



## **ACHIEVING SUSTAINABLE DEVELOPMENT GOAL OF SLUM FREE INDIA**

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### **ABSTRACT**

*Housing is the basic necessity of human being and so it is important for a country's progress and peace that all its citizens enjoy a minimum housing level and are not deprived of the basic housing necessities required to enjoy a decent life. United Nation member countries are also concerned about ensuring basic and decent housing to all as about 828 million people live in slums today and the number keeps rising. Sustainable Development Goals (SDG) adopted by various countries in 2015 targets to ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums by 2030. This paper is an attempt to find the intensity of housing poverty in urban India and analyse the efforts being made to remove housing deprivations. The present system of measuring slum household in India is not uniform resulting in varying estimates leading to many inclusion and exclusion errors in implementation of government schemes. A slum household as defined by UN-HABITAT is a group of individuals living under the same roof that possess one or more of the following five deprivations: (i) insecure tenure status, (ii) poor structural quality of dwellings, (iii) no access to safe water, (iv) no access to sanitation facilities and (v) insufficient living area. As per this definition , there*

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were 58% slum households in urban India in 2008-09 with about 10% having more than 2 housing deprivations. This estimate of slum households is in variance to the 17% slum population estimated by various agencies of Government of India .The analysis shows there has not been much improvement in the living condition of these slum households over the years and especially for the more deprived households the living conditions have deteriorated. At the present rate of growth and inflation, the growth in the real income of the deprived household is not enough to uplift it to a less deprived state on its own and hence some external help either by government or other agencies , is required to improve their housing conditions. The government is implementing various schemes for improving slums but need to work in a planned manner to achieve the SDG goal in a time bound manner.

## **Introduction**

Governments, businesses and civil society together with the United Nations have started to mobilize efforts to achieve the Sustainable Development Agenda by 2030. Universal, inclusive and indivisible, the Agenda calls for action by all countries to improve the lives of people everywhere. All countries and stakeholders, acting in collaborative partnership, have pledged to achieve the Sustainable Development Goals by 2030. The 17 Sustainable Development Goals and 169 targets, which are integrated and indivisible, demonstrate the scale and ambition of this new universal Agenda, which balance the three dimensions of sustainable development: economic, social and environmental. Housing is a basic necessity to lead a decent life and to provide all citizens minimum housing conditions is a cause of concern worldwide. One of the targets of Goal 11 is to ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums by 2030.

According to UN Habitat report titled “Affordable Land & Housing in Asia”, estimates of housing need in India vary widely (UN-HABITAT 2011). A conservative estimate suggest that in 1991 the shortage of urban housing units was 5.1 million; by 2001 this had grown to 7.1 million units. This shortage comprised of actual deficit (23.5 per cent), overcrowding (33.1 percent), housing needing complete replacement(29.0 per cent) and kutcha (temporary) housing(14.4 per cent).As these housing deficit figures are only for urban areas the national (urban and rural) housing shortage is likely to be much higher. Socio economic caste census was conducted by Government in 2011-12 , in which status on housing condition was also surveyed. Some estimates currently put the housing deficit as high as 40 million units.

Further with the increasing prices of houses, it has become all the more difficult for the people to afford a house and so the role of the government becomes all the more important to provide a decent shelter conditions to its citizens. The rising housing prices throw many other challenges for Indian policymakers. One is seeing prices rising across sectors in India. The country is expected to grow further and if one sees prices rising across categories, it defeats the purpose of high growth as people are unlikely to be better off. Rising prices are going to negate whatever gains are made from rising incomes. And as incomes usually rise disproportionately with top earners earning more income than laggards, inequality widens further.

