



An Assessment of Changing Scenario of Work Participation Rate in Pune District of Maharashtra

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Abstract

In the present paper, a Spatio-temporal analysis of the work participation rate in Pune District of Maharashtra has been attempted. The work participation rate is the percentage of workers to the total population of the District of Tehsil. The Tehsil-wise work participation rates of main and marginal workers in Pune District between 2001 and 2011 have been compared and analysed. The share of cultivators, agricultural laborers, household industry workers and other workers in the main workers and total population of the Tehsils in Pune District between 2001 and 2011 has also been analysed. In 2001, Pune District had 36.6% of main workers, 4.3% of marginal workers, and 59.1% of non-workers. In 2001, 39.6% of the total workers (26.9% cultivators and 12.7% agricultural laborers) in the District were engaged in agriculture. About 60.5% of the total workers in the district were engaged in works other than the agriculture (2.7% household industry workers and 57.8% other workers) in 2001. In 2011, Pune District had 39.8% of main workers, 3.2% of marginal workers, and 57% non-workers. In 2011, 32.1% of the total workers (21.9% cultivators and 10.2% agricultural laborers) in the District were engaged in agriculture. About 67.9% of the total workers in the District were engaged in works other than agriculture (2.6% household industry workers and 65.3% other workers) in 2011. The changes in Tehsil-wise work participation rates of main and marginal workers and the changes in the share of cultivators, agricultural labourers, household industry workers, and other workers in the main workers and total population of the Tehsils in Pune District from 2001 to 2011 has been assessed. The proportion of total workers (main and marginal) in Pune District has increased from 2001 to 2011. The proportion of cultivators (main workers) has decreased but the proportion of other workers (main workers) in Pune District has increased from 2001 to 2011. The proportions of marginal workers and non-workers in Pune District have decreased from 2001 to 2011.

Key Words: Work Participation Rate, Main workers, Cultivators, Marginal workers

Introduction:

Work means participation in an economically productive activity (Jelin, 1977) which can be with or without wages. Work involves not only the actual work but also includes effective supervision and direction of work. (Jeffrey A Burr, 2007) It also includes part-time help or unpaid work on farms or in other economic activities. (Arizep, 1977) All people engaged in 'work' are defined as workers. The nature of people's activity and the extent of participation in economically productive works (Kristin Manmen, 2000) are the decisive factors for the classification of workers in a region. The level of economic development of various regions in the District, availability of opportunities, willingness to work especially among women, entrepreneurship demonstrated by men in general activities, etc. are the important factors that influence the distribution of the population under the three categories of workers i.e. main workers, marginal workers, and non-workers. (Ahmad, 2014)

The nature of people's activity and the extent of participation in economically productive works are the decisive factors for the classification of workers in a region. (Collver, 1968) The level of economic development of various regions in the District, availability of opportunities, willingness to work especially among women, (Siddiqui 2011) entrepreneurship demonstrated by men in general activities, etc. (Gulati 1975) are the important factors that influence the distribution of the population under the three categories of workers i.e. main workers, marginal workers, and non-workers. (Herberg 1973) The time reference period for classifying a person as a worker or non-worker is generally one year preceding the date of enumeration. **Main workers** are the persons who have worked for a major

part of the time reference period in any economically productive activity. (Verhoef 2013) **Marginal workers** are the persons who have worked for less than six months of the time reference period in any economic activity.(Nath 1970) **Non-workers** are persons who have not worked at all in any economically productive activity during the time reference period.(Hayashi 2002)

The distribution of male and female workers of the District by four industrial categories of economic activities shows the relative importance of the major spheres of economic activity. Broadly the four-fold classification includes cultivators, agricultural labourers, household industry workers, and workers engaged in other economic activities. A person is classified as a cultivator if he or she is engaged in cultivation on land owned or held from government or held from private persons or institutions for payment in money or kind or share. Cultivation includes effective supervision or direction in cultivation. (Sharma 2014) Cultivation involves ploughing, sowing, harvesting, and production of cereals and millet crops such as wheat, paddy, jowar, bajra, ragi, etc., (Reddy 1979) and other crops such as sugarcane, tobacco, groundnuts, tapioca, etc., and pulses, raw jute, and kindred fiber crop, cotton and medicinal plants, fruit growing, vegetable growing or keeping orchards or groves, etc. Cultivation does not include the plantation crops such as tea, coffee, rubber, coconut, and betel nuts (areca). A person who works on another person's land for wages in money or kind or share is considered as an agricultural labourer. She/he has no risk at all in the cultivation but simply works on another person's land for wages.

The household industry is an industry conducted by the head of the household herself/himself 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. The larger proportion of workers in the household industry should consist of members of the household including the head. The industry should not be run on the scale of a registered factory that would qualify or has to be registered under the Indian Factories Act and should be engaged in manufacturing, processing, servicing, and repairs of goods. A person who has been engaged in some economic activity during the reference period but not as a cultivator or agricultural laborer or in Household Industry is termed as an 'Other Worker (OW)'. The type of workers that come under this category of 'OW' includes all government servants, municipal employees, teachers, factory workers, plantation workers, those engaged in trade, commerce, business, transport, banking, mining, construction, political or social work, priests, entertainment artists, etc. In effect, all those workers other than cultivators or agricultural laborers, or household industry workers are 'Other Workers'. The work participation rate for total workers has been defined as the percentage of total workers to the total population. It has been defined similarly for main and marginal workers.

