

URBAN POVERTY AND VULNERABILITY IN PUNE CITY

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DECLARATION

I, Shilpa Deepak Deo, hereby declare that this thesis on the topic entitled, “Urban poverty and vulnerability in Pune city” is submitted for the award of Degree of Doctor of Philosophy in Economics to the Gokhale Institute of Politics and Economics, Pune 411004.

It is an original contribution and has been completed during my tenure as a research scholar at Gokhale Institute of Politics and Economics, Pune.

This thesis has not been submitted by me elsewhere for the award of any degree or diploma – part or full. The information gathered by me elsewhere for the thesis is original, true and factual. Such material as has been obtained from other source has been duly acknowledged in the thesis. I hereby request, to consider the thesis for the award of the degree of ‘Doctor of Philosophy’.

Pune

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CERTIFICATE

CERTIFIED that the work incorporated in this thesis entitled “Urban Poverty and Vulnerability in Pune City” submitted by Shilpa Deepak Deo was carried out by candidate under my supervision. It is an original contribution and has not been submitted elsewhere for the award of any other degree. Such material as has been obtained from other source has been duly acknowledged in this thesis. I recommend that the thesis should be considered for the award of the degree of ‘Doctor of Philosophy’.

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Research Guide

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LIST OF ABBREVIATIONS

- 1) AAY: Antyodaya Anna Yojana
- 2) AIDS: Acquired Immunodeficiency Syndrome
- 3) APCE: Average Per Capita Expenditure
- 4) APL: Above Poverty Line
- 5) BPL: Below Poverty Line
- 6) BSUP: Basic Services for the Urban Poor
- 7) CD: Compact Disk
- 8) CDP: City Development Plan
- 9) CHC: Community Health Centre
- 10) CPI: Consumer Price index
- 11) CSO: Central Statistical Office
- 12) CTB: Community Toilet Block
- 13) DBT: Direct Benefit Transfer
- 14) DHS: Demographic and Health Survey
- 15) EBs: Enumeration Blocks
- 16) EGs: Expert Groups
- 17) EMI: Equated Monthly Installment
- 18) FAO: Food and Agriculture Organization
- 19) FCI: Food Corporation of India
- 20) FPS: Fair Price Shop
- 21) GDP: Gross Domestic Product
- 22) GHI: Global Hunger Index
- 23) GI: Galvanized Iron
- 24) GR: Government Resolution
- 25) GSDP: Gross State Domestic Product
- 26) HCR: Head Count Ratio
- 27) HDI: Human Development Index
- 28) HHs: Households
- 29) HIV: Human Immunodeficiency Virus
- 30) HLC: High Level Committee
- 31) HPI: Human Poverty Index
- 32) ICDS: Integrated Child Development Services

- 33) IGNDPS: Indira Gandhi National Disability Pension Scheme
- 34) IGNOAPS: Indira Gandhi National Old Age Pension Scheme
- 35) IGNWPS: Indira Gandhi National Widow Pension Scheme
- 36) IHDS: India Human Development Survey
- 37) IRDP: Integrated Rural Development Programme
- 38) ISEC: Institute for Social and Economic Change
- 39) JNNURM: Jawaharlal Nehru National Urban Renewal Mission
- 40) JNU: Jawaharlal Nehru University
- 41) LIC: Life Insurance Corporation
- 42) LPG: Liquefied Petroleum Gas
- 43) MDGs: Millennium Development Goals
- 44) MMRP: Modified Mixed Recall Period
- 45) MNS: Maharashtra Navnirman Sena
- 46) MoRD: Ministry of Rural Development
- 47) MoSPI: Ministry of Statistics and Programme Implementation
- 48) MPCE: Monthly Per Capita Expenditure
- 49) MRP: Mixed Recall Period
- 50) MSP: Minimum Support Price
- 51) NAC: National Advisory Council
- 52) NAS: National Accounts Statistics
- 53) NFBS: National Family Benefit Scheme
- 54) NFHS: National Family Health Survey
- 55) NFSA: National Food Security Act
- 56) NGO: Non – Governmental Organization
- 57) NIPFP: National Institute of Public Finance and Policy
- 58) NITI: National Institution for Transforming India
- 59) NREGA: National Rural Employment Guarantee Act
- 60) NREP: National Rural Employment Programme
- 61) NSAP: National Social Assistance Programme
- 62) NSSO: National Sample Survey Office
- 63) NT: Nomadic Tribes
- 64) NULM: National Urban Livelihoods Mission
- 65) OBC: Other Backward Classes

- 66) OPHI: Oxford Poverty and Human Development Initiative
- 67) PCA: Primary Census Abstract
- 68) PCPD: Per Capita Per Day
- 69) PDS: Public Distribution System
- 70) PGI: Poverty Gap Index
- 71) PHC: Primary Health Centre
- 72) PLB: Poverty Line Basket
- 73) PMC: Pune Municipal Corporation
- 74) PMJDY: Pradhan Mantri Jan Dhan Yojana
- 75) PMPML: Pune Mahanagar Parivahan Mahamandal Limited
- 76) PMT: Pune Municipal Transport
- 77) PNG: Piped Natural gas
- 78) PPP: Purchasing Power Parity
- 79) PRIA: Participatory Research in Asia
- 80) RAY: Rajiv Awas Yojana
- 81) RBI: Reserve Bank of India
- 82) RTE: Right To Education
- 83) SC: Scheduled Caste
- 84) SDGs: Sustainable Development Goals
- 85) SECC: Socio – Economic Caste Census
- 86) SFDP: Small Farmers Development Programme
- 87) SHGs: Self Help Groups
- 88) SJSRY: Swarna Jayanti Shahari Rozgar Yojana
- 89) SPGI: Squared Poverty Gap Index
- 90) SRA: Slum Rehabilitation Authority
- 91) ST: Scheduled Tribe
- 92) TPDS: Targeted Public Distribution System
- 93) TRYSEM: Training of Rural Youth for Self – Employment
- 94) TV: Television
- 95) UDPFI: Urban Development Plans Formulation and Implementation
- 96) UFWC: Urban Family Welfare Centre
- 97) UHC: Urban Health Centre
- 98) UHP: Urban Health Posts

- 99) ULBs: Urban Local Bodies
- 100) UN: United Nations
- 101) UPA: United Progressive Alliance
- 102) URP: Uniform Recall Period
- 103) US: United States
- 104) UTs: Union Territories
- 105) VAMNICOM: Vaikunth Mehta National Institute of Co – operative Management
- 106) VIFs: Variance Inflation Factors
- 107) VJ: Vimukta Jaati
- 108) WPI: Wholesale Price Index

CHAPTER ONE

URBAN POVERTY IN INDIA

“Let the portrait of poverty
Appear in its naked form,
Without any pretension,
In the limelight” (Mitra, 2010).

Article 25 of the Universal Declaration of Human Rights: “Everyone has the right to a standard of living adequate for the health and well – being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control”.

“We must pay particular attention to the needs and rights of the most vulnerable and excluded, such as women, children, the elderly, indigenous people, refugees and displaced families, as well as people with disabilities and those living in poor rural areas and urban slums” (United Nations General Assembly, 2013).

“Human development in India remains inadequate because the focus remains on GDP growth” (Economic & Political Weekly [EPW], 2016).

The population of the urban poor is increasing in many developing country cities. “Urban poor are largely understood as people living in overcrowded and dilapidated slums or in squatters built on pavements, along railway tracks, besides pipelines, under bridges, on ill – drained marshlands and any vacant land available to them, in the urban areas” (Karn, Shikura and Harada, 2003). In addition to this, the problem of urban slums, at least in the developing world, is one, an incremental trend whose end is not in view, and, two, a phenomenon which has recurrence built into it (Tiwari, 2010).

Contrasts between growing wealth and acute deprivation are hardly uncommon in the developing world. “Glittering skyscrapers rise next to rickety shacks, expensive restaurants look out upon ragged street children, big – ticket tennis and golf tournaments are

hosted in places where most people never get to hold a tennis racket or golf club” (Krishna, 2010).

The growing number of people living in slums and as pavement dwellers is intimately related to the process and pace of urbanization in the country as a whole. Moreover, a number of other factors affect migration streams in significant ways including the pace of rural development and the rate of urbanization within the migrant’s home state, the particular kinds of economic opportunities offered by the city, and the personal ties of the migrant, be they based on kinship, caste or merely friendship (Singh and De Souza, 1980). Further, since disparities in income and consumption and differences in life styles between the rich and the poor of the metropolitan cities are sharp, the feelings of deprivation, frustration and anger are much greater than among the rural poor (Nath, 1994).

Between 1990 and 2010, the number of extremely poor people fell by half as a share of the total population in developing countries, from 43% to 21% – a reduction of almost 1 billion people. Hence, the MDG of halving global poverty between 1990 and 2015 was achieved five years early. However, people living below \$ 1.25 a day, the internationally accepted extreme – poverty line, live lives that are poor, nasty, brutish and short. They lack not just education, health care, proper clothing and shelter – which most people in most of the world take for granted – but even enough food for physical and mental health. Raising people above that level of wretchedness is not a sufficient ambition for a prosperous planet, but it is a necessary one (The Economist, 2013).

The World Bank has recently revised the global poverty line, previously pegged at \$ 1.25 a day to \$ 1.90 a day. Hence, the latest headline estimate for 2012 suggests that close to 900 million people (12.8% of the global population) lived in extreme poverty. With the SDGs adopted in September, seeking to end poverty in all its forms everywhere, the World Bank Group has set itself the target of bringing down the number of people living in extreme poverty to less than 3% of the world population by 2030 (Venkat, 2015). However, the Bank notes that this could be an ambitious goal, with the HCR for 2030 being projected to be between 4.2% and 5.7% (Subramanian, 2015).

Moreover, according to the recent OPHI Country Briefing, 53.8% of the population is multidimensionally poor¹ and 16.4% is vulnerable to poverty² in India.

India has improved its ranking in the GHI³, by moving up to 55 in 2014 from 63 in 2013, but fighting hunger remains a challenge (The Economic Times, 2015). Moreover, though India is no longer in the ‘alarming’ category, the hunger status of the country is still classified as ‘serious’ (The Times of India, 2014).

A large proportion of India’s urban population lacks the income or assets to meet basic needs and lives in poverty in slums and informal settlements with very inadequate provision for basic services (Bapat, 2009). Identification of these urban poor households is a necessary condition for more effectively targeting the beneficiaries under various poverty alleviation programmes being implemented by the Government of India (Planning Commission, 2012). However, most of those ‘living in poverty’ are not considered poor by official definitions (Bapat, 2009).

The Planning Commission has constituted EGs from time to time to revisit the methodological issues related to the measurement of poverty so as to make the estimates more relevant to the contemporary economic situation. An earliest attempt was made by the Planning Commission in 1962 by constituting a Working Group to devise a methodology of poverty estimation. The Group submitted its report in the same year and the Planning Commission accepted its recommendations immediately. Then, a Task Force was constituted in 1977, which submitted its report in 1979, under the chairmanship of Dr. Y. K. Alagh. Further, the Planning Commission constituted an EG in 1989 under the chairmanship of Professor D. T. Lakdawala. The Group submitted its report in 1993 and the Planning Commission accepted its recommendations in 1997. Then, an EG was constituted under the chairmanship of Professor Suresh. D. Tendulkar in 2005. The Group submitted its report in November 2009 and the Planning Commission accepted its recommendations in January 2011 (Planning Commission, 2014).

On September 20, 2011, the Planning Commission, upholding the Suresh Tendulkar Committee’s findings, had filed an affidavit in the Supreme Court updating the official

¹A person is identified as multidimensionally poor if they are deprived in at least one third of the weighted indicators.

² If a person is deprived in 20 – 33% of the weighted indicators they are considered vulnerable to poverty.

³GHI combines following four component indicators into one index: undernourishment, child wasting, child stunting, and child mortality.

urban poverty line to Rs. 32 pcpd at June, 2011, prices. However, since the Planning Commission was highly criticized for giving such a low poverty line it then declared that the data collected by the SECC will be the basis for identifying those deemed eligible for entitlements under various central government programmes.

Faced with a political outcry, the Government of India appointed an EG, in June 2012, with C. Rangarajan as chairman, to take a fresh look at the methodology for the measurement of poverty. The committee submitted its report towards the end of June 2014 (Rangarajan and Dev, 2015).

The group has computed the average requirements of calories, proteins and fats. It has also taken into consideration normative level of consumption expenditure for essential non – food item groups (education, clothing, conveyance and house rent) besides a residual set of behaviourally determined non – food expenditure (Rangarajan and Dev, 2015). It raised the daily per capita expenditure to Rs. 47 from Rs. 33 for the urban poor and pegged the total number of poor in the country at 363 million or 29.5% of the population (Sharma, 2014).

However, the Rangarajan committee report has been criticized for missing the opportunity to press the case for a multidimensional assessment of poverty (Subramanian, 2014). In addition to this, it was criticized for not taking into consideration health and sanitation as essential non – food items (Mishra, 2014).

“The history of poverty lines in India is a case study in the interaction of science and politics, with political discussions often claiming a scientific basis, sometimes with justification, more often without” (Deaton and Kozel, 2005).

“There has been acrimonious discussion in India about how many are poor, but not on the more important issue of who the poor are and how they are being identified” (Saxena, 2015).

“There is by now a growing recognition that poverty is a matter of not simply inadequate income but also of low literacy, short life expectation and lack of basic needs such as adequate shelter, clothing and safe drinking water” (Radhakrishna, Ravi and Reddy, 2010).

In addition to this, it is not just the absolute lowness of the poverty line that attracts criticism, it is this lowness in relation to the ordinary, everyday meaning one attaches to the term ‘poverty line’ and what that term is commonly intended to convey. “In customary usage, one would understand by a ‘poverty line’ a level of income that enables a person to achieve a standard of living that is compatible with escaping certain basic deprivations, such as on the fronts of nutrition, clothing, shelter, education, and health”. Moreover, the ‘resolution’ frequently resorted to is to employ the language of a ‘poverty line’ to suggest that income is a means to an end (that of escaping deprivation in functionings space), whereas, in practice, income ends up being employed as an end in itself. If one insists on employing income as a means to an end, there is or at least there ought to be no option but to derive a more – or – less carefully constructed capability – based money – metric poverty line. Alternatively, if one treats income as an end in itself, there is a case for employing money – metric poverty indicator (Subramanian, 2014).

Recently, a panel tasked with devising ways to reduce poverty has backed the controversial ‘Tendulkar poverty line’, which categorised people earning less than Rs. 33 a day as poor, on the ground that the line is primarily meant to be an indicator for tracking progress in combating poverty. Moreover, the line is not meant to help identify those to whom government benefits need to be distributed. Instead, it is the BPL Census on the basis of which state governments identify the poor and the latest of these is the SECC. In addition to this, the main criticism of the Tendulkar poverty line has been that it is too low. However, if we set the poverty line at too high a level, we would be tracking how many people, who had already achieved a certain level of comfort, have been made yet further comfortable. The line will tell us little about what is happening to households in abject poverty, according to the panel (Mehra, 2016).

Measurement and identification of poor is necessary but not sufficient. It is also important to think clearly and systematically about how the position of poor people may be improved, and to act accordingly (Haughton and Khandker, 2009).

“The extent of poverty in today’s world is unacceptable. The reason that the world does not erupt in dissent is because a huge amount of intellectual effort goes into making it appear acceptable” (Basu, 2010).

Definitions of urban poverty and vulnerability

“Urban poverty is a multidimensional phenomenon. The urban poor live with many deprivations. Their daily challenges may include:

- Limited access to employment opportunities and income,
- Inadequate and insecure housing and services,
- Violent and unhealthy environments,
- Little or no social protection mechanisms, and
- Limited access to adequate health and education opportunities” (The World Bank, 2012).

Vulnerability is defined as the probability or risk today of being in poverty or to fall into deeper poverty in the future (The World Bank, 2013).

Outline of the study

The present study is organized into following 7 chapters:

Chapter 1 throws light on the importance of studying urban poverty in India. With the help of recent data and statistics, it highlights the living conditions of the urban poor and vulnerable. Further, it explains in brief the efforts taken by the government so far in case of measurement of poverty along with the need to incorporate multidimensionality of poverty. Finally, the definitions of urban poverty and vulnerability that have been followed in the study have also been explained.

Chapter 2 has been divided into following two parts: a) Critical evaluation of government’s efforts; and b) Researchers’ efforts. Since the government’s efforts with respect to measurement of poverty have been explained in brief in chapter 1, it is explained in great detail in chapter 2. Further, various issues in case of estimation of poverty have also been incorporated. An attempt has been made to explain the way in which various researchers have tried to overcome the lacunae in case of the government’s efforts. To incorporate the government’s and researchers’ efforts various books, research papers, reports, newspaper articles, etc. have been referred. Finally, importance of the present study has been highlighted by explaining the way in which it is going to be different from the studies conducted so far.

The objectives of the study have been incorporated in chapter 3. Further, the importance of understanding the living conditions of the slum dwellers and houseless households staying in Pune city has been highlighted by explaining the profile of Pune city. The living conditions of the slum dwellers staying in Pune city have been compared with the ones staying in Nagpur city with the help of the housing stock, amenities and assets in slums – census 2011 dataset. In addition to this, the sampling method, which has been used for collecting information from the slum dwellers and houseless households, has been stated. Finally, the details regarding the data that has been used for the selection of notified and non – notified slums and houseless households have also been provided.

Chapter 4 throws light on the dynamics of urban poverty and vulnerability in India. Since residential inadequacy turns out to be a major problem out of the analysis of secondary data provided by the NSSO, an attempt has been made to model the determinants of residential vulnerability using the NFHS dataset.

Chapter 5 highlights the demographic, social and economic characteristics of the notified and non – notified slum dwellers staying in Pune city. It also explains how impoverishment in the rural areas adds to the existing magnitude of urban poverty. Moreover, the reasons for increasing poverty in the urban areas have also been explained. To understand the demographic, social and economic characteristics of the slum dwellers various indicators have been incorporated into the chapter like head of the household, category, migration and role of social networks, household size, dependency ratio, literacy level, employment, per capita income, poverty, inequality, culture, and entertainment, etc.

In chapter 6 the importance of identifying the causes of vulnerability to poverty has been highlighted. Further, an attempt has been made to identify and quantify the causes of vulnerability to poverty in addition to the ones given by the SECC. The methodology used for the computation of indices of various dimensions of vulnerability has also been explained. Since a marked difference is found out between the notified and non – notified slum dwellers with respect to residential vulnerability and access to basic services, regression analysis has been carried out to find out which other factors have a significant influence on the two indices along with the type of slum. Moreover, since various indicators have been used for the computation of the indices, an indicator – wise analysis is also presented to be able to explain the differences between the two types of slum dwellers and differences across administrative wards in a better way.

Chapter 7 throws light on the importance of understanding the lived realities of the poor which are so different from our understanding of their poverty. Since the poor people also take various measures to get out of the poverty trap along with the government and NGO, the study tries to capture the measures that they all have been taking. The expectations of the slum dwellers from society or government have also been explained. Moreover, some of the schemes implemented by the government of India for poverty alleviation have been described in brief. The evolution of the PDS system over the years has been described in the chapter. Further, an attempt has been made to find out the way in which PDS has helped the slum dwellers in reducing the intensity of vulnerability to poverty. Finally, the importance of spreading awareness about the existing schemes and simplifying procedures for the poor has been highlighted.

Since a qualitative analysis along with the quantitative one helps us to get a better idea of the situation at the grass – root level, case studies of the houseless households staying in various corners of the Pune city have been incorporated in chapters 5, 6 and 7.

Chapter 8 provides a summary of all the 7 chapters along with the limitations and policy implications of the study.

CHAPTER TWO

REVIEW OF LITERATURE

There have been innumerable efforts made so far to identify the poor and vulnerable and measure poverty in India. The Government of India has taken steps towards identification of the poor (and vulnerable recently) and measurement of poverty with the help of various EGs right from the Task Force that was set up in 1962 to the NITI Aayog's Task Force on Eliminating Poverty. There have been many researchers as well who have been suggesting the ways in which the poor and vulnerable can be identified and poverty can be measured besides the suggestions given by the EGs. Hence, this module can be divided into following two parts: a) Critical evaluation of government's efforts; and b) Researchers' efforts.

a) Critical evaluation of government's efforts

The Planning Commission has been the nodal agency in the Government of India for estimation of poverty. It estimates the incidence of poverty at the national and state level separately in the rural and urban areas. The incidence of poverty is measured by the HCR. This ratio is measured from an exogenously determined poverty line quantified in terms of MPCE and the class distribution of persons obtained from the large sample survey of consumer expenditure data of the NSSO (Planning Commission, 2014).

Working Group

The Planning Commission has constituted various EGs from time to time to review the methodology of measurement of poverty in India. First Working Group was constituted in 1962 to find out a desirable minimum level of living for the population. It recommended that the national minimum consumption expenditure for a household of five persons (four adult consumption units) should not be less than Rs. 100 per month or Rs. 20 per capita per month in terms of 1960 – 61 prices. For urban areas, this figure was Rs. 125 per month or Rs. 25 per capita per month to cover the higher prices. However, this poverty line excluded expenditure on health and education as it was assumed to be provided by the State (Planning Commission, 2014).

Alagh committee

Then, a Task Force was constituted in July 1977 on 'Projections of minimum needs and effective consumption demand' under the chairmanship of Dr. Y. K. Alagh. It estimated the average calorie requirements as a population – weighted average of the age – gender – activity specific calorie allowances recommended by the Nutrition Expert Group (1968) by reference to the 1971 population Census. Based on the 28th Round (1973 – 74) NSSO data it was estimated that, on an average, consumer expenditure (food and non – food) of Rs. 49.09 per capita per month was associated with a calorie intake of 2400 pcpd in rural areas and Rs. 56.64 per capita per month with a calorie intake of 2100 pcpd in urban areas (Planning Commission, 2014).

The poverty lines for later years were estimated by updating the poverty line of the year 1973 – 74 using the implicit CSO private consumption expenditure deflator. Further, the NSSO distribution of private consumption was adjusted pro – rata to correspond to the consumption estimates of NAS made by the CSO. The Planning Commission used national poverty line uniformly for all states and UTs (Planning Commission, 2014).

However, this methodology of estimating poverty was criticized on various grounds which can be listed down as follows: a) The adjustment, whereby the discrepancy between the NAS and the NSSO estimates of consumption is allocated on a pro – rata basis across all expenditure classes, was debated by experts mainly because the discrepancy grew in later years and also because the discrepancy could not possibly be similar across all consumption expenditure deciles of the population; b) Besides, it was pointed out that the application of a uniform poverty line for all the states and UTs implicitly assumes absence of price differential across the states and UTs; and c) The methodology assumed a fixed consumption basket of the poor over time and a uniform consumption basket for all the states and UTs (Planning Commission, 2014).

Moreover, the magnitude of poverty ratio fell significantly as the adjustment factor increased over time. This in turn leads to a lower allocation not only in the anti – poverty programmes, but also in the developmental programmes, as the latter also takes poverty as one of the criteria in its allocation, both inter – and intra – state (Planning Commission, 2014).

Lakdawala committee

Hence, the Planning Commission constituted an EG in September 1989 under the chairmanship of Professor D. T. Lakdawala to re – visit the methodology of poverty estimation. It was constituted to ‘look into the methodology for estimation of poverty and to re – define the poverty line, if necessary’. However, it did not redefine the poverty line. Though, it retained the poverty line defined by the Task Force (1977) it disaggregated these national poverty lines into state – specific poverty lines in order to reflect the inter – state price differentials (Planning Commission, 2014).

The NSSO consumption distribution was used as it is, that is without adjustment to the NAS consumption. This was a major departure from the Task Force (1977) method. Further, the aggregate poverty ratio of the state was worked out by combining its rural and urban poverty ratios and the national poverty ratio was computed as weighted average of state – wise poverty ratios. The EG could estimate the poverty lines of eighteen states. In case of remaining states, the poverty ratios were equated with one of the eighteen states based on the criteria of physical contiguity of areas and similarity of economic profile. The Planning Commission estimated the poverty ratios in rural and urban areas of different states / UTs for the years 1973 – 74, 1977 – 78, 1983, 1987 – 88, 1993 – 94, 1999 – 2000 and 2004 – 05 for which the large sample survey consumer expenditure data were then available from the 28th, 32nd, 38th, 43rd, 50th, 55th and 61st rounds of the NSSO respectively. The official estimate of poverty was derived by the Planning Commission using the Lakdawala Group methodology until January 2011 (Planning Commission, 2014). The poverty line, poverty ratio, and the number of poor for different years at the national level estimated using the Lakdawala group method is given in Table 2.1.

Table 2.1: Poverty line, poverty ratio and number of poor: Lakdawala group method

Years	Poverty line (Rs. monthly per capita)		Poverty ratio (%)			Number of poor (million)		
	Rural	Urban	Rural	Urban	Total	Rural	Urban	Total
1973 – 74	49.63	56.76	56.4	49.0	54.9	261.3	60.0	321.3
1977 – 78	56.84	70.33	53.1	45.2	51.3	264.3	64.6	328.9
1983 – 84	89.50	115.65	45.7	40.8	44.5	252.0	70.9	322.9
1987 – 88	115.20	162.16	39.1	38.2	38.9	231.9	75.2	307.1
1993 – 94	205.84	281.35	37.3	32.4	36.0	244.0	76.3	320.3
2004 – 05 (URP)*	356.3	538.60	28.3	25.7	27.5	220.9	80.8	301.7

Note: *URP = URP consumption in which the consumer expenditure data for all the items are collected from 30 – day recall period.

Source: Planning Commission (2014), “Report of the expert group to review the methodology for measurement of poverty”, June, Government of India.

Tendulkar committee

An EG was constituted by the Planning Commission in December 2005 under the chairmanship of Suresh. D. Tendulkar. It was mandated to: a) examine the issues relating to the comparability of the NSSO 50th, 55th, and 61st round consumer expenditure data and suggesting methodologies for deriving such comparability with past and future survey data; b) review alternative conceptualizations of poverty, and associated technical aspects of procedures of measurement and data base for empirical estimation including procedures for updating over time and across states; and c) recommend any changes in the existing procedures of official estimates of poverty (Planning Commission, 2014).

This group did not construct a poverty line. Rather, it adopted the officially measured urban poverty line of 2004 – 05 based on Lakdawala group methodology and converted this poverty line (which is URP – consumption based) into MRP – consumption. Further, it employed a different method of pricing the goods and services constituting the consumption basket of the poor, and in essence, the poverty line. A key element in the Tendulkar group methodology is the derivation of the reference All – India PLB as one corresponding to the MRP – equivalent of MPCE corresponding to the all – India urban HCR on URP as per the Lakdawala group methodology. Moreover, it outlined the methodology for updating the state – specific rural and urban poverty lines of 2004 – 05 for

future years (Planning Commission, 2014). One of the major departures made by the Tendulkar committee was consciously moving away from the calorie anchor (Planning Commission, 2012).

The Tendulkar group recommended the compilation of price indices from unit level prices of the NSSO. Moreover, the revised poverty lines would provide adequate provision not only for food but also for education and health (Radhakrishna et al., 2010).

The Planning Commission released estimates of poverty, which were derived from the Tendulkar group method, for 1993 – 94 and 2004 – 05 in January 2011 and for 2009 – 10 and 2011 – 12 in March 2012 and July 2013 respectively (Planning Commission, 2014). The poverty line, poverty ratio, and the number of poor for different years at the national level estimated using the Tendulkar group method is given in Table 2.2. Moreover, the rate of decline in poverty ratio during different periods is given in Table 2.3.

Table 2.2: Poverty line, poverty ratio and number of poor: Tendulkar group method

Years	Poverty line (Rs. monthly per capita)		Poverty ratio (%)			Number of poor (million)		
	Rural	Urban	Rural	Urban	Total	Rural	Urban	Total
1993 – 94	-	-	50.1	31.8	45.3	328.6	74.5	403.7
2004 – 05	447	579	41.8	25.7	37.2	326.3	80.8	407.1
2009 – 10	673	860	33.8	20.9	29.8	278.2	76.5	354.7
2011 – 12	816	1000	25.7	13.7	21.9	216.7	53.1	269.8

Source: Planning Commission (2014), “Report of the expert group to review the methodology for measurement of poverty”, June, Government of India.

Table 2.3: Decline in poverty ratio: Tendulkar group method

(in percentage points per year)

Period	Rural	Urban	Total
1993 – 94 to 2004 – 05	0.75	0.55	0.74
2004 – 05 to 2011 – 12	2.32	1.69	2.18
1993 – 94 to 2011 – 12	1.36	1.01	1.30

Source: Planning Commission (2014), “Report of the expert group to review the methodology for measurement of poverty”, June, Government of India.

However, the poverty lines defined by the Tendulkar Committee did not reflect the changing times and aspirations of the people (Planning Commission, 2014). Further, there was severe criticism of the Tendulkar group methodology for its use of the urban basket for rural areas and for underestimating urban poverty (Rangarajan and Dev, 2015). In addition to this, several representations were made suggesting that the Tendulkar poverty line was too low (Planning Commission, 2013).

On September 20, 2011, the Planning Commission, upholding the Suresh Tendulkar Committee’s findings, had filed an affidavit in the Supreme Court updating the official urban poverty line to Rs. 32 pcpd at June, 2011, prices. However, since the Planning Commission was highly criticized for giving such a low poverty line it then declared that the data collected by the SECC will be the basis for identifying those deemed eligible for entitlements under various central government programmes.

Dreze and Sen (2013) have very well illustrated (in a simplified manner) how the official urban and rural poverty lines of Rs. 32 and Rs. 26 pcpd respectively are actually ‘destitution lines’, which do not ensure anything above bare subsistence. Moreover, the government passed the NFSA in 2013 extending the benefits of subsidised food to 70% of the rural and 50% of the urban population, irrespective of that the percentage of BPL households was only 26% and 14% in these areas. This was in keeping with the reality that although the poverty line was in 2011 – 12 fixed at Rs. 27 and Rs. 33 pcpd for rural and urban areas respectively (The author calls it the ‘kutta – billi’ line, as only cats and dogs can survive on such a low income), 70% of rural and 50% of urban people lived below Rs. 50 and Rs. 70 pcpd respectively, which was barely enough to meet all basic needs (Saxena, 2015).

Rangarajan committee

Hence, the Planning Commission, in June 2012, constituted an EG under the Chairmanship of Dr. C. Rangarajan to once again review the methodology for the measurement of poverty (Planning Commission, 2013).

The rate of decline in the poverty ratio during the most recent 7 year period 2004 – 05 to 2011 – 12 (2.18 percentage points per year) was about three times of that experienced in the 11 – year period 1993 – 94 to 2004 – 05 (0.74 percentage points per year) (see Table 2.3). Further, it is important to note that although the trend decline documented above is based on the Tendulkar poverty line which is being reviewed and may be revised by the Rangarajan Committee, an increase in the poverty line will not alter the fact of a decline. Hence, though the absolute levels of poverty would be higher, the rate of decline would be similar (Planning Commission, 2013).

The Rangarajan group has computed the average requirements of calories, proteins and fats. It has also taken into consideration normative level of consumption expenditure for essential non – food item groups (education, clothing, conveyance and house rent) besides a residual set of behaviourally determined non – food expenditure (Rangarajan and Dev, 2015). It raised the daily per capita expenditure to Rs 47 from Rs 33 for the urban poor and pegged the total number of poor in the country at 363 million or 29.6% of the population (Sharma, 2014).

The poverty line, poverty ratio, and the number of poor for different years at the national level estimated using the Rangarajan and Tendulkar group method is given in Table 2.4. Moreover, the rate of decline in poverty ratio and number of poor during different periods is also summarized in the table.

Table 2.4: Poverty estimates in 2009 – 10 and 2011 – 12

Years	Poverty line (Rs. monthly per capita)		Poverty ratio (%)			Number of poor (million)		
	Rural	Urban	Rural	Urban	Total	Rural	Urban	Total
Rangarajan group								
2009 – 10	801	1198	39.6	35.1	38.2	325.9	128.7	454.6
2011 – 12	972	1407	30.9	26.4	29.5	260.5	102.5	363.0
Reduction (percentage points)	-	-	8.7	8.7	8.7	65.4	26.2	91.6
Tendulkar group								
2009 – 10	673	860	33.8	20.9	29.8	278.2	76.5	354.7
2011 – 12	816	1000	25.7	13.7	21.9	216.7	53.1	269.8
Reduction (percentage points)	-	-	8.1	7.2	7.9	61.5	23.4	84.9

Source: Planning Commission (2014), “Report of the expert group to review the methodology for measurement of poverty”, June, Government of India.

A comparison of the poverty ratio for the years 2009 – 10 and 2011 – 12 derived from the two groups’ method shows that the average level of poverty ratio derived from the Rangarajan group method is higher than that derived from the Tendulkar group method. In addition to this, as has been already discussed above, though the Rangarajan committee gives a higher level of absolute poverty ratio, the reduction in poverty ratio derived using the committee’s method does not turn out to be very different than that of the Tendulkar method (Planning Commission, 2014).

It is for the first time that the poverty computations in India are based on the MMRP consumption expenditure survey. Under this method, to reduce error, data for 2009 – 10 and 2011 – 12 were collected on the basis of weekly recall for some high frequency food items, annual recall for five low frequency items and monthly recall for all other items. Though this is a positive thing from a data quality perspective, it does away with comparable poverty estimates prior to 2009 – 10 (Mishra, 2014).

Moreover, the Rangarajan committee has been criticized for missing the opportunity to press the case for a multidimensional assessment of poverty. Rather, the Rangarajan committee has been altogether too hasty in dismissing the prospects of such assessment on the strength of alleged difficulties with the availability of data and alleged difficulties in aggregation procedures. Indeed, the work of authors such as Jayaraj and Subramanian (2009) suggests that it is indeed possible to have reasonable estimates of multidimensional poverty, which have the virtue of corroborating the evidence available from ordinary observation that India is still a country of very considerable poverty, without laying claims to exhaustiveness or impeccable accuracy (Subramanian, 2014). However, the Rangarajan group states that it is not against multidimensional poverty. So, one can analyze the progress of non – income indicators like education, health, sanitation, drinking water, child mortality, etc. over time along with income or consumption poverty. Rather, such non – income indicators of poverty are reflections of inadequate income. Hence, defining poverty in terms of income or in the absence of such data in terms of expenditure seems most appropriate and it is this method which is followed in most countries (Rangarajan and Dev, 2015).

In addition to this, it was criticized for not taking into consideration health and sanitation as essential non – food items (Mishra, 2014).

It is not clear why the Rangarajan committee ignored micronutrient requirements especially, because in India iron deficiency is a significant cause for anaemia and maternal ill health (Ray and Sinha, 2014). Though the authors have rightly pointed out the importance of micronutrients for nutrition the data on this are not readily available to include them in the food component of the poverty line (Rangarajan and Dev, 2015).

Rather, some ‘practical knowledge’ of the socially necessary means of avoiding the harsher aspects of deprivation in India would suggest command over a monthly income of at least Rs. 12,500 for a family of five persons in 2011. Thus, even the enhanced poverty lines suggested by the Rangarajan Committee are substantially low in relation to the actual needs (Subramanian, 2015).

Further, the poverty lines suggested by the Rangarajan Committee have led to a popular outcry against the appropriateness of these lines. However, the Rangarajan report has indicated that any poverty measure is always somewhat judgemental, and, hence, the normative basis behind its calculation may not be agreeable to all (Mishra, 2014).

Rather, with two different criteria the Rangarajan committee could have suggested two different poverty lines (rural and urban) and linked them to two different commodity baskets (Mishra, 2014).

It must be borne in mind that there are many non – economic dimensions that are important. There are socio – political concerns that could link poverty to powerlessness, alienation and exclusion. Further, efforts should be made to identify the poor while not excluding the vulnerable who could be on or somewhat above the poverty line or dimensions that are not measured (Mishra, 2014).

Prof. Angus Deaton rejected most of the recommendations of the Rangarajan committee except for the one seeking that entitlement programmes in India be delinked from the poverty line and urged giving up of the BPL – targeting (Mehra, 2015).

NITI Aayog

Recently, NITI Aayog, tasked with devising ways to reduce poverty, has backed the controversial ‘Tendulkar poverty line’, which categorised people earning less than Rs. 33 a day as poor, on the ground that the line is primarily meant to be an indicator for tracking progress in combating poverty. Moreover, the line is not meant to help identify those to whom government benefits need to be distributed. Instead, it is the BPL Census on the basis of which state governments identify the poor and the latest of these is the SECC. In addition to this, the main criticism of the Tendulkar poverty line has been that it is too low. However, if we set the poverty line at too high a level, we would be tracking how many people, who had already achieved a certain level of comfort, have been made yet further comfortable. The line will tell us little about what is happening to households in abject poverty, according to the Aayog (Mehra, 2016).

Further, a two – pronged strategy of sustained, rapid and employment – intensive growth and making anti – poverty programmes effective was suggested to combat poverty. Outlining four options to track the poor, the Aayog explained, “Firstly, continue with the Tendulkar poverty line. Secondly, switch to the Rangarajan or other higher rural and urban poverty lines, thirdly, track progress over time of the bottom 30% of the population and lastly, track progress along specific components such as nutrition, housing, drinking water, sanitation, electricity and connectivity” (Singh, 2016).

MoSPI

However, the task of establishing accurate benchmarks for defining ‘poverty line’ is likely to go to MoSPI. It is best suited to work on a benchmark as it already has data from various sources, which it can use to further refine the poverty estimates and provide separate indicators for beneficiaries of different schemes such as health, housing and food. Moreover, the results of the Sixth Economic Census may also be used as it is one of the most up – to – date economic data sets with the government on employment and economic activities apart from the SECC, which is the main indicator for rural poverty (Surabhi, 2016).

Issues in poverty estimation

Besides the issues that have been discussed so far there are other issues regarding poverty estimation and identification of the poor and vulnerable that should be explained at least in brief.

1) PLB

The Alagh committee assumed a fixed consumption basket of the poor over time and a uniform consumption basket for all the states and UTs. Even the Lakdawala committee recommended a uniform commodity basket for all the states to enable comparability across states and over time. Moreover, this view was also implicitly endorsed by the Tendulkar committee. However, this becomes highly problematic in a continental – sized country such as India that is marked by significant variability in living environment (including, but not limited to, climatic conditions), in dietary patterns and preferences and, in prices of goods and services across states and as between rural and urban areas even within the same state (Planning Commission, 2014).

The practise followed by the Planning Commission on acceptance of the recommendations of the Alagh and Lakdawala committee, up to and until the adoption of the recommendations of the Tendulkar committee, has been to work with two separate PLBs for the rural and urban areas at the all India level. The Rangarajan committee has recommended reverting back to this earlier practice of having separate PLBs (Planning Commission, 2014).

2) Income or Consumption Expenditure

“In some countries the poverty line is an exogenously set proportion of mean or median income of population” (Rangarajan and Dev, 2015).

Income data are, however, notoriously difficult to collect in India and are prone to large measurement errors (Kjelsrud and Somanathan, 2013). Rather, obtaining precise information on income is particularly difficult in developing countries, particularly countries that have large informal sectors. Moreover, households might also find it difficult to accurately recall income from various activities in the informal sector that allow immediate payments for the purchase of food and other necessities (Son, 2011).

Income may also be a poor measure of welfare due to large fluctuations across seasons and households’ attempts to smooth consumption (Kjelsrud and Somanathan, 2013). Thus, households tend to maintain a stable consumption level over time by saving when income levels are high and borrowing when income levels are low (Son, 2011).

These are some of the reasons that poverty measures in India have always been based on consumption data collected through NSSO (Kjelsrud and Somanathan, 2013).

3) Decline in calorie consumption

The Tendulkar Group had consciously moved away from using calorie norms to derive the all India PLB, in view of the fact that the calorie consumption calculated by converting the consumed quantities (of food) in the last 30 – days as collected by the NSSO had not been found to be well correlated with the nutrition outcomes observed from other specialized surveys either over time or across space (i.e. between states or rural and urban areas) (Planning Commission, 2014).

In addition to this, though the number of calories is important, so are other factors, such as a balanced diet containing a reasonable proportion of fruits, vegetables, and fats (not just calories from cereals), and various determinants of the need for and retention of calories, including activity levels, clean and piped water, sanitation, hygiene practices, and vaccinations. Due to changes in these other factors, the fact that people are increasingly moving away from a diet that is heavy in cereals does not imply that the nutritional status will automatically get worse. Moreover, the reduction in fertility means that a shorter span of women’s lives is spent in pregnancy or lactation, during which there is a sharp increase

in recommended calorie needs. However, it is not clear that most women in India obtain these extra calories, and hence the saving from this source might be small (Deaton and Dreze, 2009).

Besides this, Deaton and Dreze (2009) have suggested some possible reasons for the decline in calorie consumption which are as follows: extension of road coverage and transport facilities, general mechanisation of domestic activities, improved epidemiological environment, growing emulation of the consumption patterns of affluent groups, exposure to new food items, influence of advertisement, and changes in food habits (specifically, substitution towards wheat and rice) induced by the PDS. Further, as income rises, though activity levels are lower at higher levels of income, there are likely to be positive income effects that cause people to consume more and rather switch to other, more expensive sources of calories that are also valued from the point of view of taste, healthiness, status, and so on.

Basole and Basu (2015) have given a very different and interesting reason that can explain the declining calorie intake. The puzzling phenomenon of declining poverty and rising under nutrition is partly explained by a food budget squeeze. Thus, galloping expenditure on non – food essentials, driven by structural changes as much as by voluntary choice, has squeezed food budgets. The diversification of diets, acting in conjunction with stagnant food budgets, has led to declining calorie intake.

An important lesson that can be drawn from the preceding discussion is that average calorie intake per se is a poor indicator of the nutritional status of the population. Hence, there is a strong case not only for paying attention to other aspects of food intake, such as the consumption of essential vitamins, fats and minerals, but also for shifting the focus away from food intake towards more ‘direct’ indicators of the nutrition status of the population, such as the growth curves of children or other evidence of nutrition – related impairments (Deaton and Dreze, 2009).

However, scholars like Sukhatme, Minhas, Deaton, etc, have nonetheless, criticised ‘calorie fundamentalism’ noting that people on their own are opting for lower calorie intake due to changed consumption habit, without jeopardising their health. Rather, even if the revised norm of 1,800 calories of the FAO is accepted, hunger and malnutrition in India would remain a matter of anxiety (Kundu, 2011).

Hence, it is the assessment of Rangarajan Group that a food basket that successfully meets the newly worked out nutrition norms in terms of calories and of proteins and fats is an essential pre – requisite for satisfactory nutrition – status outcomes. Moreover, it is important to see the calorie norm as a range rather than a single number. It is mainly because the Lakdawala Group had pointed out that the differences in energy requirements due to climatic variations, the role of inter – and intra – individual differences in the efficiency of utilization of food intake and the variations in food preferences have to be explicitly taken into account (Planning Commission, 2014).

4) Comparison of NSSO and NAS Estimates

Over time, the CSO estimates have tended to grow faster than the NSSO estimates, leading some commentators to question the reliability of NSSO data. However, it is important to note that these two notions of ‘consumer expenditure’ are not exactly the same, and also that there are major methodological differences between the two sources. Moreover, the CSO estimates are ‘residual’ figures, obtained after subtracting other items from the national product (Deaton and Dreze, 2002).

Furthermore, these two estimates of consumption do not match in any country; India is no exception. Rather, what is alarming in India is that the difference between the NSSO and the NAS consumption is widening overtime. For instance, the difference was less than 10% in the late 1970s; it rose to 50% in 2004 – 05 (Planning Commission, 2014).

The Rangarajan group, like the Lakdawala and Tendulkar group, relied exclusively on the NSSO consumption to estimate poverty (Planning Commission, 2014).

5) Length of reporting period

The major source of incomparability between the 50th and 55th rounds is the revised treatment of the low frequency items, for which the reporting period was 30 days in the 50th round and 365 days in the 55th round. However, the 50th round contained both 30 – day and 365 – day reporting periods for the low frequency items. Hence, by recalculating the 50th round headcounts using the 365 – day responses, 50th and 55th rounds can be put on a roughly comparable basis. The longer reporting period actually reduces the mean expenditures on those items, but because a much larger fraction of people report ‘something’ over the longer reporting period, the bottom tail of the consumption

distribution is pulled up, and both inequality and poverty are reduced (Deaton and Dreze, 2002).

