Household Quality of Life Index among Ethnic Population of North Kashmir Himalayas- India

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ABSTRACT

Housing dimension is regarded as the major issue affecting the quality of life. It can be assessed by quality of housing and its environment. The present paper highlights the housing quality index among ethnic population (Gujjars) of North Kashmir Himalayas. To assess the household quality of life sample survey was done. About 557 households were selected for the sample survey from five altitudinal zones. Household quality of life index (HQLI) was calculated on the basis of 11 variables. Household quality of life is made up of two distinctive indices such as housing condition index (HCI) and asset possession index (API). From the study it was analysed that variation in housing condition variables was found among all altitude zone l household quality of life index was better in Zone A (5.3) and Zone C (4.5) as compared to other altitude zones. Zone D and zone B has recorded very low housing quality. This clearly shows that accessibility, income, housing structure, family possession has an impact on housing quality of life.

Keywords: - Altitudinal zones, Ethnic, Household quality of Index,

I.INTRODUCTION

The type of house primarily depends upon the geographical environment and the socio-economic structure of the people [1]. Housing environment includes housing conditions, household water supply conditions, indoor air pollution and indoor noise pollution [2]. Housing structure and quality of materials used is one of the important parameter for estimating QoL [1]. Housing is regarded as an important social determinant of physical and mental health and well-being [3]. The concept of housing conditions is very broad and encompasses both the dwellings physical attributes and satisfaction with housing [4]. Measuring housing conditions and their effects

on people's well-being is a complex task because there are very few comparable indicators [5]. Housing reflects the cultural, social and economic values of the society, as it is the best physical and historical evidence of the civilization of a country [6]. The essence of study is to study the housing quality of life among gujjars of North Kashmir Himalayas.

A unique cultural identity with low socio-economic status is found among the high altitude ethnic group (Gujjars) of North Kashmir Himalayas. Majority of the anthropologists, sociologists, geographers are of the opinion that origin of gujjars are from central Asia [7]. The gujjars are having symbiotic interaction with the surrounding environs and in turn they derive their basic livelihood from them [8]. Environment has played a great role in their housing, food, and clothing and living style [9].

II.STUDY AREA

North Kashmir Himalayas is a branch of Great Kashmir Himalayas which lies between $34^0 16'$– 34^0 $40'$North Latitude and $73^0 45'$- 75^0 $35'$East Longitude (Fig 1). The mountainous range has an average altitude of 2324 meters and extends over an area of 5110.60 sq. Kms. North Kashmir Himalayas takes a blend towards the south west near Zojila to Kazinag. North Kashmir Range acts as a water divide between Jhelum in Kashmir valley and Kishanganga of Gurez valley [10]. North Kashmir is drained by Sind, Erin, Madhumati, Pohru, Kahmil, Mawar and Viji streams which finally drains their waters in river Jhelum. This area is abode of sedentary tribe locally called as Gujjars, [11]. They are settled in the foothills of North Kashmir Himalayas between 1600-2400 meters above mean sea level [12]. The total number of Gujjar villages in North Kashmir Himalayas is 113. The total population of North Kashmir is 2568071 persons and the total Gujjar population is 244501 persons [13].
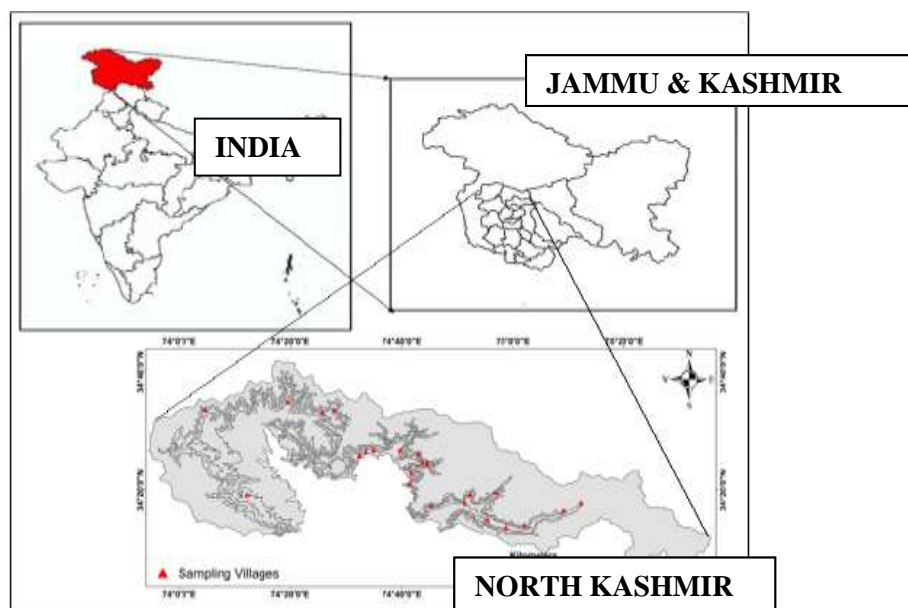

Fig 1 Study Area

III.DATA BASE AND METHODOLOGY

3.1 Survey of India Toposheets

The Survey of India Toposheets (1971) on scale 1:50000 were used in the present study to generate various data layers such as base map, settlement distribution map and drainage map.

