



ECONOMIC ASSESSMENT OF MAJOR SLUM AREAS IN PIMPRI CHINCHWAD MUNICIPAL CORPORATION NEAR PUNE, MAHARASHTRA IN INDIA

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Abstract:

Slum as a part of the urban settlement which can always affect the urban environment of nearby location. Socio-economic status of slum is mostly dependent on education, income and occupation. Socio-economic status of slum might relate to all above key that may help to turn out whole scenario (Sandip Tripathy, 2013) Economic condition or status makes much effect on housing condition, living condition, life style, education, health and all other functions in slum area. The education and income are important elements for economic assessments of slum Population.

The study was carried out on the basis of primary data including the field survey, secondary data from Pimpri Chinchwad Municipal Corporation and also computer based technique. This Paper examines the economic assessments of slum with the help of following parameters these are average annual income with educational status of slum population in major centers of Pimpri Chinchwad Municipal Corporation (Pimpri Chinchwad urban area)

Key Wards – Field Work, GPS Survey, Area measurement, Assessment of economic environment

1. Introduction:

Pimpri Chinchwad urban area had relatively developed industrial units, educational centers, various transport networks, hospitals and administrative offices. All these services and infrastructural facilities provide the job for unskilled and skilled worker. Most of the population migrated from surrounding rural areas, as there are greater economic opportunities in these urban areas. As urban centers attracts more number of population from surrounding region.

The assessment of economic status of slum population mainly includes average annual income and average annual income with educational status of slum Population in Major Centres of Pimpri Chinchwad Municipal Corporation (Pimpri Chinchwad urban area)

2. Aims & Objectives of Study:

The present study of slums in Pimpri Chinchwad urban area will be based on following objectives.

1. To locate the slum pockets in Pimpri Chinchwad urban area.
2. To study the average annual income of slum families.
3. To analyse and study the average annual income with educational status of slum Population.

3. Selection of Site:

All these slums respectively located on different major areas in PCMC these are, Akurdi, Chinchwad, Wakad, Bhosari, Nigadi, Pimpri, Pimpri-Waghare, Dapodi, kiwale. For the survey, 28 typical slums, two each from the categories as well as with respect to ownership of land, respect to location. Viz. declared and undeclared as described above were sampled.

Out of total huts & population 1087 huts from the 28 sample slums area selected. For each sample slum, a specified number of sample huts which was proportional to the total number of huts in each slum are select. The selection of slum pockets was made on the basis of stratified random sampling methods.

4. Data Collection:

Data collection with the help of the interviews, observations, areal measurements, photos, Google images, questionnaires prepared for get information of average annual income and average annual income with educational status of slums. However this paper will be mostly focus on their

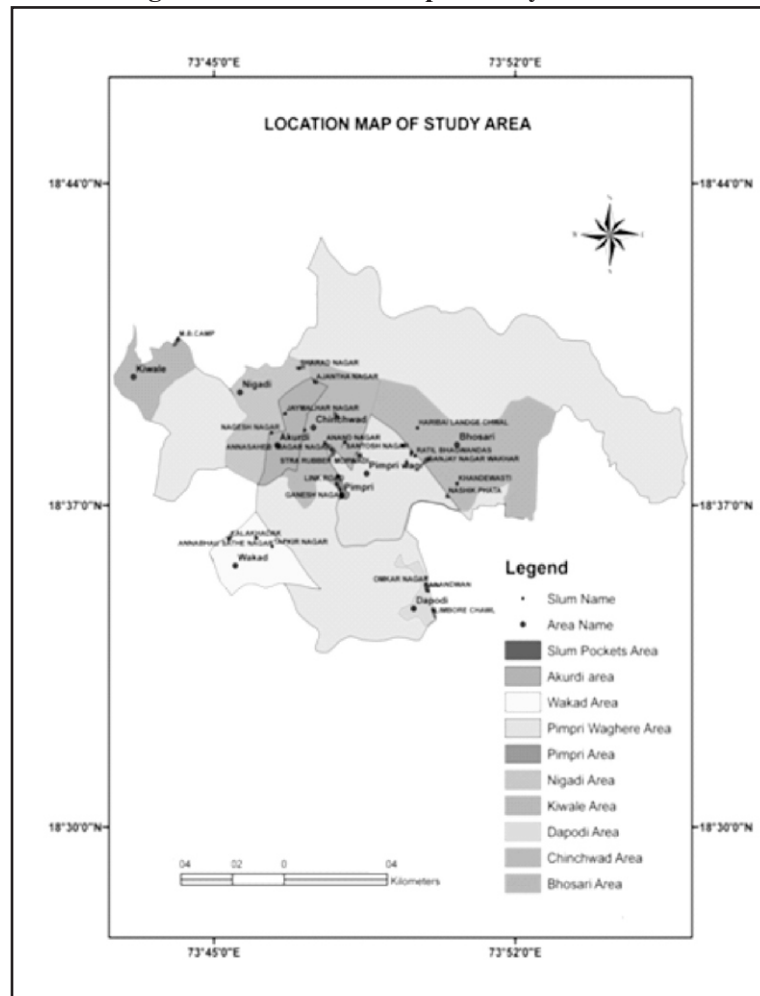
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economic status with the help of graphs, figures, areal Google images.