Study Area:

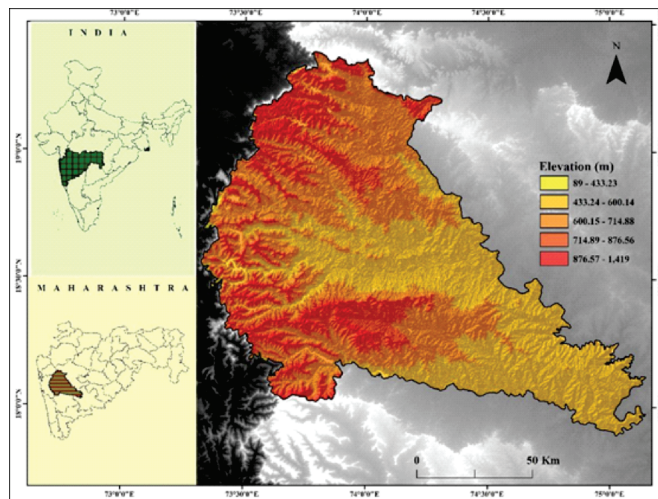


Figure 1: Location map of study area

Pune district is located between 17° 54' N and 19° 24' N latitudes and 73° 19' E and 75° 10' E longitudes (Fig.1). The district has a vast geographical area of 15,642 sq. km. with a total population of 94,29,408. Pune district is bounded by five districts: Ahmednagar district in the northeast and east, Solapur district in southeast, Satara district in the south, Raigad district in the west, and Thane district in the northwest. Pune is the second-largest district in the state and covers 5.10% of the total geographical area of the state. The shape of the Pune district is roughly triangular. Pune district is located in western Maharashtra bordered by the Sahyadri Mountains in its west. Administratively, the district is divided into 14 Tehsils. These are Junnar, Ambegaon, Shirur, Khed, Mawal, Mulshi, Haveli, Pune City, Daund, Purandhar, Velhe, Bhor, Baramati, and Indapur. Pune city is the administrative headquarters of the district. There are around 1,866 villages in the district. The general slope in the District is towards the south-east direction. In the Pune district, there are two Municipal Corporations namely Pune and Pimpri Chinchwad, and 35 town centers in the 14 Tehsils.

Objectives:

In the present paper, a Spatio-temporal analysis of the work participation rate in the Pune District of Maharashtra has been attempted.

The aims and objectives of the present study are:

1. To analyse the Tehsil wise work participation rates of main and marginal workers in Pune District for 2001 and 2011.
2. To compare the share of cultivators, agricultural laborers, household industry workers and other workers in the main workers and total population of the Tehsils in Pune District for 2001 and 2011.
3. To assess the changes in Tehsil-wise work participation rates of main and marginal workers in Pune District from 2001 to 2011.
4. To assess the changes in share of cultivators, agricultural laborers, household industry workers and other workers in the main workers and total population of the Tehsils in Pune District for 2001 and 2011.

Database and Methodology:

The present work is based on secondary data analysis. Researchers have used the Pune District Census Handbook data of 2001 and 2011. All relevant published and unpublished records have been considered. All the secondary data have been collected from the District Census Handbook, Gazetteers, District Statistical Abstracts, and Socio-economic Abstracts. Besides these, the required data and information have been collected from various books and journals. The analysis and interpretation of data have been done from the geographical point of view. The data has been organized in tables for performing various calculations and analyses with the help of statistical computer software – Microsoft Excel. The processed data has been systematically organized in tabular format. Certain statistical methods and cartographic techniques have been applied to represent the demographic data in the form of bar graphs/diagrams and maps.

Data Analysis:

Work Participation Rate in Pune District (2001):

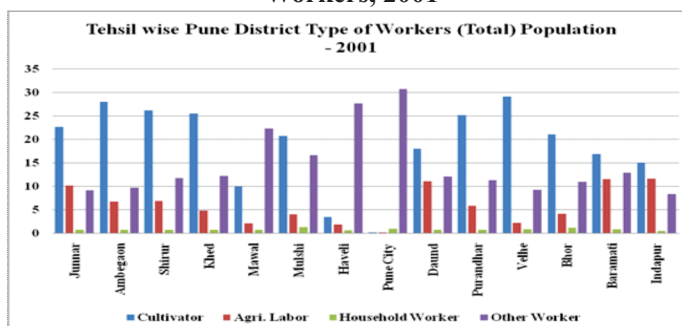
In the 2001 Census, there has been mainly a three-fold classification system of population that includes main workers, marginal workers and non-workers. This was the same scheme that was adopted for the 1991 Census. The main workers in 2001 were distributed into four categories or classes of economic activities (Cultivators, Agricultural Labourers, Household and Other Workers) instead of nine industrial categories as done in the Census of 1991. In 2001, 36.6% of Pune District's total population was recorded as main workers, 4.3% as marginal workers and 59.2% as non-workers.

Table 1: Pune District Tehsil wise Population of Workers (%) – Main Workers (Cultivators, Agricultural Laborers, Household and Other Workers), Marginal Workers and Non-Workers, 2001

Sr. No.	District / Tehsil	Total Workers - Main and Marginal	Main Workers	Cultivators	Agricultural Laborers	Household Workers	Other Workers	Marginal Workers	Non Workers
1	Junnar	50.13	42.93	22.74	10.18	0.76	9.25	7.19	49.87
2	Ambe- gaon	52.80	45.51	28.11	6.83	0.76	9.81	7.30	47.20
3	Shirur	50.93	45.79	26.21	6.98	0.76	11.83	5.15	49.07
4	Khed	50.68	43.51	25.53	4.87	0.83	12.28	7.16	49.32
5	Mawal	41.62	35.31	10.05	2.14	0.76	22.36	6.31	58.38
6	Mulshi	51.94	42.97	20.84	4.11	1.35	16.66	8.98	48.06
7	Haveli	36.72	33.81	3.54	1.91	0.63	27.74	2.90	63.28
8	Pune City	34.20	32.11	0.18	0.21	0.97	30.76	2.09	65.80
9	Daund	47.42	42.28	18.11	11.19	0.77	12.21	5.14	52.58
10	Puran- dhar	49.71	43.38	25.25	5.94	0.82	11.38	6.33	50.29
11	Velhe	53.17	41.77	29.23	2.31	0.96	9.27	11.39	46.83
12	Bhor	48.71	37.65	21.16	4.17	1.24	11.07	11.06	51.29
13	Bara- mati	47.00	42.40	16.89	11.61	0.94	12.96	4.60	53.00
14	Inda- pur	43.25	35.83	15.09	11.69	0.61	8.43	7.42	56.75
Pune District		40.85	36.58	9.81	3.84	0.84	22.08	4.27	59.15