3.2 Socio-economic data

This study relied more on primary sources of data and partly on secondary data. Primary data has been generated through sample survey with the help of structured questionnaires/ schedules, interviews, observations etc.
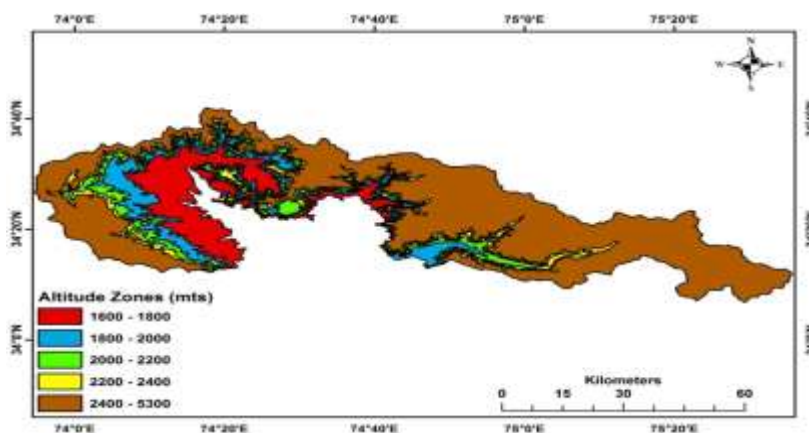
The data pertaining to various socio-economic and demographic variables of north Kashmir Himalayas have been collected from various departments. The data on population and its various attributes was obtained from Census Department; data regarding gujjar settlements was collected at district level offices.

The area under study was fairly large characterized by large altitudinal variations; it was divided into five altitudinal zones with 200 metre interval with the help of ArcGIS10.3 (Fig 2).

Table 1 Sample Frame

Altitude Zone (in mts)	Total H.Holds	Total Population (Persons)	H.H Sample Size	Sample Villages
Altitude Zone A (1600-1800)	1543	10053	125	4
Altitude Zone B (1800-2000)	2291	17022	184	9
Altitude Zone C (2000- 2200)	1983	14208	159	5
Altitude Zone D (2200-2400)	421	3096	33	3
Altitude Zone E (2400 and above)	703	6381	56	2
Total	**6941**	**50760**	**557.0**	**23**

Source: - Census, 2011

Figure 2 Altitude zones in North Kashmir Himalayas

3.3 Methodology Quality of Household Index

The household quality of life index was constructed by proportionate possession weighting technique. Possession weighting was suggested by Peter Townsend (1979) in his study of Poverty in the United Kingdom. It involves measuring the normal level of possession for standard of living or health measures and then weighting each component of an index by this level (or its inverse). The possession weighting method has been widely used by European social scientists, particularly when comparing survey results from different countries or from different years in the same country.

The household quality of life index includes two major components viz. housing condition index and household asset possession index. Each is comprised of several indicators or sub-components [14] [15]. Such type of indices have been used extensively in similar research where public opinion on the minimum acceptable standard of living has been used to construct indices that are weighted to reflect those differences by sex, age and family composition [16]. All unidirectional variables are to be given a weighting. The percentage of households avail with a particular facility or possess a particular asset has to be converted its share out of ten. Then the weights are calculated by minus the value of converted value from ten. After adding up all the scores of different variables of a particular observation the index is constructed. Here, negative aspects of the households are chosen to make the index. Higher score indicates better condition of the altitudinal zones.

To assess the household quality of life for sampled households of north Kashmir Himalayas, a household quality of life index (HQLI) was calculated on the basis of 11 variables. Household quality of life is made up of two distinctive indices such as housing condition index (HCI) and asset possession index (API). The details of variables are in Table 2.

Table 2 Variables for Household Quality of life Index

Variables used for Housing Condition Index	Variables used for asset Possession Index	Household Quality of life Index
Housing Structure	T.V	Household Condition
Ventilation	Radio	Index
Fuel used	Vehicles	
Electricity	Cell Phones	+
Income		
Drinking Water		Asset Possession Index
Sanitation		

IV. RESULTS AND DISCUSSIONS

4.1 House Hold Quality of Life Index

To assess the household quality of life for sampled households of north Kashmir Himalayas, a household quality of life index (HQLI) was calculated on the basis of 11 variables. Household quality of life is made up of two distinctive indices such as housing condition index (HCI) and asset possession index (API). The details of housing quality of life index are given in Table 3.