Moreover, the 30 – day recall period is unusually long by international standards. An experimental survey was set up in which a randomly selected half of the households got a 30 – day reporting period, while the others got a 7 day reporting period. On average, households reported about 30% more food purchases on the 7 – day questionnaire, only about 18% more on all expenditures including food, not such a large difference in itself, but enough to cut the measured number of poor in India by a half! “It seems that statistical poverty reduction is a good deal easier than substantive poverty reduction” (Deaton, 2004).

6) Price adjustments

In implementing the recommendations of the Alagh committee, the Planning Commission used a single common all – India poverty line for all the States – albeit separate ones for the rural and urban populations. For adjusting the all – India poverty lines for price – inflation over time the WPI was used to adjust both the rural and urban poverty lines. However, this posed the obvious problem that the WPI had a substantial weightage for items that were not of the consumption basket of the households. Subsequently, the Planning Commission used the implicit CSO private consumption expenditure deflator. However, even this did not provide separate indicators for the rural and urban populations (Planning Commission, 2014).

Then the Lakdawala group made some key changes. First, using State – relative – to – all – India Fisher Price Indices computed by Chatterji and Bhattacharya (1974) for rural areas and the Minhas et al. (1988) estimates for urban India, state – specific poverty lines corresponding to the Alagh committee’s all – India poverty lines were derived. Secondly, state – specific poverty lines were updated by reference to re – weighted CPI – of Agricultural labourers for rural areas and of Industrial workers for urban areas. This exercise raised the weightage of the food component of the relevant indices to correspond to the share of food in the consumption basket of those around the poverty line at the all – India level (Planning Commission, 2014).

Further, one limitation of the price indexes that have been traditionally used to update poverty lines over time is that they are based on fixed and frequently outdated commodity ‘weights’ (Deaton and Dreze, 2002). In addition to this, the use of outdated

price indices has distorted the poverty measures to a large extent (Radhakrishna et al., 2010). Hence, Deaton and Dreze (2002) suggest that the price indexes from the surveys have the advantage of being based on several million actual purchases in each round.

The changes in consumption patterns discussed earlier posed two sets of problems for the Lakdawala Group. First, the reduction in the share of cereals in total food expenditure to levels well – below those implicit in the food component of the CPI affected the ability of the price index to capture food inflation adequately when prices of non – cereal food items rose faster than cereal prices. Second, the fall in the share of food in total consumption to levels significantly below the elevated weightage assigned in the Lakdawala group methodology, implied that the true inflation faced by those around the poverty line may be higher (lower) depending on whether non – food inflation was higher (lower) than food inflation. Recognizing these problems, the Tendulkar group decided to work with Fisher price indices specifically estimated both for deriving state – specific poverty lines given the all – India (urban) poverty line and for updating the same over time. The Rangarajan group’s method of constructing the state – wise poverty lines from the national level poverty line in 2011 – 12 is broadly similar to that outlined by the Tendulkar group (Planning Commission, 2014).

7) BPL censuses

On the rural side, three BPL censuses have been conducted by the MoRD in 1992, 1997 and 2002 (Planning Commission, 2012). “While the first two censuses used income / total expenditure for the identification of poor households, the third census made use of multiple indicators. There is much debate concerning the methodology adopted by the BPL census in 2002. These debates have been centred on the choice of indicators, weights and scores used to arrive at the aggregate index” (Radhakrishna et al., 2010).

Further, no corresponding initiative had so far been taken for identifying the urban poor. Rather, in the absence of a standard methodology, the states / UT’s devise their own methodology to conduct the BPL surveys on the basis of state specific poverty lines for urban areas as defined by the Planning Commission from time to time. In addition to this, state and local governments are identifying urban poor households for urban poverty programmes and for BPL ration cards, mainly by assessments by local officials of

household incomes, based on self – reporting and personal verification. These in turn lead to outcomes which are invariably highly subjective and unverifiable and result in incoherent poverty estimates across the country (Planning Commission, 2012).

With the objective of putting in place uniform criteria to identify the BPL households in urban areas, so that objectivity and transparency is ensured in delivery of benefits to the target groups, the Planning Commission constituted an EG under the Chairmanship of Professor S. R. Hashim (Planning Commission, 2012).

After detailed deliberations and discussions, the EG recommended a 3 – Stage identification process: (i) Automatic Exclusion; (ii) Automatic Inclusion; and (iii) A Scoring Index. In the first stage, a household fulfilling any of the indicators given in ‘Stage 1’ (see Appendix D) will be automatically excluded from the BPL List. The remaining households are then screened for automatic inclusion as per the criteria set in ‘Stage 2’ (see Appendix D). All the households satisfying criteria set in ‘Stage 2’ are automatically included in the BPL List. The residual households are then assigned scores from 0 to 12 based on the scoring pattern described in ‘Stage 3’ (see Appendix D). “The households with score zero are added to the ‘excluded’ set, i.e., they are not eligible to be in the BPL List. Those households with scores from 1 to 12 are to be considered eligible for inclusion in the BPL List in the increasing order of the intensity of their deprivations. That is, those with higher scores are more deprived. The sequence of automatic exclusion, automatic inclusion and scoring index is of vital importance for the proper identification of urban poor” (Planning Commission, 2012).

If the objective is to divide the entire urban population in two groups, i.e., APL and BPL, then all those households with score 4 and above could be added to the automatically included households in order to get the BPL population. “Alternately depending upon resources available for assistance to the poor and nature of vulnerability targeted under different programmes, Government of India / States could take the population: automatically included + score 7 & above, or automatically included + score 6 & above, or automatically included + score 5 & above, and so on in that order till one reaches score one, giving increasing number of households to be assisted” (Planning Commission, 2012).

About 27.6% of 377 million people living in urban India, or 104 million people, have been identified as poor, according to the preliminary figures of the SECC (Gupta, 2015).

Since the SECC data for rural areas has been released by the government of India it would be interesting to find out how well it has identified the rural poor with the help of few studies.

The deprivations were very narrowly defined, leaving out 20 million households who, despite not having sufficient income or assets to fit into any category of the compulsorily excluded, would not be entitled to any benefit from government. Moreover, the narrow definition used in the SECC meant that a widow who is supporting her 17 – year – old son’s education through petty cultivation is not to be considered for any government benefit. “In any case, it would have been better if the total household income was assessed, rather than just the income of the highest earning member of the household”. Further, there appears to be over – reporting on the number of rich households who were excluded from the survey if they fulfilled any of the 14 parameters of exclusion. For instance, owning a motorised two – wheeler is an inaccurate measure of ‘richness’ considering it could have been obtained as dowry or bought on credit (Saxena, 2015).

“Many studies have shown that the practice of including those who should not be included, while excluding those who should be included, is widespread”. According to the Eleventh Five Year Plan, there are huge exclusion and inclusion errors in identifying the poor. More than half the poor in 2004 – 05 either had no card or were given APL cards and thus excluded from BPL benefits. “These must presumably be the most poor tribal groups, women – headed households, and people living in remote hamlets where the administration does not reach. Thus the people most deserving of government help are deprived of such assistance. On the other hand, almost 60% of the BPL or Antyodaya cards had been given to households belonging to the non – poor category. There is a great deal of clamour among all people to benefit from government largesse, and the non – poor obviously are able to get their names included in the list by using political pressure or through bribes. Identifying the poor correctly and the criterion for inclusion are thus central to poverty alleviation” (Saxena, 2015).

Further, Alkire and Seth (2013) show that relatively minor methodological differences lead to the identification of different sets of poor households. Rather, the surprise is that over one quarter of the excluded households was multidimensionally poor. Hence any targeting method including exclusion criteria needs to be carefully justified.

SECC data on household occupation, income, assets and related economic variables are less reliable. For instance, land ownership data are often inaccurate. Moreover, observable characteristics, such as the number of rooms in the house, tend to be more reliably recorded than non – observable ones, for example, income. Further, many households are asking for the inclusion of small children, born after 2011, in the SECC list – this matters, since the PDS entitlements of priority households under the NFSA are defined in per – capita terms (Dreze, Khera, and Pudussery, 2015).

“Either the definitions of deprivations are deliberately kept narrow to exclude a large number of people, or the enumerators have lived up to their past reputation of colluding with the rich. The government has not been able to eliminate poverty, but it has certainly succeeded in eliminating the poor from its radar” (Saxena, 2015).

Finally, it is tempting to think that SECC contains all the relevant information for tracking poverty and could serve as a substitute for the poverty line based assessment of poverty. However, it does not collect information on the overall income or expenditure of the household. Even if one started collecting such information, over time, there is high risk of household responses getting biased since they know that their responses determine whether or not they would receive benefits under various social schemes. Another important fact is that after nearly five years, we still have only the rural SECC results with its urban counterpart still to become available (National Institution for Transforming India [NITI] Aayog, 2016).

b) Researchers’ efforts

One of the earlier studies on poverty was done by Rowntree (1901). He defined families as being in primary poverty if their total earnings are insufficient to obtain the ‘minimum necessities of merely physical efficiency’. Further, he estimated the minimum money costs for food that would satisfy the average nutritional needs of families of different

sizes. Then, to these costs he added the rent paid and certain minimum amounts for clothing, fuel, and sundries, to arrive at a poverty line for a family of given size (Son, 2011).

People are poor if they lack the resources to participate fully in the society in which they live, who in Adam Smith's term 'are afraid to appear in public', even if their incomes would be sufficient in some other society (Deaton, 2004).

Dandekar and Rath (1971) have used an average calorie norm of 2,250 calories pcpd for both rural and urban areas as the required food energy intake. NSSO consumption data revealed that rural households with MPCE of Rs. 14.20 at 1960 / 61 prices consumed on an average food whose caloric content was 2,250 calories per day. The corresponding MPCE for urban areas was Rs. 22.60 at 1960 / 61 prices. Hence, in 1960 – 61, about 50% of the urban population in India lived below the desirable minimum.

However, being in poverty does not mean having unfulfilled wants, having very little, and having less than others. Rather, it means 'having insufficient resources to meet what are typically seen as basic needs in that place and time' (Karellis, 2009).

In addition to this, policies and programs to combat poverty should be given shape only after contextually relevant reasons for descent and escape have been identified. Characteristics such as family size, age and gender of household head, and level of education are some of the reasons of descent in addition to social and customary expenses, including expenditure on funerals and marriages, debt bondage, alcoholism, drug addiction, and laziness (Krishna, 2010). Moreover, among the most important causes of poverty are five behaviours or, better, non – behaviours: not finishing school, not working, not saving for a rainy day, not moderating alcohol consumption, and not living within the law. Obviously, not all poor people fail to do these things but they fail to do it disproportionately (Karellis, 2009). It is a common prejudice among those who are not poor that poor people inherently 'live hand to mouth' and take the short term view. However, in practice, again and again, they show tenacity and self sacrifice in trying to take the long term view and safeguarding the basis for their livelihoods (Chambers, 1995). Rather, the vast majority of poor people do not sit idly by, waiting for programmatic benefits to arrive. They do make spirited efforts to break out of poverty but these efforts are too often compromised by negative events (Krishna, 2010).

Poverty is not a clinical problem, an individual tragedy, or a behavioural distortion. Rather, it arises because of structural injustice in initial endowment of land and other assets, lack of exchange entitlements to participate in the market, the government's failure to provide equality of opportunities to access healthcare, education, employment, and so on. Hence, poverty is integrally related to the development paradigm you choose and is the outcome of the process of development itself (Oommen, 2015).

Poverty by itself imposes a heavy tax on one's cognitive abilities (Mani, Mullainathan, Shafir, and Zhao, 2013; Oommen, 2015). This 'cognitive tax' in turn can lead to economic decisions that perpetuate poverty (Oommen, 2015). The immediate financial worries of the poor leave them with much less mental 'bandwidth' to deal with other problems relative to those who are better off. Moreover, dealing with uncertain incomes and juggling finances to make ends meet is a difficult task which results in divided attention, making it harder to concentrate and grapple with other issues in a successful manner. It was found out that there wasn't any significant difference between the rich and the poor in New Jersey when they were assigned to the easy task. But the poor volunteers performed significantly worse than the rich when assigned the hard task. Similarly, in case of farmers, it was found that when they have more money they are more intelligent (Mani et al., 2013).

Poverty is a set of concrete problems which, once properly identified and understood, can be solved one at a time. The poor seemed to have many choices, and they don't elect to spend as much as they can on food. They often lack critical pieces of information and so, in case of ill – health, go in for expensive cures rather than cheap prevention. Further, the poor bear responsibility for too many aspects of their lives. In addition to this, many of them run small businesses in highly competitive industries and most of the rest work as casual labourers who need to constantly worry about where their next job will come from (Banerjee and Duflo, 2013).

There is a long tradition of setting 'scientific' poverty lines by calculating the cost of a minimal standard of living, with a particular focus on having enough to eat. Though the poorest people in poor countries spend most of their money on food, in some places as much as three – quarters, even they buy things other than food, clothing and housing and rather an increasing number of goods that are not usually classified as necessities (Deaton, 2004).

The choice of poverty line depends in large measure on the intended use of the poverty rates (Haughton and Khandker, 2009). Hence, the poverty lines are as much political as scientific constructions (Deaton, 2004). Rather, the poverty line must be unvarying in some relevant space for instance, the space of human functionings (not the space of real incomes (World Bank) or that of commodity bundles (Planning Commission)). Moreover, if this unique poverty line were the 'maximum' of individual – specific lines, no individual whose income is less than what is required to avoid deprivation in functionings space will be excluded from the count of the poor (Subramanian, 2015).

Further, the poor are often people who cannot work because they are ill or suffer from a long term disability, or are elderly. There are also poor and vulnerable groups in specific locations, such as the Indian widows who are unfortunate enough not to have sons to support them (Deaton, 2004).

Professor Angus Deaton believes that India's poverty rate might be higher than what the surveys suggest (Singh, 2015). Rather, a government that cares not at all about poverty, but is being held to a poverty reduction standard, or is keen to be seen to be reducing poverty, could do so by giving small amounts of money to those just below the line, just enough to lift them out of poverty. This money could even come from the very poor as once someone is poor, taking money away from him or her does nothing to add to the poverty count (Deaton, 2004).

What is really startling is not so much the lowness of the official poverty line, but that even with this low benchmark, so many people are below it. The shocking discovery that it is impossible to have anything like a dignified life on or below the poverty line draws attention to the appalling living conditions of the Indian poor, which receive so little attention in public discussion and go largely unnoticed in more privileged circles. This is, however, at least partly because poor people have learnt to live precariously with such deprivations, and keep, rather fatalistically, a low profile (Dreze and Sen, 2013).

According to the World Bank, 21.3% of India's population lived on less than \$ 1.90 a day in 2011. However, Subramanian (2015) argues that the World Bank's approach to poverty measurement is conceptually flawed, and that the results, in terms of the poverty numbers which it presents, are largely misleading. Rather, the essential methodological features of the Bank's global poverty assessment exercises have remained largely unvarying

over time. Further, a global poverty line derived from the poorest nations' poverty lines should serve as a lower limit on each nation's poverty line. "Perhaps the most serious of the criticisms is that the PPP exchange rates that are used were not constructed for the purpose of measuring poverty, so that there is no guarantee that they will accurately convert the living standards of poor people from one country to another. Another problem is the low priority that many statistical offices give to providing numbers that have no domestic use" (Deaton, 2004).

According to Deaton and Dreze (2002), poverty trends in India in the nineties have been a matter of intense controversy and the confusion still remains about the extent to which poverty has declined during the period. Poverty reduction is overwhelmingly driven by the growth rate of APCE. Hence, when relevant adjustments are made, and the poverty indexes are read together with the information on APCE growth, poverty reduction in the nineties appears to be more or less in line with previous rates of progress. Rather, it is important to acknowledge the possibility that the hidden costs of economic growth have intensified in the nineties. The authors have finally argued against reading these trends simply as evidence of the impact (positive or negative) of 'liberalisation' as much else has happened in the nineties, other than liberalisation.

Most poverty alleviation programs in India traditionally have had a rural centered approach. "This along with other factors has resulted in a comparatively better decline in the incidence of rural poverty than urban poverty since 1960s" (Agarwal, Taneja and Patra, 2006). Rather, it is only during the 1980's that official attitudes have changed towards recognition of the large and rapidly increasing number of the metropolitan poor, the prospect of continuing rapid increase in it in the foreseeable future and the urgent need for appropriate policies and programmes to alleviate their poverty and other disabilities. A significant result of the recognition was change from slum eradication to slum improvement as a policy objective of the Government of India which was stated in the Sixth Five Year Plan (1980 – 85) (Nath, 1994).

In addition to this, for a long time, anti – poverty strategies have looked at poverty reduction in minimalist terms of bringing the poor above the poverty line by focusing on their income improvement through employment programmes targeted at the individual. Rather, the poor near the poverty line might cross the poverty line and leave behind the hard core poor who suffer from multiple deprivations. It is now widely recognized that though

income poverty reduction is relatively easy, elimination of multiple deprivation is more difficult to achieve (Radhakrishna and Ray, 2005).

Poverty should be viewed as the deprivation of basic capabilities rather than merely as a low level of income or only in terms of the failure to meet the ‘basic needs’ of specified commodities (Sen, 1992; Son, 2011).

Viewed in terms of capability deprivation, poverty encompasses not only material deprivation, but also many other forms of deprivation such as unemployment, ill health, lack of education, vulnerability, powerlessness, and social exclusion. Moreover, the most effective way of poverty alleviation would be to implement policies that deal directly with specific kinds of deprivation that have been identified. Finally, using the capability deprivation approach should not imply that we abandon the income approach completely; rather, both approaches should complement each other (Son, 2011). So, to have inadequate income is not a matter of having an income level below an externally fixed poverty line, but to have an income below what is adequate for generating the specified levels of capabilities for the person in question. However, sometimes the same handicaps, such as age or disability or illness, that reduce one’s ability to earn an income, can also make it harder to convert income into capability. Hence, interpersonal differences in these personal and social characteristics of different persons can make the conversion of resources and primary goods into the freedom to achieve similarly variable (Sen, 1992). Further, given the inter – temporal and inter – contextual variations in the ability to transform resources into functionings, one must expect, as Sen (1983) put it, that poverty is an absolute concept in the space of functionings but a relative concept in the space of incomes or commodity bundles or resources in general (Subramanian, 2014).

“Living may be seen as consisting of a set of inter – related ‘functionings’, consisting of beings and doings. A person’s achievement in this respect can be seen as the vector of his or her functionings”. Further, closely related to the notion of functionings is that of the capability to function. It represents the various combinations of functionings that the person can achieve. Capability is, thus, a set of vectors of functionings, reflecting the person’s freedom or real opportunities to lead one type of life or another. Rather, freedom of choice can be of direct importance for the person’s quality of life and well – being. However, the capability set is not directly observable, and has to be constructed on the basis

of presumptions. Hence, it is almost always easier to observe and measure functionings than capabilities (Sen, 1992).

Sen (1992) reserved the term ‘basic capabilities’ to refer to a threshold level for the relevant capabilities. It is ‘the ability to satisfy certain elementary and crucially important functionings up to certain levels’. In other words, basic capabilities refer to the freedom to do some basic things considered necessary for survival and to avoid or escape poverty or other serious deprivations (Robeyns, 2011).

Nussbaum (2006) has given a well known list, which contains prescribed capabilities that are grouped together under ‘central human capabilities’: life; bodily health; bodily integrity; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one’s environment. She justifies this list by arguing that each of these capabilities is needed in order for a human life to be ‘not so impoverished that it is not worthy of the dignity of a human being’. However, Sen (2005) consistently and explicitly refuses to defend ‘one pre – determined canonical list of capabilities, chosen by theorists without any general social discussion or public reasoning’ (Robeyns, 2011).

There is a need for supplementing expenditure – based data with other indicators of living standards like literacy rates, health achievements, nutritional levels, crime rates and the quality of environment which prompts to acknowledge that social progress has been uneven across the different fields. Moreover, the ‘informalisation’ of labour markets is an economic change with substantial hidden costs (eg: longer working hours, higher insecurity, lower status, and deteriorating work conditions). This, again, is largely hidden from view in the income / expenditure – based analyses of poverty (Deaton and Dreze, 2002). In addition to this, according to Radhakrishna et al. (2010), income poverty together with malnutrition can provide a better approximation of the multi – dimensional poverty than either of them individually. The authors found out that though in the unidimensional income space, only about one – third of the households are income – poor, nearly three – fourths of the households suffered from poverty in the multi – dimensional space. Thus, they conclude that overcoming income poverty does not ensure freedom from other forms of deprivations.

In fact, Jayaraj and Subramanian (2010) have pointed out a simple way in which headcount indices can be sensitized to the ‘range’ of deprivation experienced by a person, the range of deprivation being captured by the number of dimensions in which the person is

deprived. Their findings suggest that multidimensional poverty in India has definitely declined between 1991 – 92 and 2005 – 06, and uniformly in all the major states of the Indian Union, but this improvement must, largely, be seen in the light of a graduation from the awful to the merely bad. Moreover, despite India's industrial progress which has created an affluent few, 200 million of the 600 million population are without electricity and have never been connected to power (Dreze and Sen 2013), symbolic of the darkness they experience on many counts. Rather, basic requirements such as good nutrition – “children and adult women are more undernourished in India (and South Asia) than almost anywhere else in the world” (Dreze and Sen 2013) – are being neglected (Gopikumar, Narasimhan, Easwaran, Bunders, and Parasuraman, 2015).

Further, the HDI has always shown how India first failed in human development, and then how its rapid increase in income since the early 1990s has not been equitably shared and fully translated into social development, especially in health and education. Rather, with the economic data warning of tough times ahead and the government lacking both political will and clarity on policy to address education, health and poverty, India will find it increasingly difficult to even maintain the existing poor level of human development (EPW, 2016).

Furthermore, for Asia and the Pacific, the \$ 1.25 poverty line is inadequate as it underestimates the costs required to maintain a minimum living standard by the poor. Rather, the consumption patterns vary by region and change over time – in Asia today, for instance, a mobile phone is considered a necessity. Moreover, coping with vulnerability increases the poor's minimum costs. Hence, poverty lines must change accordingly. In addition to this, the poor spend far more of their income on food than the non poor, so food insecurity should be considered when measuring poverty. Broadly following the procedure used for obtaining the \$ 1.25 poverty line – an Asia – specific extreme poverty line was estimated at \$ 1.51 pcpd in 2005 PPP terms. As a result, India's poverty rate rises by 15.0 percentage points. When the impact of food insecurity is considered, interestingly there was little change in the poverty line for India. This takes into consideration the impact of volatile and rising food prices. Moreover, accounting for vulnerability to risks, such as natural disasters, climate change, illness, and economic crises, raises India's poverty rate from 32.7% to 41.6% in 2010. Hence, adding food insecurity and vulnerability slows the pace of poverty reduction. Food security can be improved by enhancing food availability,

affordability and access, and stabilizing food supply. Furthermore, to deal with increasing vulnerability, risk mapping can better identify and help assess those most exposed, and what resources are available to respond (Asian Development Bank [ADB], 2014).

Gupta et al. (2014) have created an ‘Empowerment line’. It is an estimate of the minimum economic cost for a household to fulfil eight basic needs: food, energy, housing, drinking water, sanitation, healthcare, education, and social security. It was found out that 56% of India’s population, i.e. 680 million Indians, (in contrast to 29.5% of BPL population as given by the Rangarajan committee) lacks the means to meet these essential needs. They have estimated India’s empowerment line at Rs. 1,336 per capita per month after taking into account the value of government spending on basic services that already reach the people. The Empowerment Gap⁴ is seven times higher than the cost of eliminating extreme poverty. Moreover, on an average, Indian households lack access to 46% of the basic services and the extent of their deprivation varies across districts. Job creation, higher productivity and improved delivery of services could potentially allow India to achieve an average GDP growth rate of 7.8% between 2012 and 2022 and hence it can reduce the population below the Empowerment line to 7% and below the official poverty line to 1% thereby virtually eradicating extreme poverty by 2022.

“While it is true that income growth is often a powerful agent for the reduction in non – income poverty, it is neither necessary nor sufficient, as we can see from the fact that health and educational poverty have been effectively eliminated in some poor places, Costa Rica, Cuba, China prior to the economic reforms, and the Indian state of Kerala being the most often cited examples” (Deaton, 2004). “The government must focus on households that do not get enough food, cannot send and retain their children in school, leave their ailments untreated, as their first priority” (Kundu, 2011).

In fact, the growth process creates inequality and also fails to generate jobs, further compounding the problem of low incomes for the majority. Further, Dev and Ravi (2007) conclude that poverty would have declined much faster in the absence of the increases in inequality in the urban areas (Basole and Basu, 2015). “Around two – thirds of poverty reduction within a country comes from growth. Greater equality also helps, contributing the

⁴Empowerment Gap is the additional consumption required to bring the 680 million Indians above the Empowerment line.

other third. A 1% increase in incomes in the most unequal countries produces a mere 0.6% reduction in poverty; in the most equal countries, it yields a 4.3% cut” (The Economist, 2013). Hence, reducing inequality by levelling up the multiple deprivations the poor suffer is important for reducing poverty (Oommen, 2015).

Further, it is said that reduction in poverty has been the highest ever in India between 2004 – 05 and 2009 – 10. However, evaluating the data across various population sub – groups, it turns out that this reduction is not inclusive. It entirely excludes some groups with very high incidence of poverty. In addition to this, there has been an increase in relative deprivation in some states (Shukla and Mishra, 2014).

A significant number of slums in any city remain non – notified and the vulnerability in such slums is usually more acute than the notified ones (Agarwal et al., 2006). Further, the percentage of slums lacking facilities considered necessary for a decent urban life was higher in non – notified slums in comparison to the notified slums. “The phenomenon of absence of electricity in slums appears to be largely confined to non – notified slums. At all – India level only 6.5% of all slums had no electricity – the corresponding figures being 11% for non – notified slums but only 0.1% for notified slums”. “At the all – India level 71% of all slums had tap as major source of drinking water, the figure being 82% for notified slums but only 64% for non – notified slums”. The notified slums were much better placed than the non – notified slums with respect to majority of the houses having pucca structure. The road within the slum used by the dwellers as main thoroughfare was a pucca road for 83% of the notified slum dwellers and for 55% of the non – notified slum dwellers. However, at the all – India level 31% of slums had no latrine facility, the figure being 42% for non – notified and 16% for notified slums. As high as 45% of the non – notified slums had no drainage facility in comparison to only 11% of the notified slums. Similarly, a higher proportion of non – notified slum dwellers (38%) had no garbage disposal arrangement vis – a – vis the notified slum dwellers (11%). At the all – India level 24% of slums benefited from welfare schemes such as JNNURM, RAY, or any other scheme run by the Central Government or State Government or any local body – 32% among notified and 18% among non – notified slums. Thus, the benefits of these schemes appear to have gone more to the notified than to the non – notified slums (National Sample Survey Office [NSSO], 2013).

“As notified slums are expected to have better facilities than non – notified slums, households might have a tendency to stay in notified slums for longer periods”. Hence, at all India level, 67%, 61.9% and 56.2% households were living for 10 years or more in notified slums, non – notified slums and squatter settlements respectively. Further, it is observed that at all India level, 8.5% households living in notified slums had tried to move out of the slum. The proportion was estimated at 4.9% and 6.9% of households living in non – notified slums and squatter settlements respectively. Moreover, it is observed that at all – India level, 70.8% of households had identified ‘better accommodation’ as the main reason for which they intended to move out of the slum / squatter settlement whereas 11.7% households had identified ‘proximity to place of work’ as the main reason (NSSO, 2013).

Boo (2012) strongly emphasized the role of corruption in making the slum dwellers highly vulnerable to poverty. She also explained about the ill – health and high health care costs resulting into deaths, indebtedness, and low quality of public services provided at schools, hospitals, detention home, etc. In addition to this, the slum dwellers lacked access to safe drinking water, bathroom and latrine facilities. Many of the dwellers including the small children worked as scavengers which can ruin their health further. Their poverty and starvation forced them to earn livelihood instead of going to schools. Furthermore, due to the riots, that broke out because of the MNS and Shiv Sena parties, recession and inflation in 2007 – 08 and the attack on Taj and Oberoi hotels the slum dwellers were literally eating rats and frogs to survive.

National Buildings Organisation [NBO] (2010) in the report titled ‘Report of the Committee on Slum Statistics / Census’ suggested that for the purpose of planning for RAY and Slum – free India it is absolutely essential to count the slum population even in cities having population less than 20000 in 2011. Further, it recommended contiguous area with 20 – 25 households having slum like characteristics as a slum area. In addition to this, Participatory Research in Asia [PRIA] and Indicus Analytics (2013) in the report ‘Contribution of urban informal settlement dwellers to urban economy in India’ encompass all those settlements that comply with the definition of slums (as given by the Census of India) as well as those with similar or poorer dwelling conditions than slums as ‘informal settlements’. It is suggested that interventions should be targeted at all these informal settlements instead of only slums. Assuming that urban GDP is about 60% of total GDP, the total contribution of informal settlement dwellers to urban GDP of India was found out to

be 7.53%. Interestingly, most of the non – informal settlement dwellers felt that informal settlement dwellers should be given better basic services since they are an integral part of the city life. Moreover, about 40% of the non – informal settlement households thought that their daily life will be affected adversely if the informal settlements and the people living there are removed.

Furthermore, the components of a program, which was designed to reach the poorest of the poor and elevate them out of extreme poverty, were direct asset transfers, inoculation of savings habits and integration into microfinance groups along with additional training. It resulted in a 15% increase in household consumption and had positive impacts on other measures of household wealth and welfare, such as assets and emotional well-being (Banerjee, Duflo, Chattopadhyay and Shapiro, 2011).

The pavement dwellers appear to have filled a significant niche in the urban economy. However, they have been denied access to the fundamental benefits taken for granted by much of the urban population. It was found that they have a higher than average participation rate in the workforce because more people in the families need to work to make ends meet. “In return, they get very little from the city. They consider themselves to be lucky if they are ignored and allowed to stay put. A common opinion is that they should ‘go back to their villages’” (Shelter Associates, 1997). However, far from being a burden to the city’s economy, the pavement dwellers are supplying it with a vast pool of cheap labour for the unpleasant jobs. Furthermore, a society which permits and in fact depends on a large mass of unskilled and underpaid labour must also live with slums and pavement dwellers (Society for Promotion of Area Resource Centres [SPARC], 1985). They do not wish to live on pavements but are compelled by their circumstances to live in appalling conditions in what is an apology for shelter. Still, they appear to be treated more as criminals than as victims (Bapat, 1992). Rather, the pavement dwellers first need assurance of being allowed to stay where they are and then provision of basic amenities of toilets, water supply, sewerage and drainage (Karn et al., 2003).

The most economically backward, under – developed and drought – prone districts of each state are the ones from which people are forced to leave to seek a livelihood in the urban areas (SPARC, 1985). “It is rural poverty, rather than a dream of riches in an urban setting, that drives people to leave their homes”. A community, consisting of family and

friends already staying in the locality, provides a support network to poor people, who have newly migrated to the locality, which reduces their feelings of vulnerability and isolation in the city (Shelter Associates, 1997). Thus, such rural – urban linkages might have played a vital role in the expansion of slums (Karn et al., 2003). Rather, the haphazard and insensitive urban development initiatives have converted more than half of modern India's city spaces into slums. Further, more than the poverty of the slum and pavement dwellers, it is the impossibly gigantic and complex task of uprooting and transplanting them away from the vicinity of their work places (Tiwari, 2010).

Majority of the slum and pavement dwellers usually cite 'closeness to place of work' as the primary reason for settling where they do (Singh and De Souza, 1980). In response to the question as to why the respondent had selected a particular pavement, 14% of the pavement dwellers said that friends, relatives or neighbours from their native place had already settled on the same pavements. Further, other reasons were availability of facilities like water and the place was quite, safe, no trouble, etc (Ramachandran, 1972). Surprisingly, pavement dwellers were found to be the oldest and more permanent residents among all urban poor. Moreover, 68% of the dwellers had gained residency status (i.e. ration card, voter card or name in the voting list (Karn et al., 2003).

The pavement dwellers have the least education of all. Naturally, highest percentage of the dwellers was not sending any of their children to school vis – a – vis the people staying in slums and squatters (Karn et al., 2003). Within the informal sector, they are employed in the least secure, lowest paid, back – breaking and sometimes degrading jobs, and also face much higher rates of unemployment than slum dwellers (Ramachandran, 1972; Shelter Associates, 1997; Singh and De Souza, 1980). "People living in settlements near the railway stations use station facilities. In other settlements, people have to walk for up to 20 minutes to reach the nearest available toilet and water tap, which they may not be entitled to use, so they have to beg, pay or fight to use them. People use kerosene lamps to light their homes, or just manage with the light from the street lamps" (Shelter Associates, 1997).

"Food is cooked on open fires by the roadside" (Shelter Associates, 1997). Most of the pavement dwellers reported eating two meals a day, although among absolute destitutes one meal and a half a day was also common. Hotel wastes were also a source of meals for

many persons. Typically, the dwellers lived frugally, with just one or two changes of clothes, and slim bedding. For families a few pots and pans, and a cheap stove were additions to the asset base (Jagannathan and Halder, 1989). Bathing in an open area is for the members of the higher classes characterized as a threat to personal security, whereas for certain members of the lower classes, it is absolutely normal and not associated with insecurity at all because the circumstances force these lower class groups to forget that there is something known as personal security (Tribhuwan and Andreassen, 2003). “Among urban poor, the prevalence rate of all short duration as well as major diseases seems higher among pavement dwellers than in slums, which could be attributed to greater poverty and harsher living conditions of pavement dwellers” (Karn et al., 2003).

Pavement dwellers’ dignity is broken over and over again. “They have almost nothing to be proud of towards the rest of the society and they live in constant fear of being harassed. They are also a section of the population we may call ‘muted’, i.e. unable to raise their voices, unable to be heard and even to exercise their right to vote”. Rather, being victims of social abuse, physical and mental torture has become part of their system. “They have forgotten what it means to live a dignified and tensionless life, for their survival is constantly threatened, because they cannot pay bribes, nor buy land in the slum nor do anything which requires capital for that matter” (Tribhuwan and Andreassen, 2003).

It is interesting to note that 14 pavement dwellers said that they had to make lump sum payments, and 5 stated that they were making monthly payments to the Municipality. Furthermore, as many as 71 dwellers said they were paying something to the police (Ramachandran, 1972). It was found out that a bulk of people employed in the informal sector fail to progress into high wage and formal employment sector. “Consequently, the scenario develops somewhat into a shift of rural poverty into urban areas”. Further, the old settlers are recognized and tolerated by the government. However, the new settlers often bear the brunt of house demolition and eviction by the municipal authorities (Karn et al., 2003).

The main approach of city authorities has been to view the pavement dwellers as illegal ‘encroachments’ on public land which has manifested itself in periodic demolitions on one street or another. Over the decades, the dwellers came to cope with this official response by simply scattering for a few days and returning to the original location or

moving to another area which was reputed to be relatively 'safe' from demolitions. "The obsessive concern with slums has led to the neglect of pavement dwelling as presenting an equal – if not greater – challenge to urban planning and development" (SPARC, 1985). Some demolitions were very violent as the personal belongings of the dwellers were confiscated and eventually sold off to others. Moreover, only in one case an alternative location was provided by the municipal corporation in an outlying area. Given the situation of the poor and deprived, fighting a legal case is highly demanding on their resources in every sense. Vulnerability of the poor against the power of the state emerges as a matter of serious concern. Rather, the economic and psychological damage caused by demolitions can be crippling. In this process, the already poor families, leading a hand – to – mouth existence, become further impoverished (Bapat, 1992).

The most promising approach would be the acceptance of the basic ecology of slum settlements and concentration on environmental improvement schemes and self – help housing (Singh and De Souza, 1980). Further, even if rehabilitation seemed to be the only solution, the motivation for rehabilitation should not be that the pavement dwellers disturb the wealthy, the traffic or the beauty of the city, but the fact that they are human beings who deserve a certain quality of life, who have a right to get basic needs satisfied and to keep their dignity (Tribhuwan and Andreassen, 2003). Participatory, decentralized and bottom – up approach, in case of resettlement & rehabilitation, amounts to a high degree of self – governance, where dependence upon the state or municipality is minimal (Tiwari, 2010). In addition to this, any place which is selected for rehabilitating the dwellers should not be in a locality which has no industrial or commercial activity of a sizeable order. It may be easier to rehabilitate the younger ones who were found out to be more educated, and therefore, more likely to have some skills (Ramachandran, 1972). Finally, a new settlement should ensure a more dignified living which means there should be provision of sanitary, water and health and transport facilities, better living space built as per their own preferences and utilizing their inputs, legal possession, freedom from fear of eviction, possibility for spatial and mental growth and better family management (Tiwari, 2010).

"In all the major challenges currently facing the world, whether it is climate change, terrorism and conflict or urbanization and demographic shifts, no progress is possible without the alleviation of poverty. To reduce poverty sustainably, however, reducing

household vulnerability and increasing household resilience are also necessary” (Naude, Santos – Paulino and McGillivray, 2008).

Poverty is essentially dynamic in nature. It is basically the result of frequent downward tugs and restricted upward mobility. Furthermore, change constantly reconfigures the pool of the poor, which is simultaneously both ebbing and growing. However, since the flow aspect of poverty has not been given nearly as much attention as has been given to measuring and explaining its stock, we have remained ignorant about the reasons that underlie the changes observed (Krishna, 2010).

The descents into poverty can have short – lived as well as longer lasting effects, helping produce both transitory and chronic poverty. Moreover, richer as well as poorer people suffer descents into poverty. Furthermore, the distinction between chronic and transitory poverty tends to become blurred over time. Hence, transitory poverty can become chronic poverty over time and those who suffer descents can, at different points in time, occupy both categories: transitory and chronic (Krishna, 2010).

Vulnerability is a forward – looking concept. The measures of who is poor now are imperfect guides to who will be poor next year, yet it is the latter that is relevant for public policies that aim to reduce poverty. Hence, the solution is to identify those who are vulnerable to poverty. Moreover, studies of vulnerability typically find that the proportion of people who are vulnerable to poverty substantially exceeds the proportion that is currently poor. It is often associated with the effects of ‘shocks’ such as a drought, a drop in farm prices, or a financial crisis. Hence, vulnerability is a key dimension of well – being since it affects individuals’ behaviour in terms of investment, production patterns, and coping strategies, and in terms of the perceptions of their own situations (Haughton and Khandker, 2009).

Measuring vulnerability is important because it enables identification of those who are not poor but may fall into poverty and those who will remain to be poor. Once identified, appropriate policies can be designed (Zhang and Wan, 2008). “Benjamin Franklin’s axiom – ‘an ounce of prevention is worth a pound of cure’ – is as prescient as ever” (ADB, 2014).

The notion of vulnerability in the academia was systematically defined by Robert Chambers in the context of poverty studies focusing on communities and livelihoods. “He defined vulnerability as ‘exposure to contingencies and stresses and the difficulty, which some communities experience while coping with such contingencies and stresses’. Chambers proposed ‘external’ and ‘internal’ sides to vulnerability, where the former referred to exposure to external shocks and stresses and the internal was associated with defencelessness and incapacity to cope, without damaging losses”. The idea of Chambers (1989) was further expanded by Watts and Bohle (1993) and they distinguish between base level vulnerability and recurrent vulnerability. This is similar to what Lavell (2004) calls exceptional vulnerability associated with unusual events and everyday vulnerability associated with permanent conditions of poor people (for instance, health malnutrition, unemployment, illiteracy, alcoholism, etc), which restrict their development (Parmar, Visvanathan, Ramakumar and Juvva, 2009).

The concept of vulnerability is used to describe the prospects of eroding people’s capabilities and choices. The lack of timely and continuing investments in life capabilities can heavily compromise an individual’s ability to achieve full human development potential. “Poverty in old age is more often chronic, since the lack of economic opportunities and security during earlier life accumulates into vulnerability in old age. The cumulative disadvantages during younger life also imply the transfer of poverty from one generation to another”. In addition to this, when social and legal institutions, power structures, political spaces, or traditions and sociocultural norms create structural barriers for some people and groups to exercise their rights and choices they give rise to structural vulnerabilities. These vulnerabilities are often manifested through deep inequalities and widespread poverty. Hence, sustained enhancement of individuals’ and societies’ capabilities is necessary to reduce these persistent vulnerabilities. Furthermore, vulnerability is to be systematically addressed, by changing policies and social norms, for progress to be equitable as well as sustainable. Some of the policy suggestions made include universal provision of basic social services, strengthening social protection, promoting full employment, building capacities to prepare for and recover from crises, etc (United Nations Development Programme [UNDP], 2014).

In India, groups which are generally identified as vulnerable are: a) Women, especially those who are widowed or deserted; b) Children, particularly female; c) Dalits,

SCs and STs and other low caste communities; d) Disabled persons; e) The elderly population; f) People from the lower social income groups and the homeless population; g) Those most isolated from infrastructure including transport, communications and health services. However, this is not an exhaustive list (Parmar et al., 2009).

It was found out that ordinary events, such as frequent ill – health episodes, crop diseases, expensive marriage and funeral ceremonies, lack of affordable credit, and the like, were very frequently experienced by those who became impoverished. Hence, it was recommended that reducing the growth of future poverty will require dealing more forcefully with these context – specific events. Surprisingly, the analysis showed that hardly anyone had become poor or remained poor on account of alcoholism, drug use, or idleness. In addition to this, descents into poverty, resulting in long – term experiences of poverty, were common everywhere; not only in remote communities, located amid jungles and deserts, but also in bustling small towns and capital cities. Furthermore, relatively few among those who fell into poverty in the past were able to bounce back in later years (Krishna, 2010).

“In 2004 – 05, the share of population that was classified as poor was 21.8%. However, those who were classified as vulnerable formed 55% of the population. Together, the poor and vulnerable formed a whopping 76.7% of the population”. Moreover, the share of poor and vulnerable among Dalits and Adivasis was higher at 87.8%. Among Muslims and all unorganised workers the share of poor and vulnerable was 84.5% and 78.7% respectively (Parmar et al., 2009). So, this figures indicate that the unorganised workers have remained poor at a bare subsistence level without any job or social security, working in the most miserable, unhygienic and unliveable conditions, throughout this period of high economic growth since the early nineties (Nagaraj, 2012). Furthermore, if among regular wage workers, the share of poor and vulnerable was 66.7%, the figure was higher at 90% for casual workers (Parmar et al., 2009). Hence, the high congruence between informal work status and poverty / vulnerability becomes almost complete in the case of casual workers (Nagaraj, 2012).

Vulnerability to various basic entitlements in life such as health is not defined only by income. Further, a slum or a cluster of families should be the planning and intervention point of programs and a method for vulnerability assessment of slums through a multi – dimensional approach to urban poverty helps in identifying needy slum clusters.

Identification and mapping of all slums is crucial to locate non – notified slums, which are often more vulnerable and usually remain out of any government program interventions. Moreover, acknowledgement and inclusion of local vulnerability factors help in better understanding of the specific needs and to develop context appropriate intervention strategies (Agarwal et al., 2006).

Finally, attention needs to be given not only to the aggregate number of poverty escapes in a country but also to the nature and quality of individual escapes. Moreover, the problem of creation of poverty should also be discussed along with the problem of moving people out of poverty in order to prevent the growth of future poverty. The communities that are better served by physical and communication infrastructures have experienced proportionately higher numbers of escapes. In addition to this, better education, effective health care and institutions providing reliable career – related information are essential (Krishna, 2010).

“The regular monitoring of changing demographic, social, economic and environmental characteristics of slum and pavement dwellers would seem to be a pre – requisite to making effective long – range policy, planning and programme decisions” (Singh and De Souza, 1980).

Furthermore, decentralized participative planning provides space for giving a human face to urban poverty (Agarwal et al., 2006). The notion of multidimensionality could include an understanding of efforts and interventions among those who have moved out of poverty and how one could use the lessons from them to those who continue to be poor (Mishra, 2014).

“The biggest problem for those below the poverty line is a basic lack of cash. It is not a lack of motivation; people with little money spend their days actively trying to find a way out of poverty. It is not a lack of knowledge; they know what they need and manage their money extremely well”. The cash transfer programs are affordable, recipients use the money well and do not waste it, cash grants are an efficient way to directly reduce current poverty, and they have the potential to break the intergenerational poverty cycle thereby preventing future poverty by facilitating economic growth and promoting human development. However, two areas remain the subject of intense debate: targeting and conditions. Furthermore, it is possible to give money directly to the poor, but each country

must design its own program (Hanlon, Barrientos and Hulme, 2010). However, in India the basic services are still largely missing, and conditional cash transfers (useful as they may be for incentive purposes) cannot fill the gap. “None of this is to dispute the fact that direct provision of basic amenities by the state can be very inefficient and also exploitative”. However, the case for public provision requires a reasonable assurance of functionality (Dreze and Sen, 2013).

