

Research Article

Demographic Profile of Union Territory of Ladakh

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ABSTRACT

This paper looks at changes in the demographic composition of Union Territory of Ladakh over last three decades. Ladakh comprises of two districts namely, Leh district and Kargil district. The demographic composition includes the place of residence (rural and urban), sex ratio, literacy rate, workforce participation rate and occupation pattern. The successive Census reports show more than two-thirds of population of Ladakh lives in rural areas. The sex ratio is found one the lowest in the country and continuously declining during the study period. The Census reports also show an impressive increase in the literacy rate over the years. The workforce participation rate is declined over the last three decades and a shift from the traditional sector i.e. agriculture to non-traditional sector i.e. service sector. The paper is completely based on secondary data that is Census of India.

Introduction

Ladakh became a Union Territory on 31st October 2019, when the Government of India bifurcate the state of Jammu and Kashmir into two union territories, the Union Territory of Jammu & Kashmir and the Union Territory of Ladakh. Lying between 32°15' N to 36° N Latitude and 75°15' E to 80° E Longitude, it is bounded in the North and East by Tibet (China), in the Northwest by Gilgit and Skardo (Pakistan), and Baramulla, Srinagar, Anantang, and Doda districts in the west (Singh, H, 1992). The geographical area of the region is approximately 95,876 sq. km (including the areas occupied by China and Pakistan). Ladakh is known as one of the most elevated regions on the earth. The region is administratively divided into two districts, namely Leh and Kargil.

Ladakh is one of the lowest density regions in India. The average density of population of Ladakh is only 5.5 persons per sq.km, with 3 persons per sq.km in Leh (Economic Review of Leh District, 2001-02) and 8 persons per sq.km. in Kargil (Economic Review of Kargil District, 2001-02). According to Census of India 2011, total population of Ladakh was 274289, with 133487 in Leh district and 140802 in Kargil district. During 2001-2011, the average annual population growth of Ladakh was 2.98 percent, with 2.91 percent in Leh district and 3.05 percent in Kargil district.

More than two-third of population of Ladakh lives in rural areas. Like the rest of the world, the occupation pattern in Ladakh is also changing i.e. the workforce has gradually shifted from the traditional to the non-traditional occupations.

Objective of the Study

The broad objective of this paper is to analyze the changes in the demographic composition of the Union Territory of Ladakh. The specific objectives of the paper include determining whether there has been any shift from traditional occupation to non-traditional occupations.

Methodology

This paper is entirely based on secondary data. The data is collected from the Census of India, 1981, 2001 and 2011, Primary Census Abstract (PCA) of Leh and Kargil districts. However, in 1991, Census was not held in Jammu and Kashmir. The data on workforce is related to the Industrial Classification of Workforce, i.e. the four-fold classification of workforce: 1. Cultivators; 2.

Agricultural Labour; 3. Household Industry; and 4. Other Workers. Therefore, for the sake of analysis the paper will categorize the first two as agricultural sector and the subsequent two as non-agricultural sector. This four-fold classification of workforce is further classified into Main and Marginal Workers. But Census of India 1981 does not give this four-fold classification for marginal worker and therefore, the paper will highlight the shift in main workers only.

To see the concentration of various demography and workforce engaged in different economic activity, simple percentage share has been used. The temporal change has been measured by net percentage change, and by gender.

Population Composition of Ladakh

Population composition refers to the physical, socio-cultural and economic attributes of the population such as age, sex, place of residence, language, religion, marital status, ethnicity, literacy, education and occupation. In this paper, I will discuss the place of residence, sex, literacy and occupation pattern of this unique Himalayan region.

Rural-Urban Composition:

Place of residence determines most of the demographic and socio-economic characteristics of a population. Nearly three-fourths of the people in India live in villages. Urban population constitutes a little more than one-fourth of the total population.

Table 1 shows that, as per Census of India 2011, 77.39 percent of total population of Ladakh lives in rural areas, in 2001, 83.39 percent of total population of Ladakh lives in rural area and in the year 1981, the share of rural population was 90.21 percent.