Table 3 Housing Quality of Life Index among Gujjars in North Kashmir Himalayas

Housing Condition Index					
Variables / Altitude Zone	A	B	C	D	E
Housing Structure	2.2	1.8	1.2	0.9	1.1
Ventilation	3.8	3.0	2.5	2.1	2.1
Fuel used for Cooking	1.4	1.4	1.1	0.6	1.3
Electricity	3.8	3.4	4.7	3.0	2.7
Income	2.1	1.4	1.6	1.2	1.6
Drinking Water	4.4	3.6	3.3	3.0	4.6
Sanitation	3.0	0.9	0.4	0.3	0.4
	3.0	**2.2**	**2.1**	**1.6**	**2.0**
Asset Possession Index					
Television	2.1	1.1	1.2	0.6	1.3
Radio	4.1	3.7	5.5	3.6	4.3
Vehicles	1.0	0.4	1.6	0.6	0.7
Cell Phones	2.1	1.1	1.2	0.6	1.6
	2.3	**1.6**	**2.4**	**1.4**	**2.0**
Housing Quality Life Index					
Housing Condition Index	3.0	2.2	2.1	1.6	2.0
Asset Possession Index	2.3	1.6	2.4	1.4	2.0
Housing Quality of Life Index	**5.3**	**3.8**	**4.5**	**3.0**	**4.0**

Computed from sample survey 2016

From the table 3 it was found that there are also substantial differences in housing condition index within the altitude zones. The evaluation of household condition index found to be higher in zone A (3.0) as compared to other altitude zones (Fig 3). The study finds deterioration in housing condition as well as in asset possession.

The household quality of life index was better in Zone A (5.3) and Zone C (4.5) as compared to other altitude zones. The reason could be more accessibility, higher educational and occupational standards compared to other zones. Zone D and zone B has recorded very low housing quality. This clearly shows that accessibility, income, housing structure, family possession has an impact on housing quality of life.
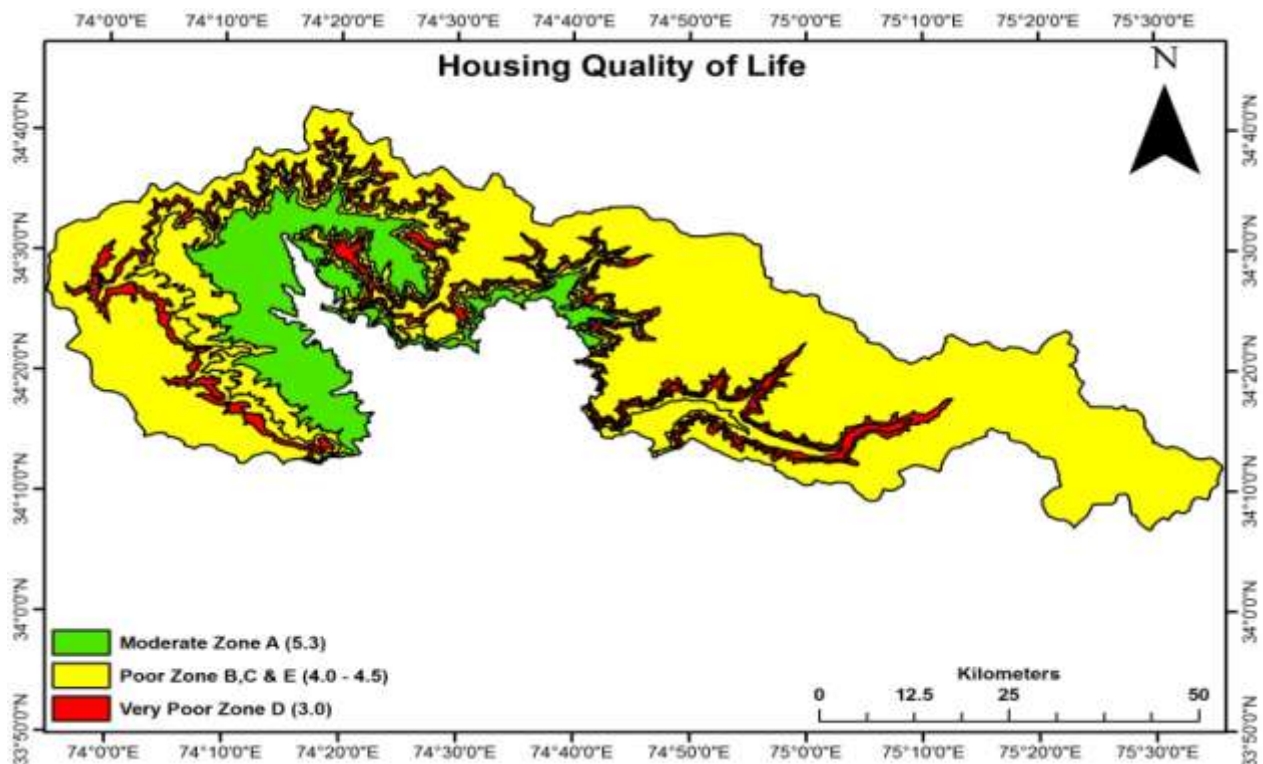

Fig 3 Household Quality of Life

V. CONCLUSION

The housing quality of a place is determined by the living standard of population. The housing quality among gujjars was found deplorable throughout the altitudinal zones though zone A and C have better household quality of life. The mountainous topography, low economic status and inaccessibility have influenced the housing environment of ethnic population in North Kashmir Himalayas. Housing quality of life index does not include subjective indicators which is the main limitation of the study. There should be positive role of Government agencies and non-Government agencies for the upliftment of ethnic population in North Kashmir Himalayas by framing and adopting policies and awareness programmes.

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