In addition to this, leaving poor people to their own devices is neither socially just nor smart public policy. In fact, there is growing evidence that various forms of income support, economic redistribution and social security can make a substantial difference to people’s living standards without delay, even with the limited administrative and financial resources that are available in India today (Dreze and Sen, 2013).

Helping 680 million people to build an economically empowered life requires a shift in focus. Only 10% of the impact will depend on additional government spending and the rest will come from job creation, productivity and improved delivery of basic services (Madgavkar, Gupta and Sankhe, 2014).

In addition to this, given the cognitive overload of the poor, it is important to simplify things for them (Mani et al., 2013; Oommen, 2015).

Finally, until large differentials in earning opportunities between cities and rural areas are reduced, the rural poor will continue to migrate and prick the conscience of the urban elite. Hence, for eradicating urban poverty we have to speed up rural development (Jagannathan and Halder, 1989). In addition to this, the only permanent solution to the problem of urban congestion is rapid and equitable development of rural areas and small towns. The policy makers should take cognizance of further in – migration in their planning exercises – particularly as regards housing development and land use (SPARC, 1985).

Therefore, there are many unresolved and highly debated issues out of which the present study aims to address ‘identification of the poor and vulnerable’ which is the most basic and first step to help the poor and vulnerable to come out of the poverty trap. In addition to this, though the SECC is in the process of identifying the poor and vulnerable households on the basis of their residential, occupational and social vulnerabilities the poor households have to go through various other vulnerabilities. Hence, the present study aims

to identify them on the basis of all those vulnerabilities along with the ones used for the SECC.

Hence, the study tries to test following hypothesis with the help of descriptive and analytical tools:

H₀: The official estimates of poor and vulnerable people are true estimates.

H₁: Far more people are poor and vulnerable than those suggested by the official estimates.

Though this study has not made an attempt of providing an accurate estimate of the poor and vulnerable people, it tries to identify the background characteristics that are highly essential for identification of the poor and vulnerable people. Since the official estimates are narrowly defined the study follows a rather pluralistic approach. Adopting a multidimensional approach for identification of the poor and vulnerable is indispensable particularly in India due to its socio – economic, cultural and ethnic diversities.

As noted above, there have been innumerable studies that have tried to identify the most vulnerable groups. Furthermore, the concerned departments of the government have also been spending huge amounts on identifying the BPL population. However, it may be a ‘national shame’ that even after 70 years of independence we could not identify the needy.

Though this study has used a narrow coverage in terms of geographical location, it is useful to the concerned departments of the government especially for prioritisation of policies to take the vulnerable out of the shackles of poverty / vulnerability / inequality trap. Theoretically speaking, it may help in understanding the economics of inequality from a multi – dimensional point of view. From an empirical point of view, it is of immense use to the PMC for identifying the poor and vulnerable. Furthermore, the study has made an attempt of suggesting ‘context – specific’ policies. Hence, it can be implemented within the city by the PMC so as to ultimately take the vulnerable out of the trap.

CHAPTER THREE

METHODOLOGY

Objectives

Against the basis of background of the literature review, the present study aims:

- To study the demographic, social and economic characteristics of the notified and non – notified slum dwellers staying in Pune city.
- To suggest additional sources of vulnerabilities along with the ones used for the SECC for identifying the poor and vulnerable households.
- To study the causes of their poverty and vulnerability and suggest context – specific measures that can be taken to get out of poverty.
- To study the impact of central and state governments’ schemes in reducing the urban poverty and vulnerability in Pune city, for instance, PDS.

Profile of Pune city

Per capita income

The major contributors to the Maharashtra state income are Mumbai (22%), Thane (13.6%) and Pune (11.3%). These districts together contribute 46.8% to GSDP. Mumbai, Pune and Thane are contributing nearly 16 – 17% each to the industry sector. The per capita district income of Pune was Rs. 1, 50,969 in 2012 – 2013 which was more than the State per capita income of Rs. 1, 03,991 (Directorate of Economics and Statistics [DES], 2014). “States with higher urban contribution to state domestic product have seen faster economic growth, greater employment generation and decline in poverty” (Mitra, 2011).

Growth of slums

Largest number of Slum EBs was reported from Maharashtra (21,359) (Chandramouli, 2011). Maharashtra, with an estimated 7723 slums, accounted for about 23% of all slums in urban India. Moreover, of the 13,761 notified and 19,749 non – notified slums estimated to exist in urban India, Maharashtra accounted for about 14% and 29% slums respectively. As many as 38% of slum households of urban India were estimated to be living in Maharashtra and notified and non-notified slums taken together, average slum size was highest in Maharashtra (433) (NSSO, 2013).

In addition to this, the National Building Organization report on slum statistics provides projections of slum population till 2017. It was found out that though the number of slum population is among the top in the country in case of Maharashtra and Delhi, the predicted growth rates for these states are also significantly higher than many other states. In Maharashtra, the number of slum population is going to increase by more than 2007 thousand in next 5 years. Obviously, the larger increase is going to be experienced in Mumbai and its surrounding areas. Moreover, according to the Census of India 2011, Pune is one of the top ten cities based on households residing in slums which together account for more than 65% of the total slum households in the country (PRIA and Indicus Analytics, 2013). With regards to slums in Pune city, the City Sanitation Plan gives the total number as 564 with 353 declared / notified and 211 undeclared / non – notified (Pune Municipal Corporation [PMC], 2012).

Table 3.1: Growth of total population and slum population in PMC area

Sr. No.	Year	Total population	Slum population	Percentage of slum population to total population
1	1921	1,33,000	NA	NA
2	1931	1,62,000	NA	NA
3	1941	2,38,000	NA	NA
4	1951	4,81,000	38,500	8.00
5	1961	6,06,777	92,101	15.18
6	1971	8,56,105	2,39,701	28.00
7	1981	12,03,363	3,77,000	31.33
8	1991	16,91,430	5,69,000	33.64
9	2001	25,38,473	10,25,000	40.38
10	2009	NA	12,59,216	40.56

Note: NA stands for Not Available

Source: Revising / updating the City Development Plan (CDP) of Pune city – 2041

The proportion of slum population to the total population has increased considerably from 8% in 1951 to 40.56% in 2009.

This growth in the composition of slum population could be attributed to the non – availability of housing stock at affordable costs, leading to the emergence of a large number of slums (PMC, 2006).

Table 3.2: Correlation: Total and slum population in PMC area

Total population	Slum population
Pearson correlation	0.998**
Significance (two – tailed)	0.000
N	6

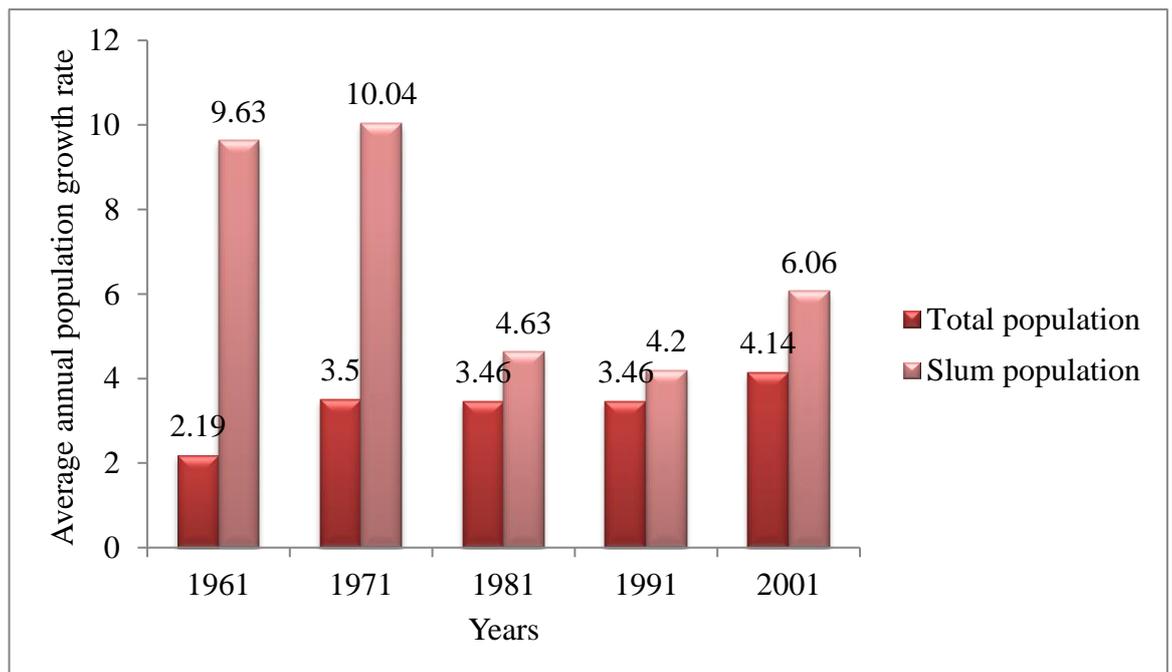
Note: **Correlation is significant at the 0.01 level (two – tailed)

Source: Author’s calculation based on data from revising / updating the City Development Plan (CDP) of Pune city – 2041

The total and slum population figures for the years 1951 – 2001, which are given in table 3.1, have been used for finding out the association between the two variables. The table 3.2 reveals that the total and slum population are highly correlated (0.998) and this association is significant at 1% level of significance.

Figure 3.1: Average annual population growth rate in PMC area

(in %)



Source: Revising / updating the City Development Plan (CDP) of Pune city – 2041

The average annual growth rate of slum population has been more than that of the total population right from 1961 to 2001. Rather, the difference between the two growth rates was much higher in the years 1961 and 1971.

Table 3.3: Ward wise analysis of notified slums in the city

Administrative wards	Area of ward	Ward wise population	Notified slums	Notified slum population	Population living in slums	Area of notified slums	Area occupied by slums	Slum density	Overall density of City
	Sq. km.	2001	Nos.	Nos.	%	Sq. km.	%	Person / sq. km.	
Yerawada	30.75	154,425	9	31,699	20.53	1.57	5.10	202	50
Tilak Road	18.14	211,103	49	72,855	34.51	3.23	17.83	225	116
Sangamwadi	21.72	213,718	21	93,621	43.81	2.03	9.35	461	98
Karve Road	10.05	204,316	43	53,100	25.99	0.81	8.06	656	203
Sahakarnagar	9.92	161,665	24	41,505	25.67	0.36	3.66	1,143	163
Aundh	44.63	179,886	28	39,665	22.05	0.34	0.76	1,171	40
Bibwewadi	22.43	239,532	20	51,600	21.54	0.31	1.38	1,662	107
Ghole Road	12.78	201,527	29	39,150	19.43	0.21	1.67	1,835	158
Hadapsar	28.01	205,009	35	61,000	29.75	0.31	1.10	1,986	73
Bhavani Peth	2.32	218,306	29	45,845	21.00	0.17	7.41	2,667	941
Dhole Patil Road	8.48	100,059	25	50,000	49.97	0.11	1.30	4,545	118
Vishrambagwada	3.61	251,100	3	9,450	3.76	0.02	0.53	4,896	696
Kasba Peth	2.8	239,370	35	90,530	37.82	0.12	4.41	7,330	855
Warje – Karve nagar	12.04	116,985	3	40,200	34.36	0.02	0.14	23,509	97
Total	227.7	2,697,001	353	720,220	26.70	9.62	4.22	749	118

Source: Fire hazards response and mitigation plan, 2011

The density in the notified slums is more than six times that of the overall density prevailing in the rest of the city. Comparing with the density standards for metropolitan areas, given in the UDPMI guidelines of 125 to 150 persons per hectare, the density of slums is excessively high (PMC, 2012).

Declaration of slums:

Under Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971 a slum is defined as:

(a) any area is or may be a source of danger to the health, safety or convenience of the public of that area or of its neighbourhood, by reason of the area having inadequate or no basic amenities, or being insanitary, squalid, overcrowded or otherwise; or

(b) The buildings in any area, used or intended to be used for human habitation are

(i) in any respect, unfit for human habitation; or

(ii) by reasons of dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light or sanitation facilities or any combination of these factors, detrimental to the health, safety or convenience of the public of that area, the Competent Authority may, by notification in the Official Gazette, declare such area to be a slum area (PMC, 2012).

Moreover, if a slum has been declared, its existence is considered to be officially recognized by the local government. Non – notified slums, regardless of their conditions, are not considered eligible for basic service provision (PMC, 2012). SRA and other schemes are applicable only to the notified slums, and to those who have been living in them since or before 1 / 1 / 1995 only. This leaves a large number of slum dwellers uncovered by the SRA or any other policy. Moreover, a slum is likely to grow physically around the original declared portion of the slum. However, the declared boundaries have not been updated; so there is no service provision in the newer sections and as a result there is considerable pressure on the existing services in the declared section (PMC, 2006). However, on the basis of consultation with various stakeholders, it has been revealed that not only notified slums have better provision of the basic services by PMC but also the rest non – notified slums are being served by the corporation (PMC, 2012).

In case of Nagpur, 40% of the city’s population lives in slums (National Institute of Public Finance and Policy [NIPFP], 2006). This figure is almost similar to the latest figures available for Pune (see Table 3.1). In addition to this, the per capita income of both Pune and Nagpur is more than Rs. 1 lakh (DES, 2014). Hence, the living conditions of the slum dwellers staying in Pune city have been compared with the ones staying in Nagpur city.

Housing stock, Amenities and Assets in Slums – Census 2011

Table 3.4: Source of Drinking Water

HHs (in %)

Source of drinking water	Pune	Nagpur
Tap	98.8	89
From treated source	97.3	86.2
From untreated source	1.5	2.8
Well	0.1	3.8
Hand pump	0.03	4.7
Tube well / Borehole	0.2	1.3
Other sources	0.8	1.2

Source: Housing stock, Amenities and Assets in Slums – Census 2011

A higher proportion of slum dwellers staying in Pune (98.8%) have access to tap as a source of drinking water in comparison to those staying in Nagpur (89%).

Table 3.5: Source of Lighting

HHs (in %)

Source of lighting	Pune	Nagpur
Electricity	96.2	96.4
Kerosene	3.2	2.6
Solar	0.05	0.1
Other oil	0.1	0.1
Any other	0.2	0.3
No lighting	0.2	0.5

Source: Housing stock, Amenities and Assets in Slums – Census 2011

The table 3.5 reveals that majority of the slums dwellers staying in both Pune and Nagpur use electricity as a source of lighting.

Table 3.6: Type of Latrine Facility

HHs (in %)

Type of latrine	Pune	Nagpur
1. Latrine within the premises	35.8	90.9
(a) Water closet	33.03	86.3
(b) Pit latrine	1.2	2.5
(c) Other latrine	1.5	2.1
2. No latrine within premises	64.2	9.1
(a) Public latrine	61.1	3.5
(b) Open	3.2	5.6

Source: Housing stock, Amenities and Assets in Slums – Census 2011

In case of availability of latrine facility the slum dwellers of Pune are in the worst condition as merely 35.8% of them have latrine within the premises whereas the figure is as high as 90.9% in case of Nagpur's slum dwellers. However, a slightly higher proportion of slum dwellers staying in Nagpur practise open defecation in comparison to those staying in Pune.

Table 3.7: Drainage Connectivity for Waste Water Outlet

HHs (in %)

Drainage connectivity	Pune	Nagpur
Closed drainage	94	90.4
Open drainage	3.6	2.6
No drainage	2.4	6.99

Source: Housing stock, Amenities and Assets in Slums – Census 2011

The proportion of Nagpur’s slum dwellers not having access to drainage connectivity is almost three times of that of the proportion of households staying in Pune.

Table 3.8: Type of Census Houses
HHs (in %)

Type of house	Pune	Nagpur
Permanent	88.4	72.7
Semi-permanent	9.2	22.99
Temporary	0.7	3.7
Any other	1.7	0.6

Source: Housing stock, Amenities and Assets in Slums – Census 2011

A higher proportion of Pune’s slum dwellers have permanent type of houses in comparison to those staying in Nagpur.

Table 3.9: Number of room
HHs (in %)

Number of rooms	Pune	Nagpur
No exclusive room	8.6	2.7
One room	59.8	32.6
Two room	21.4	34.7
Three room	6.1	17.6
Four room	2.6	7.7
Five rooms and above	1.5	4.7

Source: Housing stock, Amenities and Assets in Slums – Census 2011

Just as was observed in case of availability of latrine facility, a larger proportion of slum dwellers staying in Pune live in no exclusive room vis – a – vis those staying in Nagpur. Moreover, almost 60% of Pune’s slum dwellers live in one room which is twice of that of the proportion of households staying in Nagpur.

Table 3.10: Household Size

Household Size	HHs (in %)	
	Pune	Nagpur
1 member	3.7	2.96
2 members	9.3	7.96
3 members	15	13.8
4 members	26.4	26.1
5 members	20.9	22.1
6 to 8 members	20.2	21.3
9 and above members	4.4	5.8

Source: Housing stock, Amenities and Assets in Slums – Census 2011

The household size of majority of the slum dwellers staying in both Pune and Nagpur ranges from 4 to 8.

Table 3.11: Ownership Status of Census House

Ownership status of house	HHs (in %)	
	Pune	Nagpur
Owned	77.3	77.97
Rented	20.7	20.5
Others	2.0	1.5

Source: Housing stock, Amenities and Assets in Slums – Census 2011

There is hardly any difference between the slum dwellers staying in Pune and Nagpur with respect to ownership status of house and majority of them own their house.

Table 3.12: Location of Drinking Water Source

Location	HHs (in %)	
	Pune	Nagpur
Within premises	82.1	77.6
Near premises	16.1	17.3
Away	1.8	5.1

Source: Housing stock, Amenities and Assets in Slums – Census 2011

A higher proportion of slum dwellers staying in Pune have the drinking water source within their premises in comparison to those staying in Nagpur.

Table 3.13: Availability of Bathing Facility within Premises

HHs (in %)		
Bathing Facility	Pune	Nagpur
Have facility	95	96.7
(a) Bathroom	77	89.9
(b) Enclosure without roof	18	6.8
Does not have facility	5.0	3.3

Source: Housing stock, Amenities and Assets in Slums – Census 2011

There is hardly any difference between the slum dwellers staying in Pune and Nagpur with respect to the availability of bathing facility within premises. However, a higher proportion of Pune's slum dwellers have access to enclosure without roof vis – a – vis those staying in Nagpur.

Table 3.14: Availability of Separate Kitchen

HHs (in %)		
Availability of kitchen	Pune	Nagpur
Cooking inside house	98.2	98.7
(a) Has kitchen	63.6	87.5
(b) Does not have kitchen	34.7	11.2
Cooking outside house	0.5	0.7
(a) Has kitchen	0.1	0.3
(b) Does not have kitchen	0.4	0.4
No cooking	1.3	0.6

Source: Housing stock, Amenities and Assets in Slums – Census 2011

Though majority of slum dwellers staying in both Pune and Nagpur can cook inside house, a higher proportion of Pune’s slum dwellers do not have kitchen in the house.

Table 3.15: Fuel used for Cooking

Fuel used for cooking	HHs (in %)	
	Pune	Nagpur
Fire – wood	2.9	17.6
Crop residue	0.4	0.7
Cow dung cake	0.1	0.2
Coal, Lignite, Charcoal	0.1	1.3
Kerosene	20.8	9.2
LPG / PNG	73.8	69.97
Electricity	0.1	0.1
Biogas	0.4	0.1
Any other	0.2	0.3

Source: Housing stock, Amenities and Assets in Slums – Census 2011

Though majority of slum dwellers staying in both Pune and Nagpur use LPG / PNG for cooking, a higher proportion of Pune’s slum dwellers use kerosene for cooking. However, higher proportion of slum dwellers staying in Nagpur use firewood for cooking in comparison to those staying in Pune.

Table 3.16: Households Availing Banking Services

Banking Services	HHs (in %)	
	Pune	Nagpur
Availing	72.8	57.96
Not availing	27.2	42.04

Source: Housing stock, Amenities and Assets in Slums – Census 2011

It has been found out that a higher proportion of Pune's slum dwellers have access to banking services in comparison to those staying in Nagpur.

Table 3.17: Households Possessing Various Assets
HHs (in %)

Assets	Pune	Nagpur
Radio/Transistor	33	28.6
TV	81.2	80.3
Computer	11.8	9.57
(a) With Internet	5	3.6
(b) Without Internet	6.8	5.97
Telephone	83.8	73.6
(a) Landline only	5.4	7.7
(b) Mobile only	73.4	61.6
(c) Both	5	4.3
Bicycle	32	64.9
Scooter/Motor Cycle/Moped	35.4	38.6
Car/Jeep/Van	5.5	3.9
TV, Computer / Laptop, Telephone / Mobile phone and Scooter / Car	8.3	6.5
None of the specified assets	5.3	5.3

Source: Housing stock, Amenities and Assets in Slums – Census 2011

There is no difference between the slum dwellers staying in Pune and Nagpur in case of possessing none of the specified assets. However, the proportion of Nagpur's slum dwellers possessing bicycle is almost double of that of the proportion of households staying in Pune.

Hence, there is hardly any difference between the slum dwellers staying in Pune and Nagpur. However, the slum dwellers staying in Pune are in worse condition in comparison to those staying in Nagpur with respect to the availability of kitchen, access to number of rooms and availability of bathroom and latrine facility.

Furthermore, through a longitudinal study it was found that though Pune has achieved rapid economic growth in the course of time, most of the slum dwellers experienced little or no increase in their real income and also little possibility of finding accommodation outside slums. It also explains how the official poverty lines underestimate the living conditions of the poor people in Pune as only 2% of the households were designated as poor in accordance with the official poverty line whereas 40% of the households were 'living in poor conditions'. Moreover, it was found out that the incidence of sickness and malnutrition in children was higher when the quality of environment was worse (Bapat, 2009).

In addition to this, pavement dwellers in Pune are amongst the poorest of the city's population. Most of them come from the drought – prone areas of Maharashtra, where they are landless and work as agricultural labourers. Frequent droughts almost completely stop their employment in the villages and they are forced to move out of their native places to look out for alternative ways of earning money (Shelter Associates, 1997). Further, cities are often said to be engines of growth. Rather, productivity and wages are also found to be higher in large cities compared to smaller ones. Even workers are aware of this fact. Hence, migration to large cities is quite voluminous (Mitra, 2011). Rather, people from the drought – affected areas have been migrating to big cities like Mumbai and Pune for a long time now. However, the pavement dwellers have limited skills, and so have little or no access to the better paying jobs, even within the 'informal' sector. They earn just enough to pay for food and cannot even enter the slum housing market to have access to most basic forms of shelter (Shelter Associates, 1997).

Hence, under the same umbrella of macroeconomic policies and national growth rates, very different fates are experienced by neighbouring households. "Poverty is created, destroyed, and preserved, all at the same time". Country – level knowledge is important to acquire, but it does not help account for ground – level facts. Rather, other factors are at work, which need to be understood with the help of examinations conducted closer to the levels where poverty is actually experienced (Krishna, 2010).

Thus, gaining a better understanding of living conditions of the poor people is necessary for designing measures that can help poor people to deal with poverty more effectively as focusing on income – poverty alone overlooks the possibilities of adopting measures that could not only help in alleviating but also avoiding poverty (Bapat, 2009).

Pune city was basically selected for primary data collection due to its economic growth resulting in considerable growth of slums over the years and also because of the familiarity with the city.

The obvious answer to the question ‘What could be an adequate sample size?’ seems to be ‘The bigger, the better’. “However, it must be remembered that one purpose of sampling is to get representative data at a reasonable cost” (McTavish and Loether, 2002). Hence, it was decided to collect primary data from 300 notified and non – notified slum dwellers each. The information regarding the ward wise notified and non – notified slums’ population of Pune city was collected from the PMC’s office. With the help of this data, the sample size to be covered from each administrative ward of the city has been computed. The method of proportionate stratified sampling has been used for the determination of sample size (see Appendix A). The population is ‘stratified’ or divided into blocks of units in such a manner that the units in each stratum or block are as similar as possible. Furthermore, each of the strata is sampled at random (Yates, 1981). If sample selection is done through ‘stratified sampling method’, the reliability can be achieved even with the help of small sized samples (Tatke, 2009). In case of the proportionate stratified random samples, the sample strata use the same sampling fraction, i.e. have the same proportion of cases, as the population strata from which the cases are sampled. This method of sampling is important in generalizing sample results back to the population sampled because it ensures that no stratum in the combined sample has undue influence on the overall results of the study (McTavish and Loether, 2002).

Since a sample has to be a proper representative of the population all administrative wards of the city were selected for the purpose of data collection. For selection of notified and non – notified slums, information regarding names of the slums along with the population was collected from the PMC’s office. All the information obtained from the PMC’s office was updated up to the year 2009 – 10. In addition to this, the Spatial Slum Information available on the website of Shelter Associates was used for the selection of slums. The slums households have been selected using the snowballing technique. Table

3.18 provides details regarding the sample size and slums that were decided to be covered from all the administrative wards of Pune city.

Table 3.18: Ward wise sample size and slums covered for data collection

Sr. No.	Administrative wards	Sample size*: Notified slums	Sample size*: Non – Notified slums	Name of notified slums	Name of non – notified slums
1	Aundh	19	8	Kasturba Gandhi Vasahat, Aundh, Survey no. 59	Aadarshnagar, Bopodi, Survey no. 2
2	Karve road	33	54	Jaibhavani Nagar, Paud road, Survey no. 120	More Shramik Vasahat, Erandwane, Survey no. 48
3	Warje	3	72	Sanjay Gandhi Vasahat, Erandwane, Survey no. 39/2	Shravandhara, Kothrud, Survey no. 46 (New Shantinagar)
4	Ghole road	25	25	Wadarwadi, Shivajinagar	Pulachi wadi, Deccan, Survey no. 630
5	Dhole – Patil road	18	51	Sant Gadge Maharaj Vasahat, Koregaon Park, Survey no. 42, 43	Rajiv Gandhi Nagar, Koregaon Park, Survey no. 42
6	Wadgaon sheri Nagar road	21	3	Weikfield Vasti, Yerwada, Survey no. 30/2 (Ramwadi)	Khulewadi, Chandan Nagar, Survey no. 147
7	Yerwada	27	9	Nagpur Chawl, Yerwada, Survey no. 191	Ramabai Ambedkar, Vishrantwadi, Survey no. 113
8	Sahakarnagar	21	8	Taljai Vasahat, Sahakar Nagar, Survey no. 66	Ambedkarnagar, Sahakar Nagar, No. 2, Survey no. 85
9	Bhavani Peth	28	18	Kashewadi, Bhavani Peth, Survey no. 316/317	Doke Talim, Nana Peth, Survey no. 12,13 13/1/2
10	Kasba Vishrambaug wada	3	1	Guruwar Peth, Survey no. 274	Sadashiv Peth, Survey no. 452
11	Tilak road	55	9	Janata Vasahat, Parvati	Parvati, Survey no. 132
12	Bibwewadi	17	19	Dias Plot, Gultekadi, Survey no. 429/30	Bhimdeep, Bibwewadi, Survey no. 672
13	Hadapsar	28	16	Vetalbaba Vasahat, Hadapsar, Survey no. 5	Annabhau Sathe Vasahat, Hadapsar
14	Dhankawadi	2	7	Katraj Vasahat, Survey no. 2/3	Navin Vasahat, Katraj
15	Total	300	300	-	-

Note: *Number of households

Source: PMC office and <http://shelter-associates.org/spatial-slum-information>

It is far more difficult to cover the floating elements of the population. However, the question of whether or not minor categories should be included depends mainly on the purposes for which the information is required (Yates, 1981). Since all slum dwellers are

not poor and all poor and vulnerable do not necessarily live in slums qualitative information has been collected from houseless households staying in various corners of Pune city.

The proportion of houseless population in India declined by 8.8% from 1.94 million in 2001 to 1.77 million in 2011. Though a similar trend has been observed in the rural areas the houseless population in the urban areas has actually gone up by 20.5% from 7.78 lakh in 2001 to 9.38 lakh in 2011. Uttar Pradesh has the highest proportion of houseless people (18.56%) followed by Maharashtra (11.9%). The houseless child population (0 – 6 years) declined by 21.8%, from 3.45 lakh in 2001 to 2.70 lakh in 2011, in India. Though the rural areas also witnessed a decline the houseless child population shot up by 4.1%, from 1.08 lakh in 2001 to 1.12 lakh in 2011, in the urban areas. This indicates an increase in the dependency ratio thereby worsening the living conditions of the already poor households. The proportion of houseless population in the workforce declined surprisingly by 14.9%, from 1.08 million in 2001 to 9.19 lakh in 2011, in India. Just as is witnessed in case of total and child population the rural areas also experienced a decline. However, the proportion of houseless population in the workforce actually increased by 19.4%, from 4.14 lakh in 2001 to 4.95 lakh in 2011, in the urban areas (Jha, 2013; Office of the Registrar General & Census Commissioner, 2013).

The PMC officials could not provide ward wise list of houseless population (as it had provided in case of the slum dwellers). However, they gave information regarding the locations where the houseless households are found to be staying. Hence, the primary data has been collected from the houseless households who were available during the field visits and ready to share their information. In addition to this, the definition of houseless households given by the census of India has been followed for identification of the households which is as follows: “Households who do not live in buildings or census houses but live in the open on roadside, pavements, in hume pipes, under flyovers and staircases, or in the open in places of worship, mandaps, railway platforms, etc. are treated as houseless households”. According to the Primary Census Abstract, 2011, the houseless population of Pune district is 11,729.

The information has been collected from 39 houseless households staying near Bibwewadi, Hadapsar (Saswad road), Circus ground (Deccan), University road (under flyover), Chaturshringi temple, Bopodi railway station, Hingne Mala, Pune station (PMT

bus stop), Pune – Nagar road bypass, Mundhwa, Sadesataranali, Warje Malwadi (near Wanjale bus stop), and Narhe Ambegaon road (near Katraj). The field visits have also been carried out at Lakdi pool, Sarasbaug, Pune station (railway station), Kothrud (Shivaji putala), and Warje Malwadi (flyover near Mumbai highway). However, in case of some of the locations the houseless households were not available and in case of other locations the households refused to share their information.

Actually, these houseless households have been interrogated by many investigators on the basis of false promises so they are not willing to share their information anymore. Some of them argue that even if we share the information the corporation officials continue to evict us so what is the use of sharing it. Since most of them stay with their relatives on a pavement, under flyover, etc. only 2 – 3 families share their information and then the rest say that they face similar problems.

A pilot survey was carried out in the months of November and December, 2014. The primary data was collected from 51 slum dwellers staying in Janwadi, Dandekar Bridge, Ramtekdi, and Alkunte vasti. In addition to this, 20 houseless households staying near Corporation Bridge, Kumbhar wada, Shankar sheth road and Shivajinagar were also interviewed. After making some changes into the questionnaire the final survey was carried out from March to September, 2015.

CHAPTER FOUR

POVERTY AND VULNERABILITY OF SLUM DWELLERS IN INDIA

The secondary data on living condition of slum dwellers in India will help us to get an idea of the major problems that are being faced by them. Hence, an attempt has been made to understand the dynamics of urban poverty and vulnerability in India with the help of NSSO and NFHS datasets. NSSO had collected the data on urban slums in India in its 69th round survey (July 2012 – December 2012). During the NFHS – 3 (2005 – 06), data has been collected from the slum and non slum areas in eight Indian cities, viz; Delhi, Chennai, Hyderabad, Indore, Kolkata, Meerut, Mumbai and Nagpur.

The NSSO dataset has been primarily used to understand the situation of slum dwellers staying in Maharashtra. In case of Maharashtra, majority of the slum dwellers are found out to be staying in Thane, Pune and Mumbai and Mumbai (Suburban) districts. The density, i.e. number of households per hectare, is found out to be highest in Mumbai and Mumbai (Suburban) (1922.309) followed by Pune (1550.714).

Table 4.1: Land ownership and location of the slums

District	Land ownership and location of the slums					Total
	Private	Public: Railway	Local bodies	Not known	Others	
Thane	9 (40.9)	1 (4.5)	7 (31.8)	0	5 (22.7)	22
Mumbai and Mumbai (Suburban)	17 (48.6)	0	10 (28.6)	0	8 (22.9)	35
Pune	4 (28.6)	0	8 (57.1)	2 (14.3)	0	14
Maharashtra	52 (33.33)	3 (1.92)	65 (41.67)	4 (2.56)	32 (20.51)	156

Note: Figures in bracket indicate percentage
Source: NSSO unit level data (69th round)

It can be clearly seen that in case of all the districts, majority of the slums are located on the private land and on the land owned by the local bodies. Hence, slums here seem to be a ‘creation’ by the local bodies rather than ‘formation’. This relationship between party politics and vulnerability of the slum dwellers is explored further using the NFHS – 3 dataset. Since majority of the slums are located on the private land and on the

land owned by the local bodies, it would be interesting to throw light on the residential vulnerability of these slum dwellers.

Various indicators have been used for computation of the residential vulnerability index (see Appendix E). The methodology used by Prof. Dhanmanjiri Sathe in an article titled ‘Can the female sarpanch deliver? Evidence from Maharashtra’ for the computation of two indices has been followed in the present study. For each household and each indicator, there are multiple responses and a score has been given for each response starting from zero. The score of zero has been given to a worst response and one has been given to a best response. In case of indicators having more than two responses, the other options would lie in – between the worst and best response and have been scored accordingly. For instance, in case of the indicator type of structure, the response no structure gets a score of zero, pucca structure gets a score of 1 and the responses unserviceable katcha, serviceable katcha and semi – pucca lie in – between the two and have been given the scores 0.25, 0.5, and 0.75 respectively. Hence, all the indicators are equally weighted. In this manner, for every indicator, a score would be obtained. When all these scores are added up, the individual score for the household would be obtained. Then the maximum score for each household has been calculated by adding up the highest possible score for each indicator. The percentage of the household’s individual score to the maximum score gives us the individual index value. The percentage of households vulnerable to poverty has been computed as the opposite of the index value multiplied by 100. For instance, the index value of 0.25 indicates that the percentage of households vulnerable to poverty is 75 ($1 - 0.25 = 0.75$; $0.75 * 100 = 75\%$).

The median values of residential vulnerability index for Pune, Thane, Mumbai and Mumbai (Suburban), and Maharashtra are 0.89, 0.82, 0.89, 0.87, and 0.75 respectively. So though there is no difference between the median values for Pune and Mumbai and Mumbai (Suburban) districts, an indicator – wise analysis reveals that the slum dwellers staying in Pune district are in the worse condition in comparison to the ones staying in Thane and Mumbai and Mumbai (Suburban). Further, the residential vulnerability index has been computed separately for the notified and non – notified slums specifically in case of Pune district so as to know whether the intensity of vulnerability differs according to the type of slum. Interestingly, there is a major difference between the two types of slums with respect to their residential vulnerability. The median values of the residential vulnerability index are

found out to be 0.895 and 0.635 for notified and non notified slum respectively. In case of the Thane district, there is no difference between the two types of slums. Surprisingly, the non notified slums in Mumbai and Mumbai (Suburban) (0.94) are slightly better off than the notified slums (0.89) with respect to their residential vulnerability.

Actually, notified slum dwellers are prime movers. As a result, they might be enjoying relatively better situation. However, the non – notified counterpart may be enjoying not much lesser income gain by relocating at those urban centres. So, perhaps they don't want to invest for betterment of their temporary living standards. This may result into their higher degree of residential vulnerability. Enforcement of good practices may then be required along with adequate state provisions to reduce their vulnerabilities. Further, migration flow to Pune is higher than other non – Mumbai cities due to Pune's local economic capacity coupled with favourable weather condition. So, the headcount of affected dwellers might be higher due to their relative higher weight. Other slums may show higher vulnerability of non notified dwellers if the flow was comparable. Hence, due to the distinct deprivation faced by the slum dwellers staying in Pune, they have been investigated further through primary survey to get an understanding of the dynamics of their vulnerability to poverty.

The secondary data analysis from NSSO i.e. slum level data as well as the ongoing literature on urban slums clearly points toward the most important dimension of vulnerability i.e. residential inadequacy in almost all slums in India. Exploiting the last available unit level data from DHS, an attempt has been made to model the determinants of poor residential provision of the slum dwellers in eight major cities of India. Unlike many other household surveys, DHS in India has collected a different dimension of socio – economic attributes and connected it with not only the rural – urban categorization but also with some of the finest categorizations like different types of cities, slums, etc. It is, therefore, useful to use this large dataset to model even slum level issues, deprivation issues on the basis of the sub – sample. Not much has been forthcoming to understand the determinants of urban vulnerability in India. And possibly the determinant of such dimension might not depend on individual capacity or functioning or earning in the urban labour market. As we have pointed out from the NSSO dataset, the slums in India have not emerged in the process of economic liberalization rather created by the private political parties where individual capacity often does not help to change the prevailing situation. The study, therefore, uses only some individual level indicators to control for slum dwellers'

wealth, caste, and religion. We have incorporated some other factors of different dimension like access to health facility as a proxy for effectiveness of institutional set up and a dummy for national as well as rightist parties in state power. Some of the demographic factors that may have an influence on the residential vulnerability like place of residence, sex and age of the household head, and household structure (i.e. nuclear / non – nuclear) have also been taken into consideration.

The type of house (as defined in NFHS – 2) is considered as a dependent variable since it reflects the residential vulnerability of the households. It has been used as a dummy variable so the variable takes the value of 1 if the type of house is kachha and semi – pucca; 0 otherwise. Some of the independent variables are also dummy variables. So, the variable household structure takes the value of 1 if it is non – nuclear; 0 otherwise, the variable type of political party takes the value of 1 if it is regional; 0 otherwise; and finally the variable ideology of the political parties takes the value of 1 if it is right wing; 0 otherwise. The variables government and private health care facility, home treatment, traditional and alternative facility have been generated by combining various types of health care facilities that the households access when they are sick. So, government facility takes the value of 1 if it includes government / municipal hospital, government dispensary, UHC/UHP/UFWC, CHC / rural hospital / PHC, sub – centre, anganwadi / ICDS centre, government mobile clinic, and other public health facility; 0 otherwise, the variable private facility takes the value of 1 if it includes NGO or trust hospital / clinic, private hospital, private doctor / clinic, private paramedic, pharmacy / drugstore, other private health facility and shop; 0 otherwise, traditional facility takes the value of 1 if it includes traditional healer and DAI (TBA); 0 otherwise, and the variable alternative facility takes the value of 1 if it includes vaidya / hakim / homeopath; 0 otherwise.

Table 4.2 presents results of the following regression model:

$$\text{Residential vulnerability} = \alpha_0 + \alpha_1 \text{Place of residence} + \alpha_2 \text{Sex of household head} + \alpha_3 \text{Age of household head} + \alpha_4 \text{Wealth index} + \alpha_5 \text{Household head's religion} + \alpha_6 \text{Type of caste or tribe of the household head} + \alpha_7 \text{Household structure} + \alpha_8 \text{Type of political party} + \alpha_9 \text{Ideology of the political parties} + \alpha_{10} \text{Government facility} + \alpha_{11} \text{Private facility} + \alpha_{12} \text{Home treatment} + \alpha_{13} \text{Traditional facility} + \alpha_{14} \text{Alternative facility} + \mu$$

Table 4.2: Determinants of residential vulnerability

Residential vulnerability	Coefficients	t	P > t
Place of residence			
Capital, large city	.0171304	0.32	0.750
Small city	.0444155	0.67	0.500
Sex of the household head			
Female	-.0014576	-0.16	0.872
Age of the household head	.0011192	4.80	0.000
Wealth index	-.1862213	-50.45	0.000
Household head's religion			
Muslim	.0130679	1.61	0.107
Christian	.0077493	0.41	0.682
Sikh	.0074665	0.12	0.906
Buddhist / Neo – Buddhist	.1212355	5.99	0.000
Jain	.0189065	0.40	0.688
Parsi / Zoroastrian	.0817594	0.29	0.773
No religion	-.3989288	-1.99	0.047
Other	.0982151	0.98	0.327
Type of caste or tribe of the household head			
Scheduled caste	.0261903	2.87	0.004
Scheduled tribe	.0326066	1.71	0.088
Other backward class	.013761	1.78	0.076
Don't know	.0626223	0.73	0.464
Household structure	.0072094	1.14	0.255
Type of political party	.0560449	7.22	0.000
Ideology of the political parties	.0487793	4.55	0.000
Government facility	.1169106	1.64	0.100
Private facility	.1514879	2.13	0.033
Home treatment	.2631054	1.94	0.053
Traditional facility	-.1718795	-0.96	0.335
Alternative facility	.0979898	1.10	0.273
Constant	.6479994	7.12	0.000

Source: NFHS – 3 data

The value of adjusted R^2 is found out to be 0.2490 which means that 24.90% of the variation in the residential vulnerability can be explained by the independent variables.

Place of residence and vulnerability are intimately linked. However, in the present study, the slum dwellers are found to be vulnerable everywhere i.e. irrespective of the place of residence. Though, generally the female headed households are poorer than those headed by men, here the female headed households are found to be having a negative impact on the residential vulnerability. However, the result is not significant. According to the UNDP (2014), as people age, they generally become physically, mentally and economically more

vulnerable. This result has been confirmed by the present study as well. Hence, higher the age higher would be the residential vulnerability. Wealth index is found to be having a highly significant and negative impact on the residential vulnerability. In case of the household head's religion, Muslims and Buddhist / Neo Buddhist are found out to be facing a higher level of residential vulnerability and the results are highly significant in case of the latter group. Hence, higher the concentration of the Buddhists / Neo Buddhists in the slum areas of the cities higher would be the residential vulnerability. People with no religion may obtain semi pucca house. Since the Buddhists / Neo Buddhists come under the Scheduled Caste category, it is again the households belonging to SC category that are found out to be facing much higher level of residential vulnerability in comparison to those belonging to the ST and OBC category. So, SC population have higher propensity to stay in kaccha house in reference to the upper caste population. According to Radhakrishna and Ray (2005), poverty in India is disproportionately high among SCs and STs.

The poor tend to live in larger and younger households. Moreover, one might expect that a high dependency ratio will be associated with greater poverty (Haughton and Khandker, 2009). This result has been confirmed by the present study as well. So, the households having a non – nuclear structure are more vulnerable than the ones having a nuclear structure.

The regional political parties and right wing ideology of the political parties are found out to be playing an important role in worsening the living conditions of the slum dwellers with respect to their residential vulnerability and the results are highly significant. Rather, the slum dwellers are used as vote banks to a great extent. Further, the efforts to delay demolition programmes planned by the city administrators, and attainment of quasi – permanent residential rights in the city are realised only through collective efforts, which help secure political patronage in exchange for their promise to operate as vote banks (Gupta and Mitra, 2002). Since the political parties, that follow the right wing ideology, support deregulation of the labour market, liberalization, privatization and are generally in favour of the large business groups, it can be detrimental for the poor. Rather, Indian political parties have increasingly relied on distraction. Most notable, is the right wing Bharatiya Janata Party (BJP), which uses a politics of religious exclusion and bigotry to capture Hindu voters (Dorschner, 2013). Hence, though it is the duty of the government to provide basic services to the poor, political leaders' help is not sufficient to combat

residential vulnerability. Rather, the data reveals that the picture is somehow dismal. We have not considered education as a determinant of residential vulnerability. It may help in getting employment but doesn't help in tunneling the poor out of the nexus of residential vulnerability. Boxes 4.1 and 4.2 throw light on the dynamics between party politics and poverty in India.

Box 4.1: Is Poverty in India Politically Motivated?

Posted by Shubhojit on April 23, 2014

Flagging concern for the poor is one thing and working towards their upliftment is completely another. There's a major chasm in India when it comes to preaching and practicing pro-poor agenda. Poverty has a direct impact on the economic and social indicators of a country, but unfortunately it hasn't been able to receive consistent attention of the political parties. A very recent example is the controversial benchmarking of poor by the UPA government. The Planning Commission might claim a drastic decline in the percentage of poverty, but the issue has kicked up several stormy debates among the economists. The UPA government faced the public ire after it fixed the poverty line rate at just Rs. 33. That reflected how government perceives the poor and how distant they are from actually understanding the ground reality.