A slum household is defined by UN-HABITAT as a group of individuals living under the same roof that lack one or more (in some cities, two or more) of the following conditions: security of tenure, structural quality and durability of dwellings, access to safe water, access to sanitation facilities and sufficient living area (UN-HABITAT 2011). Thus to eliminate housing problems and deprivations of our urban population, we need to measure these indicators correctly and find out how many people are deprived of these basic housing amenities and to find the number of people classified as slum household as per this operational definition. An area based definition of slums being used presently in India defines slum as a compact settlement with a collection of poorly built tenements, mostly of temporary nature crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions in that compact area. Such an area, is considered as a “slum” if at least 20 households lived in that area. The area based definition ignores a large number of persons living in slum like conditions. NSSO survey of 2012 reveals that 85% of the HHs in slum areas(notified & Non-notified) are having pucca /semi pucca structure, about 16% of HHs living in slum areas do not have any deprivations and only 13% are having all 4 deprivations. Thus the area based definition adopted in India has many inclusion and exclusion errors. A committee on Slum Statistics/census under Government of India (Govt of India,2010) studied the various definitions of slums being adopted by various agencies and recommended criteria to decide a slum like household in its report submitted in 2010<sup>2</sup>. The definition given by the committee are in variance with the definition adopted by

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<sup>2</sup> A committee on Slum Statistics/census was constituted by Government of India to propose a uniform definition and estimate slum population in the country. The committee submitted its report in 2010. The committee recommended that any household which satisfy all the four deprivations mentioned underneath will be considered as a ‘slum like’ household (i) Predominant material of Roof of the house : roof should be made of any material other than concrete (ii) Source of drinking water not available within the premises (iii) Household have no latrine within

UNHABITAT . In addition , still old area based definition is being used for measuring slums and implementing various programmes. UNHABITAT recommended the operational definition to be used for measuring slums for MDG goal in its 2003 report “Guide to Monitoring Target 11: Improving the lives of 100 million slum dwellers. Even for SDGs, UN-Habitat has been designated as custodian agency in 8 indicators and as a supporting agency in another 5 for Goal 11 indicators. The Agency was also designated as custodian agency for indicator 1.4.2 on security of tenure along with the World Bank for Goal 1. Keeping in view the above mentioned points, slum households need to be measured using the definition recommended by UNHABITAT.

The **Research Questions** which are required to be explored for better understanding of the housing poverty status in India are:

- What is the proportion and intensity of slum household in India as per the operational definition of slums given by UNHABITAT?
- What is the intensity of deprivation among these slum households?
- Will development or market forces uplift the deprived people or we need special government intervention to deal with this problem?
- Are number of slum households & their deprivations increasing or decreasing over time?

The results section of this paper is divided into five parts. The first part gives the comparison of poverty & slums among South Asian countries. The second part describes the proportion of slum households as defined by UN-HABITAT while part 3 describes the intensity of deprivations being faced by these slum families. Part 4 gives statewise distribution of slum households and finds states with high concentration. The fifth part investigates if the market forces or economic development is enough to uplift people from slum state or some external push is needed to remove their deprivation and sixth part analyses the improvement in the condition of slum households over the years.

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the premises (iv) Household does not have closed drainage. While this definition ensures all deprivations for classifying a household as slum UNHABITAT definition declares a household as slum if atleast one deprivation is there. Thus households categorized as slum with this definition are having very poor housing conditions and is a subset of UHABITAT definition.

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## **Materials and Methods**

### **Definition of Slum**

UN-HABITAT, 2006b describes the following five Key indicators known also as ‘shelter deprivations’

- Structural quality/durability of dwellings
- Sufficient living area
- Access to improved water supply
- Access to improved sanitation
- Security of tenure

UN-HABITAT uses an operational definition of slums that uses the above mentioned five measurable indicators at household level, known also as ‘shelter deprivations’. Four of the five indicators measure physical expressions of slum conditions: non-durable housing structures; lack of water; lack of sanitation; and overcrowding. The fifth indicator, security of tenure, has to do with legality. This, however, is less easily measured, as it is often dependent on de facto or de jure rights, or lack of them. A slum household is defined by UN-HABITAT as a group of individuals living under the same roof that lack one or more (in some cities, two or more) of the following conditions: security of tenure, structural quality and durability of dwellings, access to safe water, access to sanitation facilities and sufficient living area. Information on numbers of slum dwellers and the shelter deprivations they suffer from most enables the design of interventions targeted at the most vulnerable and disadvantaged urban populations.