Source – Pune District Census Handbook Data, 2001

Figure 2: Pune District Tehsil wise Population of Workers (%) – Main Workers (Cultivators, Agricultural Laborers, Household and Other Workers), Marginal Workers and Non-Workers, 2001



Among the 36.6% main workers, the male participation rate in the Pune district was 50.0% while that of females was 22.0%, according to the 2001 Census data. The percentage of main workers was the highest in Shirur Tehsil (45.8%) and the lowest in Pune city Tehsil (32.1%). Out of the fourteen Tehsils of the District, ten Tehsils were above the District average figure i.e. Shirur (45.8%), Amebegaon (45.5%), Khed (43.5%), Purandhar (43.4%), Mulshi (43.0%), Junnar (42.9%), Baramati (42.4%), Daund (42.3%), Velhe (41.8%), and Bhore (37.6%). While the remaining four Tehsils were below the District average figure i.e. Indapur (35.8%), Mawal (35.3%), Haveli (33.8%), and Pune City (32.1%). The female work participation rate was the highest in Ambegaon Tehsil (40.0%) and lowest in Pune City Tehsil (13.6%). In Pune District, there were 26.9% cultivators and 12.7% agricultural laborers, together constituting 39.6% of the total workers in the District. The agricultural sector had absorbed about 40% of the total workers in Pune District. In Pune District, there were 9.81% cultivators (main workers) and 3.84% agricultural laborers (main workers), constituting 13.65% of the total population in the District.

The proportion of cultivators and agricultural laborers varied considerably from Tehsil to Tehsil. It was noticed that the proportion of females as cultivators was 40.0% as compared to males among whom it was only 20.8%. The proportion of cultivators among the total workers in the Tehsil varied between 65.7% for Velhe Tehsil and 0.6% for Pune City Tehsil. The proportion of cultivators (main workers) in the total population of the Tehsils varied between 29.2% for Velhe Tehsil and 0.18% for Pune City Tehsil. It was noticed that the proportion of females as agricultural labourers was 22.9% as compared to males among whom it was only 7.9%. The proportion of agricultural labourers in the total population of the Tehsils varied between 11.7% for Indapur Tehsil and 0.21% for Pune City Tehsil. The proportion of agricultural labourers (main workers) in the total population of the Tehsils varied between 11.7% for Indapur Tehsil and 0.21% for Pune City Tehsil.

It was noticed that 60.5% of the total workers in the District were engaged in works other than agriculture. About 2.7% of workers were engaged in household industries and the remaining 57.8% were engaged in other works. About 0.84% population of the District were main workers who were engaged in household industries and 22.08% were main workers engaged in other works. It was noticed that the proportion of females as household industry workers was 4.1% as compared to males among whom it was only 2.0%. The proportion of household industry workers among the total workers in the Tehsil varied between 3.9% for Bhore Tehsil and 1.8% for Indapur Tehsil. The proportion of household industry workers (main workers) in the total population of the Tehsils varied between 1.35% for Bhore Tehsil and 0.6% for Indapur Tehsil.

It was noticed that the proportion of males as other workers was 69.3% as compared to females among whom it was only 33.1%. The proportion of other workers among the total workers in the Tehsil varied between 95.1% in Pune City Tehsil and 20.5% in Velhe Tehsil. Haveli Tehsil (80.3%) and Mawal Tehsil (58.9%) also had a higher proportion of other workers among their total workers. The proportion of other workers (main workers) in the total population of the Tehsils varied between 30.8% for Pune City Tehsil and 8.4% for Indapur Tehsil. Haveli Tehsil (27.8%) and Mawal Tehsil (22.4%) also had a higher proportion of other workers (main workers) in their total population.

Among the 4.3% marginal workers in the District, the male participation rate in the District was 3.5% while that of females was 5.1%, according to the statistics of the 2001 Census. The percentage of female marginal workers (5.1%) was a little bit higher compared to males (3.5%). The percentage of marginal workers was the highest in Velhe Tehsil (11.4%) and the lowest in Pune City Tehsil (2.1%). Out of the fourteen Tehsils of the District, twelve Tehsils were above the District average figure i.e. Velhe (11.4%), Bhore (11.1%), Mulshi (9.0%), Indapur (7.4%), Ambegaon (7.3%), Junnar (7.2%), Khed (7.2%), Purandhar (6.3%), Mawal (6.3%), Shirur (5.1%), Daund (5.1%), and Baramati (4.6%). Two Tehsil were below the District marginal workers average figure i.e. Haveli (2.9%) and Pune City (2.1%).

In the Pune district during 2001, 59.2% population were recorded as non-workers, and out of

this, 46.5% were males and 72.9% were females. The percentage of female non-workers (72.9%) was significantly higher compared to males (46.5%). The percentage of non-workers was the highest in Pune City Tehsil (65.8%) and the lowest in Velhe Tehsil (46.8%). Out of the fourteen Tehsils of the District, only two Tehsils were above the District average figure of non-workers i.e. Pune City (65.8%) and Haveli (63.3%) and twelve Tehsils were below the District average figure of non-workers i.e. Mawal (58.4%), Indapur (56.8%), Baramati (53.0%), Daund (52.6%), Bhore (51.3%), Purandhar (50.3%), Junnar (49.9%), Khed (49.3%), Shirur (49.1%), Mulshi (48.1%), Ambegaon (47.2%) and Velhe (46.8%).