5. The Location of Study Area:

Pimpri Chinchwad lies between 18° 35' north to 18° 42' north latitude and 73° 42' east to 73° 56' East longitude with an area covers 177.3 km². The city of Pimpri-Chinchwad is situated near the western margin of the Deccan Plateau on the leeward side of the Sahyadri ranges and Western Ghats, 570 mt. (1,870 ft) above sea level, on the banks of the rivers Mula, Pawana and Indrayani. The city is located 18°37'0" North Latitude and 73°048'0" E Longitude. Major settlements of Pimpri Chinchwad urban area these are Pimpri, Pimpri-Waghere, Chinchwad, Akurdi, Nigadi, Dapodi and Kiwale, are located on the bank of Pawana river and also located on the old Pune Mumbai highway, Bhosari is located close to Pune Nashik Highway and Wakad is located near and close to Mumbai Bangalore Expressway

Figure No.1: Location Map of Study Area.



Source: GPS Surveyed by Researcher.

6. Economic assessment of slums:

The sprouting of slums in the urban area is the direct outcome of greater economic opportunities available in the cities and town. (Sufaira C., 2013). An assessment of economic status mainly includes the annual income, availability of home appliances, occupational structure and average annual income wise education and so on. All these factors basically determine the economical status of slum population as well as slum area. This Paper examines economic status with the help of average annual income and average annual income with educational status of slum population.

6.1: Average annual income of slum families:

Annual income of society plays important role in economic development and development of settlement in the area. The structure of houses, housing material and total no. of rooms per family were also determined by income of family. The data for average annual income of slum families was collected through the interview of families by using the questionnaire. The data is classified in three income groups; as below Rs.50,000, Rs.50,000 to Rs.1,00,000, and above Rs.1,00,000.

According to table no. 1 and fig. no.2 out of total families 17.75% families earn income above Rs.1,00,000 per annum. The 16.75% families in Akurdi, 8.62% families in Chinchwad, 32.64 families in Wakad, 20.83 families in Pimpri, 15.38% families in Bhosari, 17.01% families in Pimpri-Waghare, 15.00% families in Dapodi, 28.85% families in Kiwale earns the annually above Rs.1,00,000. whereas no family in Nigadi slum has their Average Annual income above the Rs.1,00,000. Most of the people in this income group are service mans and women's like, in Government offices, in Municipal corporation office, in nearest administrative offices, and few have their own self business. Another income group is below 50,000 Rs in this group out of total families 26.22% families earn income per annum below Rs.50,000. The 33.50% families in Akurdi, 13.68% families in Chinchwad, 20.83% families in Pimpri, 11.54% families in Bhosari, 26.53% families in Pimpri-Waghare, 33.33% families in Dapodi, 52.17% families in Nigadi and 9.62% families in Kiwale. Most of the families in this income group perform the activity like, wage labour, collected raw material (Bhangar) and last one income group is between Rs.50,000 to Rs.1,00,000 Out of total families 56.03% families earn income between Rs.50,000 to Rs.1,00,000 Per annum. The 49.75% Families in Akurdi, 47.41% Families in Chinchwad, 53.68% Families in Wakad, 58.34% Families in Pimpri, 73.08% Families in Bhosari, 56.46% Families in Pimpri-Waghare, 51.67% Families in Dapodi, 47.83% Families in Nigadi and 61.54% Families in Kiwale. Most of the Families belong to this income group perform the activity like, Rickshaw driver, Industrial worker and work in Marketing. The data shows 56.03% families in Pimpri Chinchwad slum areas earn Rs.50,000 to Rs.1,00,000 per annum.