Reasons Why Poverty Still Exists in India

Both rural and urban poverty remains ubiquitous even after more than six decades of gaining independence from foreign yoke. Political leaders are held accountable for the country-wide misery existing in the form of poverty. According to the analysts, political parties find it convenient to exclude huge chunk of the population from the poverty census. Minority ethnic communities, tribal groups and the Dalits are often not included in the list of beneficiaries. This overt marginalization of poor is a by-product of deliberate ploy to keep burden at bay.

It has often been observed that communal tensions and strife between two regional parties disrupt the process of allowing concessions and solving poverty-related problems. In most cases, rural reforms are either stalled for indefinite period of time. Even if the measures are implemented, they are mostly half-measures and confined to short-term solutions that don't do much good to India's poverty reduction goals.

Results of Anti-Poverty Programmes: Success and Failure

Eliminating poverty is a pledge that almost every political entity takes during the election campaigns. Yet, they are the ones who are found exploiting poverty instead of implementing effective measures to tackle it. There has been spurt in poverty alleviation programmes in the late 60s and even today, we come across such programmes claiming to remove landlessness and joblessness in India. Be it the rural housing programmes, self-employment schemes or food subsidy bill, the initiatives suffer from delayed implementation. Some of the obvious reasons behind a marginal success of these welfare schemes are unrealistic policy-making, faulty implementation mechanism and rampant corruption.

Political parties talk about deploying more resources for the poor and ride high on populism just before the elections. However, they fail to stay true to their commitment in the long run, thus severely affecting the effectiveness of the schemes. Lack of a holistic vision leads to abject neglect of other facets of poverty. That's exactly where political parties in India are going wrong.

There's also a serious contradiction in what politicians claim and what action plan they devise. Take a look at the Food Security Bill for instance. While the government body claims that India's poverty figure stands at 270 million people (as of 2011-12), the UPA government announced its intention of subsidizing food for 800 million people under food security scheme.

Is There a Lack of Interest Among Political Parties to Tackle Poverty?

Politicians need to gain insight into all aspects of poverty and not just blindly follow the statistics. They don't seem keen on adopting a deep-dive approach and understanding for themselves that real wages are going down sharply in recent years and purchasing power of wage earners is on decline. The ruling parties tend to evade when questions such as creation of sustainable employment opportunities and reducing inflation crop up.

Exploitation of the vulnerable section of the society is almost a norm for the majority of political players and that leads to unwanted resisted in reforms. Moreover, corruption is all pervading. It is there at a district level, at a state level and a national level. That doesn't allow the welfare schemes to be more expansive and penetrating to the last layer of the poor.

Source: <http://www.elections.in/political-corner/is-poverty-in-india-politically-motivated/>

Box 4.2: Role of poverty in Indian politics

Posted by Shiv Kumar Padha on March 17, 2015

You may or may not believe that, unlike other developed nations of the world, poverty is considered as fertile land for the Indian politics to grow and flourish and the poor an asset, vote bank and fertiliser for its growth. The victory or defeat of any political party depends upon the fact how best it can manage maximum votes from among the poorest of the poor because it is very easy to exploit the poverty for gaining the political mileage in India. We daily observe how does a healthy woman (called mother) on the cross roads use a feeble and skeletal child in her lap as a prop for begging to earn for the family at its cost. Two healthy and stout persons beg for a crippled soul being pulled in the trolley on the roads. A healthy person with 6/6 eyesight escorting a blind person and begging for him in the streets. In all these instances we find the woman with the feeble and skeletal child the healthy persons with a blind and crippled soul in the trolley earn more than if they had used the healthy child and normal persons during begging. It is a tragedy that these healthy and stout persons instead of begging for these crippled and feeble souls could prove a succour for them.

While poverty and illiteracy are considered curse on the human race, they are taken as blessings for the Indian politicians because poverty and illiteracy are highly politicised in India. An average Indian citizen is hardworking and diligent, but the politicians with whom the power lays act as cancer spreading the venom and ultimately affecting the progress and prosperity of the nation. The Indian politicians, instead of uprooting the poverty and illiteracy from the soil devise the means of minting money and making hay during the sun shine. Hardly there are a few politicians in the country who are not involved in one or the other scam or scandal.

Government of India, in order to eliminate the poverty from the Indian soil, adapted three approaches, first entails pursuit of higher economic growth which will improve the level of living of all groups of people in the society including poor, second involved direct anti-poverty programme and the third stressed high priority to governmental expenditure on social sector.

After independence government launched several poverty alleviation programs in the country among which some are worth mentioning, here like – Legal elimination of bonded labor-preventing accumulation of wealth by modifying law – Antodaya program – Drought area development programme – SFDP. Indira Gandhi’s twenty point programme – Food for work and minimum needs programmes – NREP – TRYSEM – Swarna Jayanti Swarozgar Yojna – Indira Awas Yojna – NREGA and Rural Housing Yojna etc. In order to woo the poor, religious minorities, Muslims and low caste Hindus the UPA 2 came out with many legislation like Right to Food Security, Right to Education and Right to Employment. The late Prime Minister Rajiv Gandhi famously admitted that for every rupee the government spent on anti-poverty programme only 20 paisa reached the poor. The Central Government spends crores of rupees every year on subsidised meals, cheap food, grains and other basic amenities for the people below poverty line. Poverty however could be eradicated from the Indian soil had the various facilities and concessions aimed at uplifting the downtrodden reached them and properly utilised for the targeted group it was meant for. But owing to the lack of political commitment and the political corruption nothing could trickle down to the level of the poor beneficiaries.

It is unfortunate that even after 66 years of independence India has more poor than she had in 1947. It does not figure among the top 100 countries in human index. Despite growth rate of 9 per cent it is not transforming itself into economic and social development. According to the World Bank report a person getting \$ 1.25 per day is considered at the threshold of extreme poverty. According to 2011 report of the World Bank, 24.6 per cent of the Indian population or about 300 million people earn much below the \$ 1.25 per day. Poverty in India has become an historical reality from 19th to 21st century. According to World Bank survey, out of world’s 872.3 million people under poverty, India shares 179.6 million with 17.5 per cent of the total world’s population. About 20.6 per cent share of the world’s poor reside in India. Still, 50 per cent of Indians don’t have proper shelter, 70 per cent do not have access to decent toilet, 40 per cent of the villages do not have road connectivity and 35 per cent of the household do not have nearby water facility. India has six doctors for every 10,000 people against 12 in Brazil, 14 in China and 43 in Russia.

It is a reality that Indian ruling class, irrespective of party in rule, not only love poor but wants them to remain poor for their votes and the money to be made from exploiting them. No political party can ever win the election without the support of the poor. Poor, in India, have become a laughing stock, a class to jeer at by the politicians. Raj Babar turned politician from Bollywood blatantly claim that he can have full meal for Rs. 12 in Mumbai, RS MP Rashid Masood can have Rs. 5 per thali in Delhi whereas Dr. Fatoq Abdullaha surpassed all of them claiming one time full stomach meals for Rs. 1. They perhaps forget that every poor man doesn't have the access of taking two times sumptuous meals for Rs. 28 served to our parliamentarians in Parliament mess while ignoring crores of the poorest of the poor going to bed hungry every night. It is reality that the poverty has become a fertile soil for the politicians and the poor a prop to use at the time of election. The politicians need the services of the poor people for getting crowds during the rallies and public meetings. They manage votes from the poor ilk by alluring them with money, ration, alcohol, freebies and other necessities. The politicians understand that the poor man is like specie worth preserving, a lactating cow who always stand by the politicians through thick and thin. It is fact that the ruling class pose loving the poor but wants them to remain poor forever.

Source: <http://news.statetimes.in/role-of-poverty-in-indian-politics/>

Access to market may be more important than the government facility. Nothing is more important than home care for the poverty stricken households to combat their residential vulnerability. Reliable traditional methods for the betterment of health care are actually playing a negative role.

We have also conducted robustness test of the model. The model is robust and stable even after changing the sequence of the variables.

To conclude, our results confirm that it is the right wing and regional politics, which depends mostly on local vote bank, that are detrimental for the living conditions of the urban poor. Rather, even after controlling for individual wealth, demographic factors like age and sex of the household head, and their access to public and private health care, the significant influence of these two factors clearly indicate that the Indian democracy should be brittle enough to make it effective for urban poverty reduction. Hence, the present regime for rightism and factionalism perhaps may not even be inadequate rather detrimental for the

betterment of the urban slum poor. So, coming out of the residential vulnerability nexus seems to be a pipedream.

CHAPTER FIVE

SOCIO – ECONOMIC AND DEMOGRAPHIC PROFILE OF SLUM DWELLERS

“As the face of urban poverty changes at the state level, differences are stark amongst cities as well as within a city” (Agarwal et al., 2006). Hence, it is highly important to understand the living conditions of the poor and vulnerable staying in the Pune city.

Many of the migrants are drawn from the lower socio – economic group of the country and either involuntarily or voluntarily they tend to gravitate towards poor quality housing and frequently into ‘no housing dwellings’ i.e. slums and pavements (Ramachandran, 1972). Rather, according to the ‘over – urbanization’ thesis, migrants move into the urban areas in search of jobs, and in the face of limited employment opportunities in the high productivity industrial sector, they continue to work in low productivity activities. “Urban poverty here is a spill over of rural poverty” (Mitra, 2006). Thus, the residual absorption of labour in the low productivity informal sector reduces the consumption expenditure per capita and inflates the ratio of urban poverty. However, many of the urban poor have been located in the urban areas for a considerable period of time – the recent arrivals of rural to urban migrants just adds to the existing magnitude of urban poverty. Furthermore, though there exists a statistically significant and positive relationship between urban and rural poverty, the elasticity of urban poverty with respect to rural poverty turns out to be low in magnitude. “Therefore, viewing urban poverty entirely as a reflection of rural poverty can be quite misleading” (Mitra, 1992).

Hence, all slum and pavement dwellers are not rural migrants. Some are born in the city, especially the younger generation, and a growing number of them come from better housing areas, a result not only of downward social mobility, but also of the steadily increasing cost of living and the growing shortage of housing. “Another common pattern is the rapid growth of hutment colonies in the suburbs or outskirts of the city. This is partly due to the increasing density and value of land in the central districts of the city which preclude the growth of new settlements in those areas and have forced many residents of the older slums to shift elsewhere” (Singh and De Souza, 1980). Moreover, the location or rise of a slum is obviously related to a certain demand for labour / service functions in the surrounding areas on a permanent basis (Tiwari, 2010).

In this chapter an attempt has been made to understand the socio – economic and demographic characteristics of the 300 notified and non – notified slum dwellers each staying in Pune city.

Head of the household

The definition of head of the household given by the census of India has been followed for classification of the households which is as follows: A head of the household is generally the person who bears the chief responsibility for the maintenance of the household and takes decisions on behalf of the household. This head need not necessarily be the eldest male member. Hence, in case of the women who are widow, abandoned, or have an alcoholic husband and therefore have to bear the chief responsibility for the maintenance of the household they are considered to be the head of the household.

Table 5.1: Head of the household

Head	Number of households	Percentage
Male	546	91.0
Female	54	9.0
Total	600	100.0

Source: Primary data

Table 5.1 reveals that 9% of the households are headed by women. According to K. S. James, Professor and Head, Population Research Centre at ISEC, as the life expectancy of women is more compared to men, there is a natural increase in the number of widows, which in turn adds on the number of female headed households. However, being head does not necessarily mean that the women are the property owners of the household (Kamath, 2013).

Further, qualitative analysis along with the quantitative analysis helps us to get a better idea of the situation at the grass – root level. There is a lot of evidence which supports the fact that households headed by women are poorer than those headed by men (discussed in chapter 6). Moreover, the case study⁵ in the box 5.1 highlights the severity of the vulnerability to poverty of a female headed household staying near Corporation Bridge.

⁵ Initials of names of the houseless households, instead of entire names, have been used to protect their identity.

Box 5.1: Vulnerability to poverty of a female headed household

JK has been staying on the pavement for last 10 – 15 years along with her 4 sons and a daughter. They belong to Pardhi caste. They migrate to Solapur, their native place, during monsoon to work as landless labourers where they own a house made of tin sheets. This is the only asset they own. Rather, when asked about the ownership of assets the lady replied that “How can we own assets? We lead a hand – to – mouth existence”.

She is an illiterate and her two sons and a daughter also did not attend school. Rather, due to her illiteracy she was not even able to tell their ages properly. Only the remaining two sons go to an Anganwadi center. However, all her children help her in earning the livelihood by selling balloons at Deccan. Even the young ones are not left out. All of them sell balloons from 12 noon to 12 midnight with their mother. Despite this, they can have food only once in a day. They do not cook but eat vada – pav, misal – pav, etc. from hotels to survive. At times they are given food (stale perhaps) by some people. While interviewing a lady came on a two wheeler and handed over a small plastic bag containing stale rice to one of her sons who immediately started eating it. They do not even have a ration card which makes them even more vulnerable as they get exposed to open market prices. This is because they would have probably bought subsidized food items if they had a ration card.

They go down to the Mula – Mutha River for taking bath and practise open defecation. Fortunately, they get clean water for drinking purposes from a close by common tap. However, the supply of water breaks down frequently. For all the other purposes like washing clothes and utensils they use the dirty water from the river. They throw their garbage at the open space near the river.

When at work or away from their belongings they constantly face the risk of theft as their clothes and vessels have been stolen in the past. In addition to this, the corporation officials either take or throw away their belongings. Hence, they feel insecure because of the possible evictions. Poverty, according to her, is the lack of employment forcing them to sell balloons to earn livelihood. Finally, she said saving part of the income will help them to get out of the shackles of poverty.

Religion

Table 5.2: Religion

Religion	Number of households	Percentage
Hindu	483	80.5
Muslim	49	8.2
Christian	4	0.7
Buddhists	47	7.8
Neo Buddhists	17	2.8
Total	600	100.0

Source: Primary data

Hence, majority of the households (80.5%) belonged to Hindu religion.

Category

Table 5.3: Category by type of slum

Category	Type of slum		Total
	Notified	Non – notified	
General	78 (29.21)	79 (29.70)	157 (29.46)
OBC	43 (16.10)	38 (14.29)	81 (15.20)
SC	98 (36.70)	127 (47.74)	225 (42.21)
ST	6 (2.25)	5 (1.88)	11 (2.06)
VJ	27 (10.11)	2 (0.75)	29 (5.44)
NT	15 (5.62)	15 (5.64)	30 (5.63)
Total	267 (100.00)	266 (100.00)	533 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (5) = 25.6936 Pr = 0.000

Source: Primary data

Most significantly, the biggest divide in poverty is not based on region or gender but on caste and religion; everywhere across the country the SC, ST and Muslims are worse off than all other groups. Moreover, Indian growth has resulted in greater relative economic and social deprivation for its SCs, STs and Muslim minorities (Shah and Lerche, 2015).

A higher proportion of non – notified slum dwellers (47.74%) belong to SC category and the results are highly significant.

Caste

A higher proportion of households belong to Maratha (19%), Mahar (15.3%), and Matang (12%) caste.

Language

Majority of the households (80.8%) speak Marathi language.

Migration and role of social networks

As has been already discussed the rural poor basically migrate to the urban areas for survival.

Table 5.4: Migration

Migration	Number of households	Percentage
Yes	311	51.8
No	289	48.2
Total	600	100.0

Source: Primary data

Though 51.8% of the households have migrated to the city, it is quite likely that at least some of the remaining households conceal the information regarding migration as they may not get benefit of certain schemes (discussed in chapter 3).

Table 5.5: Migration history by type of slum

Number of years	Type of slum		Total
	Notified	Non – notified	
0 – 10	15 (9.93)	26 (16.25)	41 (13.18)
11 – 20	22 (14.57)	33 (20.63)	55 (17.68)
21 – 30	33 (21.85)	37 (23.13)	70 (22.51)
31 – 40	32 (21.19)	38 (23.75)	70 (22.51)
41 – 50	34 (22.52)	14 (8.75)	48 (15.43)
51 – 60	4 (2.65)	10 (6.25)	14 (4.50)
61 – 70	9 (5.96)	2 (1.25)	11 (3.54)
71 – 80	2 (1.32)	0 (0.00)	2 (0.64)
Total	151 (100.00)	160 (100.00)	311 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (7) = 23.0122 Pr = 0.002

Source: Primary data

A higher proportion of non – notified slum dwellers turn out to be recent migrants. In contrast, a much higher proportion of notified slum dwellers have migrated 41 – 50 years ago. The results are highly significant. In fact, declaration of a slum takes time so it is obvious to find old settlers in notified slums.

In case of native place, a higher proportion of the households have migrated from rural areas of Pune district (10.7%) followed by Solapur (8.2%), Osmanabad (4.2%), and Latur (4.2%). Some of the other districts from which the households have migrated include Ahmednagar, Bijapur, Aurangabad, Beed, Kolhapur, Raigad, Ratnagiri, Sangli, Satara, etc. Generally, the largest number of migrants to slums comes from the states and districts nearest the city; migrants become progressively fewer the further the distance they have to travel (Singh and De Souza, 1980).

A much higher proportion of the households had migrated to the city in search of livelihood opportunities (31.5%). Moreover, some of the households were finding it

difficult to survive in the village (11.3%) and hence migrated to the city. About 2% had migrated to escape drought. Some of the households had no other choice but to migrate as they were rehabilitated for construction of dam. One of the root causes for migration could be adverse family situation. The family gets disorganised either through death, desertion or divorce, or because of quarrels over property rights and responsibilities. Moreover, one also sees the shadow of economic distress resulting from poor jobs, indebtedness, dishonesty and cheating (Ramachandran, 1972).

The poor living condition of the households is reflected by the type of occupation carried out by them in their native places. As high as 18.3% of the households used to work as landless labourers and about 13% used to work as farmer. Moreover, 4.3% of the households were unemployed and about 2.8% used to work as construction worker. Some of the other occupations carried out by the households in their village are as follows: domestic worker, tailor, driver, and scrap collector, etc. Fortunately, few households had migrated to the city after completing their education in search of employment.

Information networks reaching from the city back to the village are especially important in shaping rural urban migration streams. “That is because information regarding the labour market travels through these networks, and functions to encourage or discourage potential migrants accordingly. They also perform an important adaptive function for the migrant once he reaches the city. Nearly all studies have shown that the vast majority of slum dwellers migrate to particular cities because they have kinship relations, persons of the same caste, or village friends already in the city that can help them find housing, employment, and adjust to the urban situation once they arrive in the city”. Furthermore, as a result of the role which kinship and caste networks play in determining patterns of settlement, most slums end up either being dominated by a particular caste from a particular region, or else being divided into caste clusters (Singh and De Souza, 1980).

Table 5.6: Availability of social networks in city by type of slum

Social networks in city	Type of slum		Total
	Notified	Non – notified	
Yes	59 (39.07)	94 (58.75)	153 (49.20)
No	92 (60.93)	66 (41.25)	158 (50.80)
Total	151 (100.00)	160 (100.00)	311 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (1) = 12.0346 Pr = 0.001

Source: Primary data

Since a higher proportion of non – notified slum dwellers have been found out to be recent migrants they may find it difficult to survive in a city in which they do not have friends or relatives prior to migration. Hence, in comparison to the notified slum dwellers, a much higher proportion of non – notified slum dwellers had friends or relatives in city prior to migration. The result is highly significant.

Table 5.7: Motivation for migration by social networks

Motivation for migration by social networks	Type of slum		Total
	Notified	Non – notified	
Yes	49 (32.45)	77 (48.13)	126 (40.51)
No	102 (67.55)	83 (51.88)	185 (59.49)
Total	151 (100.00)	160 (100.00)	311 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (1) = 7.6685 Pr = 0.006

Source: Primary data

Again, a higher proportion of non – notified slum dwellers have been suggested by their friends or relatives to migrate to the city. The result is also highly significant. Rather, as has been already discussed, it is because these social networks provide information regarding the available employment opportunities that the rural poor decide to migrate to the cities.

Table 5.8: Help by social networks by type of slum

Help by social networks	Type of slum		Total
	Notified	Non – notified	
Yes	41 (27.15)	74 (46.25)	115 (36.98)
No	110 (72.85)	86 (53.75)	196 (63.02)
Total	151 (100.00)	160 (100.00)	311 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (1) = 11.8722 Pr = 0.001

Source: Primary data

It is again a much higher proportion of non – notified slum dwellers that have been helped by the social networks in finding employment and / or place to stay in the city.

Table 5.9: Permanent migration by type of slum

Permanent migration	Type of slum		Total
	Notified	Non – notified	
Yes	143 (94.70)	138 (86.25)	281 (90.35)
No	8 (5.30)	22 (13.75)	30 (9.65)
Total	151 (100.00)	160 (100.00)	311 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (1) = 6.2744 Pr = 0.012

Source: Primary data

Not surprisingly, a slightly higher proportion of notified slum dwellers have migrated to the city on a permanent basis. This result is significant at 1% level of significance. These slum dwellers are found out to be old settlers. Furthermore, the slum, in which they stay, has been declared by the government which means that they may be tolerated by the corporation officials and entitled to various welfare entitlements. Hence, they may have a tendency to stay in the city on a permanent basis to a larger extent. However, according to Jagannathan and Halder (1989), perhaps the best – off group are the ‘temporary’ migrants, who use urban earning opportunities to support their village homes, and return to their families after a stay in the city extending sometimes to two or three decades. At least, this group does not have to face the spectre of urban destitution in an impersonal environment during old age.

Household size

The median household size is found out to be 4. Rather, during the data collection it was observed that though there were many joint families, the respondents used to give information for separate nuclear families from the joint family. Many households had either built first floor or separate room for separate nuclear families. For instance, a couple used to stay in a room with their unmarried children and their married children used to stay in separate rooms with their respective wives. Studies have shown that the vast majority (usually at least 80%) of migrants settle in nuclear rather than joint families. Furthermore, though the migrants themselves often express an ideal preference for joint families, they claim that it is not economically feasible to live jointly in the city (Singh and De Souza, 1980).

Dependency ratio

High fertility rates are both cause and effect of poverty. When children die in large numbers, households tend to have many more children to compensate for the risk. Because the parents are risk averse, and want to ensure with very high probability at least one surviving child (and often at least one surviving son to provide social and economic security to the old), they overcompensate in a statistical sense (Sachs, 2005; Singh and De Souza, 1980). “Fertility rates come down as economic development proceeds. As more children survive, households ‘risk’ having fewer children, confident that each child is much more likely to survive. As households put their children in school, the expense of raising each child rises. Households decide to have fewer children and to invest more in each of them”. As mothers find improved economic opportunities out of the household, the time expense of raising children (in terms of lost wage income) rises as well. “And, of course, as households are able to obtain modern health services, including family planning and modern contraceptives, they are able to follow through on their changing desires about family size” (Sachs, 2005).

The age dependency ratio is calculated by dividing the population 0 – 14 years and 65 years and older by the population that is in the 15 – 64 year age group. It is found out to be 40.0973 per 100 working age population. Since this age dependency ratio is a combination of child and old age dependency ratio, it can be disaggregated further to

compute separate dependency ratios. The separate dependency ratios would help us to get an idea of the age pattern of the dependents. The child and old age dependency ratios are found out to be 33.96594 and 6.131387 per 100 working age population respectively. Hence, the child dependency ratio is more than 5 times the old age dependency ratio which could be because generally the elder members stay in the village and younger ones migrate to the cities. However, all the persons belonging to the 'working' age population might not be actually working. In addition to this, all the persons belonging to the 65 years and older age group might not be 'dependent' and would rather be earning livelihood to survive or financially support the family. Hence, an 'economic' dependency ratio has been computed which would take these factors into consideration. It is calculated by dividing the actual number of dependents by the actual number of earners in the sample. It is interestingly found out to be 128.855. Hence, the 'actual' number of dependents is much higher than what has been revealed by the age dependency ratio.

The case study in the box 5.2 throws light on the role of higher dependency ratio in increasing the vulnerability to poverty of the houseless households staying near Shivajinagar.

Box 5.2: Role of higher dependency ratio in increasing the vulnerability to poverty

HSB belongs to NT category. Her husband is alcoholic and doesn't work so she has to earn livelihood. She was married off when she was only 13 years old and her husband stopped working after marriage. He beats her a lot. They have 5 children. Her elder daughter is abandoned so she also stays with them along with her two daughters. One of her daughters was going to school in Nashik but now that she has been abandoned the daughter has dropped out of the school. Some of the family members are illiterate and others have completed education only up to primary level. HSB is the only earner in their family which suggests a very high dependency ratio. She works as a construction worker and scrap collector.

They have a saffron colored ration card so they get wheat (10 kg), rice (4 kg) and kerosene (3 litres) through FPS every month. Actually, her sons' name is not included in the ration card so they do not get adequate amount of food grains and kerosene. She can afford to purchase only 0.25 litre milk everyday and some people give them fruits. However, the corporation officials take away their belongings.

They have a bank account and own a two wheeler. Rather, she had taken loan (Rs. 5,000) from her relatives to purchase the two – wheeler so that her husband can go to work but he doesn't work. She expects her children to work and government to provide pension. When asked to define poverty she said that being a sole earner and having a hand to mouth existence is poverty. She doesn't even hope of getting out of poverty. Rather, she said how a 'sole earner' can help the entire family to get out of poverty!

Child sex ratio

The child sex ratio is calculated as the number of girls per thousand boys in the age group 0 – 6 years. It is found out to be 882.3529 girls per 1000 boys. However, it is less than the child sex ratio of Pune city. According to the census of India, 2011, the child sex ratio of Pune city is 908 girls per 1000 boys.

Literacy level

Literacy is a key determinant of poor people's ability to take advantage of income – earning opportunities as well as an important indicator of the quality of life in its own right (Haughton and Khandker, 2009).

Table 5.10: Literacy level

Level of literacy	Male	Female	Total
Illiteracy	114 (12.28)	306 (30.94)	420 (21.91)
Primary	126 (13.58)	144 (14.56)	270 (14.08)
Secondary	483 (52.05)	413 (41.76)	896 (46.74)
Higher secondary	112 (12.07)	78 (7.89)	190 (9.91)
Graduation	77 (8.30)	33 (3.34)	110 (5.74)
Post graduation	16 (1.72)	15 (1.52)	31 (1.62)
Total	928 (100)	989 (100)	1917 (100)

Note: Figures in bracket indicate percentage

Source: Primary data

A much higher proportion of women are illiterate (30.94%) in comparison to the men. Furthermore, a higher proportion of men have completed education up to secondary, higher secondary and graduation level. Rather, women experience many kinds of disadvantage and discrimination in health, education and employment. Moreover, worldwide the female HDI value averages about 8% lower than the male HDI value and South Asia has the largest gender gap in education (15% points) (UNDP, 2014).

Parents' education has a strong association with upward mobility because: a) Firstly, as parents, particularly mothers, become better educated, early childhood nutrition and upbringing practices tend to improve. b) Secondly, educated parents are better able to monitor their child's progress at school, reinforce what is taught in the classroom, hold teachers accountable, and provide emotional and practical support. c) Finally, educated

parents transmit higher levels of cultural capital – habits, dispositions, and social skills – thereby enabling their children to fit more easily within higher social strata (Krishna, 2010).

Table 5.11: Current literacy status

Level of literacy	Boys	Girls	Total
Up to Primary	64 (15.35)	43 (11.68)	107 (13.63)
Primary – Secondary	265 (63.55)	245 (66.58)	510 (64.97)
Above Secondary	88 (21.10)	80 (21.74)	168 (21.40)
Total	417 (100)	368 (100)	785 (100)

Note: Figures in bracket indicate percentage

Source: Primary data

Table 5.11 reveals the current literacy status of the children of slum dwellers. According to George Psacharopoulos, putting resources into early years' schooling (both primary and pre – primary) achieves more than in secondary and higher education. Moreover, educating girls has a higher rate of return than for boys, a reflection of a traditional gender bias in many societies (Lomborg, 2014).

In addition to this, people invest in the education of their children so that when these children come of age they are better able to escape poverty. However, the basic point is that education is not by itself, enough to guarantee a good job at least in context of weak institutional infrastructure. Hence, the provision of regular and reliable information through a variety of means – role models, mass media, career counsellors, websites, and the like – can help connect talent better with opportunity, thereby promoting faster growth along with greater equity (Krishna, 2010).

Table 5.12: Number of children by type of school (in %)

Number of children	Private school		Total
	Yes	No	
1	23.6	20.7	23.0
2	51.8	37.9	48.7
3	16.8	32.2	20.2
4	4.5	8.0	5.3
5	1.3	1.1	1.3
6	1.3	-	1.0
7	0.3	-	0.3
8	0.3	-	0.3
Total	100.0	100.0	100.0

Source: Primary data

Since women experience many kinds of discrimination an attempt had been made to find out whether a higher proportion of girls are sent to public schools in comparison to the boys. Though overall the picture is good, few girls staying in Bhimdeep Vasahat, Bibwewadi are sent to public school and their brothers are sent to private schools. Further, some girls also had to drop out of school in case of adverse economic situation whereas their brothers continued with the education. “The lesser investment in daughters’ than in sons’ higher education robs women of a source for intergenerational transfer of resources” (Pearce, 1978).

In addition to this, irrespective of the sex, fertility rate may have an impact on the choice of school. Hence, we try to find out whether the households having more number of children send their children to public school. Rather, this gets clearly reflected in table 5.12. When the number of children is 1 or 2 a higher proportion of them are going to private school. However, as the number goes up to 3 and above a higher proportion of children are found out to be going to public school. The number of children is 6, 7 and 8 mainly in case of ‘joint’ families and so they can afford to send their children to private school.

However, low quality education provided in public schools is a notable impediment. Schools located in urban slums very often deliver low – quality instructions. Further, teachers are quite often absent from duty or careless about their tasks and students emerging from these institutions are inadequately prepared to compete. However, quite often, the teachers know of no better standards. Hence, it is not that they are unconcerned about the

educational outcome (Krishna, 2010). The households staying in Annabhau Sathe Vasahat, Hadapsar also complained about the lack of teaching at public schools. Rather, some of the teachers used to chat with their husbands on phone instead of teaching. However, these poor households have no other option but to send their children to public schools. Fortunately, majority of the children going to public schools are provided with free books, uniforms and mid – day meal in the city.

Households do in fact respond to the quality of the local public schools when deciding on whether to send their children to private school (Kjelsrud and Somanathan, 2013). Rather, the private schools seem to be doing somewhat better in imparting the skills than the government schools (Visaria, 2014). Hence, some of the households are actually found out to be taking loans in order to send their children to private schools. The median amount of annual expenditure on education is found out to be Rs. 10000.00.

Employment

As has been already discussed, the slum dwellers, especially the recent migrants, are able to get employed with the help of the social networks in the city. Rather, the decision to migrate is based on rationality. “Migrants continue to reside in the urban areas even when they do not manage to acquire a formal sector job, precisely because even within the informal sector they manage to experience upward income mobility. They are able to reduce the intensity of poverty if not escape it altogether” (Mitra, 2006). Furthermore, contrary to the popular belief, entry into many activities in the informal sector is not open, but is tightly controlled by those engaged in them already (Nath, 1994).

Some of the major occupations carried out by men staying in slums are as follows: driver, construction worker, vegetables’ seller, carrier, office boy, painter, rickshaw driver, security guard, and plumber. In addition to this, some of the men are also working as scrap collector, gardener, fruits’ and fish seller, banjo artist, electrician, carpenter, waiter, chef, welder, sweeper, and peon. Few also work in garage, grocery store and company. Majority of the women are working as scrap collector, garbage collector, sweeper, construction worker, garlands’ seller, vegetables’ and fish seller, domestic worker, tailor, nurse, beautician, and caterer. Some of them also work as rag picker, accountant, peon, and assistant in anganwadi. Few women also work in grocery store. There appears to be a predictable continuity between the rural and urban occupations of a large portion, and

perhaps even a majority of the migrants. Rather, this is in part a function of their lack of skills which inevitably pushes most of them into occupations of unskilled manual labour and service (Singh and De Souza, 1980).

Nearly all the studies have found that although the proportion of women who are employed in the slums is significantly higher than for the urban population as a whole, they suffer higher rates of unemployment, receive lower pay (even for equal work), and have far fewer occupational choices than men. Furthermore, the extremely low levels of literacy and education among the migrant women and their culturally limited perceptions of what kind of work is appropriate for them to do or whether to work or not also limit their ability to participate fully and equally in the urban workforce (Singh and De Souza, 1980). “Women have to function as both home – makers, keeping a family together under precarious economic conditions, and as providers of supplementary income” (Jagannathan and Halder, 1989). Moreover, women’s life expectancy is longer than men’s, so women may spend more time in poverty than men. “Lower education and the need to combine work with childcare means that women are more likely to work in the informal sector” (UNDP, 2014). Finally, the work of very large sections of women involves what may not be considered ‘clean’ from different perspectives (Gothoskar and Kaiwar, 2014).

Majority of the men used to go by two – wheeler and walk the distance to workplace. Some also used to go by bus. Out of the total men, 88.7% are working. Further, about 45.3% of them require more than 20 minutes for going to the workplace. Some men can reach in 10 to 20 minutes as well. However, some workers like plumbers, painters, construction workers, etc. do not have a fixed workplace and hence cannot specify the time required to reach there. In case of women, majority used to walk the distance to workplace and few used to go by bus. However, out of the total women, only 57.5% are working. Since women have to combine work with child care, they have to choose workplaces that are closer to house. Moreover, majority of them work as domestic workers and generally at more than one workplace. Hence, they choose to work in societies, bungalows, etc. that are closer to each other and their house. Out of the total working women, about 29.3% can reach the workplace in 10 to 20 minutes. However, some require more than 20 minutes. Finally, the median amount of monthly expenditure incurred on conveyance by both men and women is Rs. 500. The lowest income group relies very heavily on walking – indeed, more than half of all the trips by this group are conducted on foot. “This is only to be

expected, given that trip distances are typically low for low income groups – as Tiwari (2002) points out, the poor live as close as possible to their work places, often in sub – standard housing in unplanned settlements, because of long working hours and the need to minimize transport expenditure” (Badami, Tiwari and Mohan, 2010).

Asset ownership

Asset ownership can serve as insurance against descents as experiencing one or more negative events forces households to sell off some part of their assets (Krishna, 2010).

Table 5.13: Ownership of all assets by type of slum

Number of assets owned	Type of slum		Total
	Notified	Non – notified	
1	5 (1.67)	7 (2.33)	12 (2.00)
2	5 (1.67)	13 (4.33)	18 (3.00)
3	18 (6.00)	16 (5.33)	34 (5.67)
4	40 (13.33)	32 (10.67)	72 (12.00)
5	72 (24.00)	62 (20.67)	134 (22.33)
6	66 (22.00)	78 (26.00)	144 (24.00)
7	49 (16.33)	61 (20.33)	110 (18.33)
8	30 (10.00)	21 (7.00)	51 (8.50)
9	8 (2.67)	6 (2.00)	14 (2.33)
10	6 (2.00)	2 (0.67)	8 (1.33)
11	1 (0.33)	1 (0.33)	2 (0.33)
12	0 (0.00)	1 (0.33)	1 (0.17)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Kerosene stove, gas cylinder, bicycle, mobile, radio, television, television (with cable / dish), two – wheeler, refrigerator, washing machine, computer and computer (with internet) are the assets for which the information is collected.

3) Pearson chi² (11) = 12.8247 Pr = 0.305

Source: Primary data

Though there is no major difference between the two types of slum dwellers, a slightly higher proportion of non – notified slum dwellers own only up to two assets. In addition to this, a slightly higher proportion of notified slum dwellers own 8 assets. Hence, the notified slum dwellers seem to be better insured against descents in comparison to the non – notified slum dwellers.

Health care

About 50% of the households go to private hospital in case of illness. Moreover, 26.3% of the households go to both public and private hospitals. There is hardly any difference between the men and women of the household with respect to the type of hospital visited. Almost all the children below 5 years of age are provided vaccination. Rather many are provided vaccines in the slum itself. Only one respondent was not aware of the importance of vaccines and believed that the children will get stricken to diseases if they are provided vaccines. The median amount of monthly expenditure incurred on health care is found out to be Rs. 500. Further, the median proportion of total monthly expenditure on health care is 5.1057%.

About 7% of the households reported that they face health problems due to staying in slums. Majority of them stated that they face health problems due to lack of cleanliness in the slum. Further, some of the households reported that the drainage gets clogged and especially during rainy season that water gets into their house which then results in the spread of diseases. The households staying in houses made of tin sheets find it difficult to be in the house during day especially during summer season. Other health problems faced by the slum dwellers include: respiratory problems due to lack of ventilation, air pollution due to the usage of hearth, cold, fever, and dengue, etc.

The health problems faced by the houseless households are very grave. Especially, the pavement dwellers constantly face the risk of meeting with an accident. Rather, some of the children, who seem to be merely 4 – 5 years old, beg at a signal near Poolgate, Hadapsar. Moreover, it seems as if adulthood has been imposed upon these tiny tots by the painted moustaches on their faces. They can very easily be turned down by the commuters at the signal.

The pavement dwellers may also face many health problems due to the continuous exposure to pollution. Furthermore, when they are asleep the stray dogs eat the food offered

to the pavement dwellers by some people. At times, they also have to search dust bins for food. The case study in the box 5.3 throws light on the severity of vulnerability to poverty of a houseless household staying under a flyover near University road.

Box 5.3: Health care and increasing vulnerability to poverty

LK belongs to Mahadeo Pardhi sub caste and has migrated from Karnataka 30 years ago. They had migrated due to drought at village. Further, they do not even own land and house at village. Since they are constantly harassed by the corporation officials, they keep on changing the locations. So, they stay at times under the flyover near the University road and at times at Deccan near the Circus ground.

LK and her husband are illiterate and sell balloons to earn livelihood. They also work as construction workers whenever it is available to them. Moreover, they do not own any asset nor do they have a bank account.

They can fetch water from a close by water tap available in a college. They have access to a common bathroom and mobile toilet. However, they have to pay Rs. 300 per month for using it. They cannot even afford to have access to institutional deliveries and hence deliver babies on the pavement itself. Rather, according to Tribhuwan and Andreassen (2003), majority of the pavement children are born on busy roads. Fortunately, the children staying near the University road are provided vaccines by some people. Street light is their only source of light. Further, they do not even have a ration card. They can have food twice a day. However, they have to search wood for cooking it. They are also given food by some people. In fact, while interviewing the respondent, a man came in a car and handed over a bag full of food to a boy. Moreover, they can rarely purchase food grains and vegetables and never purchase fruits, milk and non – vegetarian food.

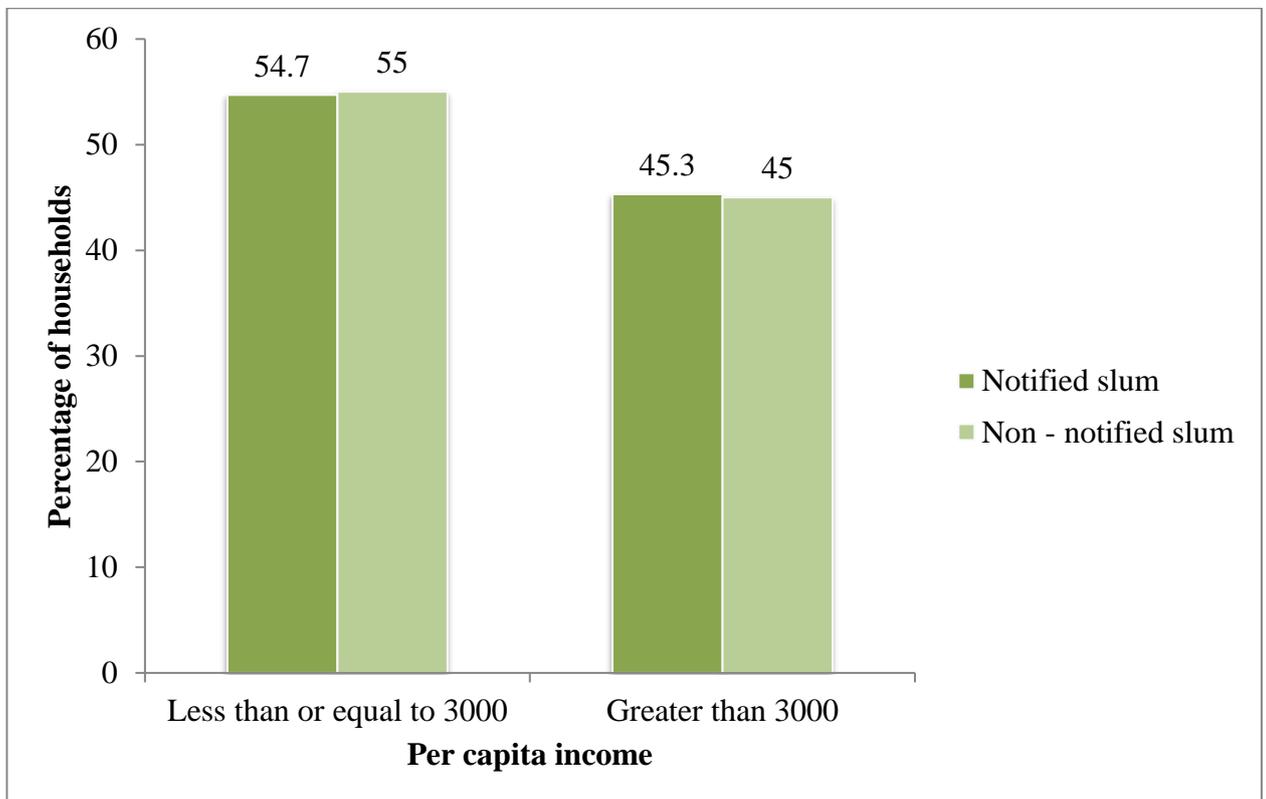
They have to pay Rs. 1000 per month to the corporation officials as bribe. The officials have been extremely cruel as they do not even spare the cooked food while throwing away their belongings. The pavement dwellers have to pay the officials to get back their belongings in case they take it away with them. The officials also burn the belongings at times and warn the dwellers to go back to their villages. A lady has requested the corporation officials to be kind to the dwellers. She also takes the dwellers' children to school, where they are offered food as well, at VAMNICOM. The pavement dwellers feel highly insecure because of the possible evictions / demolitions and theft.

When asked to define poverty, LK said that birds' lives are better than our lives as they do not have any restriction regarding staying at a particular place.

Per capita income

According to Islam et al. (1996), literature obtained in household survey data on income is often understated and hence obtained information does not necessarily truly reflect the actual income of the household (Karn et al., 2003).

Figure 5.1: Per capita income by type of slum



Source: Primary data

There is hardly any difference between the notified and non – notified slum dwellers with respect to the per capita income and more than half of the households have per capita income that is less than or equal to the median (Rs. 3000). However, income may not be used as an indicator of poverty or lack of it. It is mainly because the uncertainty of being unemployed for a particular period of time, which is an essential characteristic of the informal sector, just doesn't get captured as in case of majority of the respondents the daily

wages have been converted to monthly wages (by multiplying daily wage amount by 30) for the purposes of comparability. In addition to this, expenditure alone also may not be used as an indicator of poverty or lack of it as the households' expenditure may be high but it might be due to loans. Rather, the households have to take loans even to fulfil 'basic' needs at times.

Poverty

The HCR has a straight – forward interpretation and is easy to understand. Hence, it has much 'communication value' (Deaton and Dreze, 2002). It measures the proportion of the population that is poor. Formally,

$HCR = (N_P / N) * 100$; where N_P is the number of poor and N is the total population (sample) (The World Bank, 2005).

Table 5.14: Head count ratio by type of slum

Type of slum	No. of BPL households	Head count ratio
Notified	29	9.67
Non – notified	33	11
Total	62	10.33

Source: Primary data

The number of BPL households is slightly higher in case of the non – notified slum vis – a – vis the notified slum. However, the HCR has serious limitations as a poverty index. It ignores the extent to which different households fall short of the poverty line. Thus, an income transfer from a very poor person to someone who is closer to the poverty line may lead to a decline in the headcount ratio, if it 'lifts' the recipient above the poverty line. Furthermore, changes in HCRs can be highly sensitive to the number of poor households near the poverty line (since changes in the HCR are entirely driven by 'crossings' of the poverty line). "If poor households are heavily 'bunched' near the poverty line, a small increase in average per capita income could lead to a misleadingly large decline in the headcount ratio". This 'density effect' has to be kept firmly in view in the context of comparisons of poverty change (Deaton and Dreze, 2002). Indeed, with the HCR as the measure of poverty, any government faces a strong temptation to concentrate on the richest among the poor, since that is the way that the number of the poor – and the HCR – can be most easily reduced (Sen, 1992).

