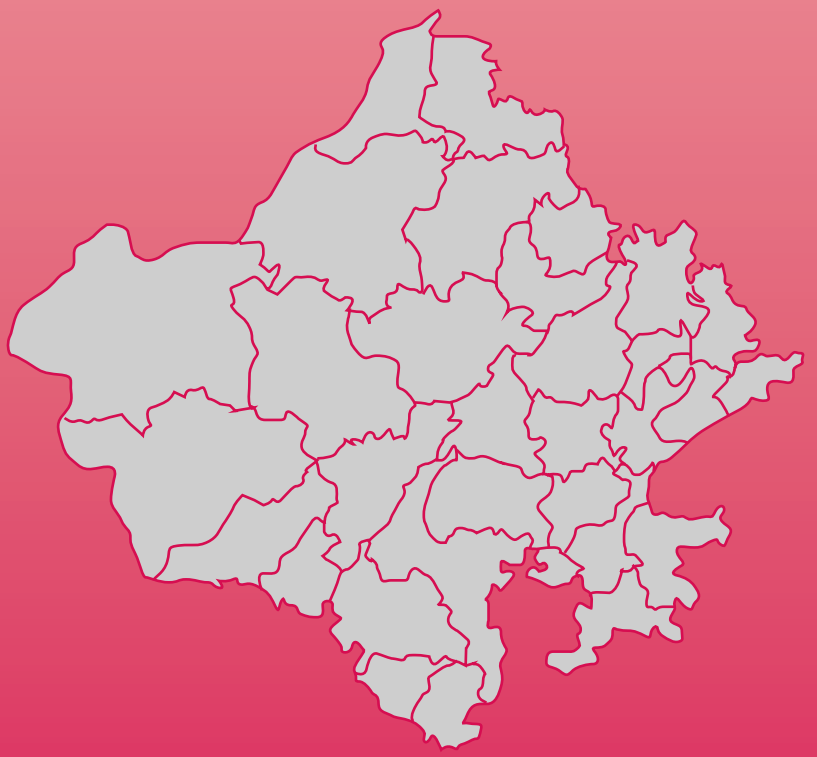
STATE OF URBAN HEALTH IN RAJASTHAN



सत्यमेव जयते

Ministry of Health and Family Welfare
Government of India

STATE OF URBAN HEALTH IN RAJASTHAN

URBAN HEALTH RESOURCE CENTRE

सत्यमेव जयते
Ministry of Health and Family Welfare
Government of India

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About the Report

This report is an attempt to bridge the information gap relating to health of the urban poor in Rajasthan. The Urban Health Resource Centre (UHRC) has been designated as the nodal technical agency for urban health by the Ministry of Health and Family Welfare, Government of India. Based on the request of the MoHFW to develop reports reflecting health scenario of urban poor for select Indian states, UHRC analyzed the National Family Health Survey (NFHS-2) data to arrive at health estimates of the urban poor and additionally undertook analyses of policies and programmes aimed at improving their health in the State. This report is part of the series of state urban health reports for generating information for the urban health programmes in the respective states.

This report has been prepared by Dr Siddharth Agarwal and Ms. Kirti Sangar for the Ministry of Health and Family Welfare.

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About UHRC

The Urban Health Resource Centre is working towards addressing health issues of the urban poor in partnership with government and civil society. It provides technical assistance, generates and disseminates urban health information to address knowledge gaps on the health of people in disadvantaged slum settlements. Demonstration and research activities conducted by UHRC at diverse cities provide evidence based inputs for strengthening programming efforts of government and non-government agencies. UHRC advocates at various platforms for enhanced attention to the health of the urban poor.

The UHRC evolved as an independent non-profit Indian organization from the USAID funded Environmental Health Project in India. The urban health activities of UHRC are sustained through continued support from USAID.

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The views expressed in this report donot necessarily reflect those of USAID.

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FOREWORD

1. The Urban population of India constitutes 285 million people and, in some quarters, it is estimated to double by 2025. Over one-fourth of this population lives in urban slums under poor and unsatisfactory environmental conditions, with high levels of susceptibility to disease and ill health. Trends in urban poverty suggest that the number of urban poor in the country is, in all, likelihood, expected to increase considerably in the years to come. Therefore, as a step in the right direction, "Urban Health" has been acknowledgment as one of the thrust areas in the Tenth Five-Year Plan, National Population Policy (NPP, 2000), National Health Policy (NHP, 2002), and Reproductive and Child Health Program (RCH-II), which is now an intrinsic component of the on-going National Rural Health Mission (NRHM). The Ministry of Health & Family Welfare (MOHFW), Government of India has already circulated detailed guidelines to all states for development of city level urban slum health project proposals, with the objective of improving access to health care services by the urban poor. Along with the development of these guidelines, the MOHFW, in partnership with the Urban Health Resource Centre (UHRC) (formerly known as the Environmental Health Project viz. EHP of USAID has developed four comprehensive sample urban health proposals for cities with differing population sizes, namely, population of around 1 lakh, 1-10 lakh, million plus and a mega city. Regional workshops, using the sample proposals and other resource material, are also being conducted, from time to time, besides State -Specific Urban Health Meetings and events to provide an impetus for the States to quickly operationalize their urban health projects. The Area Projects Division of this Ministry has been actively pursuing these endeavors with the State Governments in association with Urban Health Resource Centre.