Work Participation Rate in Pune District (2011):

In the 2001 Census and 2011 Census, there has been no conceptual change in defining the workers. In the 2011 Census, there has been a broad three-fold classification of population namely main workers, marginal workers, and non-workers, which was also adopted for the 2001 Census. A small change in the data on marginal workers in the 2011 Census is the addition of a sub-category in marginal workers for those working up to 3 months time. The main workers in 2011 were distributed into four categories or classes of economic activities (Cultivators, Agricultural Labourers, Household and Other Workers) as done in the Census of 2001.

There were 39.78% people of the District who were main workers, 3.16% were marginal workers and the remaining 57.06% were non-workers. As per the 2011 Census, the male work participation rate was 54.00% and the female work participation rate was 24.25% among the main workers. The work participation rate of main workers was highest in Ambegaon Tehsil (50.26%) and it was lowest in the Pune City Tehsil (36.28%). Out of the fourteen Tehsils, eleven Tehsils had a main work participation rate above the District average of 39.78% i.e. Ambegaon (50.26%), Shirur (49.36%), Junnar (49.01%), Purandhar (48.03%), Khed (45.26%), Indapur (44.47%), Daund (43.95%), Velhe (43.71%), Baramati (42.50%), Mulshi (41.36%) and Bhore (40.99%). In the remaining three Tehsils, the main work participation rate was below the District average of 39.78% i.e. Mawal (37.02%), Haveli (36.95%), and Pune City (36.28%). The female work participation rate was the highest in Ambegaon Tehsil (44.43%) and lowest in Haveli Tehsil (15.66%).

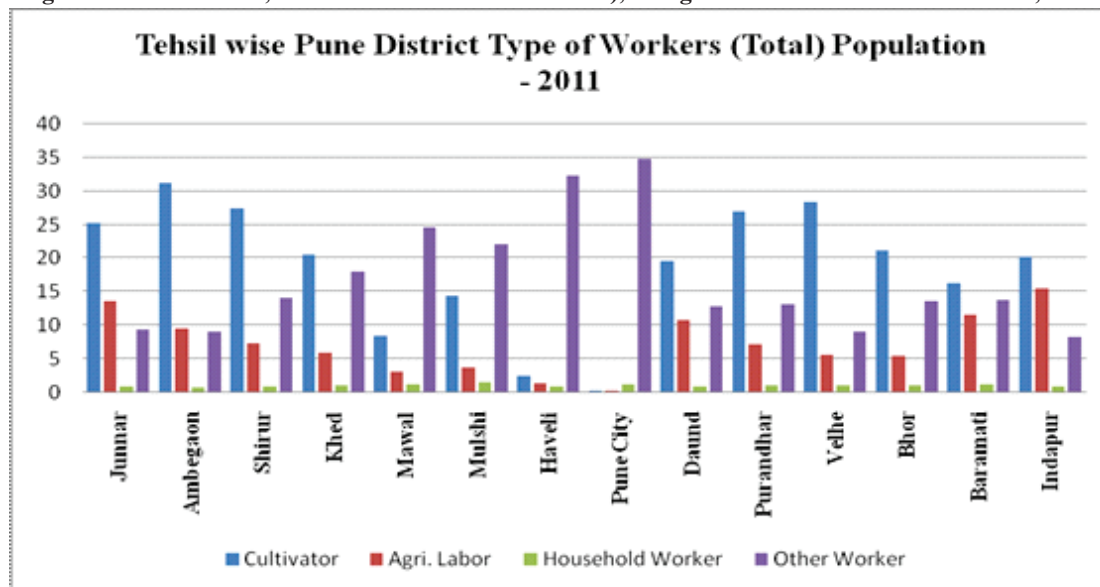
Table 2: Pune District Tehsil wise Population of Workers (%) – Main Workers (Cultivators, Agricultural Laborers, Household and Other Workers), Marginal Workers and Non-Workers, 2011

Sr. No.	District / Tehsil	Total Workers - Main and Marginal	Main Workers	Cultivators	Agricultural Laborers	Household Workers	Other Workers	Marginal Workers	Non Workers
1	Junnar	52.52	49.01	25.25	13.62	0.81	9.33	3.51	47.48
2	Ambegaon	54.16	50.26	31.21	9.46	0.66	8.93	3.9	45.84
3	Shirur	51.78	49.36	27.48	7.17	0.72	13.99	2.43	48.22
4	Khed	49.47	45.26	20.4	5.87	0.97	18.02	4.22	50.53
5	Mawal	41.69	37.02	8.35	3.07	1.03	24.57	4.67	58.31
6	Mulshi	47.5	41.36	14.29	3.68	1.38	22.01	6.14	52.5

7	Haveli	39.83	36.95	2.42	1.32	0.86	32.36	2.88	60.17
8	Pune City	38.64	36.28	0.19	0.18	1.1	34.81	2.36	61.36
9	Daund	47.93	43.95	19.5	10.77	0.85	12.83	3.98	52.07
10	Purandhar	52.65	48.03	26.93	7.09	0.95	13.06	4.62	47.35
11	Velhe	50.67	43.71	28.37	5.52	0.87	8.95	6.96	49.33
12	Bhor	47.76	40.99	21.11	5.36	0.9	13.62	6.76	52.24
13	Baramati	46.29	42.5	16.19	11.55	1.04	13.72	3.79	53.71
14	Indapur	47.44	44.47	20.1	15.43	0.71	8.22	2.98	52.56
Pune District		42.94	39.78	8.83	3.88	0.96	26.12	3.16	57.06

Source – Pune District Census Handbook Data, 2011

Figure 3: Pune District Tehsil wise Population of Workers (%) – Main Workers (Cultivators, Agricultural Laborers, Household and Other Workers), Marginal Workers and Non-Workers, 2011



About 32.14% of workers were engaged in the agricultural sector. Among these 21.90% were cultivators and 10.24% were agricultural labourers. The agricultural sector had absorbed more than 32% of the total workers in the Pune District. In Pune District, there were 8.83% cultivators (main workers) and 3.88% agricultural labourers (main workers), together constituting 12.71% of the total population in the District.