One of the limitations of the HCR has been overcome by the PGI. It adds up the extent to which individuals on average fall below the poverty line, and expresses it as a percentage of the poverty line (The World Bank, 2005). Hence, income gap measures the additional income that would be needed to bring all the poor up to the level of the poverty line, i.e. the minimal extra income that would be sufficient to wipe out poverty – in the form of low income – altogether (Sen, 1992). The PGI is found out to be 0.0211 and 0.0216 in case of the notified and non – notified slum dwellers respectively. Hence, it is slightly higher in case of the non – notified slum dwellers. The HCR and PGI together still cannot be adequate, since neither pays any attention to the distribution of income among the poor (Sen, 1992). This limitation can be overcome by the SPGI as it takes into account inequality among the poor. It is simply a weighted sum of poverty gaps (as a proportion of the poverty line), where the weights are the proportionate poverty gaps themselves. By squaring the poverty gap index, the measure implicitly puts more weight on observations that fall well below the poverty line (The World Bank, 2005). The SPGI is found out to be 0.0061 and 0.0067 in case of the notified and non – notified slum dwellers respectively. Again, it is slightly higher in case of the non – notified slum dwellers. However, poverty is not unidimensional. The poverty indexes are useful indicators of inadequate purchasing power, but on their own do not do justice to the range of deprivations we ought to be concerned with. If poverty is defined as lack of income, it is not surprising that the growth of income plays a key role in reducing it. However, when the multi – dimensional nature of poverty is acknowledged, this relation appears in a different light (Deaton and Dreze, 2002).

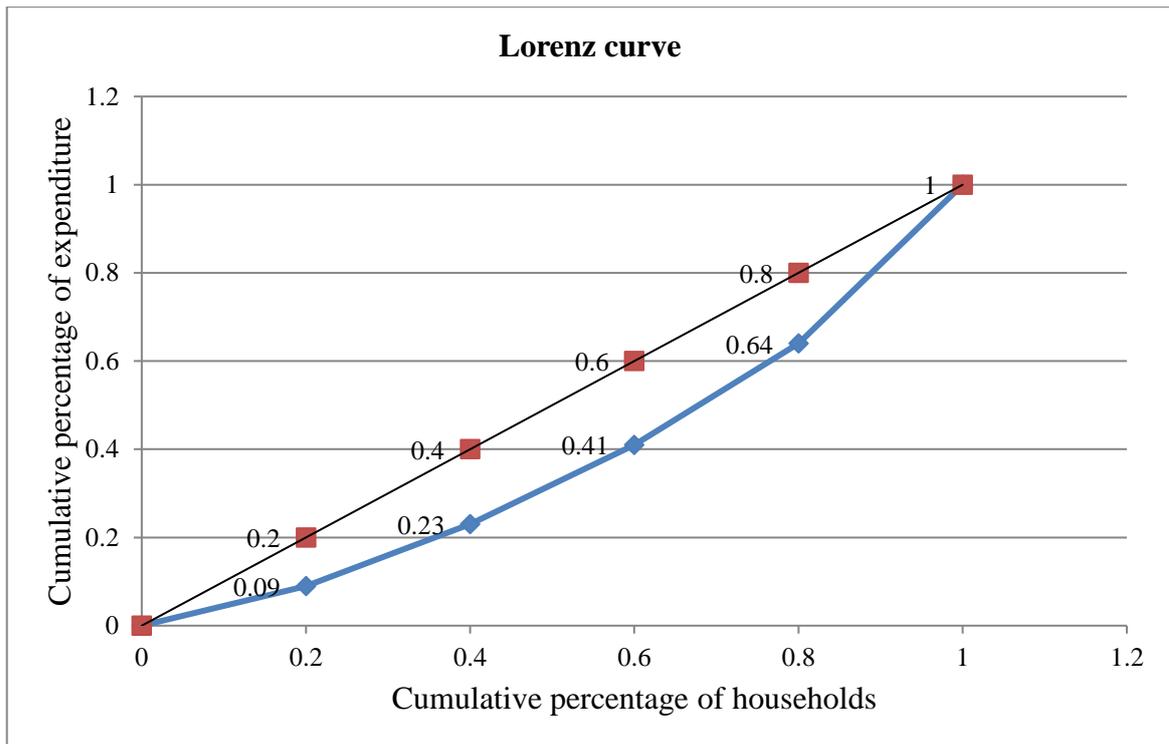
Inequality

Inequality is a broader concept than poverty as it is defined over the entire population, and does not only focus on the poor (Haughton and Khandker, 2009).

An attempt has been to capture inequality among the slum dwellers on the basis of income and expenditure. Further, the level of inequality faced may differ along with the head of the household, category, and type of slum. Hence, this factor is also taken into consideration and inequality is calculated separately for such groups. A popular measure of inequality is the Gini coefficient, which ranges from 0 (perfect equality) to 1 (perfect inequality). It is based on the Lorenz curve, a cumulative frequency curve that compares the distribution of a specific variable (for example, income or expenditure) with the uniform distribution that represents equality. This simplest measurement of inequality sorts the

population from poorest to richest and shows the percentage of expenditure (or income) attributable to each fifth (quintile) of the population. The poorest quintile typically accounts for 6 – 10 percent of all expenditure (or income), the top quintile for 35 – 50 percent (Haughton and Khandker, 2009).

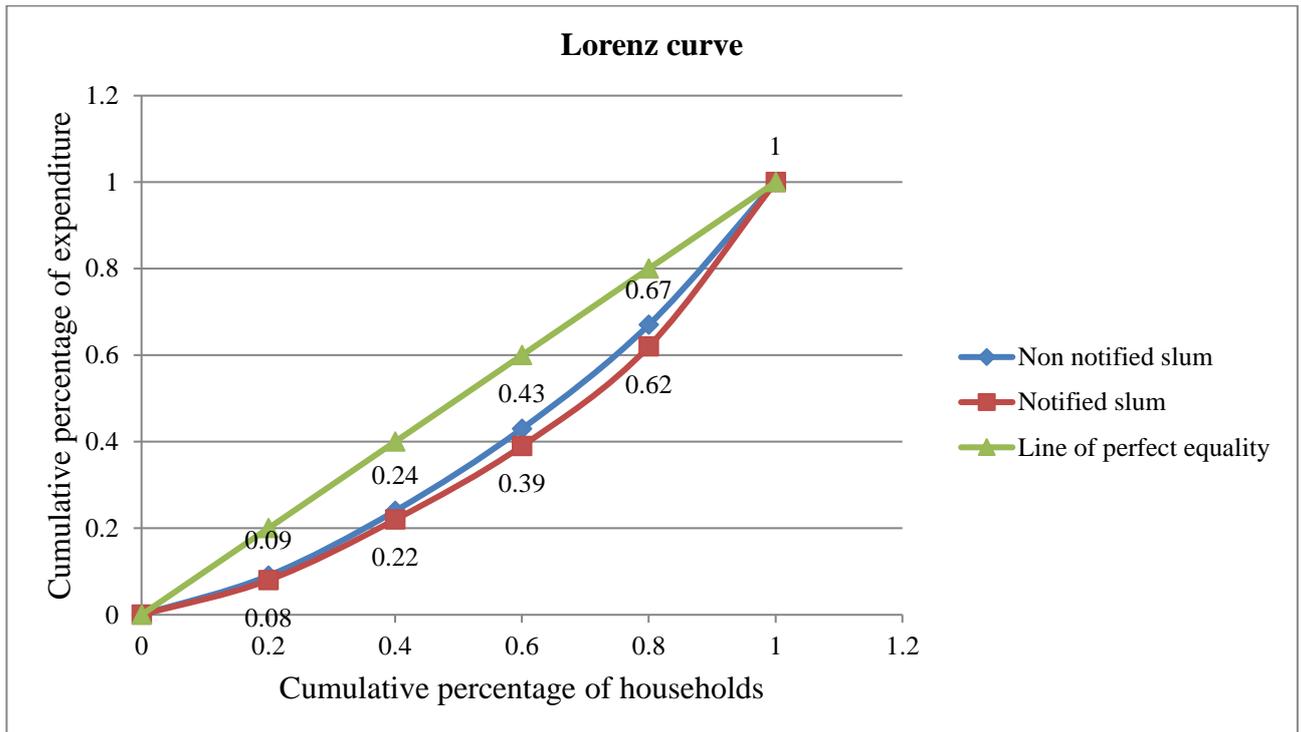
Figure 5.2: Expenditure inequality



Source: Primary data

As has been expected on the basis of literature, the poorest quintile accounts for 9% of all the expenditure and the top quintile for 36%. The Gini coefficient is defined as $A / (A+B)$, where A is the area between the line of perfect equality and Lorenz curve and B is the area under the Lorenz curve. “If $A = 0$, the Gini coefficient becomes zero, which means perfect equality, whereas if $B = 0$, the Gini coefficient becomes 1, which means complete inequality” (Haughton and Khandker, 2009). To find out the value of Gini coefficient the area under the Lorenz curve (B) is calculated using the following formula: $\frac{1}{2} (\text{base1} + \text{base2}) * \text{height}$. Then the value of B is subtracted from the value of area under the line of perfect equality (0.5) to calculate A. Thus, the value of Gini coefficient is found out to be 0.252.

Figure 5.3: Expenditure inequality by type of slum



Source: Primary data

There is no major difference between the two types of slum dwellers with respect to the poorest quintile. However, the top quintile accounts for 38% and 33% of all the expenditure in case of the notified and non – notified slum dwellers respectively. Rather, the level of expenditure inequality faced by the notified slum dwellers is higher than the non – notified slum dwellers as inequality is greater, the further the Lorenz curve from the line of perfect equality (Jenkins, 2006). The value of Gini coefficient is found out to be 0.276 and 0.228 in case of the notified and non – notified slum dwellers respectively. Hence, as has been discussed earlier, poverty instead of inequality seems to be a major concern in case of the non – notified slum dwellers (unlike the notified slum dwellers).

The level of income inequality turns out to be much higher than the expenditure inequality in case of all the households. Rather, when inequality is measured separately by type of slum, it is found out that the non – notified slum dwellers face a higher level of inequality than the notified ones (unlike expenditure inequality). However, expenditure inequality might be considered as a better measure instead of income inequality as there is a greater chance of misreporting in case of income. Rather, a respondent staying in Rajiv Gandhi Nagar, Koregaon Park has very high income level and actually he landed up in the

non – notified slum recently as the government project was not sanctioned to him (as he could not pay bribe to the concerned Ministry). Hence, due to this exceptional case the income inequality among the non – notified slum dwellers turns out to be much higher than that of the notified slum dwellers. However, after excluding this exceptional case, the results turn out to be exactly opposite and the notified slum dwellers are found to be facing a higher level of income inequality than the non – notified slum dwellers (just as has been observed in case of expenditure inequality).

Furthermore, expenditure inequality has been measured separately for households belonging to SC, ST, VJ, NT category and for those belonging to general and OBC category. However, it is found out to be similar to the expenditure inequality that is measured for all households and there is no difference between the two groups. Hence, the value of Gini coefficient is found out to be 0.252 for both the groups. In addition to this, the level of expenditure inequality faced by the female headed households is slightly higher than that of the rest of the population. The value of Gini coefficient is found out to be 0.264 and 0.236 in case of the female headed households and rest of the population respectively. One of the reasons for not finding a major difference between the two groups could be the low sample size of female headed households out of the total number of households.

Culture

Though there can be various aspects that can be considered for understanding the culture of the poor, the present study has attempted to look into the funeral and marriage expenses. Further, death of a family member results in an unexpected expenditure especially for the funeral feast. Hence, we have tried to find out the way in which the households overcome this difficulty. Rather, in communities studied in different parts of India, elaborate marriage ceremonies and dowries have contributed to many households' descents into poverty. Moreover, many households have taken out debts, often at predatory rates of interest, in order to fulfil the social obligations (marriage / dowry and funeral feast) that they recognize and respect (Krishna, 2010).

More than half of the households follow the practice of giving funeral feast in case of death of a family member and the median amount of expenditure incurred on it is found out to be Rs. 10,000. Majority of the households, that had faced death of a family member and had given funeral feast, had not taken loan for the expenses. They said that their

relatives help them financially and they can return the money to them later on. Similarly, some of them were offered help by their neighbours, friends, and employers. Few had spent out of their savings. Furthermore, some of the households stated that they spend for the feast as per their affordability. A widow reported that she got Rs. 10,000 from the government after her husband's death so she used it for the feast. Out of the conversation with the respondents it was revealed that the practice of giving feast is more widespread in their villages. Some of them have to give funeral feast and clothes to entire village which would turn out to be highly expensive. In addition to this, many households had taken loan for expenses incurred on marriage. The median amount of expenditure incurred on marriage is found out to be Rs. 1,50,000. In case of households that had not taken loan, many reported that they had either spent out of the savings or were helped financially by their relatives, friends and employers. Few also stated that they spend as per their affordability but do not take loan. For instance, a respondent had married off her 4 daughters in a temple instead of booking a marriage hall. Furthermore, some of the girls were married off by their parents even before they turned 18. They did not report this directly of course. However, it could be revealed by subtracting their children's age from their age. Finally, in case of both funeral feast and marriage, many respondents stated that since they have not faced it (marriage and death of a family member) they cannot give the details. Though it is quite likely that they may really not have faced it, at least some of them might have lied to conceal the details.

Since such social and customary expenses are one of the causes of descent into poverty one might be tempted to conclude that poor people have only themselves to blame. However, changing social expectations and norms is a collective, rather than an individual, undertaking. "Simply decrying a practice will not help effect these changes. Expectations of rightful behaviour need to change. Sustained actions by collective actors are required" (Krishna, 2010).

Drug addiction

Table 5.15: Drug addiction by sex (in %)

Type of drug	Sex			
	Male		Female	
	Yes	No	Yes	No
Alcohol	16.3	83.7	-	100
Cigarette	1.2	98.8	-	100
Tobacco	6	94	5.7	94.3
<i>Mishri</i>	-	100	12.8	87.2
Gutkha	2.3	97.7	0.5	99.5

Source: Primary data

The proportion of men addicted to alcohol (16.3%) and tobacco (6%) is higher in comparison to other drugs. Moreover, in case of women, addiction to *mishri* (12.8%) is much higher in comparison to tobacco (5.7%) and gutkha (0.5%). None of the women are addicted to alcohol and cigarette. Similarly, none of the men are addicted to *mishri*. About 0.5% of the households are addicted to drugs other than the ones for which the information has been obtained. However, it is quite likely that many households conceal the information regarding addiction.

Alcohol is looked at by most of the workers as a coping strategy (Sabhlok, Cheung and Mishra, 2015). Furthermore, slothfulness, drunkenness, and other such factors were associated with less than 5% of all recorded descents. Hence, people do not become poor or remain poor for reasons of their own making. Rather, the events that have contributed to the largest numbers of descents have occurred for reasons beyond most individuals' control (Krishna, 2010).

Entertainment

Leisure and recreation are basic human necessities (Jayaraj and Subramanian, 2010). Hence, we have tried to find out whether the households are able to spend on various forms of entertainment. Though there can be many forms of entertainment, the present study has made an attempt to understand the households' expenditure on festivals and for going to movies, fairs, parks, temples, and villages. The median amount of monthly expenditure incurred on going to movies is found out to be Rs. 0. Some of the households stated that

only their children go to watch movies. Few also said that they bring CDs at house to watch movies instead of going to theatre as it turns out to be less expensive. The median amount of annual expenditure incurred on going to fairs is found out to be Rs. 500. The median amount of monthly expenditure incurred on going to parks and temples is found out to be Rs. 0. Similarly, the median amount of annual expenditure incurred on going to villages is found out to be Rs. 0. Rather, few households reported that only some of the family members go to the village as the entire household cannot afford to go there. Moreover, some of the households stated that they go to village by train without ticket. Festivals are an important aspect of Indian culture. The median amount of annual expenditure incurred on festivals is found out to be Rs. 5000. Similarly, the median amount of annual expenditure incurred on purchasing clothes and footwear is found out to be Rs. 5000. These two amounts of expenditure are likely to overlap as the households mostly purchase clothes and footwear during festivals. Some of the households stated that they purchase it only for their children. Majority of the domestic workers reported that they get clothes from their employers so they do not purchase it. Similarly, the garbage collectors said that they repair and wear the footwear found in the dustbins. Thus, the poor households are found to be making so many adjustments to their life to enable themselves to survive in the city.

CHAPTER SIX

VULNERABILITY TO POVERTY

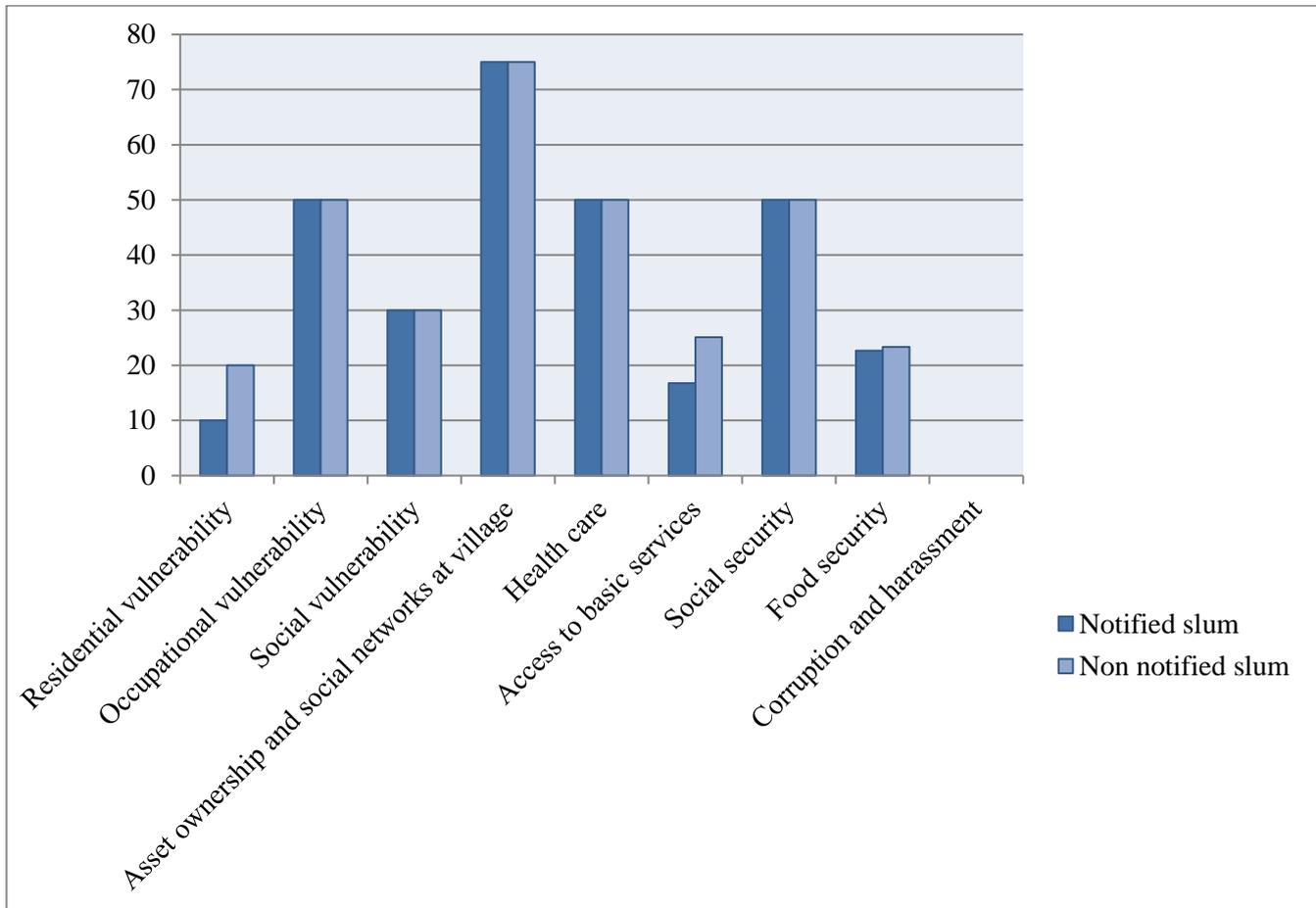
“Household vulnerability to poverty is affected by, and affects, vulnerability in other dimensions and levels, such as the vulnerability of a country or region to natural hazards and macro – economic shocks” (Naude et al., 2008). Hence, a clear sense of the causes of vulnerability to poverty is needed if one is to craft successful policies to combat it (Haughton and Khandker, 2009).

In this chapter, an attempt has been made to identify and quantify the causes of vulnerability to poverty. The three sources of vulnerability given by the SECC, namely residential, occupational and social, have also been taken into consideration. In addition to these, asset ownership and social networks at village, health care, access to basic services, social security, food security and corruption and harassment have been incorporated as essential dimensions of vulnerability. However, it is important to note that these are very basic dimensions and do not form a complete enough list.

Various indicators have been used for the computation of indices of these dimensions of vulnerability (see Appendix B). Furthermore, a composite index constructed from numerous indicators may not be viewed as desirable, given that each indicator reflects a different dimension of well being. While a single composite index may have the virtue of being simple, measuring and monitoring deprivation separately is more useful for policy making (Son, 2011). Hence, instead of clubbing all the dimensions into an aggregate index separate indices have been developed for all the dimensions of vulnerability.

The percentage of households vulnerable to poverty is presented separately for notified and non – notified slum in Figure 6.1.

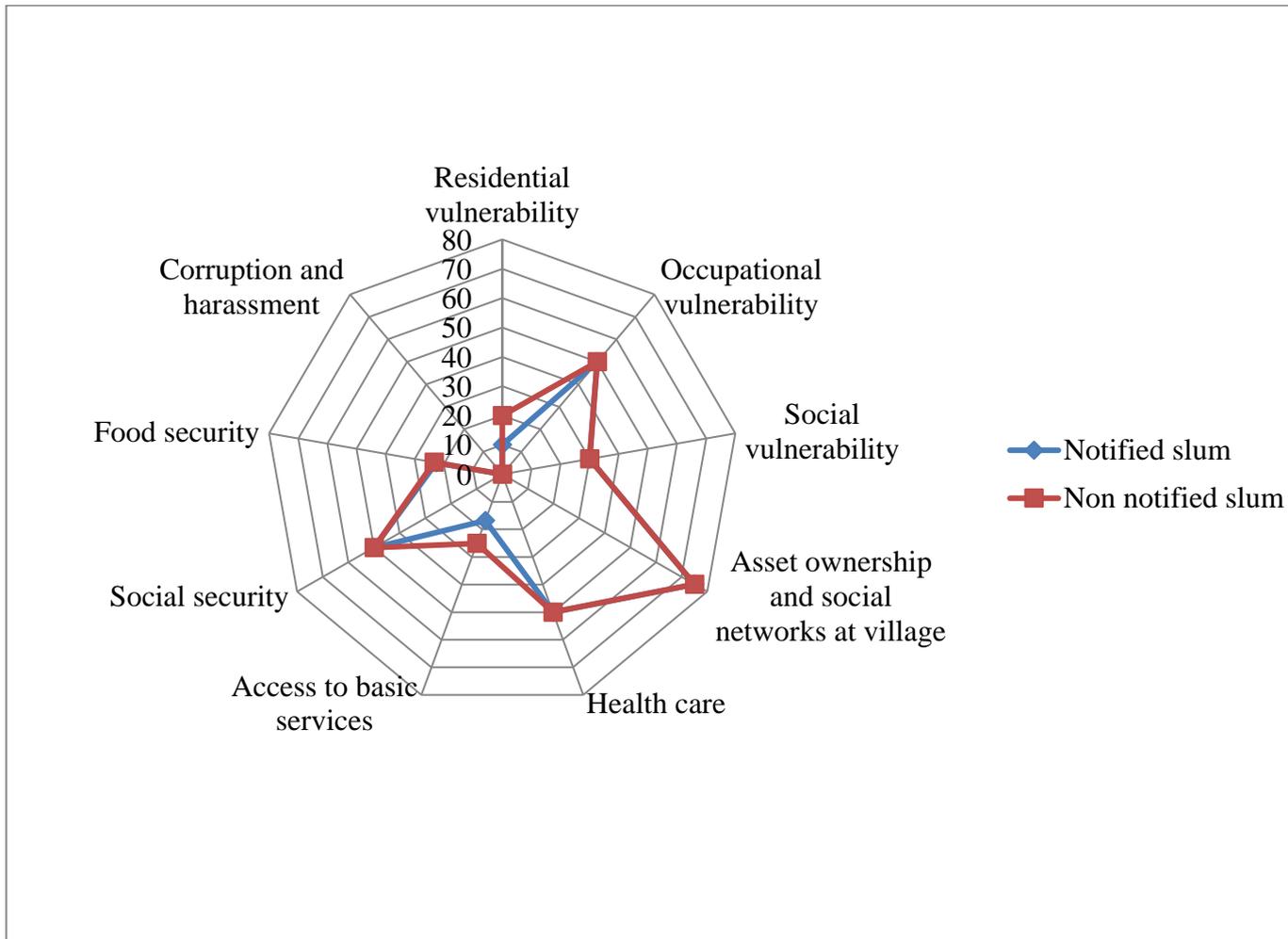
Figure 6.1: Percentage of households vulnerable to poverty by type of slum



Note: The percentage of households vulnerable to poverty are median values for both types of slum
 Source: Primary data

There is a marked difference between the notified and non – notified slum dwellers with respect to only two dimensions of vulnerability viz., residential vulnerability and access to basic services. However, 50% of the notified and non – notified slum dwellers are vulnerable to poverty when occupational vulnerability, health care and social security are taken into consideration. Furthermore, as high as 75% of the notified and non – notified slum dwellers are vulnerable to poverty with respect to asset ownership and social networks at village. Hence, only 25% of the dwellers can fall back upon the social networks and assets owned at village in case they are unable to make up / survive in the city. Similar results are depicted below with the help of radar chart.

Figure 6.2: Percentage of households vulnerable to poverty by type of slum



Note: The percentage of households vulnerable to poverty are median values for both types of slum
 Source: Primary data

Dimensions of vulnerability by type of slum

Since there is a significant difference between the notified and non – notified slum dwellers with respect to the residential vulnerability and access to basic services it would be better to analyze the indicators, which have a significant influence and are used in the computation of the two indices, in order to be able to understand the reasons for differences between the two types of slum dwellers.

1) Residential vulnerability

a) Type of house

Table 6.1: Type of house by type of slum

Type of house	Type of slum		Total
	Notified	Non – notified	
Kutcha	18 (6.00)	125 (41.67)	143 (23.83)
Semi kutcha	105 (35.00)	88 (29.33)	193 (32.17)
Pucca	177 (59.00)	87 (29.00)	264 (44.00)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (2) = 112.2422 Pr = 0.000

Source: Primary data

The table 6.1 reveals that a much higher proportion of non – notified slum dwellers stay in kutcha houses and the results are highly significant.

b) Source of light

Table 6.2: Source of light by type of slum

Source of light	Type of slum		Total
	Notified	Non – notified	
No electricity	3 (1.00)	3 (1.00)	6 (1.00)
Rented	7 (2.33)	38 (12.67)	45 (7.50)
Own	290 (96.67)	259 (86.33)	549 (91.50)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (2) = 23.1060 Pr = 0.000

Source: Primary data

Though there is no difference between the two types of slum dwellers with respect to not having access to electricity as a source of light, the proportion of non – notified slum dwellers using electricity on rent is almost six times higher than the proportion for the notified ones. The results again turn out to be highly significant.

c) Eviction / Demolition

Table 6.3: Experience of eviction / demolition by type of slum

Eviction / Demolition	Type of slum		Total
	Notified	Non – notified	
Yes	1 (0.33)	9 (3.00)	10 (1.67)
No	299 (99.67)	291 (97.00)	590 (98.33)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (1) = 6.5085 Pr = 0.011

Source: Primary data

Though very few slum dwellers have faced eviction / demolition in the past, it is again a higher proportion of non – notified slum dwellers that have faced it in comparison to the notified ones and the results are significant at 1% level of significance.

d) Theft

Table 6.4: Experience of theft by type of slum

Theft	Type of slum		Total
	Notified	Non – notified	
Yes	23 (7.67)	38 (12.67)	61 (10.17)
No	277 (92.33)	262 (87.33)	539 (89.83)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (1) = 4.1060 Pr = 0.043

Source: Primary data

A slightly higher proportion of non – notified slum dwellers have experienced theft in the past and the results are significant at 4% level of significance.

2) Access to basic services

a) Source of drinking water

Table 6.5: Source of drinking water by type of slum

Source of drinking water	Type of slum		Total
	Notified	Non – notified	
Hand pump	5 (1.67)	0 (0.00)	5 (0.83)
Common tap	12 (4.00)	68 (22.67)	80 (13.33)
Own tap	283 (94.33)	232 (77.33)	515 (85.83)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (2) = 49.2505 Pr = 0.000

Source: Primary data

About 22.67% of the non – notified slum dwellers have access to common tap as a source of drinking water as against only 4% in case of the notified ones. In fact, a much higher proportion of notified slum dwellers have own taps. The results are highly significant.

b) Type of toilet

Table 6.6: Type of toilet by type of slum

Type of toilet	Type of slum		Total
	Notified	Non – notified	
Own toilet	109 (36.33)	45 (15.00)	154 (25.67)
Common flush toilet	191 (63.67)	240 (80.00)	431 (71.83)
Open defecation	0 (0.00)	15 (5.00)	15 (2.50)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (2) = 47.1682 Pr = 0.000

Source: Primary data

It is only the non – notified slum dwellers that have to practise open defecation and only 15% of them have own toilets. The results are highly significant. The households staying in Annabhau Sathe Vasahat, Hadapsar had to go to the railway tracks to relieve themselves. Actually, the corporator of the ward has provided the dwellers with a common

flush toilet but it is not yet functional. Furthermore, the households staying in other slums, which reported that they have a common flush toilet, complained that their children have no choice but to practise open defecation. It is mainly because they cannot wait in long queues to relieve themselves. Rather, some respondents had dug holes near the drainage plates and their children used to practise open defecation over there.

India has the highest number of people practising open defecation in the world, according to the UN, which said political will at the ‘highest level’ is needed to address the challenge (The Economic Times, 2014). Open defecation is a harbinger of innumerable deadly diseases (Kumar, 2015). “There is now rigorous empirical evidence that improved sanitation systems reduce the incidence of diarrhoea among children. Diarrhoea, in turn, harms children’s nutritional status (by affecting their ability to retain nutrients). And inadequate nutrition (stunting, etc.) affects children’s cognitive skills, lifetime health and earnings. In short, the benefits of sanitation investment are huge. Cost – benefit analyses show rates of return of 17 – 55 percent, or benefit / cost ratios between 2 and 8” (Devarajan, 2014).

Further, it could take many generations for previously malnourished populations to reach the heights of which they are capable, so it is not so surprising that populations or sub – populations that are well – nourished today are still shorter than populations or sub – populations where the food and disease environments were improved long ago (Deaton and Dreze, 2009). Open defecation, is a negative externality. People who defecate in the open not only harm their own children but also other people’s children (Devarajan, 2014). In addition to this, it also impacts vulnerable populations, such as persons with disabilities and women, exposing them to sexual violence (Kumar, 2015).

c) Availability of bathing facility

Table 6.7: Availability of bathing facility by type of slum

Bathing facility	Type of slum		Total
	Notified	Non – notified	
Open air	2 (0.67)	4 (1.33)	6 (1.00)
Common bathroom	19 (6.33)	27 (9.00)	46 (7.67)
Detached bathroom	1 (0.33)	19 (6.33)	20 (3.33)
Own bathroom	278 (92.67)	250 (83.33)	528 (88.00)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (3) = 19.7428 Pr = 0.000

Source: Primary data

The table reveals that higher proportion of non – notified slum dwellers use common and detached bathroom and the results are highly significant.

d) Monthly payment for the usage of community toilet and bathroom

Table 6.8: Monthly payment for the usage of community toilet and bathroom by type of slum

Amount	Type of slum		Total
	Notified	Non – notified	
Greater than median	39 (13.00)	99 (33.00)	138 (23.00)
Less than or equal to median	68 (22.67)	80 (26.67)	148 (24.67)
Zero / No payment	193 (64.33)	121 (40.33)	314 (52.33)
Total	300 (100.00)	300 (100.00)	600 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (2) = 43.5695 Pr = 0.000

Source: Primary data

Though the non – notified slum dwellers have access to community toilet and bathroom they have to pay a higher price for the basic service. Rather, 64.33% of the notified slum dwellers use these services for free. “The history of user fees imposed on the poor is a history of the poor being excluded from basic services” (Sachs, 2005).

e) Availability of ration card

Table 6.9: Availability of ration card by type of slum

Ration card	Type of slum		Total
	Notified	Non – notified	
Yes	288 (96.00)	275 (91.97)	563 (93.99)
No	12 (4.00)	24 (8.03)	36 (6.01)
Total	300 (100.00)	299 (100.00)	599 (100.00)

Note: 1) Figures in bracket indicate percentage
 2) Pearson chi2 (1) = 4.2985 Pr = 0.038
 Source: Primary data

The proportion of non – notified slum dwellers not having a ration card is double than those of the notified slum dwellers and the results are significant at 4% level of significance. The poor people have to devote a large part of their expenditure to food so that little is left for anything else (Dandekar and Rath, 1971). Furthermore, these people may find it extremely difficult to purchase the commodities, which would have been supplied by the FPS at subsidized rates, at market prices. Hence, it would make the matters worse and increase their vulnerability to poverty to a great extent.

f) Proximity to FPS

Table 6.10: Proximity to FPS by type of slum

Proximity	Type of slum		Total
	Notified	Non – notified	
Yes	283 (98.26)	250 (90.58)	533 (94.50)
No	5 (1.74)	26 (9.42)	31 (5.50)
Total	288 (100.00)	276 (100.00)	564 (100.00)

Note: 1) Figures in bracket indicate percentage
 2) Pearson chi2 (1) = 16.0209 Pr = 0.000
 Source: Primary data

Even in case of the non – notified slum dwellers that have a ration card a higher proportion of them do not have a FPS closer to their house in comparison to the notified slum dwellers. The results turn out to be highly significant.

3) Corruption and Harassment

a) Payment to agent for getting ration card

Table 6.11: Payment to agent for getting ration card by type of slum

Payment	Type of slum		Total
	Notified	Non – notified	
Yes	55 (19.10)	71 (25.72)	126 (22.34)
No	233 (80.90)	205 (74.28)	438 (77.66)
Total	288 (100.00)	276 (100.00)	564 (100.00)

Note: 1) Figures in bracket indicate percentage

2) Pearson chi2 (1) = 3.5680 Pr = 0.059

Source: Primary data

Though both types of slum dwellers are not vulnerable to poverty with respect to corruption and harassment (see Figure 6.1) it is again a higher proportion of non – notified slum dwellers that have paid to an agent to get the ration card. The results are significant at 6% level of significance. Furthermore, the median amount paid to the agent by both type of slum dwellers is Rs. 1500 and the amount varies widely from Rs. 200 to Rs. 7000.

To summarize, the non – notified slum dwellers obviously turn out to be highly vulnerable to poverty in comparison to the notified ones at least with respect to residential vulnerability and access to basic services. Since type of slum has a significant impact on these two dimensions of vulnerability it would be interesting to find out which other factor/s is / are having a substantial influence on these dimensions.

The index values of the two dimensions have been used as dependent variables. In case of residential vulnerability, the factors that may have an influence on it are type of slum, head of the household, category, recent migrants and food expenditure out of the total expenditure. All independent variables except the last one (food expenditure out of the total expenditure) are dummy variables. So, the variable type of slum takes the value of 1 if it is non – notified; 0 otherwise, the variable head of the household takes the value of 1 in case it is headed by female; 0 otherwise, the variable category takes the value of 1 if it is SC, ST, VJ, NT; 0 otherwise, and finally the variable recent migrants takes the value of 1 in case the households have migrated 20 years ago; 0 otherwise. It may be hypothesized that the non – notified slum dwellers, female headed households, households belonging to SC, ST, VJ, NT category and recent migrants face a higher level of residential vulnerability. Similarly,

households that have to spend more on food out of the total expenses might be facing higher level of vulnerability.

Table 6.12 presents results of the following regression model:

$$\text{Residential vulnerability index} = \alpha_0 + \alpha_1 \text{ Type of slum} + \alpha_2 \text{ Head of the household} + \alpha_3 \text{ Category} + \alpha_4 \text{ Recent migrants} + \alpha_5 \text{ Food expenditure out of the total expenditure} + \mu$$

Table 6.12: Determinants of residential vulnerability index

Residential vulnerability index	Coefficients	t	P > t
Type of slum	-.1173544	-7.49	0.000
Head of the household	-.0475612	-1.41	0.160
Category	-.0133549	-0.85	0.397
Recent migrants	-.0401641	-2.28	0.023
Food expenditure out of total expenditure	.0923395	1.82	0.069
Constant	.8808781	27.06	0.000

Source: Primary data

The value of adjusted R^2 is found out to be 0.1911 which means that 19.11% of the variation in the residential vulnerability index can be explained by the independent variables. The variables type of slum and recent migrants have a highly significant and negative impact on the residential vulnerability index. Hence, the value of residential vulnerability index declines by 0.12 and 0.04 units for non – notified slum dwellers and recent migrants respectively which means that the vulnerability faced by both the groups increases. Therefore, as had been expected on the basis of literature (discussed in chapter 2) the non – notified slum dwellers’ vulnerability turns out to be more acute than the notified ones. Furthermore, Gupta and Mitra (2002) show that the incidence of poverty is highest among those who migrated between 1 – 5 years, and lowest among those who have been in Delhi for 12 – 15 years.

Though the variables head of the household and category have a negative impact on the residential vulnerability index it is not significant. It might be because of the low sample size of female headed households and households belonging to SC, ST, VJ, NT category out

of the total sample size. Actually these variables were expected to have a significant impact on the dependent variable on the basis of literature. For instance, “it is widely believed that the gender of the household head significantly influences household poverty, and more specifically, that households headed by women are poorer than those headed by men. They are severely affected by both monetary and non – monetary poverty; for example, they have low levels of literacy, are paid lower wages, and have less access to land or equal employment” (Haughton and Khandker, 2009). Furthermore, while the nature of negative events is not different for female – headed households, a greater frequency of negative events has tended to increase their odds of impoverishment (Krishna, 2010). Similarly, in case of levels of poverty among the SCs and STs Radhakrishna and Ray (2005) emphasize that poverty in India is not merely an economic phenomenon but also a social phenomenon and it is disproportionately high among SCs and STs. Moreover, among the social groups, the rate of poverty reduction was lower for ST households (Radhakrishna, 2015). “According to the Ministry of Tribal Affairs’ website, STs lag far behind the rest of the population in terms of every possible human development indicator” (Maiorano and Buddha, 2014). “The HDI and HPI for STs are found to be around 30% lower than the corresponding all – India indices. In an international comparison, development and deprivation among the STs of India are similar to that in the poorer countries of sub-Saharan Africa” (Sarkar, Mishra, Dayal, and Nathan, 2006).

The regression model has also been tested in stata to find out the presence / absence of heteroscedasticity and multicollinearity. The details of the two tests are given below:

Heteroscedasticity

ovtest

Ramsey RESET test using powers of the fitted values of Residential_vulnerability_index

Ho: model has no omitted variables

F (3, 270) = 0.97

Prob > F = 0.4052

The Ramsey RESET test confirms the absence of heteroscedasticity due to high p value.

Multicollinearity

estat vif

Variable	VIF	1/VIF
Recent migrants	1.07	0.932635
Head of the household	1.03	0.973199
Category	1.03	0.973460
Type of slum	1.02	0.977604
Food expenditure out of total expenditure	1.02	0.978448
Mean VIF	1.03	

There is no multicollinearity in the model since the value of VIFs is less than 10.

In case of access to basic services, the factors that may have an influence on it are type of slum, head of the household, category, recent migrants and help from a politician of any form. All the independent variables are dummy variables. So, the variable help from a politician takes the value of 1 in case the households have received it; 0 otherwise. It may be hypothesized that the non – notified slum dwellers, female headed households, households belonging to SC, ST, VJ, NT category and recent migrants face a higher level of vulnerability with respect to access to basic services. Similarly, the households that have not received any help from the politician in the past might be facing higher level of vulnerability.

Table 6.13 presents results of the following regression model:

$$\text{Access to basic services index} = \alpha_0 + \alpha_1 \text{ Type of slum} + \alpha_2 \text{ Head of the household} + \alpha_3 \text{ Category} + \alpha_4 \text{ Recent migrants} + \alpha_5 \text{ Help from politician} + \mu$$

Table 6.13: Determinants of access to basic services index

Access to basic services index	Coefficients	t	P > t
Type of slum	-.0546826	-5.89	0.000
Head of the household	-.0189243	-0.97	0.332
Category	-.0096464	-1.06	0.291
Recent migrants	-.0344451	-3.40	0.001
Help from politician	.0087239	0.83	0.406
Constant	.8243522	95.14	0.000

Source: Primary data

The value of adjusted R^2 is found out to be 0.1478 which means that 14.78% of the variation in the access to basic services index can be explained by the independent variables. As has been observed in case of the residential vulnerability index, the variables type of slum and recent migrants have a highly significant and negative impact on the access to basic services index. Hence, the value of the index declines by 0.05 and 0.03 units for the non – notified slum dwellers and recent migrants respectively which means that the vulnerability faced by both the groups increases. As has been discussed earlier, though the variables head of the household and category have a negative impact on the access to basic services index it is not significant which could be because of the low sample size. Similarly, the variable help from politician has a positive impact on the index as expected. Rather, it has been widely reported that security of tenure as well as the acquisition of basic community facilities (eg: safe water supply, latrines, electricity) are usually acquired through informal political networks and are often the result of political patronage especially at the time of elections (Singh and De Souza, 1980). However, the impact is again not significant may be because of the low sample size of households, which have received help from the politician, out of the total sample size. It is also possible that though the households have received help from the politician, especially during elections, they may not report it out of fear.

The regression model has also been tested in stata to find out the presence / absence of heteroscedasticity and multicollinearity. The details of the two tests are given below:

Heteroscedasticity

ovtest

Ramsey RESET test using powers of the fitted values of Access_to_basic_services_index

Ho: model has no omitted variables

$$F(3, 270) = 1.95$$

$$\text{Prob} > F = 0.1220$$

The Ramsey RESET test confirms the absence of heteroscedasticity due to high p value.

Multicollinearity

estat vif

Variable	VIF	1/VIF
Help from politician	1.09	0.916861
Type of slum	1.08	0.923249
Recent migrants	1.07	0.936986
Category	1.04	0.965702
Head of the household	1.03	0.973260
Mean VIF	1.06	

There is no multicollinearity in the model since the value of VIFs is less than 10.

However, it is recognized by both qualitative and quantitative traditions that a compelling story is often worth a thousand regressions in convincing policy makers (Kanbur, 2001). Hence, the case study in the box 6.1 highlights the appalling living conditions of the houseless households staying near Corporation Bridge.

Box 6.1: Vulnerability of houseless households staying near Corporation Bridge

RMK stays on the pavement along with his wife and 5 children. They belong to Raj – Pardhi sub – caste and have migrated from Solapur (Barshi) 50 years ago. They were staying near Juna Bazaar before shifting to current locality. However, their house was demolished by the corporation officials so they have been staying on the current pavement since last 15 years. The lack of ownership of land and lack of employment forced them to migrate.

Being illiterate he could not even tell his as well as his family members' age properly. His youngest son aged 5 years is his only son going to an Anganwadi center. He had admitted his other children also to school in the past and expected them to get educated however they discontinued with it. He sells balloons along with his four sons at a signal near Deccan. Two of his sons sell books at Deccan itself. The youngest son also sells balloons with his father. They did not own any asset nor did they have a bank account.

They have food only once a day and can afford to have it twice only when they have more money. They cook rice or something that they can afford on a hearth. They purchase tea as they cannot afford to buy milk every day. They get clean water from a nearby temple. However, the supply of water breaks down frequently. Moreover, they take bath, wash clothes and utensils on the pavement itself and practise open defecation near the Mula – Mutha River. All this results in spread of diseases which can further ruin their financial position.

They go to public hospital in case of illness and doctors over there warn them of the lack of cleanliness on pavements and ask them to take bath regularly. The corporation officials take away their belongings and also beat them. They do not even spare the pavement dwellers during monsoon. The people staying on this pavement generally go down the bridge whenever the officials arrive and come back again in the night. Hence, his family members are constantly under the threat because of possible theft and demolitions.