Table 1: Share of Population of Rural & Urban in Union Territory of Ladakh (in percentage)

<i>Year</i>	<i>Rural/ Urban</i>	<i>Leh District</i>	<i>Kargil District</i>	<i>UT Ladakh</i>
1981	Rural	87.25	94.66	90.21
	Urban	12.75	5.34	9.79
2001	Rural	75.57	91.07	83.39
	Urban	24.43	8.93	16.61
2011	Rural	65.79	88.40	77.39
	Urban	34.21	11.60	22.61

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

In the 2011, 65.79 percent of population of Leh district lives in rural areas, while in Kargil district 88.4 percent of population lives in rural areas. In 2001, 75.57 percent of population of Leh district lives in rural areas, while in Kargil district 91.07 percent of population lives in rural areas. In 1981, the percentage share of rural population in Leh district was 87.25 percent, while in Kargil district it was 94.66 percent.

The rural-urban composition of population shows that, large share of population in Ladakh lives in rural areas. Therefore, the economic policies of government should focus more on rural development.

Urbanization

The process of society's transformation from a predominantly rural to a predominantly urban population is known as 'urbanization'. It includes two things — an increase in the number of people living in urban settlements, and an increase in the percentage of the population engaged in non-agricultural activities, living in such places.

Table 2 reveals that rate of urbanization in Union Territory of Ladakh. In the year 1981, 9.79 percent of total population of Ladakh lived in urban areas, after two decades in 2001 share of urban population of Ladakh rose to 16.61 percent. In the 2011, the share of urban population of Ladakh is reached to 22.61 percent with increase of 6 percentage points.

In the year 1981, 12.75 percent of total population of Leh district lived in urban areas, while in Kargil district only 5.34 percent of the population lived in urban areas. After two decades i.e. in 2001, share of urban population of Leh district increased to

24.43 percent, while in Kargil district it rose to 8.93 percent. In the year 2011, share of urban population in Leh district rose to 34.21 percent with approximately 10 percent rise, while in Kargil district, it is marginally increased by 2.67 percentage points. It is found that, there is a wide gap in the rate of urbanization between the two districts. The prime reason for the difference in the rate of urbanization between the two districts could be the high growth rate of tourism industry in Leh district.

Table 2: Rate of Urbanization in Union Territory of Ladakh (in percentage)

<i>Year</i>	<i>Leh District</i>	<i>Kargil District</i>	<i>UT Ladakh</i>
1981	12.75	5.34	9.79
2001	24.43	8.93	16.61
2011	34.21	11.60	22.61
Net Change 1981-2001	11.68	3.59	6.82
Net Change 2001-2011	9.78	2.67	6

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Sex Composition

The sex composition of a population is usually expressed in terms of the sex ratio i.e., number of females per thousand males. Sex composition is considered an important indicator of inequality between males and females in a society.

It is astonishing to note that the sex ratio in Ladakh declined over the years, and more severely in Leh district. Table 3 documents that the sex ratio in Ladakh is one of the lowest in India. In the year 1981, the sex ratio in Ladakh was 870, after two decades, in the year 2001 it has come down to 830 and it has further declined to 750 in 2011.

In the year 1981, the sex ratio in Leh district was 886 and in Kargil district it was 853. In 2001, the sex ratio in Leh district has come down to 823, whereas in Kargil district it has come down to 837. The sex ratio is relatively better in rural areas of both the districts, while in urban areas it worsens in the both the districts. In the year 2011, the sex ratio in Leh district is further worsen to 690, which is marked as one of low sex ratio district in India, while in Kargil district it is further down to 810.

The low sex ratio in both the district can be attributed to factors other than female infanticides or any violence against girl-child in the region, as such incidences are never been reported from the region. Usually more males than females are born at high altitude, but female mortality is high in this population group (Goldstein, C. M, 1981). Therefore, the reason for low sex ratio may be high female mortality rate.

Table 3: Sex Ratio in Union Territory of Ladakh

<i>Rural /</i>	<i>Leh District</i>			<i>Kargil District</i>			<i>UT Ladakh</i>		
	1981	2001	2011	1981	2001	2011	1981	2001	2011
<i>Urban</i>									
Total	886	823	690	853	837	810	870	830	750
Rural	911	904	814	859	869	838	884	885	828
Urban	733	611	494	758	559	621	740	597	526

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Literacy Rate

According to the Census of India, a person who can read and write is defined as literate and a person who cannot read and write is defined as illiterate.