### **Data Used**

Comprehensive surveys on housing condition were earlier carried out by National Sample Survey Office (NSSO), a nodal organization under Government of India for conducting large scale sample surveys in the 28<sup>th</sup> round (October 1973-June 1974), 44<sup>th</sup> round (July 1988-June 1989), 49<sup>th</sup> round (January – June 1993) and 58<sup>th</sup> round (July–December 2002). An all-India survey of households was conducted in the 65<sup>th</sup> round of NSSO during July 2008 - June 2009 covering the subjects of housing condition, (ii) domestic tourism and (iii) condition of urban slums. The survey on housing condition based on data collected in the NSS 65<sup>th</sup> round covered the aspects of basic housing amenities available to the households, characteristics and conditions of the dwelling units, micro-environmental elements surrounding the dwelling units, certain

aspects of constructions including cost of construction undertaken by the households, etc. The latest housing survey was conducted in 2012. Household wise data of NSSO 65<sup>th</sup> round was used for this study.

### **Statistical methods Used**

Household level data of the Housing Condition Survey, 2008-09 of NSSO have been used for the study . The data was analysed using STATA software for this project. The household level data has many variables related to the five indicators needed, which were used to measure the five deprivation indicators. The survey data were utilised to define five shelter deprivation indicators as dummy variables (1=unimproved indicator, 0= improved indicator) and then these were utilized to calculate estimates for each shelter deprivations. The sum of these 5 shelter deprivation indicators gives “Deprivation score” of a household ranging from 0 to 5 (0 = no deprivation , 1 = one deprivation and so on) . The descriptive statistics like mean, median, quartiles etc. have been used for analysis and comparison.

### **Results & Discussions**

#### **Comparison among South Asian countries**

Southern Asia comprising of the Afganistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, reported slum population of 30.5% in urban areas . Graph 1a shows that the percent slum population is maximum in Afganistan followed by Bangladesh and Nepal. India with 24% population is having lower urban slum population among neighboring Asian countries. However , if we measure the slum using UNHABITAT definition , India would have 58% slum population which is high and would change its status among neighboring countries. UN agencies also need to have a look at the methods and definitions being used to measure this indicator to ensure correct estimate based on a uniformly adopted definition of slums.