The proportion of cultivators and agricultural labourers varied considerably from Tehsil to Tehsil. It was noticed that the proportion of females as cultivators was 31.15% as compared to males among whom it was only 17.82%. The proportion of cultivators among the total workers in the Tehsils varied from 61.32% in Velhe Tehsil to 0.66% in Pune City Tehsil. The proportion of cultivators (main

workers) in the total population of Tehsils varied from 31.21% in Ambegaon Tehsil to 0.19% in Pune City Tehsil. It was noticed that the proportion of females as agricultural labourers was 17.62% as compared to males among whom it was only 6.98%. The proportion of agricultural labourers among the total workers in the Tehsils varied from 35.13% in Indapur Tehsil to 0.55% in Pune City Tehsil. The proportion of agricultural labourers (main workers) in the total population of Tehsils varied from 15.43% in Indapur Tehsil to 0.18% in Pune City Tehsil.

It was noticed that 67.86% of the total workers in the District were engaged in works other than agriculture. About 2.6% of workers were engaged in household industries and 65.26% of workers were engaged as other workers. About 0.96% population of the District were main workers who were engaged in household industries and 26.12% were main workers engaged in other works. It was noticed that the proportion of females as household industry workers was 3.78% as compared to males among whom it was only 2.10%. The proportion of household industry workers among the total workers in the Tehsils varied from 3.43% in Mulshi Tehsil to 1.48% in Ambegaon Tehsil. The proportion of household industry workers (main workers) in the total population of Tehsils varied from 1.38% in Mulshi Tehsil to 0.66% in Ambegaon Tehsil.

It was noticed that the proportion of males as other workers was 73.11% as compared to females among whom it was only 47.46%. The proportion of other workers among the total workers in the Tehsils varied from 95.57% in Pune City Tehsil to 18.09% in Ambegaon Tehsil. Haveli Tehsil (87.21%) also had a higher proportion of other workers among its total workers. The proportion of other workers (main workers) in the total population of Tehsils varied from 34.81% in Pune City Tehsil to 8.22% in Indapur Tehsil. Haveli Tehsil (32.36%) also had a higher proportion of other workers (main workers) in its total population.

Among the 3.16% marginal workers in the District, the male participation rate in the District was 3.07% while that of females was 3.26%, according to the statistics of the 2011 Census. This indicates that female work participation as marginal workers along with their household duties was higher than males in 2011. The percentage of marginal workers was highest in Velhe Tehsil (6.96%) while it was lowest in Pune City Tehsil (2.36%). Ten Tehsils were above the District marginal workers average figure i.e. Velhe (6.96%), Bhore (6.76%), Mulshi (6.14%), Mawal (4.67%), Purandhar (4.62%), Khed (4.22%), Daund (3.98%), Ambegaon (3.9%), Baramati (3.79%) and Junnar (3.51%). Four Tehsils were below the District marginal worker's average figure i.e. Indapur (2.98%), Haveli (2.88%), Shirur (2.43%), and Pune City (2.36%).

In the Pune district during 2011, 57.06% population were recorded as non-workers, and out of this, 42.94% were males and 72.50% were females. The percentage of female non-workers (72.5%) was significantly higher compared to males (42.9%). The percentage of marginal workers was highest in Pune City Tehsil (61.36%) while it was lowest in Velhe Tehsil (45.84%). Out of the fourteen Tehsils of the District, only three Tehsils were above the District average figure of non-workers i.e. Pune City (61.4%), Haveli (60.2%), and Mawal (58.3%) and twelve Tehsils were below the District average figure of non-workers i.e. Baramati (53.7%), Indapur (52.6%), Mulshi (52.5%), Bhore (52.2%), Daund (52.1%), Khed (50.5%), Velhe (49.3%), Shirur (48.2%), Junnar (47.5%), Purandhar (47.3%) and Ambegaon (45.8%).

Changes in Work Participation Rate in Pune District (2001-2011):

The proportion of total workers (main and marginal workers) in Pune District has increased by 2.09% from 2001 to 2011. Pune City Tehsil has shown the highest increase of 4.44% in the proportion of total workers from 2001 to 2011, followed by Indapur Tehsil (4.19%). Mulshi Tehsil has shown the highest decrease of 4.44% in the proportion of total workers from 2001 to 2011, followed by Velhe Tehsil (2.5%). The proportion of main workers in Pune District has increased by 3.2% from 2001 to 2011. Indapur Tehsil has shown the highest increase of 8.64% in the proportion of main workers from 2001 to 2011, followed by Junnar Tehsil (6.08%). Mulshi Tehsil is the only Tehsil that

has shown a decrease of 1.61% in the proportion of main workers from 2001 to 2011.

The proportion of cultivators (main workers) in Pune District has decreased by 0.98% 2001 to 2011. Indapur Tehsil has shown the highest increase of 5.01% in the proportion of cultivators (main workers) from 2001 to 2011, followed by Ambegaon Tehsil (3.10%). Mulshi Tehsil has shown the highest decrease of 6.55% in the proportion of cultivators (main workers) from 2001 to 2011, followed by Khed Tehsil (5.13%). The proportion of agricultural labourers (main workers) in Pune District has increased by 0.04% from 2001 to 2011. Indapur Tehsil has shown the highest increase of 3.74% in the proportion of agricultural labourers (main workers) from 2001 to 2011, followed by Junnar Tehsil (3.44%). Haveli Tehsil has shown the highest decrease of 0.59% in the proportion of agricultural labourers (main workers) from 2001 to 2011, followed by Mulshi Tehsil (0.43%).