Table 4 shows the Literacy rate in Ladakh over the years. In the year 1981, the literacy rate in Ladakh was merely 22.02 percent and it is increased to 54.57 percent in 2001. In the year 2011, the literacy rate in Ladakh was 65.63 percent, which is increased by 11.06 percentage points from previous decade. Although there was remarkable improvement in the literacy rate in Ladakh, however, the disparity between male literacy rate and female literacy rate remain persisted in Ladakh during the study period.

In the year 1981, the literacy rates in both Leh and Kargil districts were very low, with 25.08 percent and 18.86 percent respectively. In both the districts, literacy rate in the rural areas were more deplorable. However, literacy rates in urban areas were relatively higher in both the districts. The female literacy rate in both the districts was very low, with only 3.14 percent in Kargil district and 12.09 percent reported in Leh district (as shown in table 4).

After two decades, in 2001, there was a significant increase in literacy rate in the two districts. The literacy rate in Leh district increased to 58.24 percent and in Kargil district it is increased to 50.96 percent. Although there was a significant increase in female literacy rate in both the districts, it is still relatively low.

In the year 2011, the literacy rate in the Leh district was more than 80 percent with 89.39 percent of male literacy rate and 64.52 percent of female literacy rate. During same period the literacy rate in Kargil district reached to 74.49 percent with 86.73 percent of male literacy rate and 58.05 percent of female literacy rate.

Although, the literacy rate Leh district is relatively better than Kargil district, especially in female literacy rate, however, the rate of increase in the literacy rate is higher in Kargil district. The higher literacy rate in Leh district could be attributed to the greater tourism based economic opportunities in Leh district. Increase in literacy rate is not only due to the tourism based economic opportunities, the influx of tourists exposes the native people to tourists from other parts of the world (Sood, V.K, 1999). This resulted in spreading new ideas, exposures, broad thinking, cultural exchanges and contact with the outside world, which have contributed towards increasing literacy rate of Leh district.

Table 4, Literacy Rate in Union Territory of Ladakh (in percentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	36.59	12.09	25.08	32.26	3.14	18.86	34.44	7.74	22.02
2001	67.90	46.51	58.24	64.40	34.90	50.96	66.14	40.63	54.57
2011	89.39	64.52	80.48	86.73	58.05	74.49	76.00	51.79	65.63
Net Change 1981-2001	31.31	34.41	33.16	32.14	31.76	32.11	31.70	32.89	32.55
Net Change 2001-2011	21.49	18.01	22.24	22.33	23.15	23.53	9.86	11.16	11.06

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Worker and Non-worker

The Census of India categorizes the Indian population into the economically active and economically non-active populations. The former is termed as workforce, and the latter consisting of the children, the students, the household workers, the old-aged people, etc. is called the non-workers.

Table 5 gives the workforce participation rate in Union Territory of Ladakh. The workforce participation rate in Ladakh is declining over the year, particularly female workforce participation rate. In the year 1981, the workforce participation rate in Ladakh was 52.63 percent and it has come down by 4.53 percentage points in 2001. In 2011, it is further declined by 1.82 percentage points to 46.28 percent. During the same period, though the male workforce participation rate is increased by

5.21 percentage points, however female workforce participation rate declined by nearly 12 percentage points. This implies that the dependent population is increased in Ladakh over the years.

In the year 1981, the workforce participation rate was higher in Kargil district (54.94 percent) than in Leh district (50.39 percent). However, workforce participation rate was higher among males in both the districts.

As indicated by the Census of 2001, the workforce participation rate declined in both the districts over the two decades. The rate of decline was however more severe in Kargil district, (by 8.3 percentage points) while it declined marginally in Leh district (by 0.81 percentage points).

In the year 2011, there was considerable increase in the workforce participation rate by 6.66 percent and male workforce participation rate by 9.13 percent increase in Leh district. However, there was marginal decline by 1.04 percent in female workforce participation rate during same period in Leh district. In the year 2011, the workforce participation rate in Kargil district further decline by 9.8 percent and sharper decline in female workforce participation rate by 23.43 percent. However, there was marginal increase in male workforce participation rate by 1.14 percent in Kargil district during same period (as shown in table 5).

