30	9 (30.0)	28	9 (32.1)	32	13 (40.6)	37	10 (27.0)	27	9 (33.3)	37	12 (32.4)	42	05 (11.9)
2.01-3.0	21	9 (42.0)	23	15 (65.2)	27	10 (37.0)	53	16 (30.1)	12	2 (16.6)	22	12 (54.5)	32	11 (34.3)
3.01-4.0	15	5 (33.3)	16	7 (43.7)	20	9 (45.0)	19	10 (52.6)	40	19 (47.5)	37	15 (40.5)	37	12 (32.4)
4.01-5.0	19	9 (47.3)	35	17 (48.5)	46	6 (13.0)	5	-	15	2 (13.3)	36	17 (47.2)	31	4 (12.9)
Above 5.01	32	12 (37.5)	36	19 (52.7)	50	12 (24.0)	-	-	5	-	30	24 (80.00)	24	-

T.P: Total Population, **L**: Literates

The physical condition of the houses in the rural areas varies from *kutcha*, semi-*pucca* and *pucca* types. The *kutcha* and semi-*pucca* type of houses are generally characterized by leaking roofs, cracked walls and floor made up of mud, which facilitates the admission of dust, soot, dirt and give rise to and attracts lice, bug, mites, mice, rats etcetera, the carriers and transmitters of different types of diseases. From Table - 5, it is seen that in all the seven villages, the houses are mostly of *kutcha* type.

All the houses are of *kutcha* type in the villages of Hanf, Dhaniwada and Gojariya. Only an insignificant proportion of *pucca* houses can be seen in the villages of Kadipani, Samaltvant and Navelja. These *pucca* houses have been constructed with the help of Government Schemes like Indira Awas Yojana etcetera. Thus, it is clear that, majority of the population in the sample villages are living in *kutcha* type of houses, which harbor many diseases such as infection, fever, cough and malaria.

Table-5 Percentage of House Holds by Type of House in Different Land Size Holdings

Land size (in Acres)	Dhaniwada		Gojariya		Hanf		Hamirpur		Kadipani		Navelja		Samaltvant	
	P	K	P	K	P	K	P	K	P	K	P	K	P	K
Landless	-	100	-	-	-	-	-	-	28.5	-	-	-	-	-
0.01-1.0	42.8	57.1	-	100	-	100	10	90	12.5	87.5	40	60	40	60
1.01-2.0	-	100	-	100	-	100	33.3	75	-	100	-	100	16.6	83.3
2.01-3.0	-	100	25	75	-	100	12.5	87.5	-	100	20	80	40	60
3.01-4.0	-	100	-	100	-	100	-	100	33.5	66.6	20	80	-	100
4.01-5.0	-	100	33.3	66.6	-	100	-	100	50	50	0	100	33.3	66.6
Above 5.01	-	100	-	100	-	100	-	-	-	100	-	100	-	100

P: *Pucca* House; **K:** *Kutcha* House

Not only the type of houses but also the number of rooms and condition of ventilation in the house affect the health of people. Small size of house, less room space and lack of ventilation provide ideal condition for propagation of various diseases. From Table - 6, it is clear that while around 40 per cent of the population lives in only one room, a similar proportion has in its possession only two rooms for living. The small and marginal land owning households present a still poor picture in this context. Around a fifth of the large land owning households posses house with three or more than three rooms to live, indicating positive relationship between greater access to the productive asset, i.e. land and standard of living.

Table - 6 Percentage of Households by Number of Rooms in Different Land Size Holdings

(All Sample Villages)

Land Size (in Acres)	1 Room	2 Rooms	More Than 3 Rooms
Landless	44.4	44.4	11.1
0.01-1.0	46.9	44.8	8.1
1.01-2.0	37.5	55	7.5
2.01-3.0	41.1	50	8.8
3.01-4.0	32.1	50	17.8
4.01-5.0	38.4	42.3	19.8
Above 5.01	36.3	50	13.6

The condition of ventilation in the sample villages was found to be extremely poor. From Table - 7, it can be seen that ventilation in the houses in all the seven villages of Kavant *taluka* varies between bad to medium ventilation category, implying thereby, most of the people in the villages live in houses that have poor to very poor ventilation. The house design in the villages have only one entry/exit door, without any windows. Circulation of air within the houses is almost absent and by no way sun light penetrates inside resulting in darkness even during the day time, resulting in dampness inside. Such conditions of the houses are certainly, in no way conducive for a healthy life of the residents and the probability of the incidence of ailments like, mental disorders, stress, bad temper, irritation, mental depression, breathing problem etcetera become most probable.