2. Non-availability of urban poor specific data has been and continues to be a serious constraint and impediment to formulating effective policies and programmes for improving health conditions of urban slum settlements. Therefore, the UHRC-the Government of India designated nodal technical agency for the urban health program-was earlier requested to look into the matter and explore the possibilities for assembling the required urban health related data through various surveys/studies, including nationwide surveys such as NFHS, and undertake brief policy analyses wherever possible.

3. This report provides urban poor specific information on demographic indictors, health conditions and access to services by them for the State of Rajasthan. This is perhaps for the first time that data specific to health of urban poor has been generated for the states which would be found useful in better informing program

managers and also serve as benchmark for data from future surveys such as the NFHS-3. The report also gives inter-alia an overview of relevant Central and State Policies and provisions that exist for improving lives of urban slum dwellers. I am sure that the concerned State Governments would be trying their best to effectively utilize the relevant provisions under these policies to expand access of health care services to the urban poor.

4. It is hoped that the State/city governments and other urban health stakeholders in the state will benefit immensely from the analysis of policies, programmes and data on health status of the urban poor contained in this report and would effectively utilize this information for better urban health program planning and implementation. **I take this opportunity to make an appeal to the various State Governments in this country to accord the necessary and deserving high levels of priority to the critically important issue of Urban Health and take all the necessary follow up actions accordingly. While pursuing this effort, the State Government must feel free to seek and obtain any technical support they may find necessary from both the Area Projects Division of this Ministry and the Urban Health Resource Centre (UHRC), which is the Government of India designated nodal technical agency for the Urban Health Programme in the country.**

(PRASANNA HOTA)
Secretary to the Government of India

Acknowledgement

This report has been possible due to the guidance and information provided by many individuals and institutions.

We are grateful to the Ministry of Health and Family Welfare, Government of India, for providing us the opportunity to develop this report on *"Reproductive and Child Health Scenario in Urban Rajasthan"*. The vision and encouragement of Mr. P.K. Hota, Secretary (Health & Family Welfare, GOI), was the driving force behind this report. We are indebted to him and Mr. S.S. Brar, Joint Secretary, RCH program, for their continued guidance. Dr. S. K. Satpathy and Mr. T. V. Raman provided the much needed feedback and support all along.

Thanks are due to the officials of the Governent of Rajasthan namely Dr S.P.Yadav, Director, Department of Family Welfare, Dr. B.K.Bhargav, Additional Director, Department of Family Welfare and Dr O.P.Gupta, Director, Department of Medical and Health for sharing pertinent information on urban health infrastructure in Rajasthan. Dr J.P.Singhal, Deputy Director Planning and his team, Mr Prem Sharma, Statistical Assistant, Department of Family Welfare, are acknowledged for spending time and effort to locate urban specific information. Thanks are due to Mr. Sharad Bhargav, RCH Consultant for sharing experiences of implementation of urban health project in Jaipur.

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Abbreviations and Acronyms

ADS	Area Development Society
ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
AWW	Angan Wadi Worker
AUWSP	Accelerated Urban Water Supply Programme
BCG	Bacille Calmette Guerin
BPL	Below Poverty Line
CARE	Cooperative Assistance for Relief Everywhere
CBO	Community Based Organization
CDS	Community Development Society
CHC	Community Health Centre
CMES	Chief Minister's Employment Schemes
DHFW	Department of Health and Family Welfare
DHS	Demographic Health Survey
DLHS	District Level Household Survey
DPT	Diphtheria Pertussis Tetanus
EAG	Empowered Action Group
EHP	Environmental Health Project
GOI	Government of India
HP	Health Post
ICDS	Integrated Child Development Services
IDSMT	Integrated Development of Small and Medium Towns
IFA	Iron Folic Acid
IHSDP	Integrated Hosing and Slum Development Program
IMR	Infant Mortality Rate
ISSA	Integrated System for Survey Analysis
IUD	Intra Uterine Device
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
MCH	Maternal and Child Health
MMR	Maternal Mortality Ratio
MOHFW	Ministry of Health and Family Welfare
MPW	Multi Purpose Worker
NFHS	National Family Health Survey
NGO	Non Government Organization
NHG	Neighbourhood Groups
NHP	National Health Policy
NPP	National Population Policy
NRHM	National Rural Health Mission
NSDP	National Slum Development Program
OBC	Other Backward Classes
OPV	Oral Polio Vaccine
ORS	Oral Rehydration Salts
PHC	Primary Health Centre
PPC	Post Partum Centre
PPW	Proportion Possession Weighting
PSI	Population Services International
RCH	Reproductive and Child Health