Table 5: Workforce Participation Rate in Union Territory of Ladakh (in percentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	59.46	40.15	50.39	59.53	49.57	54.94	59.50	44.73	52.63
2001	58.32	38.97	49.58	50.08	42.53	46.64	54.18	40.77	48.10
2011	67.45	40.01	56.24	51.22	19.10	36.84	59.39	28.80	46.28
Net Change 1981-2001	-1.14	-1.19	-0.81	-9.45	-7.04	-8.30	-5.32	-3.96	-4.53
Net Change 2001-2011	9.13	-1.04	6.66	1.14	-23.43	-9.8	5.21	-11.97	-1.82

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Main Worker and Marginal Worker

Census of India, defines the main worker as “a person who had worked for the major part of the year” and major part of the year is defined as 6 months (183 days) or more. Marginal workers are those who worked any time at all in the year preceding the enumeration but did not work for the major part of the year i.e. those who worked for less than 183 days or six months.

Table 7 gives the percentage share of main workers to total workforce in Union Territory of Ladakh. In the year 1981, there was impressive share workforce engaged as main workers with 84.41 percent. However, the successive census report shows that there is declined in share of main workers and it has declined to 67.77 percent (16.64 percentage points fall). The severity of fall in the share of main workers to total worker was more in female main workers.

In the year 1981, 86.42 percent of workforce engaged as main workers in Leh district, and it sharply declined to 66.71 percent in the year 2001. However, there was significant improvement in the year 2011 with 76.09 percent of main workers. Similarly, in the year 1981, 82.5 percent of workforce engaged as main workers in Kargil district, and it has declined to 68.88 percent in 2001 and it is further declined to 55.79 percent in 2011.

It is found that, in the both district male population is economically more active. In both the districts, both male and female main workers are declined over the period of two decades of 1981 to 2001. However, in the year 2011, there was significant improvement in both male and female workers engaged as main workers in Leh district. In the year 2011, the percentage share of main workers, both male and female main workers further decline in Kargil district and more severe decline in female main workers.

Correspondingly, the exactly the opposite is true for the marginal workers in Union Territory of Ladakh as shown in table 8. The marginalization workforce in Ladakh, and for both male and female are taking place during this study period, except in the year 2011, there was considerable decline in marginal worker in Leh district.

Table 7: Share of Main Worker to Total Workforce in Union Territory of Ladakh (in percentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	96.08	70.29	86.42	92.47	68.47	82.50	94.29	69.31	84.41
2001	76.08	49.68	66.71	79.29	54.24	68.88	77.57	52.09	67.77
2011	84.00	56.77	76.09	63.19	31.30	55.79	75.09	47.71	67.79
Net Change 1981-2001	-20.00	-20.61	-19.71	-	-14.22	-	-16.72	-17.22	-16.64
Net Change 2001-2011	7.92	7.09	9.38	-16.1	-22.94	-	-2.48	-4.38	-0.02
				13.18		13.62			
						13.09			

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Table 8: Share of Marginal Worker to Total Workforce in Union Territory of Ladakh (in percentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	3.92	29.71	13.58	7.53	31.53	17.50	5.71	30.69	15.59
2001	23.92	50.32	33.29	20.71	45.76	31.12	22.43	47.91	32.23
2011	16.00	43.23	23.91	36.81	68.70	44.21	24.91	52.29	32.21
Net Change 1981-2001	20.00	20.61	19.71	13.18	14.22	13.62	16.72	17.22	16.64
Net Change 2001-2011	-7.92	-7.09	-9.38	16.1	22.94	13.09	2.48	4.38	0.02

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Occupation Structure

The occupation of an individual refers to his or her profession, trade, or any type of work. The occupational structure of the population of India is the product of a number of factors. The occupation is classified into primary, secondary and tertiary sector. In country like India, it is also often classified into agriculture and non-agriculture sectors.

Traditionally, agriculture was the major livelihood option for most of the households in Ladakh. Successive Census reports indicate a shift from the traditional sector (agriculture) to non-traditional sector (service sector). As evident from table 9, in 1981, 71.67 percent of main workers in Ladakh were engaged in agriculture sector. However, in 2001, the share of main workers engaged in agriculture sector sharply declined by 40.47 percentage points and it is further declined by 14.79 percentage points in 2011.