The proportion of household industry workers (main workers) in Pune District has increased by 0.12% from 2001 to 2011. Mawal Tehsil has shown the highest increase of 0.27% in the proportion of household industry workers (main workers) from 2001 to 2011. Bhore Tehsil has shown the highest decrease of 0.34% in the proportion of household industry workers (main workers) from 2001 to 2011. The proportion of other workers (main workers) in Pune District has increased by 4.04% from 2001 to 2011. Khed Tehsil has shown the highest increase of 5.74% in the proportion of other workers (main workers) from 2001 to 2011, followed by Mulshi Tehsil (5.35%). Ambegaon Tehsil has shown the highest decrease of 0.88% in the proportion of other workers (main workers) from 2001 to 2011, followed by Velhe Tehsil (0.32%).

Table 3: Pune District Tehsil wise Difference in Population of Workers (%) – Main Workers (Cultivators, Agricultural Laborers, Household, Other Workers), 2001-2011

Sr. No.	District / Tehsil	Total Workers - Main and Marginal	Main Workers	Cultivators	Agricultural Laborers	Household Workers	Other Workers	Marginal Workers	Non Workers
1	Junnar	2.39	6.08	2.51	3.44	0.05	0.08	-3.68	-2.39
2	Ambegaon	1.36	4.75	3.10	2.63	-0.10	-0.88	-3.40	-1.36
3	Shirur	0.85	3.57	1.27	0.19	-0.04	2.16	-2.72	-0.85
4	Khed	-1.21	1.75	-5.13	1.00	0.14	5.74	-2.94	1.21
5	Mawal	0.07	1.71	-1.70	0.93	0.27	2.21	-1.64	-0.07
6	Mulshi	-4.44	-1.61	-6.55	-0.43	0.03	5.35	-2.84	4.44
7	Haveli	3.11	3.14	-1.12	-0.59	0.23	4.62	-0.02	-3.11
8	Pune City	4.44	4.17	0.01	-0.03	0.13	4.05	0.27	-4.44
9	Daund	0.51	1.67	1.39	-0.42	0.08	0.62	-1.16	-0.51
10	Purandhar	2.94	4.65	1.68	1.15	0.13	1.68	-1.71	-2.94

11	Velhe	-2.50	1.94	-0.86	3.21	-0.09	-0.32	-4.43	2.50
12	Bhor	-0.95	3.34	-0.05	1.19	-0.34	2.55	-4.30	0.95
13	Bara- mati	-0.71	0.10	-0.70	-0.06	0.10	0.76	-0.81	0.71
14	Inda- pur	4.19	8.64	5.01	3.74	0.10	-0.21	-4.44	-4.19
Pune District		2.09	3.20	-0.98	0.04	0.12	4.04	-1.11	-2.09

Source – Pune District Census Handbook Data, 2001 and 2011

Figure 4: Pune District Tehsil wise Difference in Population of Workers (%) – Main Workers (Cultivators, Agricultural Laborers, Household, Other Workers), 2001-2011

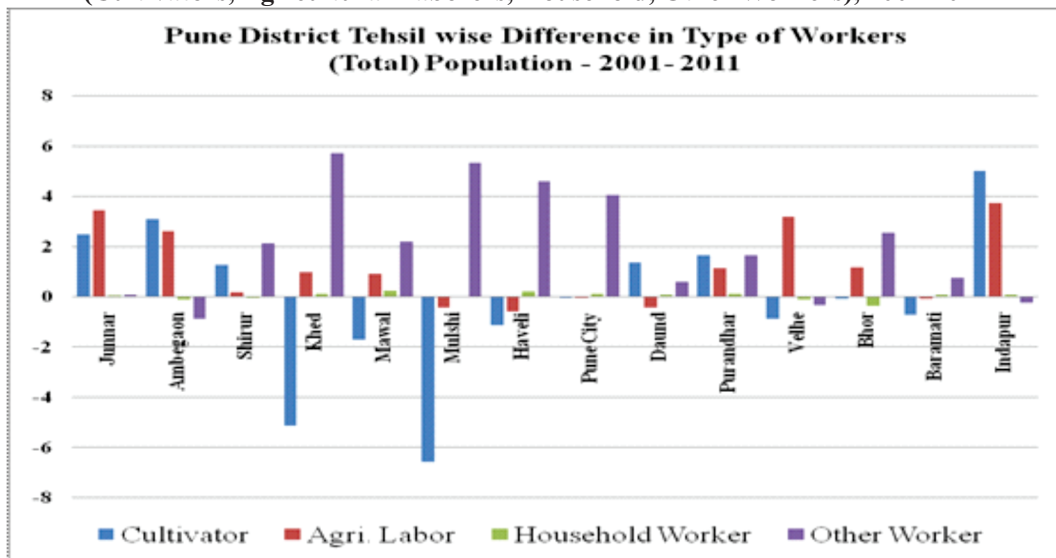


Figure 5: Pune District Tehsil wise Difference in Population of Workers (%) – Total Workers, 2001-2011

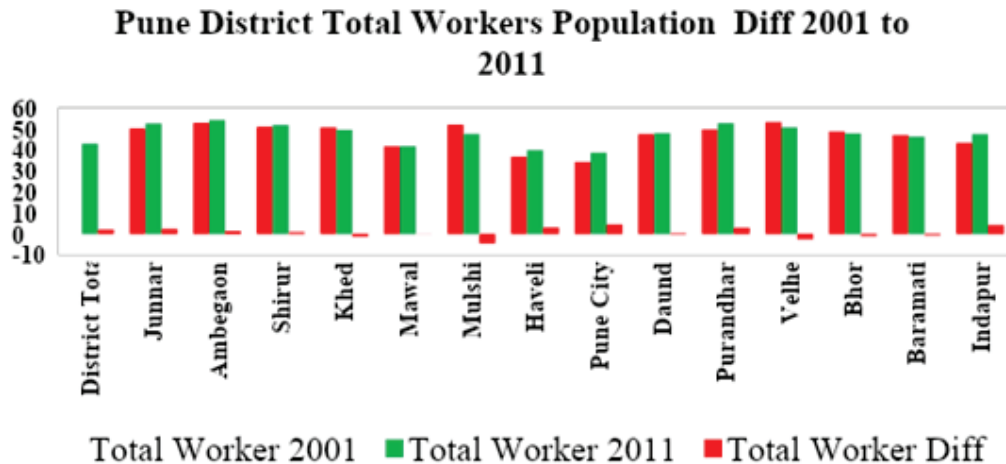


Figure 6: Pune District Tehsil wise Difference in Population of Workers (%) – Main Workers, 2001-2011