RMP	Registered Medical Practitioner
RUHHP	Rajasthan Urban Housing and Habitat Policy
RUIDP	Rajasthan Urban Infrastructure Development Project
SC	Scheduled Caste
SD	Standard Deviation
SHG	Self Help Group
SIFPSA	State Innovations in Family Planning Services Agency
SJSRY	Swarna Jayanti Shahari Rozgar Yojana
SLI	Standard of Living Index
ST	Scheduled Tribe
SUDA	State Urban Development Authority
TFR	Total Fertility Rate
TT	Tetanus Toxoid
UFWC	Urban Family Welfare Center
UHC	Urban Health Centre
UIDSSMT	Urban Infrastructure Development Scheme for Small and Medium Towns
URIF	Urban Reforms Incentive Fund
UNICEF	United Nations Children's Fund
U5MR	Under Five Mortality Rate
VAMBAY	Valmiki Ambedkar Awas Yojana

Executive Summary

India's Urbanization and Poverty Scenario

Urban migration and simultaneous natural growth of urban population have resulted in rapid proliferation of urban agglomerations. The current urban population of India, 285 million is estimated to double and reach 576 million by 2030. Percentage decadal growth in urban areas was 31.2 percent vis-à-vis 17.9 percent in rural areas between 1991 and 2001. Over one-fourth of the urban population of India today lives in urban slums under inhumane conditions with increased susceptibility to disease and ill health. Trends in urban poverty suggest that the number of urban poor will increase considerably in future in the absence of a well-planned, long-term intervention strategy.

Importance of Focusing on Health of Urban Poor

The urban poor suffer from adverse health outcomes that are not reflected in commonly available health statistics. Most sources of health information which provide for urban and rural disaggregation mask the inequalities which exist within the various economic groups. For instance, the under five mortality rates among the urban poor in India (101.3) are nearly three times higher than that of the urban high income groups (34.4). As per the NFHS 2 data, only 43 percent of urban poor children 12-23 months of age are fully immunized by one year of age. The proportion of severely under-weight children among the urban poor (23 percent) is twice that of the urban average (11.6 percent) and five times (4.5 percent) more than that of urban high income group.

Why are the Urban Poor Vulnerable ?

The poor in urban areas are vulnerable to health risks as a consequence of living in a degraded environment, inaccessibility to health care, irregular employment, widespread illiteracy and lack of negotiating capacity to demand better services. A significant proportion of slums are not listed in official records and therefore remain outside the purview of public services including health which further accentuate their vulnerability. As the vulnerability of urban poor is influenced by a variety of factors, the variation in these factors results in some slums being more vulnerable than others. It is essential that development programmes recognize the differential vulnerability of slums so that context specific approaches and effective targeting of resources to the most vulnerable is made possible.

Government of India's Focus on Health of the Urban Poor

National Health Policy (NHP) 2002 envisages setting up of an organized two-tier Urban Primary Health Care structure. Although, the urban poor find a mention in National Population Policy (NPP) 2000, NRHM/RCH II and Tenth Five Year Plan that endorse upgradation and improvement approach for all slums, the infrastructure and programs for delivering RCH services to urban poor are inadequate. The Government of India in the NRHM/ RCH II envisages a specific focus on lesser developed states such as Rajasthan for the delivery of RCH services with a focus on urban poor. The Ministry of Health and Family Welfare, Government of India has formulated guidelines for development of city level urban slum health projects which provides a mechanism for urban health delivery and its overall management.

Rajasthan– Urban Poverty, Policies and Reproductive and Child Health services

Rajasthan is one of the least developed states of India

Rajasthan, with a geographical area of 3,42,239 square kilometers is India's largest State. It is home to 56.5 million persons. Rajasthan has not experienced improvements but worsened in overall health indicators over the last decade. The Infant Mortality Rate (IMR) and Under 5Mortality Rate (U5MR) of Rajasthan is at 80.4 and 114.9 respectively (NFHS 2) showing an increase compared to the previous NFHS data (1992) when the IMR was 72.6 and 102.6. IMR in Rajasthan is 18 percent higher than the corresponding all India rate of 68/1000 live births and U5MR is 21 percent higher than the corrresponding all India rate of 95/1000 live births. According to Census 2001, the urban population comprises 23.3 percent of the total population i.e almost 13.2 million persons. One-fifth of this urban population lives below the poverty line. The maternal child health indicators are far worse for the urban poor than the state averages.