In the year 1981, 65.84 percent of main workers in Leh district were engaged in agriculture sector, but it steeply declined by 39.42 percentage points to 26.43 percent in 2001 and it is further decline to 20.6 percent in 2011. Similarly, in 1981, 77.48 percent of main workers in Kargil district were engaged in agriculture sector, while only 36.03 percent of the main workers were engaged in agriculture sector in 2001, i.e. a steep decline by 42.52 percentage points and it is further declined to 8.15 percent in 2011. This is mainly due to the erosion of subsistence economy at the advent of conventional development in Ladakh (Norberg H. H, 1992).

It was found that, in both districts more percentage share of female main workers were engaged in agriculture sector, which was higher in Kargil district. However, this trend got change in 2011, where female main workers were higher in Leh district. Table 9 shows that, in the year 1981, 84.46 percent of female and 57.69 percent of male main workers in Leh district were engaged in agriculture sector, while in the year 2001, it sharply declined by 34.01 percentage points and 39.89 percentage points respectively. In the 2011, the female main workers engaged in agriculture sector in Leh district has come down to 41.68 percent and male counterpart has come down to 14.77 percent. Similarly, in the year 1981, 97.04 percent of female and 67.19 percent of male main workers in Kargil district were engaged in agriculture sector, while in 2001, it sharply declined by 37.75 percentage points and 42.47 percentage points respectively. In the year 2011, it is further declined by 33.35 percentage points and 19.23 percentage points respectively.

Table 9: Share of Main Worker engaged in Agriculture Sector in Union Territory of Ladakh (in percentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	57.69	84.46	65.84	67.19	97.04	77.48	62.31	91.16	71.67
2001	17.80	50.45	26.43	24.72	59.29	36.03	21.09	55.32	31.20
2011	14.77	41.68	20.60	5.49	25.94	8.15	11.43	38.01	16.41
Net Change 1981-2001	-39.89	-34.01	-39.42	-	-37.75	-	-41.22	-35.84	-40.47
Net Change 2001-2011	-3.03	-8.77	-5.83	-	-33.35	-	-9.66	-17.31	-14.79
				19.23		27.88			

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Table 10 shows the main workers engaged in non-agriculture sector in Ladakh. During the last three decades, it is found that, for both male and female, there was complete shift in occupational structure from agriculture sector to non-agriculture sector. In the year 1981, 28.33 percent of main workers were engaged in non-agriculture sector and it is increased by 40.47 percentage points in 2001. In 2011, the share of main workers engaged in non-agriculture sector was further increased by 14.79 percentage points to 83.59 percent. This trend of shifting from agriculture to non-agriculture was more dominant in male main workers.

In the year 1981, 34.16 percent of main workers in Leh district were engaged in non-agriculture sector, it is gone up by 39.42 percentage points in 2001 and in the year 2011 nearly 80 percent of main workers were engaged in non-agriculture sector. Similarly, in the year 1981, 22.52 percent of main workers in Kargil district were engaged in non-agriculture sector, it is increased by 41.45 percentage points in 2001 and in the year 2011, it is further rose to 91.85 percent (increased by 27.88 percentage points).

However, it is important to mention that the workers engaged in non-agriculture sector may not portray an exact picture in Ladakh because it also includes workers engaged in livestock rearing (Singh H, 1998). Due to this definition problem, it may mislead the analysis because in many parts of Ladakh *Nomadic* economy exists, especially in the Eastern part of Ladakh

namely *Changthang* region of Leh district. Nonetheless, the share of such nomadic population in the total population of Ladakh is insignificant.

Table 10: Share of Main Worker engaged in Non-Agriculture Sector in Union Territory of Ladakh (in percentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	42.31	15.54	34.16	32.81	2.96	22.52	37.69	8.84	28.33
2001	82.20	49.55	73.57	75.28	40.71	63.97	78.91	44.68	68.80
2011	85.23	58.32	79.40	94.51	74.06	91.85	88.57	61.99	83.59
Net Change 1981-2001	39.89	34.01	39.42	42.47	37.75	41.45	41.22	35.68	40.47
Net Change 2001-2011	3.03	8.77	5.83	19.23	33.35	27.88	9.66	17.31	14.79

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Sub-categories of workforce

The workforce engaged in agriculture and non-agriculture sectors can further be sub-categorized into Cultivator, Agriculture Labour, Household Industry and Other Worker as per Census of India. The agricultural sector comprises of the workforce engaged as cultivator and agriculture labour, while the non-agricultural sector comprises the workforce engaged in household industry and other workers.