Region wise Classification of Average Annual income		Table No. 1: Average Annual income of slum families in PCUA.			Total
		Below Rs. 50,000	Rs. 50,000 to Rs.1,00,000	Above Rs. 1,00,000	
Akurdi	No .	66	98	33	197
	%	33.5	49.75	16.75	100
Chichwad	No .	51	55	10	116
	%	43.97	47.41	8.62	100
Wakad	No .	13	51	31	95
	%	13.68	53.68	32.64	100
Pimpri	No .	25	70	25	120
	%	20.83	58.34	20.83	100
Bhosari	No .	15	95	20	130
	%	11.54	73.08	15.38	100
Pimpri - Waghare	No .	78	166	50	294
	%	26.53	56.46	17.01	100
Dapodi	No .	20	31	9	60
	%	33.33	51.67	15	100
Nigadi	No .	12	11	0	23
	%	52.17	47.83	0	100
Kiwale	No .	5	32	15	52
	%	9.62	61.54	28.85	100
Total	No .	285	609	193	1087
	%	26.22	56.03	17.75	100

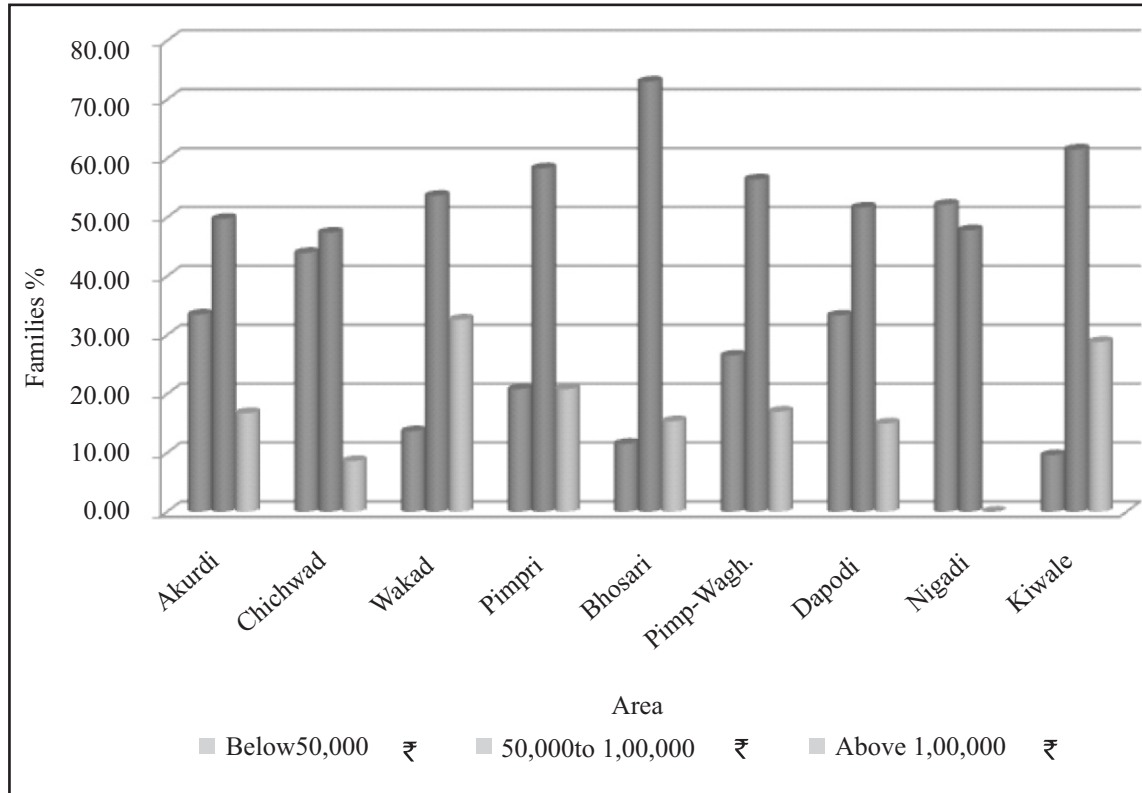


Figure No. 2: Average annual income of slum families in PCUA

6.2: Average annual income with educational status of slum population:

Income and education indicate the status in society or slum and income also play as important role of development of settlement. Educational development is change in life pattern and life style. Average annual income also reflects the up gradation of population towards the education and literacy. The data shows the income class and level of educated family members. This may help to get the idea of educational level of slum population in Pimpri Chinchwad slum area in different economic classes.

According to table no.2 and figure no.3 in below Rs.40,000 annual incomes class educationally 30.13% population is illiterate, 17.57% population have Primary level education, 41.63% population have secondary level education, 6.28% population have Junior college level education, 4.39% population are graduates and post graduate level education. Second income class is Rs.40,000 to Rs.60,000 annual incomes. In this annual class educationally 30.40% population is illiterate, 15.32% population is getting primary level education, 44.89% population is getting secondary level education, 6.18% population is getting junior college education, and 3.21% population is getting gradate and postgraduate level education. Third income class is Rs.60, 000 to Rs.80, 000 annual incomes. In this annual class educationally 28.62% population is illiterate, 13.69% population is getting primary level education, 44.63% population have secondary level education, 9.39% population havejunior college level education, and 3.67% population are gradate and

postgraduate level education. Fourth income class is Rs.80,000 to Rs. 1,00,000 annual incomes. In this annual class educationally 30.13% population is illiterate, 13.77% population is getting primary level education, 42.08% population is getting secondary level education, 8.96% population is getting junior college level education, and 5.06% population is getting gradate and postgraduate level education. Fifth income class is Rs.1, 