Health related policies and provisions for urban poor

Government of Rajasthan has formulated its own policy level mandate related to urban RCH. The State Population Policy specifically affirms components of urban programme management strategy. Besides that, are several State specific and Central policies and schemes for urban poor in Rajasthan for housing improvement (IHSDP, Draft-RUHHP , Night Shelter for Urban Shelterless), environmental improvement (JNNURM Sub-mission on Basic Services for Urban Poor, RUIDP, Low Cost Sanitation Scheme, Urban Malaria Scheme) employment generation (SYSRY, CMES), women empowerment (Rajasthan Women's Policy, Balika Samridhi Yojna) and for strengthening urban local bodies (74th Ammendment, URIF, RUIDP, UIDSSMT). Though a policy level mandate exists, the inadequate allocation and / or inadeqaute utilization of resources along with multiplicity of departments at the city, hampers the efforts for improving the conditions of the urban poor.

RCH infrastructure and services focussing on urban poor

In urban areas of Rajasthan, primary level health services are available through the Health Posts, Urban Family Welfare Centers and Mother and Child Welfare Centers. Curative services are available through the urban dispensaries and Aid posts. Few Urban dispensaries have been upgraded to include outreach facilities and renamed Urban PHCs. Access and availability of health services to the urban poor is however restricted. The distribution of number of public health infrastructure is sufficient in a few cities such as Jaipur, Bikaner, Jodhpur and Ajmer. In other cities, the health infrastructure remains grossly inadequate to cater to the urban population or the urban poor. For instance, cities like Kota, Udaipur, Kishangarh, Pali have a high total population but meager or no public health infrastructure. Health Posts initally planned for a population of 50,000 currently serve a larger population in most cities of Rajasthan. The location of health centre is often not in proximity of slums.This severely restricts its utilization by the intended. UFWCs and MCWCs are not independent entities, but are often attached to an Urban PHC / District Hospital / Female Hospital limiting their utilization. The situation gets compounded due to lack of adequate staff mainly doctors and ANMs. High population- staff ratio results in poor service coverage with some areas being underserved or unserved.

Reproductive and Child Health conditions among urban poor in Rajasthan

Commonly available data including NFHS on health conditions in Rajasthan provides for only rural – urban comparisons. Urban averages mask the inequalities that exist within different urban economic groups and the real plight of the urban poor does not comes into light. NFHS 2 (1998-99) data available for the state of Rajasthan was

re-analyzed according to Standard of Living Index (SLI), an asset-based indicator developed by International Institute of Population Sciences - ORC MACRO International, to understand the comparative health status of urban poor. This report uses the 'low SLI' segment of urban population as representative of 'urban poor'.

The inadequacy in availability and use of health infrastructure coupled with poor economic and environmental conditions severely restricts the chances of child's survival among urban poor. IMR among the urban poor in Rajasthan at 98.2 per 1000 live births is much higher than the urban average of 68.9. The U5MR is 162.3 among the urban poor as compared to the urban average of 93.3. Domiciliary delivery is still the norm with 79 per cent of the deliveries taking place at home among the urban poor. Only 26.2 per cent of the deliveries were attended by trained personnel. This situation is further worsened by the fact that only 7.4 per cent of the children aged 12-23 months are completely immunized. Dropout and left out rates are far higher among urban poor households (71 per cent and 17.4 percent respectively), in comparison to the overall urban average (39.1 per cent and 21.3 per cent respectively).

Encouraging use of spacing methods and adoption of permanent methods after 2 children is necessary if the target of replacement level fertility is to be reached. The Total fertility rate (TFR) among urban poor is 4.2 as compared to the urban average of 3. Bringing the TFR to replacement level appears a herculean task with the spacing method usage of only 2.5 percent. Usage of permanent method (female sterilization) is also low at 25percent, besides most of these women would have already had more than 3-4 pregnancies. More than 75 per cent of the mothers among urban poor do not received the recommended 3 or more antenatal check ups that also serve as important contact points to disseminate RCH related information including family planning.

Further evidence of the rich-poor divide for RCH services and lack of awareness in urban areas are apparent as the proportion of children from poor urban families who are severely underweight (below 3 SD) is nearly four times (27.1 per cent) as compared to children from rich families (7.2 per cent). Prevalence of anemia was found to be higher among children belonging to this category. Only 2.4 per cent of the newborns in urban poor households were breastfed within one hour of birth while 75 per cent of the children do not receive complementary foods by 7-9 months of age among the urban poor. The health conditions further deteriorate due to poor environmental conditions. Among the urban poor households in Rajasthan majority (81 per cent) donot have access to a sanitary facility or piped water supply at household level (87 per cent).