TABLE - 7 Percentage of Households by Ventilation Category in Different Land Holding Size

Land Size (in Acres)	Dhaniwada			Gojariya			Hanf			Hamirpur			Kadipani			Navelja			Samaltvant		
	Ventilation Category																				
	G	M	B	G	M	B	G	M	B	G	M	B	G	M	B	G	M	B	G	M	B
Landless	-	50	50	-	-	-	-	-	-	-	-	-	-	85.7	14.2	-	-	-	-	-	-
0.01-1.0	-	28.5	71.4	-	100	-	-	50	50	-	60	40	-	75	25	20	40	40	10	70	20
1.01-2.0	-	50	50	-	80	20	16	50	33.3	-	62.3	37.5	-	100	-	-	100	-	-	66.6	33.3
2.01-3.0	-	100	-	-	50	50	-	83.3	16.6	-	62.3	37.5	50	50	-	-	60	40	20	40	40
3.01-4.0	-	66.6	33.3	-	-	100	33.3	66.6	-	-	33.3	66.6	-	50	-	-	100		-	100	-
4.01-5.0	-	66.6	33.3	33.3	33.3	33.3	0	50	50	-	-	100	-	50	-	-	100		-	33.3	66.6
Above5.01	-	75	25	-	28.5	71.4	25	75	-	-	-	-	-	100	-	-	50	50	-	-	100

G: Good Ventilation; **M**: Medium Ventilation; **B**: Bad Ventilation.

Defecation facility is also one of the important aspects of hygiene and if it is not proper, it may lead to the spread of various communicable diseases. It can be observed that in all the seven villages, people mostly use open space outside their houses for defecation purposes (Table – 8). Only in two villages viz. Kadipani and Gojariya, all households have toilet facility inside the house, perhaps because Kadipani is a mining (GMDC) area and Gojariya is located near Kavant, the *taluka* headquarter.

Table-9 Prevalence of Diseases

Land Size (in Acres)	Diseases
Landless	Fever, Back pain, T.B, Depression.
0.01-1.00	Piles, T.B.,Tumor.
1.01-2.00	Fever, Cough, malaria, mouth ulcer, eye pain, joint pain, Lung disease, T.B., Cancer.
2.01-3.00	Fever, cough, joint pain, stomach pain, Pneumonia, Malaria
3.01-4.00	Fever, stomach pain, T.B
4.01-5.00	Fever, Breathing problem, Polio ,T.B
Above 5.01	Cough and Acidity problem

Table - 8 Percentage of Households by Defecation Facility in Different Categories of Land Size holding

Landsize (in Acres)	Dhaniwada		Gujariya		Hanf		Hamirpur		Kadipani		Navelja		Samaltvant	
	Defecation Facility													
	I	O	I	O	I	O	1	O	I	O	I	O	I	O
Landless	-	100	-	-	-	-	-	-	14.2	85.7	-	-	-	-
0.01-1.0	-	100	-	100	-	100	-	100	25	75	-	100	-	100
1.01-2.0	42.8	57.2	-	100	-	100	-	100	-	100	-	100	-	100
2.01-3.0	-	100	-	100	-	100	-	100	-	100	-	100	-	100
3.01-4.0	-	100	-	100	-	100	-	100	16.6	83.3	-	100	-	100
4.01-5.0	-	100	16.6	83.3	-	100	-	100	100	-	-	100	-	100
Above 5.01	-	100	14.2	85.7	-	100	-	100	-	100	-	100	-	100

I: Inside House; **O**: Outside House.

The survey of the seven villages of the *taluka*, reveals that most people irrespective of economic status suffer from diseases that are communicable in nature. Table – 9 indicates that, people in all land size categories, are affected by different kind of diseases such as, fever, cough, back pain, piles, T.B., lung diseases, malaria and breathing problem etcetera. It also indicates that in all categories, T.B., is the most prevalent disease across almost all land holding size categories. Another striking feature that emerged out of the survey is, people are also affected by non-communicable diseases like, tumor and cancer.