Cultivators

Census of India, defines Cultivator as a person "if he or she is engaged either as employer, single worker or family worker in cultivation of land owned or held from government or held from private persons or institutions for payment in money, kind or share. Cultivation includes supervision or direction of cultivation".

Table 11 documents the share of main workers engaged as cultivators in Ladakh. In the year 1981, 66.37 percent of total main workers engaged as cultivator, while the successive census reports shows that there was sharp decline in the share of cultivator and it is declined to 30.43 percent in 2001 and further declined to 15.12 percent in 2011.

In the year 1981, 58.48 percent of total main workers engaged as cultivators in Leh district, while in 2001 it decreased by 32.95 percentage points to 25.54 percent and in 2011, it is further declined to 19.56 percent. In 1981, 74.23 percent of total main workers engaged as cultivator in Kargil district, while in 2001 it is decreased by 38.84 percentage points to 35.39 percent and in 2011 it is declined to 6.34 percent.

In 1981, 51.94 percent of male and 73.44 percent of female main workers in Leh district were engaged as cultivator, while in 2001 it decreased by 34.84 and 24.42 percentage points to 17.10 and 49.02 percent respectively. In the year 2011, it is further declined by 3.01 percentage points and 9.68 percentage points respectively. Similarly, in 1981, 62.53 percent of male and 96.47 percent of female main workers in Kargil district were engaged as cultivator, while in 2001 it decreased by 38.39 and 37.94 percentage points to 24.14 percent and 58.53 percent respectively. In the year 2011 it is further sharply decreased by 19.76 percentage points and 39.43 percentage points respectively (as given in table 11). Largely, it is due to conventional development, together with urbanization and consequent neglect of agriculture and rural economy (Norberg H. H, 1992).

Table 11: Share of Main Worker engaged as Cultivator in Union Territory of Ladakh (in percentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	51.94	73.44	58.48	62.53	96.47	74.23	57.09	85.69	66.37
2001	17.10	49.02	25.54	24.14	58.53	35.39	20.44	54.26	30.43
2011	14.09	39.34	19.56	4.38	19.43	6.34	10.59	34.70	15.12
Net Change 1981-2001	-34.84	-24.42	-32.94	-	-37.94	-	-36.09	-31.43	-35.94
Net Change 2001-2011	-3.01	-9.68	-5.98	-	-39.43	-	-9.85	-19.56	-15.31
				38.39		38.84			
				19.76		29.05			

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Agricultural Labourer

Census of India, defines Agricultural Labourer as “a person who works on another person’s land for wages in money, kind or share’. He or she has no risk in cultivation, but he or she merely works on another person’s land for wages. An Agricultural Labourer has no right of lease or contract on land on which he or she works”. As stated above that due to definition problem the workers engaged in livestock rearing are also included in this category.

Table 12 documents the percentage share of workers engaged as agricultural labour in Ladakh. In the year 1981, 5.30 percent of total main workers engaged as agriculture labour and it is further declined by 4.53 percentage points in 2001. However, in 2011, it is marginally increased by 0.53 percentage points and also for both male and female.

In 1981, 7.36 percent of total main workers engaged as agricultural labour in Leh district, while in 2001 it sharply declined by 6.47 percentage points to 0.89 percent and in 2011, it is marginally increased by 0.15 percentage points. Similarly, in 1981, 3.25 percent of total main workers engaged as agricultural labour in Kargil district, while in 2001 it is decreased by 2.61 percentage points to 0.64 percent and however it is increased marginally by 1.17 percentage points in 2011.