00,000 to Rs.1, 20,000 annual incomes. In this annual class educationally 27.02% population is illiterate, 13.31% population is getting primary level education, 43.55% population is getting secondary level education, 9.68% population is getting junior college level education, and 6.45% population is getting gradate and postgraduate level education. Sixth income class is Rs.1, 20,000 to Rs.1, 40,000 annual incomes. In this annual class educationally 26.64% population is illiterate, 10.25% population is getting primary level education, 47.95% population is getting secondary level education, 10.25% population is getting junior college level education, and 4.92% population is getting gradate and postgraduate level. Another income class is Rs.1, 40,000 to Rs.1, 60,000 annual incomes. In this annual class educationally 23.18% population is illiterate, 11.92% population is getting primary level education, 44.37% population is getting secondary level education, 13.25% population is getting junior college level education, and 7.28% population is getting gradate and postgraduate level education. Another income class is Rs.1, 60,000 to Rs.1, 80,000 annual incomes. In this annual class educationally 29.09% population is illiterate, 7.27% population is getting primary level education, 43.64% population is secondary level education, 12.73% population is getting junior college level education, and 7.27% population is getting gradate and postgraduate level education. Another income class is Rs.1, 80,000 to Rs.2, 00,000 annual incomes. In this annual class educationally 32.50% population is illiterate, 10.00% population is getting primary level education, 40.00% population is getting secondary level education, 7.50% is getting junior college level education, and 10.00% population is getting gradate and postgraduate level education. Last one income class is above Rs.2, 00,000 annual incomes. In this annual class educationally 25.35% population is illiterate, 12.68% population is getting primary level education, 38.03% population is getting secondary level education, 9.86% population is getting junior college level education, and 14.08% population is gradate and postgraduate level education. The data were related to the average family member Average Annual income wise education. The data indicate out of the total population 29.03% population is illiterate, 43.79% population is taken the secondary level education and 4.61% population is taken the gradate and postgraduate level education in slum population of Pimpri Chinchwad urban area. The data given for the average Annual income and educational status was tested through χ^2 test the calculated value ie $\chi^2 = 61.67$ was found greater than critical value. Which means these two attributes (annual income and educational status) is associated with each other.