There are a total of seven PHCs in Kavant *taluka*, which is relatively less with respect to the population of the *taluka*. Resultantly, the PHCs can be reached by the people of most villages only after travelling a distance of 5 to 10 kilometers. Villages like Dhaniwada and Hamirpura are the two villages among the seven surveyed villages which lie within 5 kilometers distance from the PHC located at Kavant. The people of Kadipani, located near the GMDC Fluorspar mine, also get the benefit of the PHC located there. People from other villages need to travel at least 5 to 10 kilometers to reach the nearest PHC.

Although majority of the people (66.67%) makes use of the Government run PHCs and CHCs, absence of public health care centre at an easily accessible distance has resulted in the continuation of the practice of adhering to the traditional method of visiting the witch doctor (locally called *Bhua*) by a segment of the population in every village. It is interesting to note that no person from the landless category households visit the witch doctor. The reason could be, majority of the landless household people seasonally migrate to the nearby urban areas, where their exposure to modern forms of medicine has inculcated a different perception in them towards medical treatment. This was also clarified through personal discussions. The proportion of households going to the witch doctor is also relatively less among the large land owning households, probably due to increased level of education and awareness. Besides, around a third of the population in every village also prefers to visit the private medical practitioner. Although not much of difference is noticed in the proportion of households of different land size categories in visiting the private doctor, relatively a higher proportion of the largest land owners display preference to visit the private doctor (Table – 10).

Conclusion

It is concluded that most of the people of Kavant *taluka* have small landholdings of lesser than two acres in size. Cultivation of crops and agricultural labourer are the main economic activities of the population. The economic condition of the all villagers is comparatively low and maximum population is under below poverty line. Most houses in this *taluka* are of *kutcha* type (85%), made up of mud, wood, bamboo, thatch. Only 28 (13%) houses were *pucca* houses constructed with the help of the Indira Awas Yojana. Ventilation is poor to moderate in almost all houses. With a limited number of rooms to live in and without proper cleanliness, the probability of acquiring diseases increases. Besides the people in the study villages were found to be lacking in maintaining sanitation and hygiene. Among all the surveyed households, only 6 (2.86%) houses were found to have had defection facility inside the house. The health status of the tribes in the villages studied do not display satisfactory situation. This observation stands true all across irrespective of land size holding. People are suffering from common type of diseases such as fever, cough, joint pain,

Table -10 Percentage of Households by Type of Health Treatment Availed in Different Categories of Land Holding Size

Land Size (in Acres)	Bhua	Pvt.Doctor	PHC	CHC	Government (PHC+CHC)
Landless	0	33.3	33.3	33.33	66.66
0.01-1.0	6.5	32.8	46	14.4	60.4
1.01-2.0	8.8	32.3	50	8.8	58.8
2.01-3.0	10	33.3	46.6	10	56.6
3.01-4.0	10.6	34	46.8	8.5	55.3
4.01-5.0	4.8	26.8	53.6	14.6	68.2
Above 5.01	3.4	41.3	44.8	10.3	55.1
Total	**7.4**	**33.30**	**47.90**	**11.60**	**59.50**

stomach problem and malaria. Besides, cases of T.B., cancer, stroke, breathing problem etcetera were also found as common diseases among the surveyed population. For purposes of treatment people generally prefer to go to the Government health centers, which are located at 5 to 10 kilometers distance. In the final analysis, the study clearly brings out the problem of accessibility of health facilities in the area which is perhaps one of the main reasons behind the poor health condition of the people. The study suggests that further research on the issue of accessibility of health care facilities in the study can make relevant revelations.

Besides, lack of awareness among people through formal and informal education acquires importance under the situation. In the absence of alternative employment opportunities in the area, people are compelled to depend almost fully on agricultural pursuits in an agriculturally difficult ecology, which do not produce enough to sustain them yearlong. To compensate the deficiency, a good number move out seasonally in search of casual labour in the unorganized construction sector of the nearby urban centres. The gradual depletion of forest cover in the area has snatched away a traditional alternative avenue for the tribes to fall back upon for their survival, dragging them towards perennial poverty, ignorance and ill health. The study is clearly indicative of the fact that, improvement of health status of the population in the tribal areas of the State needs to be approached with a coordinated manner involving all pervasive development of the area.

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Authors' Contact

Ms. Vijayata*
* Research Scholar,
Department of Geography,
Faculty of Science,
The M. S. University of Baroda,
Vadodara-Gujarat
390002.
and

Dr. Niladri Ranjan Dash**
** Professor,
Department of Geography,
Faculty of Science,
The M. S. University of Baroda,
Vadodara-390002.
Email: n_r_dash@yahoo.com
Mob: 09427837149.