It is also interesting to note that there are more female workers engaged as agricultural labour compared to males workers in Leh district, while the opposite is true for Kargil district. In 1981, 5.75 percent of male and 11.03 percent of female main workers were engaged as agricultural labour in Leh district, while in 2001 it is decreased by 5.06 and 9.6 percentage points to 0.69 and 1.42 percent respectively. However, in 2011 female main workers engaged as agriculture labour is increased marginally by 0.92 percentage points. Similarly, in 1981, 4.66 percent of male and 0.57 percent of female main workers were engaged as agricultural labour in Kargil district, while in 2001 male agriculture labour decreased by 4.08 percentage points to 0.59 percent. However, the female agriculture labour has increased by 0.19 percentage point to 0.76 percent and in 2011 it is increased by 5.74 percentage points (as given in table 12). This argument suggests that more male workers are engaged in non-agriculture sector and there is migration of male workers from rural areas.

Table 12, Share of Main Worker engaged as Agricultural Labour in Union Territory of Ladakh (in parentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	5.75	11.03	7.36	4.66	0.57	3.25	5.22	5.46	5.30
2001	0.69	1.42	0.89	0.59	0.76	0.64	0.64	1.06	0.77

2011	0.68	2.33	1.04	1.11	6.50	1.81	0.83	3.31	1.30
Net Change 1981-2001	-5.06	-9.60	-6.47	-4.08	0.19	-2.61	-4.58	-4.4	-4.53
Net Change 2001-2011	-0.01	0.91	0.15	0.52	5.74	1.17	0.19	2.25	0.53

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Household Industry

Census of India, defined Household Industry as 'an industry conducted by the head of the household himself or herself and or by the members of the household at home or within the village in rural areas and only within the precincts of the house where the household lives in urban areas'. Household industry relates to production, processing, servicing, repairing or making and selling (but not merely selling) of goods.

Due to various constraints, Ladakh is not favorable for the industrialization. Because of this, percentage share of main workers engaged in household industry is very low. Table 13 shows, in 1981, 0.55 percent of total main workers engaged in household industry in Ladakh and it is marginally increased by 0.27 percentage points and 0.08 percentage points respectively in 2001 and 2011.

In 1981, only 0.84 percent of main workers engaged in household industry in Leh district, while in 2001 it is further decreased by 0.20 percentage points to 0.64 percent and in 2011 it is marginally increased by 0.24 percentage points. Similarly, in 1981, only 0.26 percent of main workers engaged in household industry in Kargil district, while in 2001 it slightly increased by 0.74 percentage points to 1 percent and in 2011 it is very marginally decreased by 0.06 percentage points (as shown in table 13).

It is interesting to note that the female main workers engaged in household industry were higher in numbers in both the districts. In 1981, 0.36 percent of male and 1.93 percent of female main workers engaged in household industry in Leh district. In 2001, the male main workers engaged in household industry marginally increased by 0.19 percentage points to 0.55 percent, while the female main workers engaged in household industry decreased by 1.05 percentage points to 0.88 percent. In 2011, female main worker engaged as household industry is increased by 1.66 percentage points and the male counterpart is marginally decreased by 0.13 percentage points. Similarly, in 1981, only 0.20 percent of male and 0.38 percent of female main workers engaged in household industry in Kargil district, while in 2001 it increased by 0.48 and 1.27 percentage points to 0.69 percent and 1.65 percent respectively. In 2011, both male and female main worker engaged as household industry decreased marginally (as given in table 13).

Table 13: Share of Main Worker engaged in Household Industry in Union Territory of Ladakh (in percentage)

<i>Year</i>	<i>Leh District</i>			<i>Kargil District</i>			<i>UT Ladakh</i>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	0.36	1.93	0.84	0.20	0.38	0.26	0.29	1.10	0.55
2001	0.55	0.88	0.64	0.69	1.65	1.00	0.61	1.30	0.82
2011	0.42	2.54	0.88	0.82	1.73	0.94	0.56	2.35	0.90
Net Change 1981-2001	0.19	-1.05	-0.20	0.48	1.27	0.74	0.32	0.2	0.27
Net Change 2001-2011	-0.13	1.66	0.24	0.13	0.38	-0.06	-0.05	1.05	0.08

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

Other Workers

Census of India, all workers, i.e., those who have been engaged in some economic activity during the year preceding enumeration who are not cultivators or agricultural labourers or household industry workers are 'Other Workers'. The type of workers that come under this category include factory workers, plantation workers, those in trade, commerce, business transport, mining, construction, political or social work, all government servants, municipal employees, teachers, priests, entertainment artists, etc.