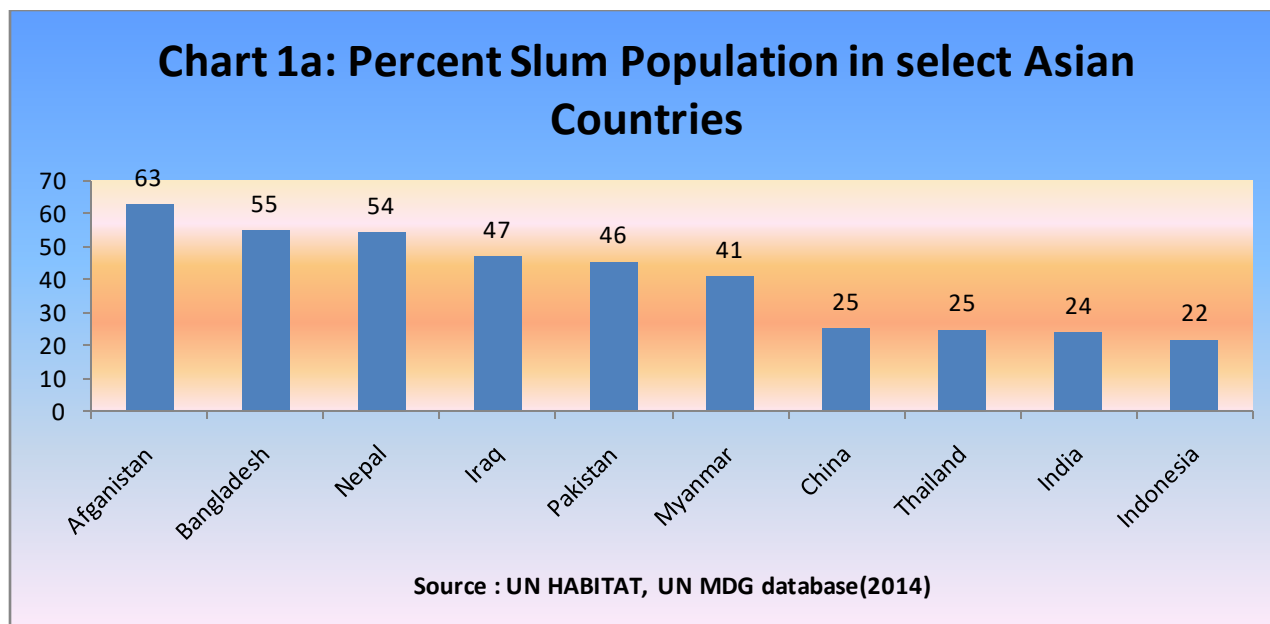


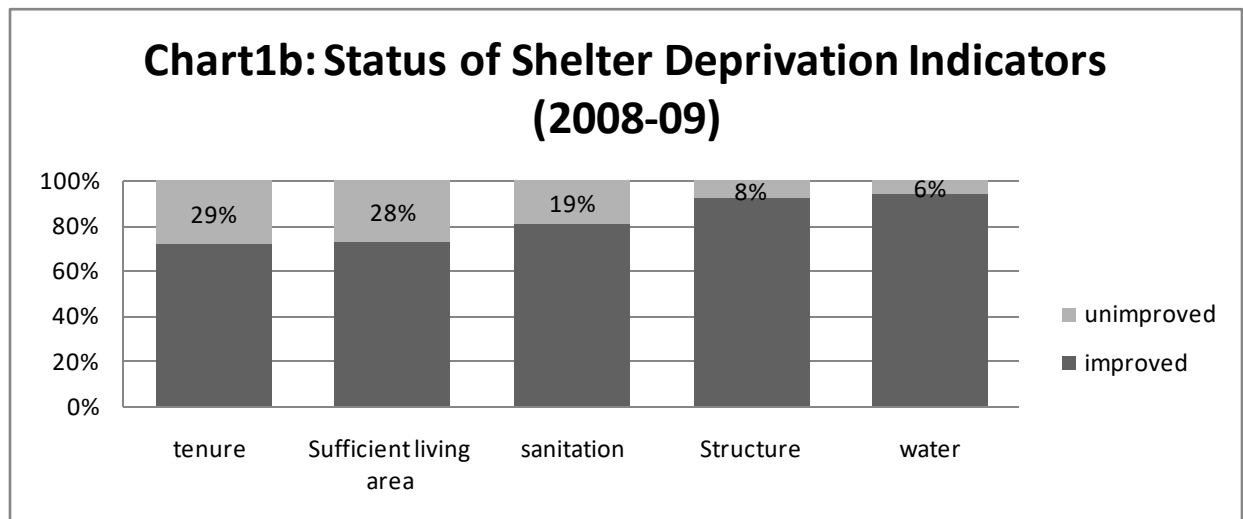
Table A: Comparison of Poverty among South Asian Countries

Area	Time Period	Population below national poverty line - Percent
India	2011	21.9
Afghanistan	2011	36
Bangladesh	2010	31.5
Fiji	2008	35.2
Nepal	2010	25.2
bhutan	2012	12
Pakistan	2013	29.5
Sri Lanka	2012	6.7

Source : Global poverty working group , World Bank

### Estimation of Slums and their distribution

Chart 1b below shows the percent of urban households with each of the five shelter deprivations. Urban India has (i) 6% of households without access to safe drinking water, (ii) 8%



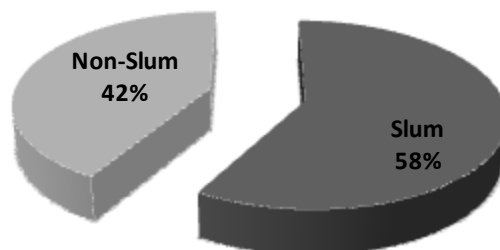
poor structures which are risky to live and hence this area needs immediate attention and action (iii) 19% not having access to improved sanitation (iv) Still 28% living in overcrowded houses with more than 3 persons sharing the same room & (v) 29% not having security of tenure. The highest percent of urban households suffer from deprivation of security of tenure followed by overcrowding. Government will have to amend laws or make some policy to tackle the problem of security of tenure so that the poor households get property rights of their dwellings.