Some people help them by giving clothes and food at times. He knows clearly that his 'illiterate' sons will have to do the same work throughout their lives. According to him, lack of employment, ownership of assets and ancestral property is poverty. He expected the government to give them a house, which will not be demolished, and then he said they will do any work to survive and finally will be able to get out of poverty. He is willing to purchase a house but does not have money to do the same. As a result of this, he cannot even have a ration card and ultimately lacks access to all the welfare entitlements.

Furthermore, the dimensions of vulnerability have been analyzed separately for all the administrative wards of the city to find out whether any difference exists between the wards with respect to the dimensions. Table 6.14 presents the median values of the indices of dimensions of vulnerability for all the wards.

Table 6.14: Dimensions of vulnerability by administrative wards of Pune city

Administrative wards	Dimensions of vulnerability								
	Residential vulnerability index	Occupational vulnerability index	Social vulnerability index	Asset ownership and social networks at village index	Health care index	Access to basic services index	Social security index	Food security index	Corruption and harassment index
Hadapsar	0.8	0.5	0.7	0.375	0.5	0.77	0.5	0.75	0.67
Tilak road	0.9	0.5	0.7	0.25	0.5	0.83	0.5	0.75	1
Ghole road	0.9	0.5	0.7	0.25	0.5	0.75	0.5	0.8	1
Bhavani Peth	0.9	0.625	0.7	0.25	0.5	0.83	0.5	0.77	1
Aundh	0.9	0.75	0.7	0.25	0.5	0.83	0.5	0.77	1
Sahakarnagar	1	0.5	0.7	0.25	0.5	0.83	0.5	0.81	1
Bibwewadi	0.8	0.75	0.7	0.25	0.5	0.82	0.5	0.73	1
Dhankawadi	0.9	0.5	0.7	0.25	0.5	0.83	0.5	0.74	1
Kasba Vishrambaug wada	0.95	0.5	0.75	0.25	0.5	0.755	0.375	0.74	1
Karve road	1	0.75	0.8	0.25	0.5	0.82	0.5	0.77	1
Warje	0.8	0.5	0.7	0.25	0.5	0.75	0.5	0.75	1
Yerwada	1	0.625	0.7	0.25	0.5	0.86	0.5	0.815	1
Wadgaon sheri Nagar road	0.9	0.75	0.7	0.25	0.5	0.86	0.5	0.815	1
Dhole Patil road	0.8	0.75	0.7	0.25	0.5	0.75	0.5	0.77	1
Total	0.9	0.5	0.7	0.25	0.5	0.79	0.5	0.77	1

Source: Primary data

Decomposition of dimensions of vulnerability across wards

Residential vulnerability

In case of residential vulnerability, 20% of the households staying in Hadapsar, Bibwewadi, Warje and Dhole Patil road are vulnerable to poverty. The indicators used in the computation of the residential vulnerability index have been analyzed in order to be able to understand and justify the difference between intensity of vulnerability across all the administrative wards.

It was found out that a much higher proportion of households staying in Bibwewadi (69.44%) stay in kutchha houses followed by Dhole Patil road (62.32%), Warje (33.33%) and Hadapsar (31.82%). “Housing in slums and squatters has both the anticipated problems of extreme congestion and bad condition (weak structure) of houses” (Karn et al., 2003). Furthermore, conditions of over – crowding enhance the rate of infectious diseases, such as respiratory ailments, and tuberculosis (Singh and De Souza, 1980). Rather, even pucca houses are no more than a basic protection against the contingencies of strong winds, rain, and fire, and are, by themselves, not a pointer to the adequacy of shelter in terms of the requirements of size, space, and privacy (Jayaraj and Subramanian, 2010).

Though other wards like Ghole road (34.00%), Aundh (25.93%) and Dhankawadi (22.22%) have higher proportion of households that do not own house in city, this proportion is also quite high in case of Warje (20.00%). The rent payers probably pay rent to the first occupier without the notice of real landowner (Karn et al., 2003). In case of all the administrative wards, the median amount of rent paid per month is Rs. 2000 and the monthly expenditure incurred on electricity is Rs. 500. Furthermore, higher proportion of households staying in Warje (22.67%) and Dhole Patil road (15.94%) use electricity on rent. Since renting out electricity is illegal these households do not reveal who provides it to them. However, it is quite likely that the households who have their own electricity meters might be renting it out to others. Out of the total slum dwellers that have faced eviction or demolition in the past, majority of them stay in Warje (12.00%). In fact, the households staying in Shrivandhara slum, Warje were initially staying on a mountain. The corporation officials demolished their huts and asked them to shift to the current slum. Finally, in comparison to other wards, higher proportion of slum dwellers staying in Bibwewadi (16.67%) has faced theft in the past. In case of all the administrative wards, 3.8% of the

households reported that they feel insecure because of the possible evictions, demolitions, and theft.

The case study in the box 6.2 highlights the appalling living conditions, specifically with respect to the residential vulnerability, of the houseless households staying near Swargate.

Box 6.2: Vulnerability of houseless households staying near Swargate

RRP stays on the pavement along with her mother – in – law, brother – in – law, two sisters – in – law and two daughters. They belong to Pardhi caste and have been staying in Pune for last 5 – 6 years. They were staying near Sarasbaug before shifting to the current pavement. They have migrated from Solapur, where they used to work as landless labourers, and they own land and a house at their native place. One of their relatives informed them about the available employment opportunities and suggested them to migrate to Pune.

Some of them are illiterate and others have studied up to primary or secondary level of education. One of her daughters is getting educated in public school. RRP sells balloons and toys near Sarasbaug. Her mother – in – law works as a construction worker along with her daughter and daughter – in – law. Her brother – in – law works at a coffee shop as a waiter. Fortunately, the elder daughter is not working. They own cot, bicycle, radio, television, mobile, and 2 two – wheelers and also have an account in bank.

They get water for drinking and other purposes from a nearby petrol pump. Though they are not charged for using the water its supply breaks down frequently. They take bath in a canal and throw the garbage at the open space behind their house. Their house is made of plastic cover supported by bamboo and a wall. They have to pay Rs. 2 per visit for using the public toilets. Since they cook using a hearth they cut trees around them for the wood. This not only causes depletion of scarce resources but also environmental degradation because of the pollution. It is hazardous for their health as well. They have a saffron colored ration card and get wheat (10 kg) and rice (5 kg) through FPS every month. They can never eat fruits and non – vegetarian food and purchase only ½ litre milk every day.

Her brother – in – law had met with an accident in the past and they had admitted him to a private hospital so as to get proper treatment. They had spent Rs. 20,000 on his operation for which his mother had to mortgage her gold ornaments. She is still unable to get back her ornaments.

They have never faced demolition but the people, who have been staying there for a long time, quarrel and ask them to vacate the place. However, a ‘Saheb’ instructs them not to leave the place. He also helps them in some other ways. According to RRP, staying on pavements is poverty.

Other people staying over there are fed up of interrogations made in the past by too many people and so refused to give the information. They dry clothes on strings that divide the road. Some of them keep their belongings like clothes between the branches of a tree before going to work maybe to hide it from the eyesight of corporation officials.

Occupational vulnerability

As high as 50% of the households staying in Hadapsar, Tilak road, Ghole road, Sahakarnagar, Dhankawadi, Kasba Vishrambaugwada and Warje are vulnerable to poverty with respect to occupational vulnerability. Though there doesn't seem to be any difference between the intensity of vulnerability across these wards, the decomposition of this dimension would help us to throw light on the factors that have resulted in such a higher level of vulnerability.

About a quarter of the households staying in Hadapsar, Tilak road and Kasba Vishrambaugwada have members that earn only on daily or weekly basis. This proportion is higher in case of the dwellers staying in Dhankawadi (37.50%). The households earning on daily or weekly basis have to spend their incomes on day – to – day expenses and find it difficult to save. Rather, John. M. Keynes has discussed about 3 motives of demand for money in his Theory of Demand for Money: Transactionary, Precautionary and Speculative (Dwivedi, 2010). Hence, earning on a daily basis results in having more transactionary demand vis – a – vis precautionary and speculative demand for money. This is because people prefer to buy goods in small amounts since they cannot afford to buy goods once in a month in bulk amount. Furthermore, by purchasing in small amounts the poor people end up paying a higher price for 'same quantity'.

Majority of the households did not have any household member carrying out secondary occupation. However, in case of multiple occupations it was observed that though many households were carrying it out they were reluctant in reporting it as they believed that the next question that could be asked would be regarding the amount of income that they earned out of the work. Rather, diversification of livelihood sources is a more widespread household strategy, associated both 'with success at achieving livelihood security under improving economic conditions as well as with [preventing or alleviating] livelihood distress in deteriorating conditions'. Hence, multiple household members work at multiple low paying occupations (Krishna, 2010).

Furthermore, the real tragedy of poverty is not so much low income levels as much as the reduced expectations of life for the physically weak. "Physically arduous vocations are usually difficult for them because of malnutrition and unhealthy living environs" (Jagannathan and Halder, 1989). However, the occupational choice is greatly determined by the narrow spectrum of jobs available within the geographic area where the migrants reside,

rather than by what they are capable of pursuing (Gupta and Mitra, 2002). In addition to this, the 'unskilled' or 'disposable' labourers are never able to accumulate additional utility or human capital even after many years of experience. Their only capital – the body – is treated as a disposable and inanimate piece of machinery that loses its value in order to generate value for the nation (Sabhlok et al., 2015).

In comparison to other wards, higher proportion of households staying in Dhankawadi (11.11%) is unemployed followed by Sahakarnagar (6.90%) and Ghole road (4.00%). Rather, during the rainy season there is particularly little construction work and therefore, the construction workers have to sit idle in that period (Gangopadhyay, Shankar and Rahman, 2014).

Finally, about 75% of the households staying in Kasba Vishrambaugwada face health problems due to the type of occupation that they are engaged in followed by Hadapsar (59.09%), Tilak road (54.69%), Warje (52.00%) and Dhankawadi (50%). The major health problems faced by the slum dwellers are as follows: body pain, weakness, fever, cold, sun stroke, gap in spondyl and bone erosion, etc. The problem is severe in case of some of the workers such as painters and construction workers. These workers are not even insured against accidents. So if they fell down while painting or constructing a building they are doubly burdened: they have to incur huge expenses on health care and cannot even get back to work until they have completely recovered. The situation was much worse in case of a respondent staying in Kashewadi, Bhavani Peth. Her husband fell down from third floor of a building while painting it so she is a sole earner in the household now. Moreover, her daughter had to discontinue her education in order to look after her father.

The SECC has taken into consideration occupation of only the head of the household. However, in case an elder person is the head of the household he / she may be employed in the informal sector (and earn on a daily / weekly) basis due to low level of education but his / her children may be employed in the formal sector on contract basis (and earn on a monthly basis). Hence, it is essential to take into consideration the occupation of all employed members of the household.

The case study in the box 6.3 highlights the appalling living conditions, specifically with respect to the occupational vulnerability, of the houseless households staying near Shivajinagar.

Box 6.3: Vulnerability of houseless households staying near Shivajinagar

SAB belongs to NT category. Her husband is alcoholic and doesn't work so she has to earn livelihood. They have completed education only up to primary level. She works as a construction worker and also sells earrings, chains, etc and her elder son sells utensils. He purchases utensils on credit. Her daughter – in – law (merely 15 years old and she is already pregnant which is dangerous for her health) and two daughters also stay on the pavement. The daughters are getting educated in public school as she cannot afford to send them in private school.

They cook food on hearth for which they have to search wood. They have a saffron colored ration card so they get wheat (10 kg), rice (4 kg) and kerosene (3 litres) through FPS every month. She can afford to purchase only 0.25 litre milk every day. Moreover, the corporation officials take away their belongings so the dwellers have kept it under the bridge.

They have a bank account, and own a mobile and 2 two wheelers. In fact, her son had taken a loan for purchasing the two – wheeler. She had also taken loan from SHG for her son's marriage. She wants to purchase a house but requires Rs. 50,000 for it. About 100 families have already received houses and only 9 families are yet to receive it. She had met with an accident and had to spend Rs. 20,000 for the same and now she doesn't have money for her daughter – in – law's delivery.

Some people give the pavement dwellers fruits, food (stale), clothes and blankets. She expects her children to work and government to provide pension and bus pass. She explained that working as a construction worker for survival is poverty and though she is trying to she cannot get out of poverty as her husband is alcoholic.

Social vulnerability

In case of social vulnerability, there is hardly any difference between the wards of the city and 30% of the households are vulnerable to poverty.

A higher proportion of the households staying at Dhole Patil road (10.14%) do not have any household member who has completed primary education followed by Warje (9.33%). Rather, at the subsistence level and below, education must often be foregone as a luxury the poor cannot afford (Singh and De Souza, 1980). Aundh has a higher proportion of households (5.56%) whose children do not go to school followed by Hadapsar (4%). Some of the reasons given for not going / sending to school are as follows: need to look after younger siblings, lack of interest resulting in discontinuing education, lack of ability to

pay ultimately resulting into child labour, and mental disability. In fact, Singh and De Souza (1980) have pointed out that where both parents work (and the percentage of such cases is high among slum dwellers), older children are frequently kept at home to look after younger siblings. This is true for boys and girls, but most studies have found that this affects girls more than boys. Moreover, the children are often allowed to make the decision about attending school or not. However, with higher levels of education, the likelihood of being poor falls considerably (Haughton and Khandker, 2009). In addition to this, if one doesn't recognise the potential and invest in equipping children for future the demographic dividend can become demographic despair (Visaria, 2014).

Yerwada has the highest proportion of households (25%) having at least one disabled household member followed by Ghole road (16%). About 69.44% of the households staying in Yerwada have more than two dependent members. The figure stands at 62.07% in case of households staying in Sahakarnagar. As the number of dependent members in a household increases the risk of falling into poverty or remaining poor goes up considerably. A much higher proportion of households staying in Dhankawadi (88.89%) and Hadapsar (86.36%) own only 6 or less than 6 assets. Assets can actually provide insurance to the households during their difficult times as they can sell it to overcome the crisis. So, the households having very few assets may further become impoverished during such crisis.

The case studies in the box 6.4 throw light on the role of disability in increasing the vulnerability to poverty of the houseless households staying near Shivajinagar and Corporation Bridge.

Box 6.4: Role of disability in increasing the vulnerability to poverty

1) SR belongs to Mang caste and has migrated from Beed 30 years ago for survival. Though they had a house at village his brother sold it so they do not have any asset except a mobile. They used to work as construction workers in village and he continues to do similar work in the city as well. Rather, he does any available work like collecting garbage to survive. His wife is blind so she cannot work.

They are illiterate and highlighted that if we would have been educated we wouldn't have been staying on the pavement. Three of his sons stay in village in a rented house and a younger son stays with them on the pavement. He could study only up to first standard as he has to look after his blind mother after his father goes out for work. He also washes cars on Jangli Maharaj road and is offered food or Rs. 20 at times by the car owners. They take bath on the pavement itself (early in the morning at 5 a.m. as it is still somewhat dark then). His mother, being blind cannot cook food. So they can have food either if people offer it to them or if they purchase it from hotels (on the condition of paying the bill later on). Fortunately, they have a saffron coloured ration card and get wheat (10 kg), rice (5 kg), sugar (2 kg), oil (2 litres) and kerosene (5 litres) through FPS every month. However, since she cannot cook she gives it to other pavement dwellers.

SR's wife actually became blind as her cataract operation turned out unsuccessful which was done in a government camp in Mohammadwadi and they had spent around Rs. 40,000 on it. They were actually staying in a slum (Khatav Vasahat) but the corporator demolished it and they were deprived of their food grains as well. The corporation officials also take away their clothes and other belongings and the police officials beat them. Some of the pavement dwellers stated that the corporation officials harass them just because they are answerable to the higher authority.

2) SK belongs to Mahar caste and has migrated from Solapur 30 years ago due to drought in the village. They do not own land or house at village and used to work as landless labourers over there. She is handicapped so her husband and elder son earn livelihood by working as construction workers. Her younger son fortunately goes to school. The school authorities have also been kind enough to provide them everything including bus service for free. They have a bank account and own only a bicycle and mobile.

They have a saffron coloured ration card so they get wheat (12 kg), rice (6 kg) and kerosene (4 litres) through FPS every month. They can purchase vegetables and oil, spices, sugar, salt, etc on a daily basis and fruits rarely only for their children. They cannot purchase these items in bulk as the corporation officials take it away.

Though the officials do not demand bribes, they take away their belongings and the pavement dwellers have to spend two days in their office to get it back which means a lot for them as they earn on a daily basis. They are hoping to get a house at Warje Malwadi for which they had to pay Rs. 50,000.

In addition to this, these pavement dwellers help each other financially. They said that their children's lives are better than their lives. Further, they stated that they have had worst experiences in poverty. They believe that coming out of poverty depends on their children's support.

3) SS has to look after her handicapped husband. Her abandoned daughter along with her two (out of five) children also stays with them. They belong to Maratha caste.

SS's husband and daughter are illiterate and she has attained education up to secondary level. She and her daughter work as domestic workers at Gaothan. They are informed by a bureau about any patient requiring nurses. They were staying near Gaothan for 6 years before shifting to current locality. They have migrated from Talegaon Dabhade 9 years ago for earning livelihood. They own land in Karnataka and also have radio, mobile, and a rented wheel chair. However, none of them have an account in a bank. Actually her son, daughter – in – law and their children stay at Talegaon Dabhade in a rented house. They own a television. His children are getting educated currently. Out of the conversation it seemed that he does not look after his parents so they have to migrate and work to survive.

They can have food twice a day and cook using a kerosene stove or a hearth at times when kerosene is not available. Since they have lost their ration card they are totally exposed to the open market prices of kerosene, food grains, etc. They are also given food at times by some people. They use public toilet for which they are charged Rs. 4 per visit. So, they have to pay a very high price for a very basic service!

SS's husband is diabetic so after his leg was injured it was cut off at a public hospital. They did not have enough money to treat him at private hospital and had to spend Rs. 1,300 on the operation. She could pay the fees without taking any loan just because her family members helped her. In addition to this, they have to spend Rs. 900 per month on health care. This along with food expenses almost exhausts their monthly income and nothing is left out for saving.

They have faced demolition and theft in the past and feel insecure because of it. She expects the government to give them a house and a small shop for her handicapped husband.

She explained that lack of insurance against uncertain future is poverty and strongly believed that saving will help them to get out of poverty. She also wants to have a bank account for the same. Moreover, her husband strongly felt that he would have been able to come out of poverty if his parents would have educated him.

Asset ownership and social networks at village

Just as was observed in case of social vulnerability, there is hardly any difference between the wards of the city with respect to asset ownership and social networks at village. However, the proportion of households vulnerable to poverty is highest (75%) in comparison to other dimensions of vulnerability. Hence, analysis of all the indicators used in the computation of the index would give us a better idea regarding the intensity of the vulnerability.

As high as 75% of the households staying in Hadapsar has migrated to the city. The figure stands at 66.67% in case of households staying in Aundh. Out of the households that have migrated to the city, Wadgaon Sheri Nagar road has the highest proportion of households who did not own land at village (91.67%) followed by Bibwewadi (89.47%). In case of all the administrative wards, the median amount of land owned is found out to be 2.5 acres. Moreover, a higher proportion of households staying in Bhawani Peth (66.67%) did not own house at village followed by Yerwada (60.87%). Finally, 50% of the households staying in Wadgaon Sheri Nagar road did not have relatives staying at village. The figure stands at 25% in case of households staying in Dhankawadi.

Ownership of assets (land and house) and social networks at village can play a very important role and rather function as a fall back mechanism in case the migrants are unable to make up / survive in the city. However, the results reveal that very few households would be able to take benefit of such a mechanism.

Health care

About 50% of the households are vulnerable to poverty in case of all the wards with respect to health care. Though there is no difference between the wards the level of vulnerability itself is very high.

A higher proportion of households staying in Dhankawadi (66.67%) have faced chronic illness or accident in the past 5 years (preceding the survey date) followed by Tilak road (60.94%). Out of the households who had faced chronic illness or accident in the past, about 34.3% of them had visited private hospital for treatment and very few of them (9.2%) had visited public hospital for treatment. In fact, the government hospitals are in general not adequately equipped with the latest medical appliances, technologies and medicines, and they are always crowded (Ramaiah, 2015). In addition to this, many of the poor patients prefer to approach private hospitals since public hospitals often remain under – staffed and badly managed, and leave patients dissatisfied with their services” (EPW, 2014).

Furthermore, the median amount of expenses incurred on treatment is Rs. 25,000. However, the amount varied widely from Rs. 10 to Rs. 16, 00,000. Out of the households who had faced chronic illness or accident in the past, Kasba Vishrambaugwada has the highest proportion of households who have taken loan for expenditure incurred on the treatment (100%) followed by Wadgaon Sheri Nagar road (50%). “Outstanding debts are common among households who fell into poverty on account of health – related reasons” (Krishna, 2010). However, many households reported that they did not take loan but resorted to other means to overcome the difficulty. Some of the ways are listed below: financial help from NGO’s, employers, neighbours, friends and relatives, savings, ignoring ill health, mortgaging gold jewellery and selling assets. Some of the households also explained that since they do not get loan they have no choice but to resort to other means. Moreover, lack of documents like income and caste certificate also deprives them from taking loan. The people who help them financially do not charge any rate of interest and the households can return the money to these people as and when it is possible for them to do so.

‘Health is wealth’ is a popular saying yet without wealth, access to healthcare remains merely an illusion (Ramaiah, 2015). Hence, serious health situations were often left unattended by members of the households who did not have insurance coverage. Furthermore, people who desperately needed to see a doctor failed to do so quite often because they anticipated unbearably high costs (Krishna, 2010). In this way, poor people often go in for expensive cures rather than cheap prevention (Banerjee and Duflo, 2013).

“The human body is often poor people’s main productive asset, an indivisible and, in most cases, an uninsured asset, which unlike most other assets can flip or slide from

being an asset to being a liability. The resulting dependence of survivors, including orphans, upon other household members contributes further to descent in many cases". Hence, millions of households are only one illness away from chronic poverty (Krishna, 2010). Furthermore, India spends just over 1% of its GDP on publicly funded health – care, and almost 7 in 10 people pay for their healthcare, with 60 million Indians pushed into poverty every year as a result. In comparison to India, China's public health investments in 2011 were 2.9% of GDP and Brazil's 4.1% (Summers, 2014). Hence, success in reducing poverty creation is to a considerable extent dependent upon providing more effective health care services (Krishna, 2010).

Access to basic services

In case of access to basic services, 23 – 25% of the households staying in Hadapsar, Ghole road, Kasba Vishrambaugwada, Warje and Dhole Patil road are vulnerable to poverty. "Combined with the high levels of poverty and vulnerability, the absence of access to basic social services violates a number of fundamental freedoms of an average Indian" (Parmar et al., 2009).

It is only the households staying in Hadapsar (11.36%) that have to fetch drinking water using a hand pump. Moreover, about 47.73% of the households have to use a common tap as they do not have own tap. Similarly, a much higher proportion of the households staying in Kasba Vishrambaugwada (75%) and Dhole Patil road (50.72%) have to fetch water using common tap. It is again only the households staying in Hadapsar (31.82%) that have to practise open defecation. Furthermore, as high as 59.09% of the households have to use community toilet as a much less proportion has own toilet at house. Similarly, only 8% of the households staying at Ghole road have own toilet. This proportion is much less in case of households staying in Warje (4%). Worst of all, none of the households staying at Dhole Patil road have own toilet. The proportion of households having own bathroom at house is much less in case of Kasba Vishrambaugwada (50%), Hadapsar (63.64%), and Ghole road (66%) in comparison to Warje (100%) and Dhole Patil road (98.55%). Failure of access to the facility of toilet and bathroom reflects a radical failure of privacy, hygiene and personal dignity (Jayaraj and Subramanian, 2010). A much higher proportion of households staying in Warje (93.33%) have to pay more than Rs. 30 per month per family for the usage of community toilet and bathroom. Similarly, about 25% and 21.74% of the households staying in Kasba Vishrambaugwada and Dhole Patil road

respectively have to pay more than Rs. 30. Hence, though all the households staying in all administrative wards (except few in Hadapsar in case of toilet) have access to community toilet and bathroom the amount paid for its usage varies widely across wards.

A higher proportion of households staying in Hadapsar (11.36%) do not have a ration card followed by Warje (10.81%) and Dhole Patil road (7.25%). As high as 50% of the households staying at Ghole road does not have FPS closer to their house. Moreover, in case of Kasba Vishrambaugwada, 25% of the households do not have FPS near their house. In addition to this, about 90 – 100% of the households staying in Hadapsar, Ghole road, Kasba Vishrambaugwada, Warje and Dhole Patil road think that the quantity of the commodities provided through FPS is not sufficient for the whole family to survive. However, it is important to note that it is just a perception and anybody (especially the people who cannot afford to purchase the commodities at market prices) would like to have more of a subsidized commodity. In case of all the administrative wards, majority of the households have an aadhaar card. The card has now gained prominence especially for having access to various welfare entitlements like subsidized commodities through FPS, bank account, etc. Rather, about 8.3% of the households stated that they could use aadhaar card as an address proof to have access to such welfare entitlements.

Finally, a higher proportion of households staying at Kasba Vishrambaugwada (25%) have to travel for more than 20 minutes to reach the public hospital followed by Hadapsar (11.36%). In case of all the administrative wards, more than half of the households walk the distance to hospital and about 21.8% of them go by two – wheeler. Furthermore, more than 80% of the households have public maternity home closer to their house.

The situation seems to be worst in case of the houseless households. The case study in the box 6.5 highlights the severity of the vulnerability to poverty, due to the need to pay very high price for having access to basic services, of a houseless household staying at Deccan near the Circus ground.

Box 6.5: Access to basic services and increasing vulnerability to poverty

SC stays on the pavement along with her two children. She didn't intend to share any information regarding her caste and whereabouts. However, gradually she explained that she has migrated from Karnataka 30 years ago and had been staying near the Chaturshringi temple 8 years ago. She has many relatives staying near the Corporation Bridge and Bhikardas temple.

She is an illiterate. Fortunately, her children have started going to a public school since last year. She sells balloons near Kamgar Putala Vasahat and hotels. She actually stays on the Circus ground in plastic tent but since an amusement park had been put up there she had to shift to the pavement next to the ground. She did not own any asset and didn't even have a bank account.

They get clean water from a common tap. However, they have to pay Rs. 5 and Rs. 10 per visit for using public toilet and bathroom respectively. She received her yellow coloured ration card after 5 years and had to pay huge amounts for the same. How can the pavement dwellers leading a hand – to – mouth existence pay such exorbitant prices for 'basic' services! She gets wheat (8 kg), rice (8 kg), sugar (2 kg), dal (1 kg) and oil (1 kg) through FPS every month.

She refused to share any more information. Rather, all the people staying with her were angry as they had been interrogated by many people on the basis of false promise of giving houses. In addition to this, they have been informed by a politician not to share their information with anyone. He has helped them in several ways like getting pan card, voter card and Aadhaar card. He has also promised them of giving a two – room house in Wagholi soon.

Social security

As high as 62.5% of the households staying in Kasba Vishrambaugwada is vulnerable to poverty with respect to social security. In case of all the remaining wards, 50% of the households are vulnerable to poverty. The analysis of all the indicators, used for computation of the index, would help us to understand the reasons for such a higher level of vulnerability in Kasba Vishrambaugwada ward.

All households staying in Kasba Vishrambaugwada have a bank account. However, about 75% of the households do not have an insurance policy. Furthermore, 50% of the households could not save part of the income and a much higher proportion of them (75%) have taken loan in the past five years.

In case of all the wards, out of the households who have a bank account 20% of them have it because of the PMJDY. About 64.7% of the households have an individual account and 14% have a joint account. Furthermore, out of the households who could save part of their income, majority of them (27.3%) deposited it in banks and a small proportion (2.5%) deposited it in SHGs. Besides depositing the savings in banks and SHGs, 19.3% of the households were depositing it as *bishi*. The median amount deposited as *bishi* per month is Rs. 1000. Moreover, on the stereotype that poor people don't know how to save money, D. Subbarao, former governor of the RBI, said that poor people do sophisticated financial engineering – precisely because their savings are low, needs are high, and they have emergencies to meet (Business Line, 2016).

Out of the households who have taken loan in the past 5 years, a much higher proportion of them have taken it from SHGs (13.2%) and other financial institutions (12%). Moreover, 5.3% of the households have taken loans from banks. Some of the households took loans from relatives, friends, neighbours, employers, and shopkeepers. Since the slum dwellers lack access to formal credit institutions, they usually pay exceptionally high rates of interest. This results in reduction of their realised income significantly (Singh and De Souza, 1980). Though the SHGs give loans for productive purposes to the slum dwellers many of them actually end up using it for unproductive purposes. For instance, some of them informed the field investigator that they use the loan for repaying other loans, marriage, or for expenses that are to be incurred on a daily basis. Rather, they said that even if the SHG officials know about it they cannot utter a word about it as they pay the loan well in time. However, some of the lenders have been very cruel to the slum dwellers. Before giving the loan they make a list of all the assets that the dwellers have so that it can be confiscated later on if the loan is not repaid in time.

The median amount of loan taken is Rs. 20,000. However, the amount varied widely from Rs. 3000 to Rs. 8, 00,000. Some of the major reasons for which the loan was taken are as follows: business (5.7%), education (5.5%), building house (4.3%), ill health (4.2%), marriage (4%), and household expenses (3.8%). In addition to this, some of the households have taken loan to purchase two – wheeler and repay other loan. Rather, most debts are small and are incurred for domestic purposes (i.e. 'to keep the fire burning'). This indicates just how close to the borderline of subsistence most slum dwellers live (Singh and De Souza, 1980).

Out of the households who have taken loan only 12.8% were able to repay it. About 1.7% of the households repaid the loan out of their salary in instalments. However, 0.5% of the households took another loan to repay the current one. In this way, actually the poor may get into a debt trap and find it extremely difficult to come out of the vicious circle of poverty. Rather, the microfinance institutions have increasingly focused on the financial performance and have neglected their declared social mission of poverty reduction and empowerment. Loan officers in the field are under enormous pressure to achieve individual financial targets and routinely mistreat clients. Furthermore, debt is much worse if you are extremely poor as it jeopardises your shelter, daily food consumption, medication, social networks, dignity and self worth. “Maitrot (2013) and Cons and Paprocki (2010) report loan officers requesting clients with repayment problems to postpone burying their husband; take children out of school; and take loans from other MFIs (to repay the loans officer’s MFI). Both studies report ‘unauthorized, though tacitly accepted, asset confiscations’ (of roofing iron and basic cooking equipment) (Cons and Paprocki 2010), arguing with clients’ family members in public, advising clients to stop their medication and telling clients to sell basic assets in order to repay on time” (Hulme and Maitrot, 2014).

Out of the households who have an insurance policy, 29.5% have it through LIC and a small proportion (1.3%) has it due to the Pradhan Mantri Social Security Scheme. The poor are the ones most subject to shocks (perhaps) and they have the fewest mechanisms for dealing with such shocks (probable). This makes them understandably risk averse and so they may be less prone to innovate. Hence, this represents lower investment and they are more likely to remain trapped in poverty. In short, addressing risk (by providing insurance) is not only desirable in its own right, but it may also help a country grow economically (Haughton and Khandker, 2009).

Food security

“Food security is the very foundation of poverty eradication” (ADB, 2014). However, 25 – 27% of the households staying in Hadapsar, Tilak road, Bibwewadi, Dhankawadi, Kasba Vishrambaugwada, and Warje are vulnerable to poverty with respect to food security. In case of all the administrative wards, almost all households cook food inside the house and eat it twice or thrice in a day. However, very few households are unable to cook and depend on others for food. The median amount of monthly expenditure incurred on food is Rs. 6,000. Furthermore, the median proportion of total monthly

expenditure on food is found out to be 58.5940%. Hence, the households have to spend a much higher proportion of their total monthly expenditure on food.

About 2.27% of the households staying in Hadapsar use wood whereas 8.33% of the households staying in Bibwewadi use both wood and kerosene as cooking fuel. The proportion of households using only kerosene as cooking fuel is much higher in case of Kasba Vishrambaugwada (50%) followed by Warje (10.67%) and Tilak road (7.81%). However, 'clean' fuel for cooking not only reduces disproportionately large expenditures of energy, largely by women, in the activity of scouring for firewood, but also reduces the seriously adverse health consequences of high bio – mass smoke levels in the kitchen (Jayaraj and Subramanian, 2010). The median amount of monthly expenses incurred on cooking fuel is Rs. 460. Furthermore, in case of all the administrative wards, very few households reported that the cooking fuel, especially wood, is not easily available. A much higher proportion of households staying in Kasba Vishrambaugwada (50%) purchase food grains on a daily basis in comparison to Tilak road (4.69%) and Warje (1.33%). Moreover, about 13.89% of the households staying in Bibwewadi could purchase food grains on a weekly basis. The figure stands at 11.11% in case of Dhankawadi. Fortunately, in case of all the administrative wards, very few respondents stated that they could never or hardly purchase vegetables. Many households staying in Hadapsar, Tilak road, Bibwewadi, Dhankawadi, Kasba Vishrambaugwada and Warje have to purchase oil, spices, sugar, salt, etc on a daily and weekly basis. Since these households get wages on daily / weekly basis they cannot afford to purchase in it bulk amount. Moreover, there are many households that can never or rarely purchase fruits. A much higher proportion of households staying in Bibwewadi (38.89%) can never consume fruits. In addition to this, about 23.44% of the households staying at Tilak road can purchase fruits only rarely. Majority of the households staying in all administrative wards could purchase milk on a daily basis. In addition to this, as high as 44.44% of the households staying in Dhankawadi never purchase non – vegetarian food and about 15.91% of the households staying in Hadapsar could rarely purchase it. However, it is important to note here that there are many households that reported that they eat only vegetarian food and so never purchase non – vegetarian food.

Furthermore, under nutrition makes the slum dwellers more susceptible to certain types of diseases than a normal healthy individual, and also slows their process of recovery. Illness in turn tends to increase under nutrition. Further, under nutrition also plays an

important role in the high rates of infant and child mortality. Both health and nutrition are adversely affected by the unhygienic slum environments (Singh and De Souza, 1980).

Finally, about 81% of the households undertake fasting for religious purposes. The median number of days for which a woman undertakes fasting per annum is found out to be 52 (once a week). However, the median number of days for which a man undertakes fasting is found out to be 0. This result is in accordance with the expectation as generally women undertake fasting to a larger extent than men.

Corruption and harassment

Thirty – three percent of the households staying in Hadapsar are vulnerable to poverty with respect to corruption and harassment. Rather, none of the households staying in other administrative wards are vulnerable to poverty. Actually, this dimension has been incorporated on the basis of literature. Boo (2012) has highlighted the role of corruption and harassment in making the slum dwellers staying in Annawadi, Mumbai highly vulnerable to poverty. Fortunately, the slum dwellers staying in Pune city did not have to face corruption and harassment to a great extent perhaps. It is also possible that many households did not report it out of fear.

It is only the households staying in Hadapsar (2.27%) who have faced harassment by corporation officials for staying at current locality. Though these households did not have to pay bribe for staying at current locality, a much higher proportion of households (47.50%) had to pay to an agent to get the ration card. In case of the remaining wards, 0.3% of the households had to pay bribe to the police officials for staying at current locality. Moreover, a household reported paying bribe of Rs. 1000 per month to the police.

The houseless households, especially the recently migrated ones, are badly harassed for staying at a particular locality. The case study in the box 6.6 highlights the fact that the houseless households are the worst sufferers with respect to harassment.

Box 6.6: Role of harassment in increasing the vulnerability to poverty

BR has been staying on an open ground near Saswad road, Hadapsar since last 10 years. She belongs to Lamani caste and has migrated from Raichur, Karnataka. They own land (4 acres) and house at village.

BR and her husband have completed education up to secondary level and work as construction workers in the city. They do not own any asset and didn't even have a bank account. They use kerosene lamp as a source of light and stay in a tent made up of plastic and cloth supported by bamboo. Since the open ground is owned by a lady, they have to pay Rs. 600 per month as rent to her. Though the lady has provided them with a common tap, they do not have access to a common toilet or bathroom. Hence, they have to take bath in a canal and practise open defecation. They throw garbage in the canal itself. In addition to this, a lady was found to be washing utensils near an open drainage. All this can result in the spread of deadly diseases. Moreover, BR could not get vaccines for her son in the public hospital since last 6 months.

They do not even have a ration card and have to purchase wood for cooking food on hearth. Furthermore, they can afford to purchase only 0.25 litre milk every day.

Since they stay on the open ground owned by the lady, they have never faced eviction or demolition in the past. However, their anklets get stolen at night. When asked whether they are harassed for staying at current locality the lady denied having faced it. However, gradually the other respondents opened up and explained that the owner is extremely exploitative. At times, she doesn't even allow them to use the common tap. She also gets her work done from them. In fact, while the respondents were sharing this information the owner turned up and they stopped sharing it.

In addition to this, some of the houseless women feel highly insecure and are afraid of even stepping out of their tents as they are very easily kidnapped, raped and thrown near the canal by the outsider men. It seems that the poor are too poor to remain pure (Mitra, 2010).

CHAPTER SEVEN

PERCEPTIONS OF POOR ABOUT POVERTY AND MEASURES FOR POVERTY REDUCTION

“For ages what has remained imprisoned
For want of time and for want of selfless love,
Let the ribs break and the voices be heard –
The voices of poverty” (Mitra, 2010).

The realities of the poor are local, diverse, often complex and dynamic. However, our views of the realities of the poor, and of what should be done, are constructed mainly from a distance, and can be seen to be constructed mainly for our convenience (Chambers, 1995). Moreover, to understand how and why their situation persists, economic data needs to be complemented by the lived reality of the poor, a more grass roots approach of an understanding of the processes of inequality and how they are experienced (Shah and Lerche, 2015).

There is much to be learned from asking people what constitutes poverty. “For example, the Gallup Poll in the US has regularly asked people to report what is the smallest amount of money a family of four, two adults and two children, would need ‘to get along in this community’. Although some people give fanciful answers, the central tendency of these reports provides a sensible measure of the ‘poverty line’, the amount of income that is the borderline between poverty and non – poverty. Yet if the national poverty line were to be set based on the results of such a poll, it is easy to imagine interest groups asking people to inflate their answers in the expectation of higher benefits” (Deaton, 2004). Hence, in the present study an attempt has been made to understand what the poor people mean by ‘poverty’ instead of poverty line.

Along with the government and NGO, the poor people also take various measures to get out of the poverty trap. Therefore, in addition to understanding their definitions of poverty, the present study also tries to capture the measures that the poor have been taking to get out of poverty. In case of the government schemes, an attempt has been made to find out the way in which PDS has helped them in reducing the intensity of vulnerability to poverty.

Perceptions of poor about poverty

“Your perception of my poverty
Is absolutely different from
My perception of my life.
Yes, your education levels
Are higher than mine,
But that does not mean,
You hold the right to interfere into my life
Without understanding it” (Mitra, 2010).

“As M N Srinivas (1996) has argued the researcher should learn to trust the subjective experience and the subjective description as being true to the subject who has experienced or who speaks that experience” (Sathe, 2015).

Majority of the slum dwellers have defined poverty as follows: starvation, subsistence / hand to mouth existence, striving hard and begging at times for survival, low level of income, need to spend cautiously, low level of education, lack of employment (even for the highly educated ones), earning income on a daily basis / working in the informal sector, uncertainty, insecurity, exploitation, need to carry out multiple occupations, child labour, lack of ability to save and access to quality education, lack of access to credit and insurance, working even in the old age, worst living conditions, lack of ownership of assets and access to ancestral property which ultimately results into intergenerational transmission of poverty, lack of support and access to basic necessities and amenities, indebtedness, lack of ability to get educated turning the youngsters into criminals, helplessness, lack of dignity, etc.

While defining poverty some respondents have stated specific groups of people as poor / vulnerable to poverty which are as follows: sole earners with many dependents in the family, disabled people, female headed households, and households belonging to ST category. In fact, the situation worsens if the sole earner falls ill as it results into the lack of ability to earn livelihood. Similarly, frequent illness and death of an ‘earning’ family member has resulted into many descents into poverty. Further, many households are found to be ignoring ill – health due to the lack of ability to afford healthcare facilities. Widening

inequality and inflation are also reported by some households as the factors resulting into increasing their vulnerability to poverty. Moreover, few households stated that being born in the open category increases their vulnerability to poverty as they are deprived of the reservation policy (Caste alone cannot be a determinant of poverty!).

Some of the households have defined poverty as suffering, God's curse, malnourishment, deception, addiction, domestic violence, depression, corruption, and lack of safety, especially in case of girls, in slums. Moreover, a household said that poverty is like pest as it destroys everything. Few respondents also said that they cannot express themselves in words when asked to define poverty.

Some who did not consider themselves to be poor and clearly stated that they are not poor defined poverty, as lack of basic necessities, for others, especially for the houseless people. Few among them also described their living conditions when they were poor. In those days, they were deprived of even the basic necessities of life and had to stay on pavements and search dust bins for food. Some of the respondents who did not have to starve said that they are happy and satisfied with whatever they have.

Few respondents blamed themselves for being poor and reported that if we all work 'together' without being ashamed of any work, use the earned income wisely and support other family members in their decisions we can surely get out of poverty. A respondent, who was highly optimistic, stated that poverty can be considered as a challenge.

A respondent also tried to explain poverty in terms of the vicious circle. She stated that being illiterate we have to work in the informal sector which ultimately results in having lower level of income and hence we continue to remain poor.

"Participatory studies undertaken in the past have shown how local understandings of poverty are most often expressed in terms of assets and capabilities" (Krishna, 2010).

Since the houseless households have to face precarious living conditions their definitions of poverty have been highly touching. The case study in the box 6.1 throws light on the appalling living conditions of the houseless households staying on the Circus Ground near Deccan Gymkhana.

Box 7.1: Vulnerability of houseless households staying on the Circus Ground

GC belongs to Pardhi caste and stays at times on the Circus ground and at times near the Chaturshringi temple. He is illiterate and sells balloons and toys to earn livelihood. His daughter has completed education up to primary level and she also sells balloons and toys with him. Actually, all the children staying over there were staying and getting educated at a politician's institute at Wagholi. However, the teachers were not teaching properly and the children could not even read a single word. Moreover, the children were not even given adequate food so they dropped out of the institute and came back on the pavement. GC did not own any asset except a mobile. Fortunately, he has a bank account. Further, they stay in tents made up of plastic cover supported by bamboo.

They have to fetch water from a close by water tap available in a hotel or shop. They take bath on the ground itself and practise open defecation. Street light is their only source of light. Fortunately, they have a yellow coloured ration card. Actually, the politician has helped all the houseless households (277) staying over there to get a yellow coloured ration card and he will be including their names in the voting list as well. Moreover, he will soon be providing them with aadhaar and pan cards. Since, the corporation officials harass these households a lot he negotiates with the officials as well and asks them to return their belongings. GC gets wheat (15 kg), rice (10 kg) and sugar (2 kg) every month through FPS.

Though they can food twice a day they have to search wood for cooking it. Moreover, they can never purchase fruits, milk and non – vegetarian food and have to purchase vegetables on a daily basis.

When asked whether they face any health problems due to the type of occupation that they are engaged in, he said that some people die due to working for long hours but still one has to work for survival. Actually, he was having fever since last 3 days (prior to the interview) but could not afford to go even to the public hospital and had to continue with his work. In addition to this, some of the men staying over there have purchased second – hand two – wheelers (for Rs. 5000) so that they can travel to far off places to sell balloons.

When asked to define poverty, he said that even the pet dogs live a dignified life, as they travel in the cars of their owners, and our lives are much worse than their lives. Actually, some of his relatives are missing but nobody pays attention to their complaints. Furthermore, in case of marriage, he said that since we cannot afford to spend a single penny on it, the couple just starts staying together. Finally, he said that they can afford to pay Rs. 10,000 – 15,000 to the government if it provides a house to them.

Measures for poverty reduction

There are various NGOs that help the poor people in several ways to get out of the poverty trap. Besides NGOs, many rich people also help the poor in various ways. However, less than 6% of the slum dwellers have received help from the NGOs and rich people so far. Moreover, slightly higher proportion of notified slum dwellers (6.7%) has received the help in comparison to the non – notified slum dwellers (5%). Some NGOs help the slum dwellers by providing financial assistance for their children’s education.