Conclusion

The current scenario in Rajasthan indicates that one out of every five urban dwellers is poor. The real health conditions and service coverage among this section of the population is masked by the urban average figures. The urban public health infrastructure on which the poor are most dependent is woefully inadequate. The implementation of pro-poor policies needs to be vitalized to ensure the reach of these benefits to the poor. Reanalysis of NFHS-2 (1998-99) highlights the disparities across economic groups in Rajasthan which necessitate rethinking on allocation of resources and targeting the urban underserved. Following the guidelines for development of city level slum health projects, by MOHFW,GOI, there is a need to augment infrastructure and services to ensure primary health care delivery center for 50,000 population and an ANM for 12,000-15,000 population.

In order to strengthen services and improve the health of the urban poor, the following measures are suggested:

1. Augment urban health infrastructure and services in order to increase access of primary health care services to the urban poor. Partnerships with the private sector is an effective way to improve access to health services in urban slums
2. Improve functional coordination among stakeholders (like health, ICDS, urban local bodies, water supply, sanitation, slum development, public distribution system, private health service providers etc). A task-force at the city level comprising officials of different departments who review different programmes can bring in synergy and improve efficacy of the various ongoing parallel programmes.
3. Improve capacity of Municipalities and Municipal Corporations to manage health services better. This can be achieved through training programs which expose the elected representatives and officials to the various policy and program provisions which can be leveraged for improving the health of slum dwellers. Exposure visits to successfully managed urban health programs can also help urban local bodies to initiate similar programs in their cities.
4. Recognize that all slums are not alike and the need to focus on the most vulnerable. It is essential that all slums are listed and assessed for their health vulnerability. Slum lists should be periodically updated as rapid urbanization results in the creation of new slum clusters regularly.
5. Migratory trends need to be considered while planning RCH services in urban areas. Specific communication strategies should be designed for such populations and health providers should be mandated to provide services to temporary and new residents in addition to population in their service records.
6. Strengthen community networks such as self-help groups and their linkages with health providers. Such groups can generate awareness, increase demand and negotiate for better services.

SECTION 1

Health of the Urban Poor: India's emerging priority

SECTION 1
Health of the Urban Poor: India's emerging priority

1.1 India's Urbanisation and Urban Poverty

Urbanization is fast becoming the defining process in shaping the course of social transformation and ensuing development concerns in India. Out of the total population of 1027 million (as on 1st March, 2001), 742 million lived in rural areas and 285 million in urban* areas. The percentage decadal growth of population in rural and urban areas during the decade was 17.9 and 31.2 percent respectively[1]. An analysis of population growth trends between 1991 and 2001 shows that while India grew at an average annual growth rate of 2 percent, urban India grew at 3 percent, mega cities at 4 percent and slum populations rose by 5 percent [2]. If urban India is considered a separate country, it would be fourth largest in the world after China, India and the United States. Population projections by the United Nations indicate that by 2030, India's urban population will grow to 576 million and constitute 40 per cent of the total population[3]. In 2001, there were 35 cities with million plus population and 393 cities above 100,000 population. It is estimated that the number of million plus cities in India will grow to 51 by 2011 and 75 by 2021. In addition there would be 500 large cities with population above 100,000 by 2021[4].

Urban poor constitute one- fourth of India's urban population.

The urban advantage evades the 67 million urban poor.

About one-fourth (24 percent) of the urban population of India is poor i.e. their expenditure on consumption goods is less than the poverty line of Rs 454 per month[5]. The benefits of urbanization have eluded this burgeoning 67 million[5] urban poor population, most of whom live in slums. This rapid and unplanned urbanization and simultaneous growth of urban population in the limited living spaces has a visible impact on the quality of life of the slum dwellers of the city. Existing services and infrastructure is hard-pressed to cater to this growing urban population and the urban poor bear the brunt of this burden. When infrastructure and services are lacking, urban settlements are amongst the world's most life threatening environments[6].

** Census of India defines urban areas as a) all areas with a municipality, corporation, cantonment board or notified area committee etc b) a place satisfying the following three criteria simultaneously: a minimum population of 5,000; at least 75 percent of male working population engaged in non agricultural pursuits and a density of population of at least 400 per sq. km. (1000 per sq. mile)*

1 Registrar General of India. 2001. *Primary Census Abstract. Total Population: Table A-5*. New Delhi: Registrar General and Census Commissioner.
2 Chatterjee G. 2002. Consensus versus confrontation: Local authorities and State Agencies form Partnerships with Urban Poor Communities in Mumbai. Nairobi : UNHABITAT.
3 United Nations, 2002. *World Urbanization Prospects : The 2001 Revision.* New York : The United Nations.
4 Sivaramakrishnan K and Singh B (2001). Urbanization, planningcommission.nic.in/ reports/sereport/ser/ vision2025/urban.doc, accessed on 21.09.04.
5 National Sample Survey Organization. 2001. Household Consumer Expenditure in India 1999-2000 - Key results. New Delhi : NSSO, Ministry of Statistics and Programme Implementation.
6. WHO. 1999. Creating healthy cities in 21st century, In David Satterthwaite (eds.). *The Earthscan Reader on Sustainable Cities*, London Earthscan Publications.