As per the operational definition of slums given by UN-HABITAT, about 58% of the urban households in India have been categorized as slum showing a dismal picture of urban India. *With so many millions living in slums, and countless thousands joining them every day, we are indeed sitting on a social time bomb that is ticking away quietly in many overcrowded, poverty-stricken corners of a geopolitical chessboard already fraught with problems.*

*Dr. Joan Clos, Executive Director UN-HABITAT*



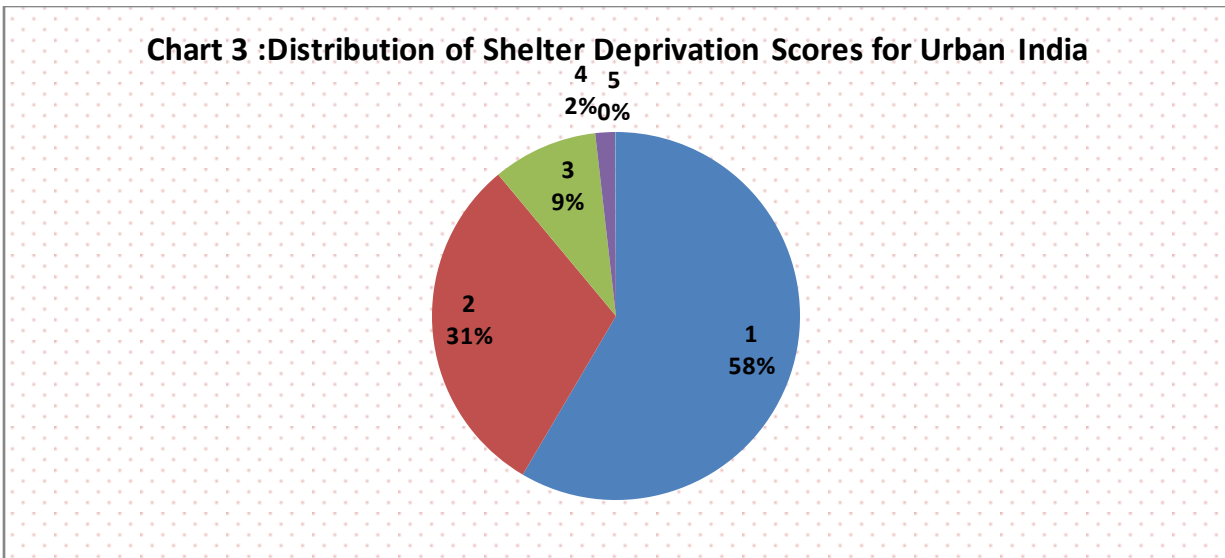
**Chart 2: Distribution of slums as per operational definition of UNHABITAT**



The census 2011 estimate (RGI,2013) of slum HHs is about 18% (13.9 million HHs) , NSSO estimates (NSSO,2012) give slum as 11%( 8.8 million HHs), Socio Economic & Caste Census (SECC) 2011 gives an estimate of 17% (13.16 million slum HHs), showing variation in estimates by different official survey agencies in India . These variations in estimates of slum population are also mentioned in the ‘Millennium Development Goals India Country Report 2015 ‘published by Ministry of Statistics and Programme Implementation, Government of India (CSO,2015) . Thus the estimates arrived by Census & NSSO are low as compared to the UNHABITAT definition due to different definition being adopted by these agencies.

### **Intensity of Deprivation among Slum households**

The majority of the deprived households or ‘slum’ households, however suffer from only one deprivation (58%) , followed by 2 deprivations (31%). Thus, about 90% of the slum households are deprived of utmost 2 deprivations which decreases the intensity of deprivation. But though the percentage of households with three deprivations and above are only about 10%, the number of households are very large (4.3 million households) requiring huge financial and human resources to improve their situation.