Instead of depending only on others, the poor people undertake various measures to get out of poverty. More than 13% of the households are trying to move out of the slum. There is hardly any difference between the two types of slum dwellers with respect to the efforts to move out of the slum. Furthermore, about 6.7% of the households feel that they can cut spending on few goods in order to come out of the trap. A slightly higher proportion of notified slum dwellers (7.7%) feel so vis – a – vis the non – notified ones (5.7%). Majority of the households felt that cutting expenditure on following goods would help them in getting out of the shackles of poverty: alcohol, TV / cable, mobile, vehicles, watching movies, building house, expensive clothes, health care, cooking fuel, non – vegetarian food, etc. However, house, health care, cooking fuel, and non – vegetarian food seem to be very basic and the households should not cut their expenses on these goods.

Besides all these measures, the poor people think that they can come out of the shackles of poverty with the help of following steps: saving and investment, undertake business, support from relatives and government, access to basic amenities, education, decent employment, and bank account, ownership of assets, and de – addiction, etc. Majority of the households stated that all family members should work hard, earn more, and spend cautiously. However, few households said that getting out of poverty depends on

having 'son' instead of daughters. Furthermore, some respondents stated that getting out of poverty depends on the destiny. Some of the households are not sure about the way in which they would be able to get out of poverty. Finally, the households that had spent their entire lives in poverty are not optimistic about getting out of poverty.

Furthermore, about 46.3% of the households felt that their children's life is better than their lives and merely 1.2% felt that it is actually worse than their life. They expect their children to come out of poverty by getting well educated and employed, building house, purchasing vehicles, not getting addicted to alcohol, cigarette, etc. and being a good human being and an ideal citizen. Few households expected their children to look after them in their old age. Some households could not explain their ambitions as their children are too young. Similarly, some of the households stated that their children have already fulfilled their expectations. Moreover, few households could not have any ambitions as their children are disabled. Finally, some of the respondents stated that since their children would not be able to fulfil their expectations it is better not to have any ambitions for them.

The slum dwellers have following expectations from society or government: provision of any sort of help, basic amenities, employment, credit, insurance, pension, financial assistance for higher education, health care, building house and doing business, reduction in inflation, inequality and corruption, and efficient implementation of schemes. Moreover, most studies have shown that while the initial investment in slum housing may be small, the slum dweller or hutment owner gradually makes substantial improvements on the dwelling and environment over time as long as there is a reasonable security of tenure (Singh and De Souza, 1980).

Some of the households did not have any expectations as they have not received any help so far from the society or government. Few respondents stated that they did not have any expectations from the government as it is already providing basic services in slums and education and other facilities at government school. Rather, a respondent pays Rs. 5000 every year in a private school as charity instead of having expectations from government. Interestingly, some households said that we should depend on ourselves to get out of poverty instead of having expectations from society or government.

Further, the politicians generally help the slum dwellers in various ways to get out of poverty. Moreover, the proportion of non – notified slum dwellers (37.8%) that have

received help from the politician is more than double the proportion of the notified slum dwellers (17.3%). Since, the notified slum dwellers are in a better position in comparison to the non – notified ones it is quite obvious that a higher proportion of the latter may require help from the politician to get out of poverty. The politicians help the slum dwellers in solving various problems and for getting documents like aadhaar card, pan card, etc. Moreover, the slum dwellers, especially the non – notified ones, report that the politicians have provided basic services to them. However, out of the discussion with PMC officials it has been revealed that the politicians provide these basic services out of the funds allocated by PMC. In addition to this, the politicians provide financial help during difficult times like illness, death, marriage etc. They also provide various free gifts like feast in temple every year, soaps and oil during diwali, saris to widows, trips, etc. Few households reported that the corporators had allowed them to stay in government school and provided food during flood – like situation in their slums. Moreover, the politicians provide recommendation letter to the slum dwellers in case of employment. They also recommend doctors to reduce the hospital bill. Further, some of the slum dwellers stated that the politicians help them only during elections whereas others said that the politicians have always been very helpful to them. However, some of the households complained that the politicians or corporators have not helped them in any way. In addition to this, some of the households stated that they have never approached any politician for help. Rather, a respondent asked the investigator that why should the politicians help us and further said that this expectation itself keeps us poor.

The slum dwellers are used as vote banks to a great extent. Rather, the efforts to delay demolition programmes planned by the city administrators, and attainment of quasi – permanent residential rights in the city are realised only through collective efforts, which help secure political patronage in exchange for their promise to operate as vote banks (Gupta and Mitra, 2002). Many of the households reported that they are provided money, free gifts, and basic amenities before elections. For instance, they may be provided private water taps before elections with a promise of provision of water supply after elections. However, they may or may not get it once the elections are over. Rather, they are provided four – wheelers to travel to the voting booths but have to walk back the distance to their house. Moreover, few households reported that they are taken to the publicity campaigns by the politicians but they do not even turn up in the slums later on.

Role of government schemes in reducing urban poverty and vulnerability

There have been direct interventions in a major way for poverty alleviation in India. The major poverty alleviation programmes include self – employment programmes, wage employment programmes, PDS and nutrition programmes, and social security programmes (Radhakrishna and Ray, 2005). In fact, it is hard to think of any important aspect of poor people’s lives in a country like India that does not depend in one way or another on public policy (Dreze and Sen, 2013). Furthermore, many measures which make a big difference to poor people have low financial costs (Chambers, 1995).

There have been many schemes implemented by the government of India for poverty alleviation so far. In this section, some of these schemes have been described in brief. Moreover, the slum dwellers staying in Pune city may have benefitted due to various government schemes. Hence, an attempt has been made to understand the way in which the government has helped the slum dwellers to reduce the intensity of vulnerability to poverty through these schemes.

RAY

RAY was launched in June 2011 in two phases; the preparatory phase for a period of two years which ended in June 2013 and the implementation phase for the period 2013 – 2022. It envisages a ‘Slum Free India’ with inclusive and equitable cities in which every citizen has access to basic civic infrastructure and social amenities and decent shelter. Its mission is to bring all existing slums, notified or non – notified (including recognized and identified) within the formal system and enabling them to avail the basic amenities that is available for the rest of the city. Some of the objectives of the scheme are as follows: a) “enabling reforms to address some of the causes leading to creation of slums; b) facilitating a supportive environment for expanding institutional credit linkages for the urban poor; c) strengthening institutional and human resource capacities at the municipal, city and state levels through comprehensive capacity building and strengthening of resource networks; and d) empowering community by ensuring their participation at every stage of decision making through strengthening and nurturing Slum Dwellers’ Association / Federations”.

Moreover, RAY will provide financial support to States / UTs / ULBs / Central Government Agencies for providing housing and improvement of basic civic infrastructure and social amenities in each selected slums. Rental and transit housing will be admissible

and operation and maintenance of assets created under this scheme will also be eligible for funding. Finally, the scheme is also applicable to ‘urbanized villages’ inside the planning area of the city, urban homeless and pavement dwellers (Ministry of Housing and Urban Poverty Alleviation [MHUPA], 2016).

NULM

NULM was launched by the MHUPA, government of India on September 23, 2013 by replacing the existing SJSRY (MHUPA, 2016).

It will adopt following strategy: a) “building capacity of the urban poor, their institutions and the machinery involved in the implementation of livelihoods development and poverty alleviation programmes through handholding support; b) enhancing and expanding existing livelihoods options of the urban poor; c) building skills to enable access to growing market – based job opportunities offered by emerging urban economies; d) training for and support to the establishment of micro – enterprises by the urban poor – self and group; e) ensuring availability and access for the urban homeless population to permanent 24 – hour shelters; f) establishing strong rights – based linkages with other programmes which cover the rights of the urban homeless to food, healthcare, education, etc. and ensuring access for homeless populations to various entitlements, including to social security pensions, PDS, ICDS, feeding programmes, drinking water, sanitation, identity, financial inclusion, school admission etc., and to affordable housing; and g) addressing livelihood concerns of the urban street vendors by facilitating access to suitable spaces, institutional credit, social security and skills for accessing emerging market opportunities” (MHUPA, 2016).

NSAP

The government of India launched NSAP as a centrally sponsored scheme with effect from August 15, 1995. It is a welfare programme being implemented in both rural and urban areas. Furthermore, it represents a significant step towards the fulfilment of the Directive Principles of State Policy enshrined in the Article 41 of the Constitution of India.

NSAP comprises of the following five schemes:

i) IGNOAPS: Under this scheme, BPL persons aged 60 years or above are entitled to a monthly pension of Rs. 200 up to 79 years of age and Rs. 500 thereafter.

- ii) IGNWPS: Under this scheme, BPL widows aged 40 – 59 years are entitled to a monthly pension of Rs. 200.
- iii) IGNDPS: Under this scheme, BPL persons aged 18 – 59 years with severe and multiple disabilities are entitled to a monthly pension of Rs. 200.
- iv) NFBS: Under this scheme, a BPL household is entitled to lump sum amount of money on the death of primary breadwinner aged between 18 and 64 years. The amount of assistance is Rs. 10,000.
- v) Annapurna: Under this scheme, 10 kg of food grains per month are provided free of cost to those senior citizens who, though eligible, have remained uncovered under IGNOAPS (MoRD, 2016).

BSUP

The objective of JNNURM is to provide basic services to the urban poor and the duration of the mission was planned to be seven years beginning from the year 2005 – 2006 (MHUPA, 2009). Moreover, since the extended period of BSUP scheme ended on March 31, 2015, the government of India has recently further extended the mission period by two years up to March 31, 2017 only to complete ongoing projects (The Economic Times, 2015).

The BSUP reform will ensure following outcomes:

- i) “All urban poor, including slum dwellers who may be living in non – notified, irregular or illegal settlements, will gain access to basic municipal services such as water supply, toilets, waste water drainage, solid waste management, power, roads, transport, etc.
- ii) All urban poor settlements will be integrated and mainstreamed with municipal supply networks resulting in sustainable improvements in the quality of life of the urban poor.
- iii) Urban poor communities will have better access to legal and affordable housing with in – house basic services that will allow them to live as legitimate citizens. Further, housing for the poor must be found close to their work places and preferably within the city limits. This will ensure that poor people are able to get work, earn an income, and meaningfully contribute to city development.
- iv) Urban poor communities will have improved access to social services such as education, health and other social programmes of the government. This will ensure better education,

improved health and access to sustainable livelihoods which in turn would help reduce poverty.

v) Urban poor will be able to voice their demands / grievances related to basic service provision. Their participation in political processes and city governance will also be enhanced” (Ministry of Urban Development [MoUD], 2016).

PMJDY

PMJDY is a national mission for financial inclusion to ensure access to financial services, namely, banking / savings and deposit accounts, remittance, credit, insurance, and pension to the excluded sections i.e. weaker sections and low income groups in an affordable manner. Moreover, financial literacy would be an integral part of the mission in order to let the beneficiaries make best use of the financial services being made available to them. It was launched on 28th August, 2014, across the nation simultaneously.

Some of the objectives of the scheme are creation of a Credit Guarantee Fund to cover the defaults in overdraft accounts and provision of micro – insurance to all willing and eligible persons by August 14, 2018, and then on an ongoing basis. The accounts can be opened with zero balance in any bank branch or Business Correspondent (Bank Mitra) outlet. Moreover, if the account – holder wishes to get a cheque book, he / she will have to fulfill minimum balance criteria. Further, some of the special benefits of the PMJDY scheme are as follows: interest on deposit, RuPay debit card with accidental insurance cover of Rs. 1,00,000, life insurance cover of Rs. 30,000, beneficiaries of government schemes will get DBT in the account, and an overdraft facility will be permitted after satisfactory operation of the account for 6 months. The overdraft facility up to Rs. 5000 is available in only one account per household, preferably lady of the household (Ministry of Finance, 2014; Ministry of Finance, 2016).

PDS

“The PDS system evolved during the Second World War from the system of fair price shops intended to regulate speculative trading in food grains. This system further evolved into the system of statutory rationing in 1942. During the post – independence period, the Government of India used food policy to ensure price stability and food security for the emerging working class in the era of planned industrial development.

However, the urban bias of the PDS and its inadequate coverage, especially in some of the poorer states, was a continuing source of concern. As a consequence, the Sixth Five – Year Plan (1980 – 85) emphasised the need to expand the reach of the programme towards its ‘universalisation’ across the country. The Seventh Plan (1985 – 90) incorporated the PDS as part of the Minimum Needs Programme, to ensure equitable physical access to food grains in addition to price stability and control”.

However, the growing challenge of rising food subsidies during times of fiscal stringency led to the transformation of the PDS from a universal to a targeted programme. “The targeted PDS was introduced in 1997 as part of the economic reforms agenda of the Government of India. Under this system, BPL and APL groups are subject to differential prices with subsidised food grains accessible only to the former” (Nagaraj, 2012).

“The central government provides wheat and rice to state governments to run the PDS. Allocations to states are based on official poverty estimates; some state governments supplement them with their own resources”. Moreover, it is their prerogative to assign households to different types of ration cards (Dreze and Sen, 2013).

The affluent families do not purchase foodgrains under PDS and therefore with a view to curb diversion of foodgrains and provide more foodgrains to the needy families, the Maharashtra government introduced the tricolour ration card scheme with effect from 1st May, 1999. Hence, as per the following criteria 3 different coloured ration cards are issued in the state:

Yellow ration card

- i) “Families having annual income up to Rs. 15,000 having been included in IRDP List of 1997 – 98.
- ii) None of the members in the family should be a doctor or a lawyer or an architect or a chartered accountant.
- iii) None of the members in the family should be a professional tax payer, a sales tax payer or an income tax payer or eligible to pay such tax.
- iv) The family should not possess residential telephone.
- v) The family should not possess a four wheeler vehicle.

vi) None of the family members should hold total two hectare rain fed or one hectare semi – irrigated or 1/2 hectare irrigated (double in drought prone talukas) land.

vii) The government has taken decision to issue BPL ration card, on temporary basis to all the vidi workers, all members of Pardhi and Kolhati community vide GR dated 9. 9. 2008.

viii) The government has taken the decision to issue BPL ration card, on temporary basis to the abandoned women vide GR dated 29. 9. 2008 and 21. 2. 2009 and amendment has been made to the same vide GR dated 17. 1. 2011.

ix) The government has taken the decision to issue BPL ration card on temporary basis to all the non – working cloth mill, cotton mill and sugar factory workers vide GR dated 17. 3. 2003.”

AA Y

In the state, AAY has been started with effect from 1st May, 2001. Under this scheme, 35 kg foodgrains (wheat at the rate of Rs. 2 per kg, rice at the rate of Rs. 3 per kg, coarse grains at the rate of Rs. 1 per kg) is distributed to the AAY cardholders and saffron ration card holders are provided with 15 kg foodgrains i.e. both wheat and rice.

Further, under this scheme, the families are selected from following BPL categories:

i) “Land less agriculture labourers, marginal farmers, rural artisans / craftsmen such as potters, tanners, weavers, blacksmiths, carpenters, slum dwellers and persons earning their livelihood on daily basis in the informal sector like porters, coolies, rickshaw pullers, hand cart pullers, fruit and flower sellers, snake charmers, rag pickers, cobblers, destitutes and other similar categories in both rural and urban areas.

ii) Households headed by widows or terminally ill persons or disabled persons or persons aged 60 years or more with no assured means of subsistence or social support.

iii) All primitive tribal households (Madia, Kolam, and Katkari)

v) Households headed by leprosy patients or recovered leprosy patients are eligible to get the benefits

vi) While distributing AAY ration cards to eligible families, priority will be given to HIV / AIDS affected persons”.

Saffron ration card

- i) “Families having total annual income of more than Rs. 15,000 and less than 1 lakh.
- ii) None of the members in the family should have a four wheeler vehicle (excluding taxi – driver).
- iii) The family in all should not possess four hectare or more irrigated land”.

White ration card

“The families having annual income of Rs. 1 lakh or above, any member of the family possessing a four wheeler or the family aggregately holding more than 4 hectare irrigated land are issued white ration cards”.

Sugar distribution

In February 2001, the government of India decided to restrict the distribution of levy sugar only to the BPL families. In order to make more sugar available to BPL families through the PDS, the quantum has been increased from 425 gms to 500 gms per person per month. The retail issue price of levy sugar is Rs. 13.50 per kg with effect from 1. 3. 2002.

Palm oil distribution

“Under this scheme, 1 litre palm oil per beneficiary (i.e. per card) per month is being distributed at the subsidized rate of Rs. 45 per litre to BPL, AAY, APL and Annapurna beneficiaries in the state”.

Kerosene distribution

“At present the retail price of kerosene in Mumbai / Thane Rationing Area is Rs. 15.05 per litre and in other districts it comes between Rs. 15.05 to Rs. 16.22 per litre” (Government of Maharashtra, 2016).

Table 7.1: Quantum of Kerosene Distribution

Category	Area	Quantity (per head per month) (Litres)		Maximum (per card per month) (Litres)
Without gas ration card holder	A) Rural Nashik, Jalgaon, Pune, Solapur, Kolhapur, Nanded, Thane, Raigad., Ratnagiri, Sindhudurg, Dhule, Hingoli, Satara, Gondia, Wardha, Nagpur, Yavatmal, Latur, Beed, Jalna, Chandrapur, Akola, Osmanabad, Buldhana, Nandurbar, Bhandara, Aurangabad, Ahmednagar, Amravati, Parbhani, Gadchiroli, Sangli and Washim	2		15
	B) Urban a) Taluka head office, and Municipality.	2		20
		Persons	Litres	
	b) Mahanagarpalika and having more than 2 lakh population 'A' Class Nagarpalika.	1	3	24
		2	8	
		3	10	
		4 or more persons	3 per person	
C) Mumbai / Thane Rationing area	1	5	24	
	2	12		
	3	15		
	4	18		
	5	21		
	6	23		
	7 or more persons	24		
1 gas cylinder holder	All Area	4 litre		4 litre
2 gas cylinder holder	All Area	Nil		Nil

Source: <http://mahafood.gov.in/website/english/PDS.aspx>

FPS

In the state, 51,596 FPS was in force up to September, 2013. The numbers and classification of the same is as follows:

Table 7.2: Classification and number of FPS in Maharashtra

Classification	Individual shops	SHGs (Women)	SHGs (Men)	Grampanchayat	Co – operative societies	Total FPS
Number	41202	2050	48	77	8219	51596

Source: <http://mahafood.gov.in/website/english/PDS.aspx>

However, the targeted version of the PDS has resulted in errors of omission of eligible poor households and excess coverage of ineligible non – poor households (Nagaraj, 2012). Furthermore, basic features of the old style PDS include narrow coverage (typically, BPL targeting), large exclusion errors (due to the unreliability of the BPL list), erratic supply of food (often reflecting the disempowerment of the target group) and massive corruption (Dreze and Sen, 2013). Rather, Prof. Amitabh Kundu, Professor of Economics at the Centre for the Study of Regional Development and Dean of the School of Social Sciences at JNU, said there should be more focus on ‘inclusion’ of the target groups in the welfare schemes. “There are errors of inclusion, but there are also errors of exclusion; and it is more desirable to include than to exclude” (Ramachandran, 2013). In addition to this, targeting (and especially hit – or – miss targeting) is very divisive. Since the coverage of the BPL list is supposed to match the Planning Commission’s poverty estimates, BPL households are typically in a minority.

Meanwhile, many public programmes based on alternative principles of universalism with ‘self selection’ have done comparatively well, for instance, India’s school meal programme and NREGA. However, some interventions do not lend themselves so easily to self – selection. For example, not many households ‘opt out’ of the PDS when it supplies rice or wheat at a fraction of the market price. “Various suggestions have been made to induce more self – targeting in the PDS (eg: by distributing millets or fortified flour instead of rice and wheat), but whatever their merit, they have not convinced the authorities involved. It is in the light of this sobering experience and (in some cases) of popular resentment against targeting, that many states have recently moved towards a more

inclusive or even ‘universal’ PDS – Andhra Pradesh, Chhattisgarh, Himachal Pradesh, Odisha, Rajasthan and Tamil Nadu, among others”. Further, this new approach, combined with other PDS reforms, seems to have been of considerable help in making the PDS work better than it had earlier (Dreze and Sen, 2013). However, the argument made by some, under supposedly human right framework, that the public policy must only create institutional and legal framework to guarantee everyone her basic needs and do away with targeted programmes, is rooted in the interest of the middle class who have been pressuring the state to open the doors of anti – poverty programmes for them (Kundu, 2011). In such case, quasi – universalization methodology seems to be the way out. It entails including all households in the PDS except for those that clearly meet a predetermined exclusion criteria (Chatterjee, 2014). In light of the above discussion, NFSA seems to be a step in the right direction.

As passed by the Parliament, Government has notified the NFSA, 2013 on 10th September, 2013 with the objective to provide food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity. The Act provides coverage of up to 75% of the rural and 50% of the urban population for receiving subsidized foodgrains under TPDS, thus covering about two – thirds of the population. Further, the eligible persons will be entitled to receive 5 kg of foodgrains per person per month at subsidized prices of Rs. 3 / 2 / 1 per kg for rice / wheat / coarse grains (Ministry of Consumer Affairs, Food and Public Distribution, 2016). In addition to this, in a bold move to empower the women of the country, it has directed that the eldest woman in a household, 18 years or above shall be the head of the household for the purposes of the issuance of a ration card (Mathew, 2015). Moreover, economist Jean Dreze, former NAC member, and said to be the original architect of the bill, had written (2013) that the bill would be a form of investment in human capital, bringing security to people’s lives and making it easier for them to meet their basic needs, protect their health, educate their children, and take risks (Mathew, 2015).

However, the act does not specify eligibility criteria. “The main issue is the identification of priority households, since a list of Antyodaya households already exists, though the act does not preclude revising it. The use of SECC data for this purpose is still an option, but it is not mandatory”. Further, it is partly to provide a means of protecting the poorest among the small households (for instance widows) that the Antyodaya category was

retained under the NFSA. However, there is a danger of the Antyodaya households getting slowly absorbed into the priority and the Antyodaya programme being phased out altogether (Dreze et al., 2015). In addition to this, the HLC report, aside from calling for sweeping changes in the mode of operation of the FCI, makes strong recommendations aimed at downsizing the NFSA. These include reducing the coverage of the PDS from 67% to 40% of the population, raising issue prices to half of the relevant MSP (instead of Rs 3 / kg for rice and Rs 2 / kg for wheat), and a gradual transition to cash transfers. Moreover, the report disputes the view that the recent PDS reforms have led to reduced leakages and cites an alarming figure of 47% leakage in 2011 – 12. Recent data from the second IHDS, which is possibly a more reliable source of data on PDS purchases than the NSSO, also suggest much lower leakages – 30% or so. “Indeed, the decline of PDS leakages over time is particularly clear in states that are known to have implemented bold PDS reforms in recent years, eg: Chhattisgarh, Odisha, and – more recently – Bihar. Finally, it is important to remember that NFSA entitlements are not confined to subsidised food grains under the PDS. There are also important entitlements to nutritious food for young children, and to maternity benefits for pregnant women. Maternity benefits of Rs. 6,000 per child have been a legal entitlement of Indian women since July 2013, but nothing has been done about it. The central government seems to think that it is above the law” (EPW, 2015).

However, even with small leakages this is an expensive system, with large transaction costs associated with the procurement, transportation and storage of grain. “This is one reason why the case for replacing the PDS with a system of cash transfers continues to be made quite forcefully by many economists”. It is important to think about the possible effects of cash transfers on social norms and their role, and not just about economic self interest (Dreze and Sen, 2013). In addition to this, DBT does not address the problems of identifying the poor (‘targeting’). “In fact, cash transfers would make it even more difficult because there is an element of self – selection as far as the PDS is concerned, which will be absent in the case of cash transfers”. According to Ghosh (2011), the experience of other countries is that cash transfers there were not introduced as substitutes to other public programmes (Sinha, 2015). Rather, food entitlements through PDS could act as an important nutrition supplement for poor households, more effectively than cash transfers (in so far as PDS entitlements work as a ‘nudge’ in the direction of nutritious food consumption). Moreover, even the income support role of the PDS need not work in the same way as cash transfers, since income in kind is often used differently from income in

cash. “Food tends to be consumed sparingly, day after day, and everyone in the family gets a share (even if not exactly the same share)”. In case of cash there is a risk of it being misused, frittered away, or inequitably shared. “Cash is also more easily deflected towards the purchase of goods that are consumed mainly by adult members of the family, especially men, at the expense of undernourished girls and other children. While it is certainly true that even food given to a family can be sold to shopkeepers with the same opportunity of adult consumption, there tends to be some psychological barrier to such abuse of free or subsidized food”. In addition to this, the real value of cash transfers may get eroded by inflation. “Cash transfers can be indexed to the general price level, but that would still leave the possibility of their value being eroded by local price increases. There is also an issue of political guarantee of the periodic price adjustments actually taking place, even when – say – the finance minister is under pressure to cut expenditure”. Finally, the really important issue, however, is not ‘cash versus kind’ – it is to put in place an effective system of income support and economic security, whether it is based on cash transfers or on the PDS (or a combination of the two) (Dreze and Sen, 2013).

As has been already discussed, an attempt has been made to find out the way in which PDS has helped the slum dwellers staying in Pune city. Majority of the households (71.3%) have saffron coloured ration card. Moreover, 14.3% of the slum dwellers have yellow coloured ration card and only 5.2% of them have white coloured ration card. In case of the joint families, it was found out that the households have more than one ration card. Out of the households that did not have a ration card, some had it in their village and few had lost it. A household could not afford to pay Rs. 2,500 to the agent so could not have it. Some of the households, that had a ration card but did not consume the subsidized commodities, gave the commodities to the households that did not have the card. These households did not consume it mainly due to the poor quality of the subsidized commodities. “The fact that almost all households consuming either PDS rice or wheat also consume the same items through the regular market, suggests that the amount supplied is below their optimal level. Of course, there could also be other reasons for households to do additional purchases in the open market. For example, the PDS items might not be available when the consumers need them, or they might be of different quality as compared to the market goods” (Kjelsrud and Somanathan, 2013). In addition to this, majority of the households (71%) use the ration card once a month. However, about 5.5% of the dwellers

never use it. About 70.7% of the households often get the subsidized commodities through FPS. However, as high as 16.8% of the dwellers have never received it.

Furthermore, majority of the yellow ration card holders (75.6%) received 9 – 18 kg wheat every month. However, some of them are also found to be receiving only 8 kg wheat or even less than that every month. Similarly, about 59.9% of the saffron ration card holders have received 9 – 18 kg wheat every month. In addition to this, 23.6% of the households received 5 – 6 kg wheat every month. Hence, though the saffron ration card holders are entitled to receive 15 kg foodgrains (both wheat and rice) some of them are found to be receiving more or less than that. Rather, though the white ration card holders are not entitled to receive food grains all of them are found to be receiving 4 – 15 kg wheat every month. Similarly, in case of rice, about 93.6% of the yellow ration card holders received 5 – 15 kg every month. Few households are found to be receiving even less than that. Just as has been observed in case of wheat, majority of the saffron ration card holders (85%) received 4 – 12 kg rice every month. Moreover, even the white ration card holders are found to be receiving 5 – 15 kg rice every month. In case of sugar, all the yellow ration card holders received 1 – 5 kg every month. However, though the government of India has restricted the distribution of levy sugar only to the BPL families, all the saffron ration card holders too received 2 – 5 kg every month. Since, sugar is allocated on a per person per month basis, an attempt has been made to find out whether the households have received an appropriate quantity in accordance with the household size. Though some households have received sugar in accordance with the household size, many of them have actually received more or less than the appropriate quantity. All the households are found to be receiving very less quantity of kerosene every month. Moreover, few households received more than 4 litres of kerosene despite owning LPG. Since, kerosene is distributed on a per person per month basis to the households that do not own LPG, an attempt has been made to find out whether the households have received an appropriate quantity in accordance with the household size. Majority of the households have received very less quantity of kerosene and it is not at all in accordance with the household size. In addition to this, merely 2.5% of the households received 1 litre oil every month. Only 1.7% of the households received 1 – 4 kg dal every month. Finally, only one household received 5 kg jowar every month through the FPS. Thus, the inclusion and exclusion errors are clearly evident in case of the distribution of subsidized commodities. However, since some state governments supplement the allocations with their own resources it is quite likely that the distribution represents usage of

state's resources instead of inclusion error. Hence, the exclusion error turns out to be a major problem in case of the slum dwellers staying in Pune city.

Role of government schemes in reducing poverty and vulnerability in Pune city

About 80.2% of the households are likely to resettle if the government provides houses to them. Out of these, it is a slightly higher proportion of non – notified slum dwellers (81%) that would like to resettle in comparison to the notified ones (79.3%). Remaining households stated that they would not resettle even if it is provided by the government because they want the government to build their house in the current locality itself as they stay closer to their workplaces and schools. Moreover, some of them stated that they would find it extremely difficult to find new jobs after resettlement. Even if they decide to continue with their present occupations they would hardly be left with any money after spending on conveyance. It is mainly in case of the houses that are provided to the slum dwellers at the outskirts of the city. Furthermore, few respondents stated that they cannot afford to pay for the resettlement. The dwellers who have own and specifically 'big houses' in slums do not want to resettle in small flats provided by the government. Few respondents stated that the houses provided to other slum dwellers are in a bad locality so they would resettle only if the houses provided to them are in a good locality. In addition to this, some households had not yet come up to a decision regarding resettlement and rather stated that the decision will be taken by other family members. Finally, some of the households have been given false promises in the past so they are sure that they will never get a house from the government.

“Unfortunately, most efforts in Pune to move people out of slums have been unsuccessful, for one reason or another. They have taken possession of their pucca homes, which they either rented out or sold outright and continued to stay on in the slum. So, the slums have not just continued but have grown, the proof available on most hill slopes in and around Pune.

One way to ensure they move is to get them to pay for that home, which is where the EMI comes in since you value what you have paid for; whatever comes free is seen as a birthright to be misused or abused. EMIs are typically supposed to be 40 per cent of the household's income (leaving the household with something in hand to get along). When you take into account that almost every person in a household living in the slums is earning, that

EMI of about Rs 12,000 would cover the loan, which again, ideally, should not be more than four times the annual income.

But, if you read about plans and projects being announced for the affordable segment, they are high – rise, which increases costs for the builder, hence the buyer. It also increases maintenance costs, which that segment can often ill – afford... all of it leading to eyesores for us passers – by and unhygienic conditions for those who live there.

This could be a lucrative segment but recent announcements for affordable homes are in areas that can best be described as outside the city’s fringe areas, possibly falling within the Pune Metropolitan Region Development Authority zone.

This leaves slums in the core city and cantonment intact, outside the gates of premium gated communities” (Athale, 2016).

Furthermore, though only 8% of the households stated that they have received benefit due to the schemes implemented by the government in the past, it is a slightly higher proportion of notified slum dwellers (9.7%) that have received the benefit in comparison to the non – notified slum dwellers (6.3%). Majority of the schemes that have been beneficial to the slum dwellers are as follows: Gharkul yojana, PMJDY, RTE, post – matric scholarship scheme, BSUP, Sanjay Gandhi Niradhar Anudhan Scheme, Ladli scheme, Pradhan Mantri Social Security Scheme, Rajiv Gandhi Jeevandayee Arogya Yojana, PDS, NFBS, Scheme for Promotion of Women Self Help Groups, and Rashtriya Arogya Nidhi, etc. Some of the households stated that they have not received any help from the government so far. However, when the investigator asked them about specific schemes like PMJDY they stated that they have a bank account due to this scheme. Hence, it is quite likely that the respondents might find it difficult to recall when asked about all the government schemes that have been beneficial to them so far.

However, few households are not aware of the schemes meant for them. Hence, spreading awareness about the existing schemes would help the poor people in a great way. In addition to this, some of the households are not able to take advantage of the available schemes due to the complex procedures. These complex procedures mean that the poor are either unable to understand it or they have to forgo a day’s wage to get the things done. Furthermore, forgoing a day’s wage means a lot to the poor who have to work very hard barely for survival. Hence, there is a need to simplify the procedures for the poor.

CHAPTER EIGHT

SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

Introduction

“The extent of poverty in today’s world is unacceptable. The reason that the world does not erupt in dissent is because a huge amount of intellectual effort goes into making it appear acceptable” (Basu, 2010).

“Urban poor are largely understood as people living in overcrowded and dilapidated slums or in squatters built on pavements, along railway tracks, besides pipelines, under bridges, on ill – drained marshlands and any vacant land available to them, in the urban areas” (Karn et al., 2003). In addition to this, the problem of urban slums, at least in the developing world, is one, an incremental trend whose end is not in view, and, two, a phenomenon which has recurrence built into it (Tiwari, 2010).

The growing number of people living in slums and as pavement dwellers is intimately related to the process and pace of urbanization in the country as a whole. Moreover, a number of other factors affect migration streams in significant ways including the pace of rural development and the rate of urbanization within the migrant’s home state, the particular kinds of economic opportunities offered by the city, and the personal ties of the migrant, be they based on kinship, caste or merely friendship (Singh and De Souza, 1980).

Moreover, according to the recent OPHI Country Briefing, 53.8% of the population is multidimensionally poor and 16.4% is vulnerable to poverty in India.

A large proportion of India’s urban population lacks the income or assets to meet basic needs and lives in poverty in slums and informal settlements with very inadequate provision for basic services (Bapat, 2009). Identification of these urban poor households is a necessary condition for more effectively targeting the beneficiaries under various poverty alleviation programmes being implemented by the Government of India (Planning Commission, 2012). However, most of those ‘living in poverty’ are not considered poor by official definitions (Bapat, 2009).

The Planning Commission has constituted EGs from time to time to revisit the methodological issues related to the measurement of poverty so as to make the estimates more relevant to the contemporary economic situation (Planning Commission, 2014).

On September 20, 2011, the Planning Commission, upholding the Suresh Tendulkar Committee's findings, had filed an affidavit in the Supreme Court updating the official urban poverty line to Rs. 32 pcpd at June, 2011, prices. However, since the Planning Commission was highly criticized for giving such a low poverty line it then declared that the data collected by the SECC will be the basis for identifying those deemed eligible for entitlements under various central government programmes.

Further, the Rangarajan group raised the daily per capita expenditure to Rs. 47 from Rs. 33 for the urban poor and pegged the total number of poor in the country at 363 million or 29.5% of the population (Sharma, 2014).

However, the group has been criticized for missing the opportunity to press the case for a multidimensional assessment of poverty (Subramanian, 2014). In addition to this, it was criticized for not taking into consideration health and sanitation as essential non – food items (Mishra, 2014).

“The history of poverty lines in India is a case study in the interaction of science and politics, with political discussions often claiming a scientific basis, sometimes with justification, more often without” (Deaton and Kozel, 2005).

“There has been acrimonious discussion in India about how many are poor, but not on the more important issue of who the poor are and how they are being identified” (Saxena, 2015).

“There is by now a growing recognition that poverty is a matter of not simply inadequate income but also of low literacy, short life expectation and lack of basic needs such as adequate shelter, clothing and safe drinking water” (Radhakrishna et al., 2010).

Moreover, the ‘resolution’ frequently resorted to is to employ the language of a ‘poverty line’ to suggest that income is a means to an end (that of escaping deprivation in functionings space), whereas, in practice, income ends up being employed as an end in

itself. If one insists on employing income as a means to an end, there is or at least there ought to be no option but to derive a more – or – less carefully constructed capability – based money – metric poverty line. Alternatively, if one treats income as an end in itself, there is a case for employing money – metric poverty indicator (Subramanian, 2014).

Recently, a panel tasked with devising ways to reduce poverty has backed the controversial ‘Tendulkar poverty line’, which categorised people earning less than Rs. 33 a day as poor, on the ground that the line is primarily meant to be an indicator for tracking progress in combating poverty. Moreover, the line is not meant to help identify those to whom government benefits need to be distributed (Mehra, 2016).

Measurement and identification of poor is necessary but not sufficient. It is also important to think clearly and systematically about how the position of poor people may be improved, and to act accordingly (Haughton and Khandker, 2009).

“To reduce poverty sustainably, however, reducing household vulnerability and increasing household resilience are also necessary” (Naude et al., 2008).

There are many unresolved and highly debated issues out of which the present study aims to address ‘identification of the poor and vulnerable’ which is the most basic and first step to help the poor and vulnerable to come out of the poverty trap. In addition to this, though the SECC is in the process of identifying the poor and vulnerable households on the basis of their residential, occupational and social vulnerabilities the poor households have to go through various other vulnerabilities. Hence, the present study aims to identify them on the basis of all those vulnerabilities along with the ones used for the SECC.

Hence, the study tries to test following hypothesis with the help of descriptive and analytical tools:

H₀: The official estimates of poor and vulnerable people are true estimates.

H₁: Far more people are poor and vulnerable than those suggested by the official estimates.

Though this study has not made an attempt of providing an accurate estimate of the poor and vulnerable people, it tries to identify the background characteristics that are highly essential for identification of the poor and vulnerable people. Since the official estimates are narrowly defined the study follows a rather pluralistic approach. Adopting a

multidimensional approach for identification of the poor and vulnerable is indispensable particularly in India due to its socio – economic, cultural and ethnic diversities.

Research methodology

Pune city was basically selected for primary data collection due to its economic growth resulting in considerable growth of slums over the years and also because of the familiarity with the city.

The obvious answer to the question ‘What could be an adequate sample size?’ seems to be ‘The bigger, the better’. “However, it must be remembered that one purpose of sampling is to get representative data at a reasonable cost” (McTavish and Loether, 2002). Hence, it was decided to collect primary data from 300 notified and non – notified slum dwellers each. The information regarding the ward wise notified and non – notified slums’ population of Pune city was collected from the PMC’s office. With the help of this data, the sample size to be covered from each administrative ward of the city has been computed. The method of proportionate stratified sampling has been used for the determination of sample size.

Since a sample has to be a proper representative of the population all administrative wards of the city were selected for the purpose of data collection. For selection of notified and non – notified slums, information regarding names of the slums along with the population was collected from the PMC’s office. All the information obtained from the PMC’s office was updated up to the year 2009 – 10. In addition to this, the Spatial Slum Information available on the website of Shelter Associates was used for the selection of slums.

Since all slum dwellers are not poor and all poor and vulnerable do not necessarily live in slums qualitative information has been collected from houseless households staying in various corners of Pune city.

The PMC officials could not provide ward wise list of houseless population (as it had provided in case of the slum dwellers). However, they gave information regarding the locations where the houseless households are found to be staying. Hence, the primary data has been collected from the houseless households who were available during the field visits and ready to share their information. In addition to this, the definition of houseless

households given by the census of India has been followed for identification of the households.

Summary of findings

Poverty and vulnerability of slum dwellers in India

An attempt has been made to understand the major problems that are being faced by the slum dwellers in India with the help of NSSO and NFHS datasets. The NSSO dataset has been basically used for understanding the situation of slum dwellers staying in Maharashtra. So, majority of the slum dwellers are found out to be staying in Thane, Pune and Mumbai and Mumbai (Suburban) districts of Maharashtra. Further, in case of all the three districts, it has been found out that majority of the slums are located on the private land and on the land owned by the local bodies. Hence, slums here seem to be a ‘creation’ by the local bodies rather than ‘formation’. Therefore, it would be interesting to throw light on the residential vulnerability of these slum dwellers.

In case of the residential vulnerability index, an indicator – wise analysis reveals that the slum dwellers staying in Pune district are in the worse condition in comparison to the ones staying in Thane and Mumbai and Mumbai (Suburban). Moreover, there is a major difference between the notified and non – notified slum dwellers with respect to their residential vulnerability in case of the Pune district. Actually, the migration flow to Pune is higher than other non – Mumbai cities due to Pune’s local economic capacity coupled with favourable weather condition. So, the headcount of affected dwellers might be higher due to their relative higher weight. Other slums may show higher vulnerability of non notified dwellers if the flow was comparable. Hence, due to the distinct deprivation faced by the slum dwellers staying in Pune, they have been investigated further through primary survey to get an understanding of the dynamics of their vulnerability to poverty.

Since residential inadequacy turns out to be the most important dimension of vulnerability, NFHS dataset has been used to model the determinants of residential vulnerability of slum dwellers staying in eight major cities of India. These slum dwellers are found out to be vulnerable everywhere irrespective of the place of residence. Further, higher the age higher would be the vulnerability. Wealth index is found out to be having negative

and highly significant impact on the residential vulnerability. Moreover, higher the concentration of the Buddhists / Neo Buddhists in the slum areas of the cities higher would be the vulnerability. Access to market may be more important than the government facility with respect to health care. Nothing is more important than home care for the poverty stricken households to combat their residential vulnerability. Interestingly, it is the right wing and regional politics, which depends mostly on local vote bank, that are detrimental for the living conditions of the urban poor.

Socio – economic and demographic profile of slum dwellers

The study highlights the demographic, social and economic characteristics of the notified and non – notified slum dwellers staying in Pune city. It also explains how impoverishment in the rural areas adds to the existing magnitude of urban poverty. Moreover, the reasons for increasing poverty in the urban areas have also been explained.

A higher proportion of non – notified slum dwellers belong to SC category in comparison to the notified ones. Further, a higher proportion of households belong to Maratha, Mahar, and Matang caste. About 51.8% of the households have migrated to the city. Hence, as has been already explained, these rural migrants have added to the existing magnitude of poverty in the Pune city. In addition to this, a higher proportion of non – notified slum dwellers have been found out to be recent migrants vis – a – vis the notified ones. Majority of the households have migrated either from the rural areas of Pune district or from the drought – prone districts of Maharashtra. Hence, a much higher proportion of the households had migrated to the city in search of livelihood opportunities as they were finding it difficult to survive in the village. The role and importance of social networks in shaping the rural urban migration streams has also been highlighted. Since a higher proportion of non – notified slum dwellers are found out to be recent migrants, they may find it difficult to survive in the city without their friends or relatives. Hence, a higher proportion of these dwellers had friends or relatives in the city prior to migration in comparison to the notified slum dwellers. Moreover, a higher proportion of the non – notified slum dwellers have also received help from these social networks in finding employment and / or place to stay in the city vis – a – vis the notified ones. Since a higher proportion of the notified slum dwellers have been found out to be old settlers they are more likely to settle in the city on a permanent basis. As has been expected on the basis of literature, majority of the migrants have settled in nuclear rather than joint families in the city. In addition to this, higher child dependency ratio can be considered as both the cause

and effect of poverty. Rather, the child dependency ratio is found out to be more than 5 times of that of the old age dependency ratio. Further, the 'economic' dependency ratio has revealed that the 'actual' number of dependents is much higher than what has been found out by the age dependency ratio.

In accordance with the literature, a much higher proportion of women are found out to be illiterate in comparison to the men. Furthermore, the importance of investment in education of the children along with the provision of regular and reliable information to help them to escape poverty has also been emphasized. Interestingly, fertility rate is found out to be having a negative impact on the choice of school. Hence, as the number of children goes up to 3 and above a higher proportion are found out to be going to public school. However, low quality education provided in the public schools is a notable impediment (Krishna, 2010). Hence, some of the households are actually found to be taking loans in order to send their children to private schools. In case of occupation, majority of the men are found out to be working as driver, construction worker, vegetables' seller, carrier, office boy, painter, rickshaw driver, security guard, and plumber, etc. Moreover, majority of the women work as scrap collector, garbage collector, sweeper, construction worker, domestic worker, and tailor, etc. There seems to be a predictable continuity between the rural and urban occupations of majority of the migrants which is in part a function of their lack of skills (Singh and De Souza, 1980). In addition to this, the discrimination faced by the women in comparison to the men with respect to employment has also been highlighted. Out of the total men, 88.7% are working. However, out of the total women, only 57.5% are working. Further, majority of the women walk the distance to workplace while majority of the men go by two – wheeler. However, it is basically because these women have to choose workplaces that are closer to their house since they have to combine work with child care.

The notified slum dwellers seem to be better insured against descents into poverty in comparison to the non – notified slum dwellers especially when the ownership of assets is taken into consideration. Further, about half of the households go to private hospital in case of illness. The median proportion of total monthly expenditure on health care is found out to be 5.1057%. Out of the households that face health problems due to staying in slums, majority of them stated that one of the major reasons is the lack of cleanliness in the slum. Other health problems faced by the slum dwellers include: respiratory problems due to lack of ventilation, air pollution due to the usage of hearth, cold, fever, and dengue, etc.