The data indicate the most of the population having average annual income Rs.60, 000 to Rs. 80,000 had the secondary level education. In the entire slum shows 29.03% population is illiterate. The majority of population in all slum has got the education from 1st std. to 10th std. it is because, this Primary and secondary level education is available in near the settlement of slum which is not much expensive and affordable the slum dwellers. But little population has got the opportunity of higher education which also away from the slum and rather expensive than primary and secondary education. The low income of slum dweller will not support the child to get the costly higher education.

Table No. 2:
Average annual income with educational status of slum population in PCUA

Classification of Average Annual income in Rupees	No. of family member educated up to the level of										Total
	Illiterate		Primary		Secondary		Junior College		U.G. & P.G.		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Below 40,000	144	30.13	84	17.57	199	41.63	30	6.28	21	4.39	478
40,000 to 60,000	256	30.4	129	15.32	378	44.89	52	6.18	27	3.21	842
60,000 to 80,000	320	28.62	153	13.69	499	44.63	105	9.39	41	3.67	1118
80,000 to 1,00000	232	30.13	106	13.77	324	42.08	69	8.96	39	5.06	770
1,00000 to 1,20,000	67	27.02	33	13.31	108	43.55	24	9.68	16	6.45	248
1,20,000 to 1,40,000	65	26.64	25	10.25	117	47.95	25	10.25	12	4.92	244
1,40,000 to 1,60,000	35	23.18	18	11.92	67	44.37	20	13.25	11	7.28	151
1,60,000 to 1,80,000	16	29.09	4	7.27	24	43.64	7	12.73	4	7.27	55
1,80,000 to 2,00000	13	32.5	4	10	16	40	3	7.5	4	10	40
Above 2,00000	18	25.35	9	12.68	27	38.03	7	9.86	10	14.08	71
Total	1166	29.03	565	6.60	1759	43.79	342	8.51	185	4.61	4017

Source: Own Sample Surveyed.