Cross tabulation of households living in areas classified as slum and slum households as per the operational definition shows that more than 80% of the households living in slum areas of urban India are operational slums too but they constitute only 11% of the total slum households showing that majority (89%) of the slum households live in other areas not identified as slum by the government authorities. Many Government schemes like Jawaharlal Nehru National Urban Renewal Mission (JNNURM) , National Urban Livelihood Mission (NULM) , Rajiv Awas Yojana (RAY) and Pradhan Mantri Awas Yojana are being implemented with an aim to address the concerns of housing, basic amenities, employment and skill development of the urban poor, with focus on slum dwellers (Govt of India , 2013) . These schemes are working to improve the situation of people living in slum areas declared by authorities but may be ignoring the rest 89% of the operationally slum households living outside declared slum areas .

### **Statewise distribution of Slum households**

The top 10 states with high slum population (table B) are Maharashtra(16.8%) followed by Tamil Nadu, Andhra Pradesh & Uttar Pradesh. These 4 states constitute about 50% of the slum population of India.

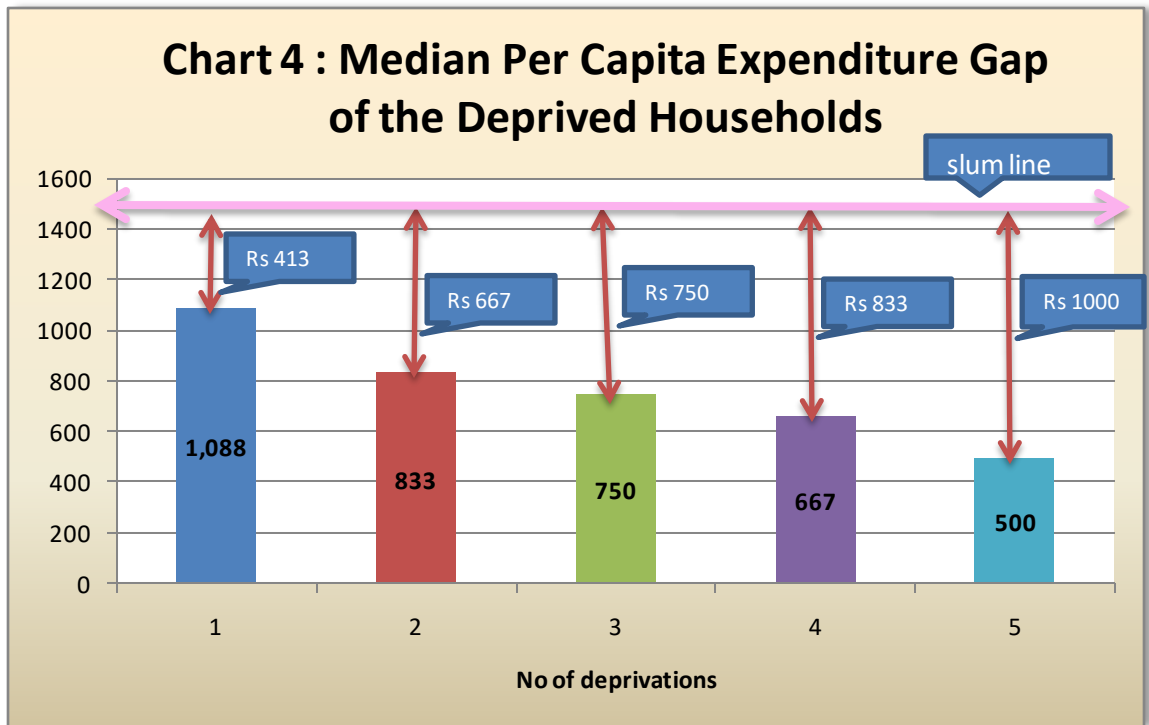
Table B:

States	Number of Slum households	Slum households as % of total slum HHs in the country
Maharashtra	6,515,340	16.8
Tamil Nadu	5,403,097	13.93
Andhra Pradesh	4,765,451	12.29
Uttar Pradesh	3,885,198	10.02
West Bengal	2,379,772	6.14
Karnataka	2,275,935	5.87
Gujarat	2,229,738	5.75
Madhya Pradesh	1,713,318	4.42
Rajasthan	1,467,819	3.79
Delhi	1,461,782	3.77
Total	-	83