The eight EAG States are home to 43 percent of India's urban poor.

The eight large and less developed states of India - Uttar Pradesh, Madhya Pradesh, Rajasthan, Bihar, Orissa, Jharkhand, Chhatisgarh and Uttaranchal constitute 32 percent of the total urban population and home to 43 percent of India's urban poors. Thus, 28 million or almost one third of the urban population is poor in these States. It is no surprise that these less developed states perform much below the urban averages for various child health indicators at the national level as detailed in later sections, emphasising the need to prioritize them in urban health programs as well.

1.2 Importance of Focusing on Health of the Urban Poor

The urban poor suffer from adverse health outcomes that are not reflected in commonly available health statistics. Most sources of health information which provide for urban and rural disaggregation mask the inequalities which exist within the various economic groups. For instance, the under five mortality rates among the urban poor in India (101.3) are nearly three times higher than that of the urban high income groups (34.4)[7]. As per the NFHS 2 data, only 43 percent of urban poor children 12-23 months of age are fully immunized. The proportion of severely under-weight children among the urban poor (23 percent) is five times more than that of urban high income group (4.5 percent)[7].

The poor health conditions among slum dwellers who comprise a large section of our growing cities need to be addressed on a priority basis. Owing to rapid growth, the already underserved urban poor are at risk of becoming even more underserved as the population growth outstrips the meager services that exist. The health and productivity of this section of the population are vital as they play an imperative role in the economic activities of cities which in turn contribute to the economic growth of the country.

1.3 Why are the Urban Poor Vulnerable

'Vulnerability' can be defined as a situation where the people are more prone to face negative situations and there is a higher likelihood of succumbing to them[8]. With reference to health, it implies a situation with / leading to increased morbidity and mortality. Factors which contribute to such a state may or may not be within the group's control.

Health vulnerability is multi-dimensional and complex in nature. In order understand the health vulnerability for poor in urban areas, one needs to understand the links between urbanization, a degraded environment, inaccessibility to health care and urban poverty

7 USAID-EHP. 2003. Standard of Living Index based reanalysis of National Family Health Survey (NFHS 2), India 1998-1999, International Institute for Population Sciences (IIPS) and ORC-Macro.

8 Loughhead S et al.. 2001. *Urban Poverty and Vulnerability in India*, New Delhi : Department for International Development (DfID).

Various studies have developed different criteria for health vulnerability in different ways [6, 9 ,10] . An approach for assessing health vulnerability of urban slums has been developed based on the factors mentioned in Table 1[11] ..

Table 1: Criteria for health vulnerability assessment in slums

Factors	Situation Affecting Health Vulnerability in Slums
Economic conditions	Irregular employment, poor access to fair credit
Social conditions	Widespread alcoholism, gender inequity, poor educational status
Living environment	Poor access to water supply and sanitation facilities, overcrowding, poor housing and insecure land tenure
Access and use of public health services	Lack of access to ICDS and primary health care services, poor quality of health services
Hidden / Unlisted Slums	Many slums are not notified in official records and remain outside the purview of civic and health services
Rapid mobility	Temporary migrants denied access to health services and other development programs, difficulty in tracking and providing follow-up health services to recent migrants
Health and disease	High prevalence of diarrhea, fever and cough among children
Negotiating Capacity	Lack of organized community collective efforts in slums

All Slums are not Equally Vunerable

The variation on factors that influence vulnerability results in some slums being more vulnerable than others.

An aspect that severly restricts the reach of health and development activities in several slums and impacts vulnerability is the fact that slum statistics donot get updated. This doesnot bring to fore several hidden and missing slum pockets where the urban poor reside. As an example, in indore, Madhya Pradesh, there were 438 officially recognised slums based on the lists from the Mayor's and Municipal office. Through a process of mapping and categorization, an additional 101 slums were identified in a study conducted by EHP[11] (now UHRC). Of these total 539 slums,157 were categorised as vulnerable; many of which were not on the government's official list.

Missing slums

In Indore, Madhya Pradesh, there were 438 officially recognized slums (based on list from the Mayor's and Municipal office). Through a process of mapping and categorization, an additional 101 slums were identified during an assessment conducted by EHP.

In the city of Agra, as per the list of the DUDA , there were 215 slums with an estimated population of 3 lakhs. The vulnerability assessment of the underserved population done by the EHP for developing the Urban Health Project estimated the number of slums to be 393 with an estimated population of approximately 8 lakhs.

9 Cleene S, 1999. Community Learning Information Communication Case Study: Kerala Community Development Society. London : GHK Research and Training.