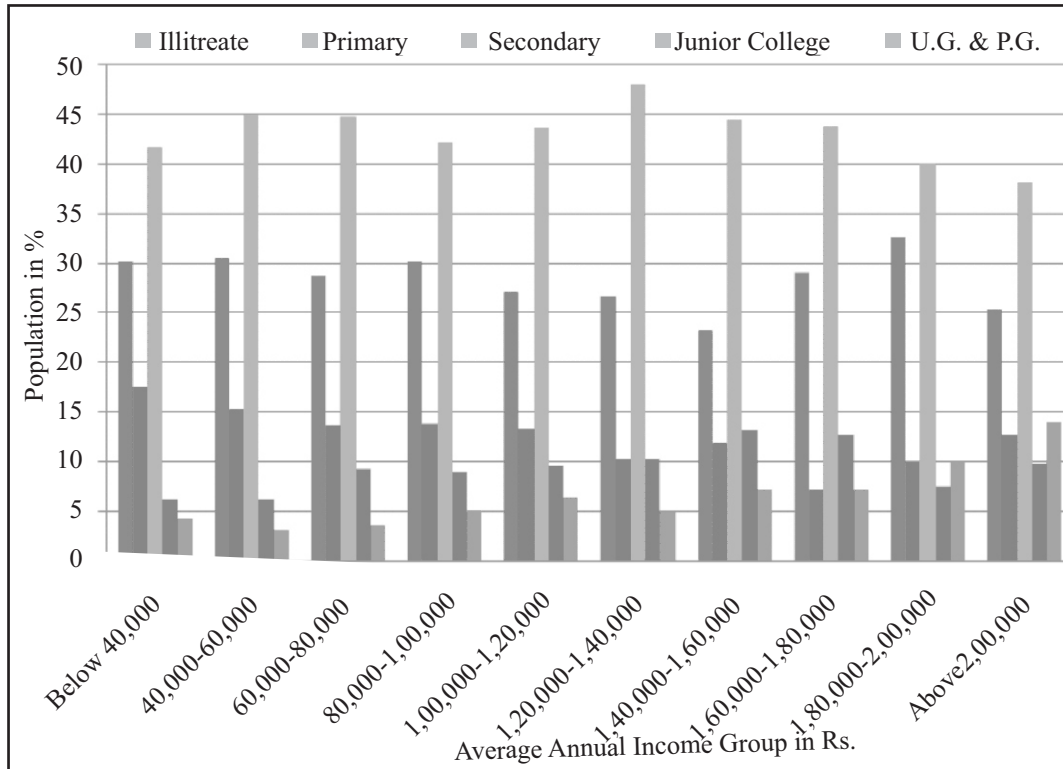


Figure No. 3: Average annual income with educational status of slum population in PCUA

7. Conclusion:

Economic condition or status makes much effect on housing condition, living condition, life style, education, health and other all functions in slum area. The education, income, age structure and cast status all these elements are important for socio-economic assessment of slum population.

Average annual income of society plays important role in economic development and development of settlement in the area. The slum population in Pimpri Chinchwad slum area is in poor stage.

Out of the total sample slum families 26.22% families are in below Rs.50, 000 annual incomes. 56.03% families having income between Rs. 50,000 to Rs. 1, 00,000 and 17.75% families have income above Rs. 1, 00,000 annually. The half of the families in the slum earn their day to day living expenses, where as 26.22% slum families struggle to earn to fulfill their needs. Only 17.75% slum families were earning with better sources in various work places of Pimpri Chinchwad urban area. (Table no.4)

Table No. 4: Average annual income of slum families in Pimpri Chinchwad urban area.

Sr. No.	Average annual income in Rupees	Families in %	Concluding Remarks
1	Below Rs. 50000	26.22	<ul style="list-style-type: none"> • These families in the slum were struggling to earn to fulfill their needs. • Most of the families in this income group perform the activities like, wage labour, collected raw material, painter, construction line and other work. • Most of the workers in this annual income group are illiterate and unskilled type.
2	Rs. 50000 to 100000	56.03	<ul style="list-style-type: none"> • These families in the slum earned their day to day living expenses. • Most of the families belonging to this income group perform activities like, rickshaw driver, industrial worker and work in marketing. • Most of the workers in this group are semi skilled type. • Most of the population in this group is working on temporary base.
3	Above 100000	17.75	<ul style="list-style-type: none"> • These families in the slum were earning with better sources in various work place of PCUA. • Most of the people in this income group are working in government offices, municipal corporation office, nearest administrative offices, and few have their own self small business. • Most of the workers in this group are skilled type.

Sr. No.	Education level	Population in %	Concluding Remarks
1	Illiterate	29.03	<ul style="list-style-type: none"> • Most of the families were poorer household and had parents with lower level education. • The burden of school fees and cost. • These populations in the slum were earning their day to day living expenses.
2	Primary school	14.07	<ul style="list-style-type: none"> • The majority of population has got education from 1st to 10th level. • It is because the free education is provided in slum area up to 10th class only.
3	High school	43.79	
4	Junior college	8.5	<ul style="list-style-type: none"> • Most of the populations are working as professional type work. • These people are educated due to this are getting better education. • These populations got the very well education because of average annual income is better than other population in slum. • These populations in the slum were earning with better sources in various work in places of Pimpri Chinchwad urban area.
5	Under graduate	3.51	
6	Higher educated	1.1	

Source: Own Sample Surveyed.

The majority of population in all slums has got the education 1st std to 10th std level it is because this primary and secondary level education is available in near the settlement of slum which is not much expensive and affordable to the slum dwellers. The major slum family has its Average annual income of about Rs. 40000 to Rs. 80000. Little population of slum has got the higher education it is included the more than Rs.200000 annual income. The low income of slum dweller will not support the child to go to the higher education. (Table no.5)

Table No. 5: Average annual income with educational status of slum population in PCUA.

Source: Own Sample Surveyed.

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