### Are market forces and overall development enough to uplift slums

Chart 4 displays the gap in Per capita monthly Expenditure of slum households from the line of Shelter Deprivation or slum line. Slum line is the median MPCE (monthly per capita expenditure) of households with no shelter deprivation (shelter deprivation score=0)<sup>3</sup> which comes out to be Rs 1500 MPCE. The graph clearly shows that the gap increases as the number of deprivation increases. A household with five deprivations needs to increase his per capita expenditure by Rs 1000 or say by three times (from 500 Rs to 1500 Rs) to lift itself to no deprivation state. Similarly a household with four deprivations has to increase its per capita expenditure by Rs 833 or say by more than two times (from 667 Rs to 1500 Rs) to switch to no deprivation state. Here it needs to be considered whether the market progress or the economic progress which India is undergoing will take care of these gaps or some other targeted steps need to be taken to fill these gaps.

<sup>3</sup> The consumption expenditure has been taken as a proxy to represent income assuming that poor households do not have much savings. Per capita consumption expenditure are captured in NSSO surveys using robust sampling techniques while data on income is not captured through authentic surveys.



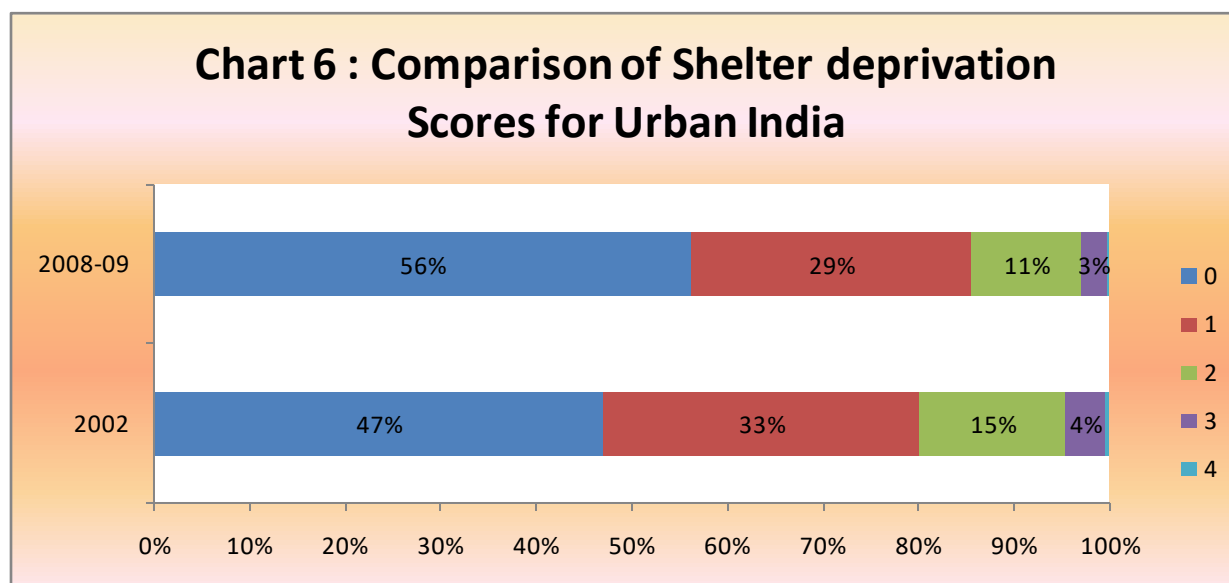
Comparing the real<sup>4</sup> increase in median per capita expenditure from 2002 to 2008-09 shows that real expenditure of the households with three or more deprivations have decreased (Chart 5 ). The median real expenditure of households with three and four deprivations decreased by 0.4% and 0.5% respectively showing stagnant income during 2008-09 from year 2002 making it more difficult for them to come out of their poor housing conditions. In contrast the real per capita expenditure of households with two or less deprivations have increased showing that they have become economically better and may be able to improve their conditions. But the growth in the income for less deprived population is not as per the required increase of 50%. At the present rate of growth and inflation, it will take more than 50 years to households with one or two deprivations to come to a status of no deprivation on their own while the households with more than two deprivations cannot even envisage lifting themselves to a “no-deprivation” state.