Table 14 documents the percentage share of main workers engaged as other workers in Ladakh. In the year 1981, 27.77 percent of total main workers engaged as other worker and it is jumped by 40.21 percentage points in 2001. In 2011, it is further increased by 14.79 percentage points to 82.69 percent. This trend is found more dominant in male workers.

Table 14: Share of Main Worker engaged as Other Worker in Union Territory of Ladakh (in percentage)

Year	Leh District			Kargil District			UT Ladakh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1981	41.95	13.61	33.32	32.61	2.58	22.26	37.41	7.74	27.77
2001	81.65	48.67	72.94	74.59	39.06	62.97	78.30	43.38	67.98
2011	84.81	55.79	78.52	93.69	72.34	90.91	88.01	59.65	82.69
Net Change 1981-2001	39.70	35.07	39.62	41.99	36.48	40.71	40.89	35.64	40.21
Net Change 2001-2011	3.16			19.1	33.28	27.94	9.71	16.27	14.71
		7.12	5.58						

Sources: (1) Primary Census Abstract of Leh and Kargil district, Census of India 1981.

(2) Primary Census Abstract of Jammu & Kashmir (Compact Disk), Census of India 2001.

(3) Primary Census Abstract of Jammu & Kashmir, Census of India 2001, www.censusindia.gov.in

It is found that the percentage share of main workers engaged as other workers were more in Leh district than in Kargil district. In 1981, 33.32 percent of total main workers engaged as other workers in Leh district, while in 2001 it is jumped to 72.94 percent, a sharp increased by 39.62 percentage points and in 2011 it is further increased to 78.52 percent. Similarly, in 1981, 22.26 percent of main workers engaged as other workers in Kargil district, while in 2001 it sharp increased by 40.71 percentage points to 62.97 percent and in 2011 it is further increased by 27.94 percentage points to 90.91 percent. In both districts, for both male and female witnessed an increase in main workers engaged as other workers. They are mostly composed of government servants, workforce in tourism, shopkeepers, Military and Paramilitary personnel etc. These other workers are centered in and around the town areas, which is a part of urbanization due to rural-to-urban migration (Goodall, S. K, 2004).

Conclusion

This study, although quantitative in terms of strict demographic analysis, presents more than a simple picture of changing populations of Ladakh over the last three decades. Rather, it presents a detailed demographic picture of this Himalayan region. This paper presents more than a vague, broad-scale estimation of population change useful for policymaking and priorities of development strategies. In this regard, the following findings are drawn from this paper.

It was found that, more than two-thirds of population of Ladakh lives in rural areas. There is a wide gap in the rate of urbanization in the two districts and Leh district is more urbanized. The sex ratio in Ladakh was one of the lowest in the country and more severe in Leh district during 2011.

Although there has been a improvement in the literacy rate during the year 1981-2011 in Ladakh, but disparity between the male and female, and Leh and Kargil district still persists. The reason for this can be again attributed to the tourism based economic opportunities, because tourism in Ladakh is gender biased, urban based and it is more developed in Leh district.

The workforce participation rate in Ladakh is declined over the last three decades, as well as in Kargil district and while in Leh district it was fluctuating trends. There was a sharp decline in main workers in Ladakh during the study period. The successive Census reports indicate a shift from the agriculture to non-traditional sector. According to Census of India 2011, only 16.41 percent of main workers engaged in agriculture sector in Ladakh. (15.21 percent as cultivators and 1.30 percent as agriculture labour) Correspondingly, there was a sharp increase in non-agriculture sector in Ladakh. Due to the industrialization bottlenecks in Ladakh, there was a marginal increase in the main workers engaged in household industry during 1981-2011 and less than 1 percent of main workers engaged in household industry. However, there was a sharp increase in main workers engaged as other workers during the same period. This increase in other workers mostly consists of government servants, shopkeepers, tourism based business persons, military and military personnel etc. Therefore, a broad conclusion that emerges from the analysis of occupation pattern is that the workforce has gradually shifted from the traditional to the non-traditional occupations in Ladakh.

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