More than half of the households have per capita income that is less than or equal to Rs. 3000. However, since the uncertainty of being unemployed for a particular period of time does not get captured in the present study, income may not be used as an indicator of poverty or lack of it. Further, expenditure alone may not be used as an indicator of poverty or lack of it as the households' expenditure may be high but it might be due to loans. Hence, there is a need for the multidimensional assessment of poverty. According to the HCR, the number of BPL households is slightly higher in case of the non – notified slum vis – a – vis the notified slum. However, since the HCR has serious limitations as a poverty index, PGI and SPGI have also been computed. Moreover, even the value of these two indices is slightly higher in case of the non – notified slum dwellers in comparison to the notified ones. However, the poverty indexes do not do justice to the range of deprivations we ought to be concerned with (Deaton and Dreze, 2002). Further, inequality is a broader concept than poverty (Haughton and Khandker, 2009). The level of expenditure inequality faced by the notified slum dwellers is higher than the non – notified slum dwellers. Hence, poverty instead of inequality seems to be a major concern in case of the non – notified slum dwellers (unlike the notified ones). In addition to this, expenditure inequality might be considered as a better measure instead of income inequality as there is a greater chance of misreporting in case of income. The level of expenditure inequality faced by the female headed households is slightly higher than that of the rest of the population. One of the reasons for not finding a major difference between the two groups could be the low sample size of female headed households out of the total number of households.

Furthermore, social and customary expenses, including expenditure on funerals and marriages, have contributed to many households' descents into poverty (Krishna, 2010). Since, majority of the households received financial help from their relatives, neighbours, friends, and employers for the expenses to be incurred on funeral feast, they had not taken loan. Moreover, it was revealed that the practice of giving feast is more widespread in their villages. Many households had taken loan for the expenses incurred on marriage. However, few also stated that they spend as per their affordability instead of taking loan. In addition to this, it seems that very few households have provided information regarding their addiction to various drugs. Overall, men are found out to be addicted to alcohol and women to *mishri* in comparison to other drugs. Rather, alcohol is looked at by most of the workers as a coping strategy (Sabhlok et al., 2015). Finally, in case of entertainment, it has been found

out that the households make several adjustments like purchasing CDs instead of going to theatre to watch movies, going to village by train without ticket, etc.

To summarize, the non – notified slum dwellers are found out to be in the worst position with respect to various indicators in comparison to the notified slum dwellers.

Vulnerability to poverty

The study throws light on the importance of identifying the causes of vulnerability to poverty. Along with the three sources of vulnerability given by the SECC, viz., residential, occupational and social, asset ownership and social networks at village, health care, access to basic services, social security, food security and corruption and harassment have also been incorporated as very basic and essential dimensions of vulnerability. In addition to this, various indicators have been used for the computation of indices of these dimensions of vulnerability.

It has been found out that there is a marked difference between the notified and non – notified slum dwellers with respect to only two dimensions of vulnerability viz., residential vulnerability and access to basic services. However, 50% of the notified and non – notified slum dwellers are vulnerable to poverty when occupational vulnerability, health care and social security are taken into consideration. Furthermore, as high as 75% of the notified and non – notified slum dwellers are vulnerable to poverty with respect to asset ownership and social networks at village. An indicator – wise analysis of the residential vulnerability index shows that a higher proportion of non – notified slum dwellers stay in kutchha houses, use electricity on rent, and have faced eviction / demolition and theft in the past. Similarly, an indicator – wise analysis of the dimension access to basic services shows that a much higher proportion of the notified slum dwellers have own taps. Moreover, it is only the non – notified slum dwellers that have to practise open defecation and only 15% of them have own toilets. Open defecation results in the spread of deadly diseases. It is rather a negative externality (Devarajan, 2014). Further, a higher proportion of the non – notified slum dwellers use common and detached bathroom and they have to pay a higher price for the usage of community toilet and bathroom. The proportion of non – notified slum dwellers not having a ration card is double than that of the notified ones. This may increase their vulnerability to poverty to a great extent. Rather, even in case of the non – notified slum dwellers that have a ration card, a higher proportion of them do not have a FPS closer

to their house. Finally, a higher proportion of these non – notified slum dwellers had to pay to an agent to get the ration card.

Furthermore, it has been found out that the variables type of slum and recent migrants have a highly significant and negative impact on the residential vulnerability and access to basic services indices. Though the variables head of the household and category have a negative impact on the two indices it is not significant which might be because of the low sample size of female headed households and households belonging to SC, ST, VJ, NT category out of the total sample size. Similarly, though the variable help from politician has a positive impact on the access to basic services index it is not significant may be because of the low sample size of households, which have received help from the politician, out of the total sample size.

Ward wise analysis of all the dimensions of vulnerability showed that, in case of residential vulnerability, 20% of the households staying in Hadapsar, Bibwewadi, Warje and Dhole Patil road are vulnerable to poverty. Further, indicator – wise analysis of the residential vulnerability index showed that a much higher proportion of the households staying in Bibwewadi (69.44%) stay in kutchha houses followed by Dhole Patil road (62.32%), Warje (33.33%) and Hadapsar (31.82%). The proportion of households that do not own house in the city is quite high in case of Warje (20.00%). Moreover, higher proportion of households staying in Warje (22.67%) and Dhole Patil road (15.94%) use electricity on rent. Out of the total slum dwellers that have faced eviction or demolition in the past, majority of them stay in Warje (12.00%). Finally, in comparison to other wards, higher proportion of slum dwellers staying in Bibwewadi (16.67%) has faced theft in the past. Hence, though the level of residential vulnerability faced is higher in case of all the 4 administrative wards, viz., Hadapsar, Bibwewadi, Warje and Dhole Patil road, it turns out to be most acute in case of Warje.

As high as 50% of the households staying in Hadapsar, Tilak road, Ghole road, Sahakarnagar, Dhankawadi, Kasba Vishrambaugwada and Warje are vulnerable to poverty with respect to occupational vulnerability. Moreover, indicator – wise analysis of the occupational vulnerability index showed that quarter of the households staying in Hadapsar, Tilak road and Kasba Vishrambaugwada have members that earn only on daily or weekly basis. This proportion is higher in case of the dwellers staying in Dhankawadi (37.50%). In comparison to other wards, higher proportion of the households staying in Dhankawadi

(11.11%) is unemployed followed by Sahakarnagar (6.90%) and Ghole road (4.00%). Finally, about 75% of the households staying in Kasba Vishrambaugwada face health problems due to the type of occupation that they are engaged in followed by Hadapsar (59.09%), Tilak road (54.69%), Warje (52.00%) and Dhankawadi (50%). Hence, the level of occupational vulnerability faced by the households staying in Dhankawadi turns out to be more acute.

In case of social vulnerability and asset ownership and social networks at village, there is hardly any difference between the wards of the city and 30% and 75% of the households are vulnerable to poverty respectively. Hence, only 25% of the households can fall back upon the social networks and assets owned at village in case they are unable to make up / survive in the city. Moreover, about 50% of the households are vulnerable to poverty in case of all the wards with respect to health care.

In addition to this, in case of access to basic services, 23 – 25% of the households staying in Hadapsar, Ghole road, Kasba Vishrambaugwada, Warje and Dhole Patil road are vulnerable to poverty. An indicator – wise analysis shows that it is only the households staying in Hadapsar that have to fetch drinking water using a hand pump (11.36%) and have to practise open defecation (31.82%). Moreover, only 8% of the households staying at Ghole road have own toilet. This proportion is much less in case of the households staying in Warje (4%). Worst of all, none of the households staying at Dhole Patil road have own toilet. The proportion of households having own bathroom in house is much less in case of Kasba Vishrambaugwada (50%), Hadapsar (63.64%), and Ghole road (66%) in comparison to Warje (100%) and Dhole Patil road (98.55%). Further, a much higher proportion of households staying in Warje (93.33%) have to pay more than Rs. 30 per month per family for the usage of community toilet and bathroom. A higher proportion of the households staying in Hadapsar (11.36%) do not have a ration card followed by Warje (10.81%) and Dhole Patil road (7.25%). As high as 50% of the households staying at Ghole road does not have FPS closer to their house. Finally, a higher proportion of households staying at Kasba Vishrambaugwada (25%) have to travel for more than 20 minutes to reach the public hospital followed by Hadapsar (11.36%). Hence, taking into consideration all the indicators that have been used in the computation of the access to basic services index, it has been found out that the level of vulnerability faced by the households staying in Hadapsar and Warje is much higher in comparison to other wards.

As high as 62.5% of the households staying in Kasba Vishrambaugwada is vulnerable to poverty with respect to social security. In case of all the remaining wards, 50% of the households are vulnerable to poverty. Further, an indicator – wise analysis shows that 75% of the households staying in Kasba Vishrambaugwada do not have an insurance policy. Moreover, 50% of the households could not save part of their income and a much higher proportion of them (75%) have taken loan in the past five years. Hence, though the level of vulnerability faced is higher in case of all the administrative wards, it is more acute in case of the households staying in Kasba Vishrambaugwada ward.

Further, 25 – 27% of the households staying in Hadapsar, Tilak road, Bibwewadi, Dhankawadi, Kasba Vishrambaugwada, and Warje are vulnerable to poverty with respect to food security. An indicator – wise analysis shows that about 2.27% of the households staying in Hadapsar use wood whereas 8.33% of the households staying in Bibwewadi use both wood and kerosene as cooking fuel. The proportion of households using only kerosene as cooking fuel is much higher in case of Kasba Vishrambaugwada (50%) followed by Warje (10.67%) and Tilak road (7.81%). Moreover, a much higher proportion of households staying in Kasba Vishrambaugwada (50%) purchase food grains on a daily basis in comparison to Tilak road (4.69%) and Warje (1.33%). Moreover, 13.89% of the households staying in Bibwewadi could purchase food grains on a weekly basis. Many households staying in Hadapsar, Tilak road, Bibwewadi, Dhankawadi, Kasba Vishrambaugwada and Warje have to purchase oil, spices, sugar, salt, etc on a daily and weekly basis. In addition to this, there are many households that can never or rarely purchase fruits. In comparison to other administrative wards, the level of vulnerability faced by the households staying in Kasba Vishrambaugwada and Hadapsar seems to be more severe.

Thirty – three percent of the households staying in Hadapsar are vulnerable to poverty with respect to corruption and harassment. Rather, none of the households staying in other administrative wards are vulnerable to poverty. Furthermore, an indicator – wise analysis shows that 2.27% of the households staying in Hadapsar have faced harassment by corporation officials for staying at current locality. Though these households did not have to pay bribe for staying at current locality, a much higher proportion of them (47.50%) had to pay to an agent to get the ration card. Hence, it is only the households staying in Hadapsar who are vulnerable to poverty with respect to corruption and harassment.

To summarize, the non – notified slum dwellers and recent migrants obviously turn out to be highly vulnerable to poverty in comparison to the notified slum dwellers and old settlers respectively at least with respect to residential vulnerability and access to basic services. Rather, a higher proportion of the non – notified slum dwellers are recent migrants which ultimately increases their vulnerability to poverty.

It has been found out that the level of vulnerability faced by the households differs according to the dimensions as well as the administrative wards. So, the level of residential vulnerability faced turns out to be most acute in case of Warje. The level of occupational vulnerability faced by the households staying in Dhankawadi is more severe. Further, the level of vulnerability faced by the households staying in Hadapsar and Warje is much higher in comparison to other wards with respect to the access to basic services index. Though the level of vulnerability faced is higher in case of all the administrative wards with respect to social security, it is more acute in case of the households staying in Kasba Vishrambaugwada ward. The level of vulnerability faced by the households staying in Kasba Vishrambaugwada and Hadapsar wards seems to be somewhat more severe with respect to food security. Furthermore, a much higher proportion of households staying in all the administrative wards are vulnerable to poverty with respect to asset ownership and social networks at village and health care. Finally, it is only the households staying in Hadapsar who are vulnerable to poverty with respect to corruption and harassment.

Perceptions of poor about poverty and measures for poverty reduction

The study throws light on the importance of understanding the lived realities of the poor which are so different from our understanding of their poverty. Majority of the slum dwellers have defined poverty as starvation, subsistence / hand to mouth existence, striving hard, lack of employment (even for the highly educated ones), earning income on a daily basis / working in the informal sector, working even in the old age, lack of ownership of assets and access to ancestral property which ultimately results into intergenerational transmission of poverty, lack of access to basic necessities and amenities, and lack of dignity, etc.

Various NGOs and rich people help the poor ones in various ways to get out of the poverty trap. It has been found out that a slightly higher proportion of notified slum dwellers have received such help in comparison to the non – notified ones. Moreover, besides NGOs, the poor people make continuous efforts to break the shackles of poverty.

Some of them have been trying to move out of the slum. Few households shared that they can cut spending on various goods like alcohol, TV / cable, mobile, watching movies, etc. In addition to this, majority of the slum dwellers stated that saving and investment, support from relatives and government, access to education and decent employment, and spending cautiously, etc. would help them in a great way to get out of poverty. Interestingly, when asked regarding their expectations from society or government, some households said that we should depend on ourselves to get out of poverty instead of having expectations from them. The politicians also help the poor people in various ways and as expected a much higher proportion of non – notified slum dwellers have received such help vis – a – vis the notified ones. These politicians have helped the slum dwellers financially during their difficult times. They have also assisted the dwellers to get various documents. However, it is basically to use these dwellers as vote banks that the politicians help them generously. Rather, many households reported that they are provided money, free gifts, and basic amenities before elections.

There have been many schemes implemented by the government of India for reducing the intensity of vulnerability to poverty so far. Hence, some of these schemes like RAY, NULM, NSAP, BSUP, and PMJDY have been described in brief. Furthermore, food security is the very foundation of poverty eradication (ADB, 2014). The evolution of the PDS system over the years has been described in the study. Since the targeted version of the PDS has resulted in large inclusion and exclusion errors, erratic supply of food and massive corruption many states have recently moved towards a more inclusive or even universal PDS. However, universalization is basically in the interest of the middle class and hence quasi – universalization methodology seems to be the way out. In such case, NFSA seems to be a step in the right direction. However, there have been some problems in case of NFSA as well like the results and recommendations cited in the HLC report, lack of coverage of maternity benefits, etc. In addition to this, the pros and cons of replacing the PDS with cash transfers have also been explained. Rather, the general pattern, revealed during a survey, was a strong preference for the PDS over the cash transfers wherever the system functioned relatively well (Dreze and Sen, 2013). Besides this, efforts taken by the government to help the slum dwellers staying in Pune city have also been explained. Exclusion errors and corruption are found out to be major problems in case of the slum dwellers. In addition to this, poor quality of the subsidized commodities has resulted in lack of consumption of the commodities at least in case of some households. Furthermore,

majority of the households are willing to resettle if the government provides houses to them. However, some of the remaining households emphasized that they would not resettle even if it is provided by the government because they want the government to build their house in the current locality itself as they stay closer to their workplaces. Finally, majority of the schemes implemented by the government that have been beneficial to the slum dwellers so far are as follows: Gharkul yojana, PMJDY, RTE, Sanjay Gandhi Niradhar Anudhan Scheme, Pradhan Mantri Social Security Scheme, and Rajiv Gandhi Jeevandayee Arogya Yojana, etc. However, few households are not aware of the schemes meant for them. Further, some of the households are not able to take advantage of the available schemes due to the complex procedures. Hence, spreading awareness about the existing schemes and simplifying the procedures would help the slum dwellers in a great way.

Houseless households

The case studies highlight the extremely poor conditions in which the houseless households live. They have migrated from their villages due to lack of ownership of land and availability of employment. Being illiterate or having limited education they have no choice but to join the informal sector. Moreover, majority of the houseless households have very high dependency ratios and are not even insured against any uncertainties. The lack of ownership of ancestral property results in the intergenerational transmission of poverty. All these factors along with indebtedness, lack of access to basic services and ownership of assets make them highly vulnerable to poverty. Since they lead a hand – to – mouth existence any shock; for instance, chronic illness / accident, deception, theft, demolition, etc. can make them much poorer than before.

Limitations of the study

Despite trying the best to know the reality in case of some respondents the information provided might be faulty.

The sample size could have been more than 600 households as larger the sample size more accurate the results are likely to be. Moreover, since the vulnerability to poverty of the houseless households is most acute, a quantitative analysis of their living conditions would be highly beneficial for policy making purposes.

Some other peculiarities of the poor could also be studied like understanding the problems faced (for instance, working poverty) and the tactics adopted to overcome it (renting out the houses provided by the government and returning back to the slum) by the resettled households.

Instead of analysing the overall living conditions, an in – depth analysis of specific variables like the pattern of food consumption and the adjustments made to it due to the lack of affordability (for instance, curtailing the consumption of chicken and mutton and eating eggs and preferring dal most of the times instead of vegetables) can also be of great use for formulating specific policies.

Finally, since this is a cross – sectional study nothing can be said about the increase or decrease in poverty or vulnerability to poverty over time but one can get an idea about the current living conditions of the slum dwellers and houseless households staying in Pune city.

Policy implications

There is a need to define slums in a ‘measurable’ way instead of a ‘subjective’ definition (refer declaration of slums section in chapter 3). It is mainly because the government may not ‘declare’ a slum irrespective of the living conditions of the slum dwellers like lack of ventilation, overcrowding, etc. due to the subjectivity of the definition.

It was found out that though the community toilets were available in majority of the slums the children had no choice but to practise open defecation. Further, a hole had been made near the drainage plate so that the children can defecate over there but it may result into spread of diseases. So, some facility has to be made in all the CTBs, specifically for the children who cannot control and wait in a queue to go to the toilet, just as has been done in some slums. For instance, there is a separate facility for children in the CTB at Sanjay Gandhi Vasahat, Erandwane. Further, a CTB at More Shramik Vasahat, Erandwane has a baby channel for children less than 5 years of age.

There has to be a periodic monitoring of the living conditions of the poor and the ration cards should be allocated accordingly. For instance, the households having a yellow coloured ration card may not be fulfilling the criteria required to get the card anymore like having an annual income of up to Rs. 15,000. Hence, the ration cards of the households

should be changed periodically in accordance with the differing living conditions. There is also a need to review the criteria that had been set to issue the ration cards with changing times. For instance, there has to be an upward revision of the total annual income limit from time to time.

Since poverty turns out to be a major concern in case of the non – notified slum dwellers and inequality in case of the notified slum dwellers, both types of slum dwellers would require different sets of policies.

While framing policies for the non – notified slum dwellers and recent migrants the focus should be on tackling the residential vulnerability and vulnerability with respect to the access to basic services. Moreover, importance should also be given to tackling the occupational vulnerability and vulnerability with respect to the health care, social security, and specifically the asset ownership and social networks at village in case of both the notified and non – notified slum dwellers staying in Pune city.

Furthermore, different policies should be framed for different wards taking into consideration the severity of vulnerability to poverty with respect to various dimensions. For instance, while framing policies for Hadapsar ward the focus should be on tackling vulnerability with respect to access to basic services, food security and corruption and harassment. This approach may be highly beneficial to address the vulnerability to poverty of the households staying in different administrative wards of Pune city.

Some changes should be made to the policies according to the needs of the poor. For instance, a respondent staying in Ramtekdi, Hadapsar had been given a house in a building built by SRA which was very close to their slum. However, she said that she won't be able to resettle due to a very genuine problem. She explained that since we earn a monthly income of only around Rs. 2500 we cannot afford to purchase a gas cylinder. She added further that currently we can cook our food on hearth in the slum, but once we shift to the new building how we can cook the food! Even in case of many other slum dwellers, that have LPG for cooking food but use hearth mainly for boiling water, this challenge remains unresolved.

Finally, until large differentials in earning opportunities between cities and rural areas are reduced, the rural poor will continue to migrate and prick the conscience of the urban elite. Hence, for eradicating urban poverty we have to speed up rural development

(Jagannathan and Halder, 1989). In addition to this, for reduction of urban poverty one has to realise the importance of urban employment measures instead of seeking its solution only in terms of the rural employment programmes (Mitra, 1992). Hence, though the rural development programmes are highly essential to curb the future generation of urban poverty, the policies suggested above are also indispensable especially to remove the poor people (already residing in the city) out of the pool of poverty.

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APPENDIX A

Methodology – Determination of Sample Size

Sr. No.	Administrative wards	Estimate of population: Notified slums	Percentage of ward wise population to total slum population	Sample size	Estimate of population: Non – Notified slums	Percentage of ward wise population to total slum population	Sample size
1	Aundh	34605	6.4774	19.44	3330	2.7463	8.25
2	Karve road	59981	11.2274	33	21780	17.9623	54
3	Warje	4600	0.8610	2.58	28530	23.5291	72
4	Ghole road	44373	8.3058	24.93	10105	8.3337	24.99
5	Dhole – Patil	31479	5.8923	17.7	21115	17.4139	51
6	Wadgaon sheri Nagar road	37539	7.0266	21.09	1330	1.0969	3.291
7	Yerwada	47923	8.9703	26.91	3735	3.0803	9.24
8	Sahakarnagar	37575	7.0334	21.09	3379	2.7867	8.37
9	Bhavani Peth	49858	9.3325	27.9	7135	5.8843	18
10	Kasba Vishrambaug wada	5770	1.0800	3.24	510	0.4206	1.26
11	Tilak road	98615	18.4589	55.38	3780	3.1174	9
12	Bibwewadi	30295	5.6707	17.01	7645	6.3049	18.9
13	Hadapsar	47457	8.8831	26.7	5880	4.8493	15
14	Dhankawadi	4170	0.7805	2.34	3000	2.4741	7.41
15	Total	534240		299.31	121254		300.71

Source: Author's calculations based on data from PMC office

APPENDIX B

Methodology – Indices: Dimensions of vulnerability to poverty

Sr. No.	Dimensions of vulnerability	Indicators	Criteria	Scores	Maximum score
1	Residential vulnerability index	Type of house	Kutcha	0	1
			Semi kutcha	0.5	
			Pucca	1	
		Ownership of house	No	0	1
			Yes	1	
		Source of light	No electricity	0	1
			Rented	0.5	
			Own	1	
		Eviction / Demolition	Yes	0	1
			No	1	
		Theft	Yes	0	1
			No	1	
2	Occupational vulnerability index	No household member is earning on monthly basis	Yes	0	1
			No	1	
		At least one household member is carrying out secondary occupation	No	0	1
			Yes	1	
		None of the household member is employed	Yes	0	1
			No	1	
		Health problems due to the type of occupation	Yes	0	1
			No	1	
3	Social vulnerability index	No household member has completed primary education	Yes	0	1
			No	1	
		Children going to school	No	0	1
			Yes	1	
		Disability	Yes	0	1
			No	1	
		Number of dependent members	Greater than median	0	1
			Less than or equal to median	0.5	
			0	1	
		Ownership of assets	No asset	0	1
			Less than or equal to median	0.5	
			Greater than median	1	

4	Asset ownership and social networks at village index	Migration	Yes	0	1
			No	1	
		Ownership of land at village	No	0	1
			Yes	1	
		Ownership of house at village	No	0	1
			Yes	1	
Relatives staying in village	No	0	1		
	Yes	1			
5	Health care index	Chronic illness / accident	Yes	0	1
			No	1	
		Took loan for expenditure incurred on treatment	Yes	0	1
			No	1	
6	Access to basic services index	Source of drinking water	Hand pump	0	1
			Common tap	0.5	
			Own tap	1	
		Time taken to travel for fetching water	More than 20 minutes	0	1
			Between 10 to 20 minutes	0.33	
			Between 5 to 10 minutes	0.66	
			Less than 5 minutes	1	
		Type of toilet	Open defecation	0	1
			Mobile toilet	0.33	
			Common flush toilet	0.66	
			Own toilet	1	
		Availability of bathing facility	Open air	0	1
			Canal	0.2	
			River	0.4	
			Common bathroom	0.6	
			Detached bathroom	0.8	
			Own bathroom	1	
		Amount paid for the usage of public toilet and bathroom	Greater than median	0	1
			Less than or equal to median	0.5	
			0	1	
		Availability of drainage facility	No drainage	0	1
			Open	0.5	
			Closed	1	

		Garbage disposal	Open place	0	1
			Common dustbin	1	
		Availability of ration card	No	0	1
			Yes	1	
		Proximity of Fair Price Shop	No	0	1
			Yes	1	
		Sufficiency of the quantity of commodities	No	0	1
			Yes	1	
		Availability of aadhaar card	No	0	1
			Yes	1	
		Time taken to reach public hospitals	More than 20 minutes	0	1
			Between 10 to 20 minutes	0.33	
Between 5 to 10 minutes	0.66				
Less than 5 minutes	1				
7	Social security index	Bank account	No	0	1
			Yes	1	
		Insurance policy	No	0	1
			Yes	1	
		Saving	No	0	1
			Yes	1	
		Loan	Yes	0	1
			No	1	
8	Food security index	Cooking	No	0	1
			Yes	1	
		Type of cooking fuel	Wood	0	1
			Both wood and kerosene	0.17	
			Kerosene	0.34	
			Diesel	0.51	
			Wood, kerosene and LPG	0.68	
			Both kerosene and LPG	0.85	
			LPG	1	
		Ease of availability of cooking fuel	No	0	1
			Yes	1	
		Frequency of purchasing food grains	Never	0	1
			Rarely	0.13	
			Daily	0.26	
			Weekly	0.39	
			Fortnightly	0.52	
			Monthly	0.65	
			Quarterly	0.78	
Bi annually	0.91				
Annually	1				

		Frequency of purchasing vegetables	Never	0	1
			Rarely	0.33	
			Daily	0.66	
			Weekly	1	
		Frequency of purchasing oil, spices, sugar, salt, etc	Never	0	1
			Rarely	0.13	
			Daily	0.26	
			Weekly	0.39	
			Fortnightly	0.52	
			Monthly	0.65	
			Quarterly	0.78	
			Bi annually	0.91	
		Frequency of purchasing fruits	Never	0	1
			Rarely	0.2	
			Monthly	0.4	
			Fortnightly	0.6	
			Weekly	0.8	
			Daily	1	
		Frequency of purchasing milk	Never	0	1
			Rarely	0.33	
Weekly	0.66				
Daily	1				
Frequency of purchasing non – vegetarian food	Never	0	1		
	Rarely	0.2			
	Monthly	0.4			
	Fortnightly	0.6			
	Weekly	0.8			
	Daily	1			
9	Corruption and harassment index	Harassment for staying at the current location	Yes	0	1
			No	1	
		Payment of bribes for staying at the current location	Yes	0	1
			No	1	
		Payment to agent for getting ration card	Yes	0	1
			No	1	
Total					48

APPENDIX C

Gokhale Institute of Politics & Economics

Topic: Urban poverty and vulnerability in Pune city (Doctoral work)

Questionnaire for notified, non – notified slum dwellers and houseless households

Personal Information:

- 1) Name of the respondent:
- 2) Address.....
- 3) Mobile number
- 4) Head of the household 1) Male 2) Female
- 5) Religion: 1) Hindu 2) Muslim 3) Christian 4) Buddhists 5) Other
- 6) Category: 1) General 2) OBC 3) SC 4) ST 5) VJ 6) NT 7) Other.....
- 7) Sub – caste:
- 8) Mother tongue: 1) Marathi 2) Hindi 3) Other
- 9) Have you migrated? 1) Yes 2) No
- 10) If no, had your parents migrated? 1) Yes 2) No
- 11) If yes, when did you migrate?
- 12) Where have you migrated from?
- 13) Why did you migrate?
- 14) Did you own land in your village? 1) Yes 2) No
- 15) If yes, how much?
- 16) Did you own house in your village? 1) Yes 2) No
- 17) What occupation had you carried out there?
- 18) Do you have any of your relatives still staying in your village? 1) Yes 2) No
- 19) Did you have any friend or relative in this city before migration? 1) Yes 2) No
- 20) If yes, did he / she ask you to migrate to this city? 1) Yes 2) No
- 21) Did he / she help you in finding employment and / or place to stay? 1) Yes 2) No
- 22) Have you permanently migrated along with your family? 1) Yes 2) No
- 23) Since when are you staying on pavement / in this slum?
- 24) Where were you staying before coming to this locality?
- 25) Why do you stay in this locality (occupational proximity)?

26) Profile of the family:

Sr. No.	Relation with respondent	Sex M – 1 F – 2	Age (in years)	Education I – 1, P – 2, S – 3, H – 4, G – 5, PG – 6	Marital Status M – 1, U – 2, W – 3, A – 4	Occupation/s (Primary and Secondary)	Number of years for which one is carrying out current occupation/s	Periodicity of earnings D – 0, W – 1, M – 2	Monthly income
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Total									

27) What is the total number of family members? 1) Earning 2) Dependent

28) Ownership of assets:

Assets	Yes – 1, No - 2
Kerosene stove	
Gas cylinder	
Bicycle	
Mobile	
Radio / Transistor	
TV	
TV (with cable / dish)	
Two wheeler	
Refrigerator	
Washing Machine	
Computer / Laptop	
Computer / Laptop (with internet)	

29) Does anyone from your family have any disability? 1) Yes 2) No

30) Do you / anyone from your family have a bank account? 1) Yes 2) No

31) If yes, did you have it because of the Jan Dhan Yojana? 1) Yes 2) No

32) If yes, what is the type of account? 1) Joint 2) Individual 3) Both

Relation with respondent	Gender	Type of account

33) Do you own the house in which you stay currently? 1) Yes 2) No

34) If yes, what is the type of house: 1) Kutcha / Very poor 2) Semi kutcha / Poor
3) Pucca / Not so poor

35) If no, what is the amount of rent paid per month (For house and light both)?

Access to basic services:

- 36) Do you have access to clean water? 1) Yes 2) No
- 37) If yes, what is the source of drinking water? 1) Own tap 2) Common taps
3) Other
- 38) How much time do you take to travel for fetching water (for drinking as well as other purposes)? 1) More than 20 minutes 2) Between 10 to 20 minutes 3) Between 5 to 10 minutes 4) Less than 5 minutes
- 39) Does the supply of water break down often? 1) Yes 2) No
- 40) Where do you have your bath? 1) Own bathroom 2) Detached bathroom
3) Common bathroom 4) River 5) Canal 6) Open air 7) Other
- 41) What kind of toilets do you use? 1) Own toilet 2) Common flush toilet 3) Mobile toilet 4) Open defecation 5) Other
- 42) Are you allowed to use public toilets and bathrooms for free? 1) Yes 2) No
- 43) If no, what is the amount paid for the usage of each?
- 44) What kind of drainage facility do you have in the vicinity of your house?
1) Closed 2) Open 3) No drainage
- 45) Where do you throw your garbage? 1) Common dust bins 2) Other
- 46) What is the source of light? 1) Electricity 2) Street lights 3) Other
- 47) What is the amount of monthly expenditure incurred on electricity?
- 48) How do you go to the public hospital? 1) Bus 2) Bicycle 3) Walking
4) Auto 5) Two wheeler 6) Other
- 49) How much time do you take to reach the public hospital? 1) More than 20 minutes
2) Between 10 to 20 minutes 3) Between 5 to 10 minutes 4) Less than 5 minutes
- 50) How much time do you take to reach the maternity home? 1) More than 20 minutes
2) Between 10 to 20 minutes 3) Between 5 to 10 minutes 4) Less than 5 minutes
- 51) What is the type of the maternity home? 1) Public 2) Private 3) Both
- 52) Do you have a ration card? 1) Yes 2) No
- 53) How did you get the ration card? (Did you pay for it to some agent?) 1) Yes 2) No
- 54) If yes, how much?

- 55) What is the colour of your ration card? 1) Yellow 2) Saffron 3) White
- 56) Is there any ration shop near your home? 1) Yes 2) No
- 57) How often do you use the ration card? 1) Once a week 2) Twice a month
3) Once a month 4) Once in two months 5) Never
- 58) What is the frequency in availability of commodities which you need?
1) Very often 2) Often 3) Rarely 4) Never
- 59) Which and how much commodities do you get from the ration shop?
a) Wheat b) Rice c) Kerosene d) Other
- 60) Is the quantity of the commodities sufficient for the whole family to survive?
1) Yes 2) No
- 61) Do you have an Aadhaar card? 1) Yes 2) No
- 62) Have you received any benefits with the help of this card? 1) Yes 2) No
- 63) Are you harassed for staying here? 1) Yes 2) No
- 64) Do you have to pay bribes for staying here? 1) Yes 2) No
- 65) If yes, by / to whom? 1) Corporation officials 2) Police 3) Other
- 66) If yes, how much do you have to pay per month?

Financial stability:

- 67) Do you save? 1) Yes 2) No
- 68) If yes, where do you deposit it? 1) Bank 2) Home 3) SHGs 4) Other
- 69) Are you a member of Bishi? 1) Yes 2) No
- 70) If yes, what is the amount of money deposited as bishi per month?
- 71) Have you taken loan in past 5 years? 1) Yes 2) No
- 72) If yes, whom have you taken the loan from?
1) Relatives 2) Moneylenders 3) Shopkeepers 4) Banks (Public, Private, Co –
operatives) 5) Workplace 6) Friends 7) Neighbours 8) SHGs 9) Other
- 73) What was the amount of loan taken?
- 74) What was the interest rate charged by each one of them?
- 75) Why was the loan taken?
- 76) Have you repaid the loan? 1) Yes 2) No
- 77) Did you face any difficulty in repaying the loan? 1) Yes 2) No

- 78) If yes, how did you overcome it?
- 79) Are you or anyone from your family a member of any insurance policy?
1) Yes 2) No
- 80) If yes, which one?

Living conditions: (Food, education, health, shelter, entertainment, etc)

- 81) How many times do you have food in a day?
- 82) Do you cook? 1) Yes 2) No
- 83) If yes, where? 1) Inside house 2) Outside house
- 84) If no, what is the source of food?
- 85) Which fuel do you use for cooking? 1) LPG 2) Kerosene 3) Wood 4) Other
- 86) Is the cooking fuel easily available? 1) Yes 2) No
- 87) What is the amount of monthly expenditure incurred on cooking fuel?
- 88) Give details regarding the frequency and quantity purchased of the following food items:

Food items	Daily	Weekly	Fortnightly	Monthly	Quarterly	Rarely	Never
Food grains							
Vegetables							
Oil, spices, sugar, salt, etc.							
Fruits							
Milk (quantity in litres)							
Non – veg							

- 89) What is the amount of monthly expenditure incurred on food?
- 90) Does anyone from your family undertake fasting? 1) Yes 2) No
- 91) If yes, what is the number of days in a week / month / year for which he / she fasts?

Relation with respondent	Gender	Number of days

- 92) What is the amount of monthly expenditure incurred on clothing and footwear?
- 93) Do you send your children to school? 1) Yes 2) No
- 94) If yes, in which school? 1) Government 2) Private 3) Both

Relation with respondent	Age	Gender	Type of school	Annual expenditure

- 95) If your children go to government school, are they provided free books? 1) Yes 2) No
- 96) Are they provided free uniforms? 1) Yes 2) No
- 97) Does the school provide mid day meal to your children? 1) Yes 2) No
- 98) If your children do not go to school, what are the reasons?
- 99) Would your children like to go to school? 1) Yes 2) No
- 100) Has anyone from your family fallen ill / met with an accident in the past 5 years?
1) Yes 2) No
- 101) If yes, in which type of hospital was he / she given treatment?
1) Public 2) Private 3) Both

Relation with respondent	Age	Gender	Type of hospital	Amount of expenditure

102) Had you taken loan for the expenditure incurred on the treatment?

- 1) Yes 2) No

103) Which type of hospital do you visit in case of illness? 1) Public 2) Private 3) Both

Relation with respondent	Age	Gender	Type of hospital	Monthly expenditure

104) Do you take your children to hospital for vaccination regularly? 1) Yes 2) No

105) How do you go to the workplace? 1) Bus 2) Bicycle 3) Walking 4) Auto
5) Two wheeler 6) Other

Relation with respondent	Gender	Mode of transport

106) How much time do you take to reach the workplace? 1) More than 20 minutes
2) Between 10 to 20 minutes 3) Between 5 to 10 minutes 4) Less than 5 minutes

107) What is the amount of monthly expenditure incurred on travelling to the workplace?
.....

108) Do you face any health problems because of the type of occupation? 1) Yes 2) No

109) If yes, which ones?

110) Do you follow the practice of giving funeral feast in case of death of a family member? 1) Yes 2) No 3) Haven't faced it / Can't say

111) If yes, what is the amount of expenditure incurred on a funeral feast?

112) Had you taken loan for expenditure incurred during funeral feast? 1) Yes 2) No

- 113) What is the amount of expenditure incurred on a marriage?
- 114) Had you taken loan for expenditure incurred during marriage? 1) Yes 2) No
- 115) Has your family ever faced eviction or demolition from any locality? 1) Yes 2) No
- 116) Have you ever faced theft in any locality? 1) Yes 2) No
- 117) Do you feel insecure because of possible evictions, demolitions, thefts, etc?
1) Yes 2) No
- 118) Do you face any health problems due to staying in slums / on pavements?
1) Yes 2) No
- 119) If yes, which ones?

120) What is amount of monthly / annual expenditure incurred on entertainment and religious purposes?

Sr. No.	Source of entertainment / Religious purpose	Monthly	Annually
1	Movies		
2	Fairs		
4	Parks		
5	Temples		
6	Village		
7	Festivals		

121) Are you or anyone from your family addicted to any of the following?

Items	Relation with respondent	Yes – 1, No - 2
Alcohol		
Cigarette		
Tobacco		
<i>Mishri</i>		
Gutkha		
Other		

- 122) Are you trying to move out of this slum / pavement? 1) Yes 2) No
- 123) Would you like to resettle if provided by the government? 1) Yes 2) No
- 124) If no, why?.....

Measures for poverty reduction:

- 125) Do you receive any benefits due to various government schemes? 1) Yes 2) No
- 126) If yes, which are those schemes?
- 127) Do you receive any benefits like free meals, clothes, etc from NGO's, public, etc?
1) Yes 2) No
- 128) Are there any goods you would like to cut spending on? 1) Yes 2) No
- 129) If yes, which ones?
- 130) Is the life of your children 1) Better than you have 2) Same as you have
3) Worse than your life
- 131) What are your ambitions for your children?
- 132) What are your expectations from society or government?
-
- 133) What do you mean by poverty?
-
- 134) How do you think you can get out of poverty?
-
- 135) Is any politician helping you to get out of poverty currently? 1) Yes 2) No
- 136) If yes, in what way?
- 137) Why?
- 138) Write down the list of belongings besides the ones mentioned above:

APPENDIX D

SECC – Identification Process

Stage 1: Automatic Exclusion

For identification of poor households in urban areas, at the first instance one need to begin with automatic exclusion of households from BPL list based on indicators listed below.

1. If the number of dwelling rooms exclusively in possession of the household is 4 and above (Dwelling rooms with wall of concrete or burnt bricks or stone packed with mortar, roof of concrete or burnt bricks or machine made tiles), that household will be excluded.
2. Households possessing any one of the following assets will be excluded:
 - i. 4 wheeler motorized vehicle,
 - ii. A.C. set,
 - iii. Computer or laptop with internet.
3. Households possessing any 3 of the following assets will be excluded:
 - i. Refrigerator,
 - ii. Telephone (land-line),
 - iii. Washing machine,
 - iv. 2 wheeler motorized vehicle.

Stage 2: Automatic Inclusion

In the second stage, households facing any of the vulnerabilities listed below will be included in the BPL list automatically.

- a) **Residential Vulnerability**
 - i. If the household is 'houseless'⁶.
 - ii. If the household has a house of roof and wall made of plastic / polythene.
 - iii. If the household has a house of only one room or less with the material of wall being grass, thatch, bamboo, mud, un – burnt brick or wood and the material of roof being grass, thatch, bamboo, wood or mud.

⁶ Households who do not live in buildings or census houses (structure with roof) but live in the open on roadside, pavements, in hume pipes, under flyovers and staircases, or in the open in places of worship, mandaps, railway platforms, etc. are treated as Houseless households (The Census of India, 2001).

b) Occupational vulnerability

- i. If the household has no income from any source, then that household will be automatically included.
- ii. Any household member (including children) who is engaged in a vulnerable occupation like beggar / rag picker, domestic worker (who are actually paid wages) and sweeper / sanitation worker / mali should be automatically included.
- iii. If all earning adult members in a household are daily wagers or ir – regular wagers, then that household should be automatically included.

c) Social Vulnerability

- i. Child – headed household i.e. if there is no member of the household aged 18 years and above.
- ii. If there is no able – bodied person aged between 18 and 60 years in the household, i.e. all members of the household aged between 18 and 60 years either have a disability⁷ or are chronically ill⁸.
- iii. If all earning adult members in a household are either disabled, chronically ill or aged more than 65 years then that household should be automatically included.

It is important to reiterate that this segment of the population faces severe poverty and deprivation and hence deserve to be included in the BPL list at all costs.

Stage 3: Scoring Index

In the third stage, the remaining households will be ranked on the basis of an index score. It was decided to settle the overall cap to 12 points (maximum of 5 points for residential vulnerability, maximum of 5 points for social vulnerability and maximum of 2 points for occupational vulnerability). The household with zero score will be excluded from the BPL list. The household with the highest score will have the highest priority for inclusion in the BPL list. The indicators and their respective scores by type of vulnerability are given below.

⁷ SECC defines disability as disability in terms of seeing, hearing, speech, movement, mental retardation, mental illness, other disability, multiple disabilities.

⁸ According to SECC chronic illness include cancer, TB, leprosy, other illness.

Residential vulnerability

Sr. No.	Indicator	Score
A	Households living in houses of more than one room with roof of Grass / thatch / bamboo / wood / mud etc. and wall of grass / thatch / bamboo etc.	2
B	Households living in houses with roof of handmade tiles or G.I / metal / asbestos sheets and wall of mud/ unburnt brick or wood or stone not packed with mortar or G.I / metal / asbestos sheets	1
C	Household with non – availability of drinking water source within or near the premises	1
D	Households with main source of lighting other than electricity	1
E	Households with no exclusive water – seal latrines	1

Maximum score – 5

Social Vulnerability

Sr. No.	Indicator	Score
A	Female – headed households i.e. households where there is no adult male member or where the principal bread – earner in the family is a woman	2
B	Household with a widow below the age of 50 years as a member of that household	1
C	SC households	2
D	ST households	2
E	No literate adult	2
F	No adult in the household educated up to primary level	1
G	For every disabled / chronically ill person in the household	1

Maximum score – 5

Occupational Vulnerability

Sr. No.	Indicator	Score
A	<p>Any of the following occupations of the head of the household:</p> <ul style="list-style-type: none"> • Street vendor / cobbler / hawker • Construction / plumber / mason / labour / painter / welder / sec guard • Home – based / artisans / tailor • Transport worker / driver / conductor / helper to drivers and conductors / cart puller / rickshaw • Washermen / dhobi / chowkidar • Coolie / head – loader 	2
B	<p>Any of the following occupations of the head of the household:</p> <ul style="list-style-type: none"> • Shop – worker / assistant / helper / peon in small establishment / attendant / waiter • Electrician / mechanic / assembler / repair worker 	1
C	Households where the main source of income of the head of the household is through a weekly / daily wage earning.	2
D	Households where there is no enterprise / wage earning i.e. non-work and the earning is chiefly through any one of the following means i.e. (a) Pension; (b) Interest; and / or (c) Rent	1

Maximum score – 2

APPENDIX E					
Methodology – Residential vulnerability index: NSSO					
Dimension of vulnerability	Indicators	Criteria	Scores	Maximum score	
Residential vulnerability index	Type of structure	No structure	0	1	
		Unserviceable katcha	0.25		
		Serviceable katcha	0.50		
		Semi pucca	0.75		
		Pucca	1		
	Access to latrine facility	No latrine facility	No latrine facility	0	1
			Public latrine (without payment): others	0.09	
			Public latrine (with payment): others	0.18	
			Shared latrine: others	0.27	
			Own latrine: others	0.36	
			Public latrine (without payment): dry pit	0.45	
			Public latrine (with payment): dry pit	0.54	
			Shared latrine: dry pit	0.63	
			Own latrine: dry pit	0.72	
			Public latrine (without payment): flush / pour flush	0.81	
			Public latrine (with payment): flush / pour flush	0.90	
			Shared latrine: flush / pour flush	0.99	
			Own latrine: flush / pour flush	1	
	Type of drainage system	No drainage system	No drainage system	0	1
			Open katcha	0.25	
			Open pucca	0.50	
			Covered pucca	0.75	
			Underground	1	
	Garbage disposal	No arrangement	No arrangement	0	1
			Others	0.33	
			Arrangement by: resident(s)	0.66	
			Arrangement by: municipality / corporation	1	
Access to electricity	Neither for street lights nor for household use	Neither for street lights nor for household use	0	1	
		Yes: for street lights but not for household use	0.33		
		For household use but not for street lights	0.66		
		For street lights and household use	1		

	Major source of drinking water	Others	0	1
		Unprotected well	0.25	
		Protected well	0.50	
		Tube well / borehole	0.75	
		Tap	1	
Total				6