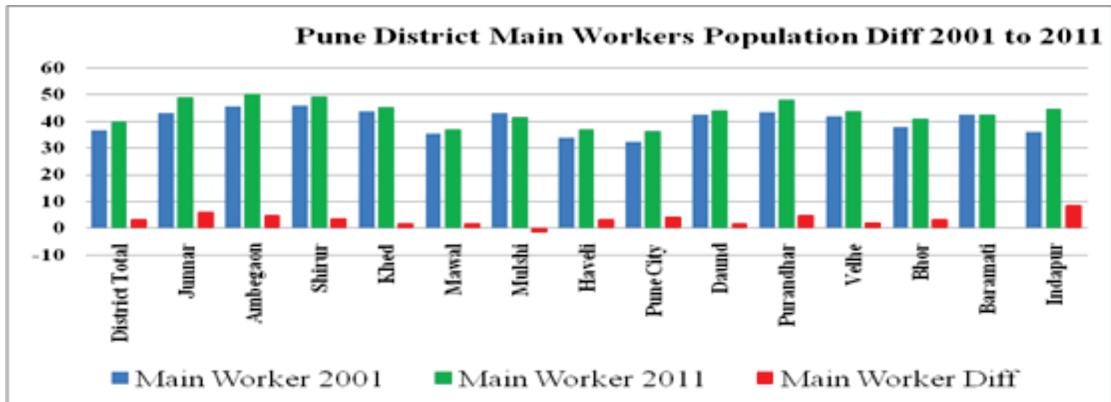


Figure 7: Pune District Tehsil wise Difference in Population of Workers (%) – Marginal Workers, 2001-2011

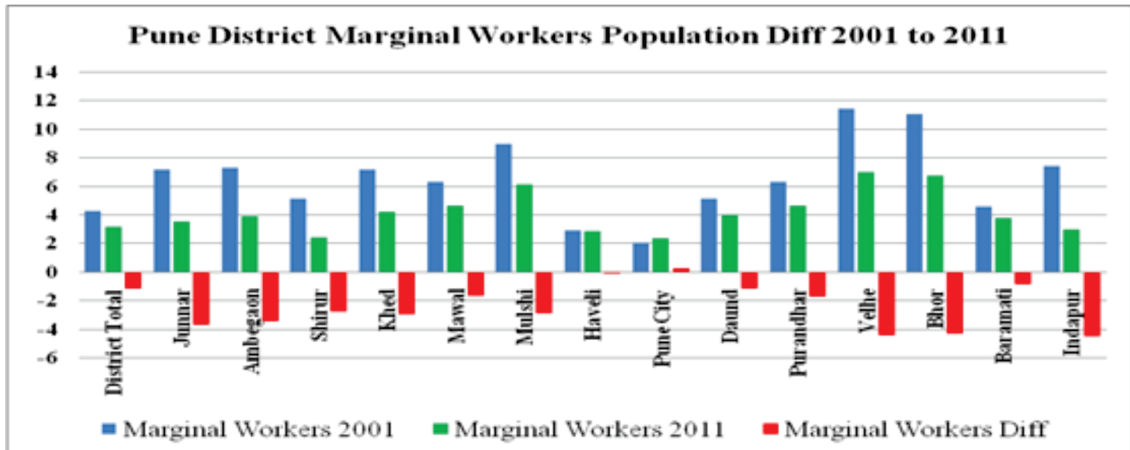
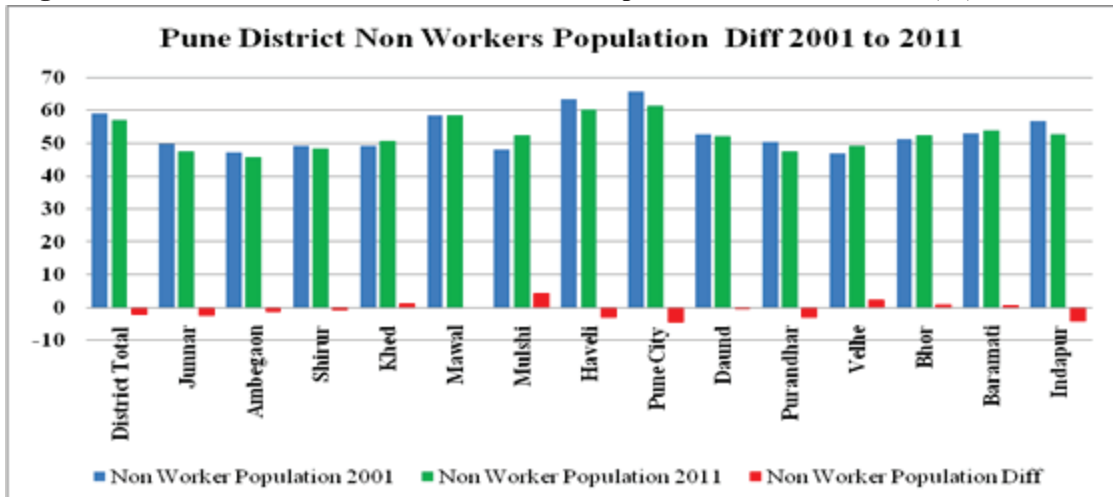