10 Plummer J, Ayamnuang N. 2001. *Poverty in Vientiane: A Participatory Poverty Assessment.* London : GHK International.

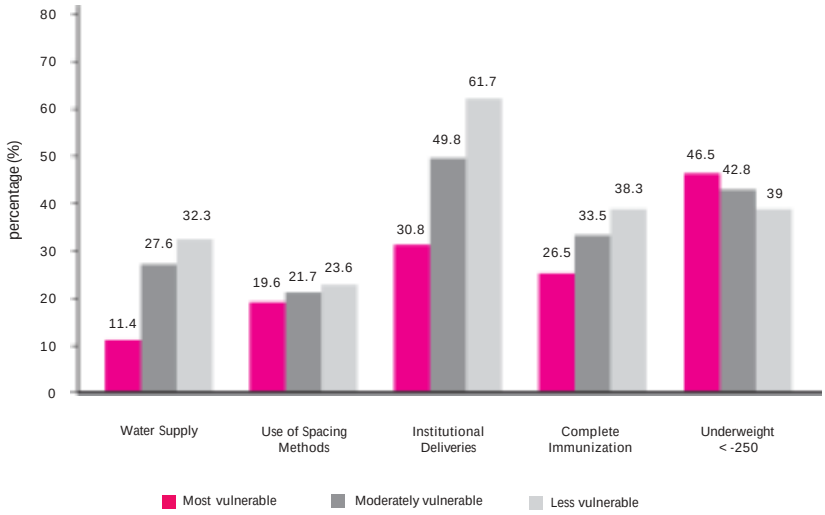
11 Taneja S and Agarwal S. 2004. *Situational Analysis for guiding USAID/EHP India's Technical Assistance Efforts in Indore, Madhya Pradesh, India,* Environment Health Project Activity Report 133. Washington D.C : Environmental Health Project.

All slums are not equally vunlerable and it is essential to focus on the most vulnerable

In a maternal and child health survey conducted in the slums of Indore by EHP(now UHRC), it emerged that the health of the residents of most vulnerable slums is much worse than those of other slums. For instance, while only 11.4 per cent of the residents of most vulnerable slums have individual piped water supply, the corresponding figure in less vulnerable slums was 32.3. In most vulnerable slums, only 26.5 percent of the children were completely immunized as against 38.3 percent in less vulnerable slums of Indore (Fig.1).

It is essential that development programs recognize the differential vulnerability of slums so that context specific approaches and effective targeting of resources to the most needy is made possible.

Fig.1: Health and Basic Services Availability in Slums of Indore by Vulnerability



Source: USAID-EHP (now UHRC) 2004.Maternal and Child Health Survey, Indore. New Delhi: Environmental Health Project

1.4 Government of India's Focus on Health for the Urban Poor

The Government has acknowledged the non-availability as well as substantial under utilization of available primary health care facilities in urban areas along with an overcrowding at secondary and tertiary care centers.

MCH services to the urban poor have been recognized as important thrust area by the government under the National Population Policy-2000, National Health Policy-200[12] , NRHM/RCH II[13] and the Tenth Five Year Plan[14] .The 2010 goals of the NPP 2000, which are to ensure universal immunization,

12 Ministry of Health and Family Welfare (MOHFW). 2002. National Health Policy, 2002. New Delhi: Department of Health, MOHFW.
13 Ministry of Health and Family Welfare.2005. Reference Material for NRHM. New Delhi, MOHFW.
14 Planning Commission. 2002. Tenth Five Year Plan, 2002-2007, New Delhi : Planning Commission, Government of India.

intensify neonatal care, facilitate 80 per cent institutional deliveries, reduce IMR from 68 per 1000 births to 30 per 1000 births and MMR to 100/ 100,000, envisaged that a comprehensive urban health care strategy be finalised for achieving access to all in urban areas, especially urban slums. NHP-2002 envisages setting up of an organized two-tier Urban Primary Health Care structure.The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) launched in December 2005, has a sub-mission on basic services for urban poor which addresses among others health, water supply and sanitation services in urban poor habitations in sixty cities in India[15] . The National Rural Health Mission (NRHM) (2005-2012) launched by the Government of India throughout the country, to provide comprehensive integrated healthcare, has constituted a Task Group on Urban Health to recommend strategies for urban poor[13].

The second phase of the Reproductive and Child Health Programme (RCH II), a component of the NRHM, seeks to improve the health status of urban poor by ensuring accessibility and availability of primary health care and family welfare services to them. The program envisages focusing on backward states such as Rajasthan (which are performing poorly on maternal and child health indicators) for the delivery of RCH services including particular focus on urban poor. Pursuing the cause of health improvement among the urban poor, the MOHFW has encouraged state governments to identify priority districts and initiate the urban health project to augment infrastructure development and community provider linkages. The MOHFW, Government of India has formulated guidelines for development of city level urban slum health projects which provides a mechanism for urban health delivery and its overall management. The guidelines suggest provision of a primary health care delivery center for every 50,000 urban populations, manned with 3-4 ANMs[16].