### **Improvement in conditions of slum households over time**

Comparison of number or percent of households with shelter deprivation (for 4 shelter deprivations as comparable data for only 4 shelter deprivation was available for the two comparing years – 2002 & 2009) over the 5 and half years shows some slow decreasing trends. The percentage populations with no shelter deprivations have increased from 47% to 56% and

<sup>4</sup> After adjusting with inflation. Consumer Price index for urban has been used to calculate the real expenditure.

households with one or two deprivations have decreased from 48% to 40%.



This improvement has mainly been due to the government efforts for improving the sanitation situation in the country. The percentage of population with improved sanitation have decreased from 27% to 19% showing that 8% of the population increased to one less deprived state due to sanitation only. Other government schemes have also helped in reducing the percentage of slum households. The proportion of urban households having access to improved water sources, increased from about 87.6% in 1992-93 to 94% in 2008-09. In other words, halving the proportion of households without access to safe drinking water sources from its 1990 level (about 34%) i.e. of the order of 17% to be reached by 2015 as per target of MDG, was achieved before 2015.

Various schemes of the government are being implemented to improve the conditions of deprived households. Jawaharlal Nehru National Urban Renewal Mission (JNNURM) aims to encourage cities to initiate steps to bring about improvement in the existing service levels in a financially sustainable manner. The JNNURM consists of two sub missions: The Urban infrastructure and Governance and the basic services to the urban poor. One of the objectives of JNNURM is to ensure that the following are achieved in the urban sector - Provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply and sanitation, and ensuring delivery of other existing universal services of the government for education, health and social security. Basic Services to Urban poor (BSUP) and Integrated Housing and Slum Development Programme (IHSDP) under JNNURM contemplates key reforms in areas of pro-poor governance. Though, a number of similar initiatives like

National Urban Livelihood Mission (NULM) , Rajiv Awas Yojana (RAY) and Pradhan Mantri Awas Yojana are being implemented to address the concerns of housing, basic amenities, employment and skill development of the urban poor, with focus on slum dwellers, challenges still remain in this Country of 1.21 billion population. Thus it seems that the progress in the housing deprivation may be mainly due to the efforts and schemes being implemented by the government. However, considering the magnitude of the problem, government needs to expand its area of schemes to other than defined slum areas, so as to bring improvement in lives of all deprived households so as to achieve its SDG target of slum free cities by 2030.

### **Conclusions & Recommendations**

As per the operational definition of slums given by UN-HABITAT, about 58% of the urban households in India have been categorized as slum showing a dismal picture of urban India. The data shows that about 10% of the slum households are deprived of 3 or more shelter deprivation showing extremely poor housing conditions. Income analysis of these poor households show that the increase in their income is not sufficient to move them out of all deprivations and so they may require some external support to give them decent housing. However the government agencies have estimated 17% of the households as slum and are working for their improvement. This is leading to exclusion of the major slum households. Though Government of India constituted a committee in 2010 to recommend methodology for measuring slum population, the definition given by the committee is in large variation with the definition adopted by UNHABITAT.

Government of India is focusing on housing through some flagship schemes like Jawaharlal Nehru National Urban Renewal Mission (JNNURM) , National Urban Livelihood Mission (NULM) , Rajiv Awas Yojana (RAY) and Pradhan Mantri Awas Yojana to address the concerns of housing, basic amenities, employment and skill development of the urban poor, with focus on slum dwellers. As SDG target is for slum free cities by 2030, more focused approach needs to be followed to achieve this objective. A uniform definition to measure slum households need to be developed in line with the UNHABITAT definition and then the progress in this area needs to be monitored regularly. A more recent survey data can also be used to measure slum based on this definition. India has a strong statistical system and so both census and NSSO large sample surveys can be used for regularly measuring the progress in reduction of slum

deprivation. Census is done every 10th year while NSSO conducts housing survey after 5 years and so both these sources can be used for measuring progress in achieving the SDG target. In addition NSSO conducts sample survey every year which can also be redesigned to capture the required indicators enabling monitoring on an yearly basis. With more than half of urban population living in slum like conditions, India needs to work in a mission mode to achieve the desired results. UN agencies may also call a workshop to discuss and make a strategy so that all member countries measure the slum uniformly as per definition and report regularly on the progress made.

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