Figure 8: Pune District Tehsil wise Difference in Population of Non-Workers (%), 2001-2011



The proportion of marginal workers in Pune District has decreased by 1.11% from 2001 to 2011. Pune City Tehsil is the only Tehsil that has shown an increase of 0.27% in the proportion of marginal workers from 2001 to 2011. Indapur Tehsil has shown the highest decrease of 4.44% in the proportion of marginal workers from 2001 to 2011, followed by Velhe Tehsil (4.43%). The proportion of non-workers in Pune District has decreased by 2.09 % from 2001 to 2011. Mulshi Tehsil has shown an increase of 4.44% in the proportion of non-workers from 2001 to 2011. Pune City Tehsil has shown the highest decrease of 4.44% in the proportion of non-workers from 2001 to 2011, followed by Indapur Tehsil (4.19%).

Conclusion:

In 2001, Pune District had 36.6% of main workers, 4.3% of marginal workers, and 59.1% non-workers. In 2001, 39.6% of the total workers (26.9% cultivators and 12.7% agricultural labourers) in the District were engaged in agriculture. About 60.5% of the total workers in the District were engaged in works other than agriculture (2.7% household industry workers and 57.8% other workers) in 2001.

In 2011, Pune District had 39.8% of main workers, 3.2% of marginal workers, and 57% non-workers. In 2011, 32.1% of the total workers (21.9% cultivators and 10.2% agricultural labourers) in the District were engaged in agriculture. About 67.9% of the total workers in the District were engaged in works other than agriculture (2.6% household industry workers and 65.3% other workers) in 2011. The work participation rate of total workers (main and marginal) in Pune District has increased by 2.1% from 40.9% in 2001 to 43% in 2011. Pune City Tehsil has shown the highest increase of 4.44% in the work participation rate of total workers from 2001 to 2011, followed by Indapur (4.19%), Haveli (3.11%), Purandhar (2.94%), and Junnar (2.39%). This indicates that the overall work participation rate in Pune District is increasing substantially. The overall work participation rate in Pune District is decreasing in Mulshi, Velhe, Khed, Bhor, and Baramati Tehsils. Mulshi Tehsil has shown the highest decrease of 4.44% in the work participation rate of total workers from 2001 to 2011, followed by Velhe Tehsil (2.5%).

The work participation rate of main workers in Pune District has increased by 3.2% from 36.6% in 2001 to 39.8% in 2011. Indapur Tehsil has shown the highest increase of 8.64% in the work participation rate of main workers from 2001 to 2011, followed by Junnar Tehsil (6.08%). The work participation rate of main workers has increased substantially in all the Tehsils of Pune District except Mulshi Tehsil. Mulshi Tehsil is the only Tehsil that has shown a decrease of 1.61% in the work participation rate of main workers from 2001 to 2011.

The work participation rate of cultivators (main workers) has decreased but the work participation rate of agricultural labourers (main workers), household industry-main workers other main workers in Pune District has increased from 2001 to 2011. Indapur Tehsil has shown the highest increase of 5.01% in the work participation rate of cultivators (main workers) from 2001 to 2011, followed by Ambegaon Tehsil (3.10%). The work participation rate of cultivators (main workers) has increased substantially in only six Tehsils of Pune District. Mulshi Tehsil has shown the highest decrease of 6.55% in the work participation rate of cultivators (main workers) from 2001 to 2011, followed by Khed Tehsil (5.13%). This is an indication of the changing composition of main workers in the District. The work participation rate of agricultural labourers (main workers) has increased substantially in nine Tehsils of Pune District. Indapur Tehsil has shown the highest increase of 3.74% in the work participation rate of agricultural labourers (main workers) from 2001 to 2011, followed by Junnar Tehsil (3.44%). Haveli Tehsil has shown the highest decrease of 0.59% in the work participation rate of agricultural labourers (main workers) from 2001 to 2011, followed by Mulshi Tehsil (0.43%).

The work participation rate of household industry workers (main workers) in Pune District has not shown much variation from 2001 to 2011. The work participation rate of other main workers in

Pune District has increased by 4.04% from 2001 to 2011. The work participation rate of other main workers has increased substantially in eleven Tehsils of Pune District. This shows that work participation rate of main workers in the District is increasing in other fields as compared to agricultural activities. Khed Tehsil has shown the highest increase of 5.74% in the work participation rate of other main workers from 2001 to 2011, followed by Mulshi Tehsil (5.35%). Ambegaon Tehsil has shown the highest decrease of 0.88% in the work participation rate of other main workers from 2001 to 2011, followed by Velhe Tehsil (0.32%) and Indapur Tehsil (0.21%).

The work participation rate of marginal workers in Pune District has decreased from 2001 to 2011. Pune City Tehsil is the only Tehsil that has shown an increase of 0.27% in the proportion of marginal workers from 2001 to 2011. Indapur Tehsil has shown the highest decrease of 4.44% in the work participation rate of marginal workers from 2001 to 2011, followed by Velhe Tehsil (4.43%). This shows that the proportion of marginal workers is decreasing in almost all the Tehsils of Pune District except Pune City. The proportion of non-workers in Pune District has decreased by 2.09 % from 2001 to 2011. The proportion of non-workers has decreased substantially in nine Tehsils of Pune District. Pune City Tehsil has shown the highest decrease of 4.44% in the proportion of non-workers from 2001 to 2011, followed by Indapur Tehsil (4.19%). This shows that the proportion of non-workers is decreasing in most of the Tehsils of Pune District. Mulshi Tehsil has shown an increase of 4.44% in the proportion of non-workers from 2001 to 2011.

It can be concluded that the share of marginal workers and non-workers is decreasing and the share of main workers is increasing in Pune District. The work participation rate of main workers in Pune District is increasing in other fields as compared to agricultural activities.

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