RCH II Urban Slum Health Projects are to be prepared for cities / towns having population of more than one lakh. In smaller towns, the requisite focused interventions for urban poor including slum dwellers will be incorporated in the District plan. Health Plan for other vulnerable communities such as SCs/STs and the poor living in urban areas (not covered by Urban and Tribal Projects) will be a part of district health plan[17].

NRHM / RCH II places special emphasis on the health of the urban poor.

The MOHFW has encouraged state governments to identify priority districts and initiate the urban health projects under NRHM / RCH II.

15 Ministry of Urban Emplyment and Poverty Alleviation.2005.Guidelines for Projects on Basic Services to the Urban Poorto be taken under Jawaharlal Nehru Nation Urban Renewal Mission.Available at URL: http://muepa.nic.in/programs/bsup.pdf

16 Ministry of Health and Family Welfare (MOHFW). 2004. Guidelines for Development of City level Urban Slum Health Projects. New Delhi: Department of Family Welfare, MOHFW.

17 Ministry of Health and Family Welfare. 2004. Project Implementation Plan for Vulnerable Groups under RCH II. New Delhi: Department of Family Welfare, MOHFW, Government of India

KEY MESSAGES

- 28 percent of India's population comprising 285 million people live in urban areas and this figure is expected to rise to 40 percent (576 million) by 2030.
- The "urban advantage" evades the urban poor who constitute one fourth (67 million) of the urban population; many dwelling in slums or slum like settlements.
- Slum lists do not get updated, and there are vast hidden and missing slum pockets (where a large section of urban poor reside) that do not find a mention in the averages.
- The under 5 mortality rates are nearly three times higher among the urban poor compared to the urban high income groups.
- Identifying, listing and plotting of all slums including unlisted and hidden clusters is important to ensure equity and reach to hitherto underserved clusters.
- Assessment of slums on the basis of factors that affect health vulnerability: socio-economic and living conditions, accessibility to public health services, and existence of organized community groups amongst others, is crucial to determine differential needs and identifying the most vulnerable.
- The MOHFW, Government of India has recently formulated guidelines for development of city level urban slum health projects which provide a mechanism for urban health delivery and its overall management.
- NRHM/RCH II envisages focusing on less developed states such as Rajasthan.

SECTION 2

Urban Poverty, Policies and RCH Services in Rajasthan

Section 2

Urban Poverty, Policies and RCH Services in Rajasthan

2.1 Rajasthan- The Urban Poor Scenario

Rajasthan, the largest Indian State in terms of area (3,42,239 square kilometers), is home to 56.5 million persons. The population of the state grew by 28.33 per cent during the decade 1991-2001 which is higher than the national average of 21.34 per cent. Nearly one-fourth (23.4 per cent) of the population comprising 13.2 million persons live in the 222 towns and cities [1].

One out of every four people in Rajasthan is an urban resident.

The level of urbanization in Rajasthan is lower than India's overall level of 27.8 per cent. However, the proportion of Rajasthan's total population living in urban areas has been consistently increasing from 18 per cent in 1971, 21 per cent in 1981 to 23 per cent in 1991. The urban population of Rajasthan grew at a rate as high as 31.5 per cent during the decade 1991-2001. It is projected that by 2026, 24.2 million persons comprising 29 per cent of the state's population would be residing in urban areas[2]. As in the rest of the country, urbanization in Rajasthan is top-heavy i.e., a few large cities comprise a large proportion of the urban population. Jaipur, the only million-plus city of Rajasthan comprises nearly one-fifth (17.4 percent) of the urban population of the state and 17 Class I cities, including Jaipur, account for a more than a half (55 percent). The remaining 205 towns are inhabited by the other 45 percent of the state's urban population. Jaipur, Kota and Ajmer are most urbanized districts of the State. Most of the western and southern parts of the

1 Registrar General of India. 2001. *Primary Census Abstract*. New Delhi : Registrar General and Census Commissioner.

2 Directorate of Economics and Statistics. 2002. *Statistical Abstract Rajasthan*, Jaipur: Directorate of Economics and Statistics

One-fifth of the urban population comprising 26.78 lakh persons in Rajasthan is living below poverty line.

state, comprising the Great Indian desert, are sparsely urbanized with less than 10 per cent of the population of these districts residing in urban areas.

Large magnitude of the urban poor

In absolute terms, the number of urban poor in 1999-2000 was 26.78 lakh constituting about 20 percent of the total urban population of the State. However, these estimates do not reflect the true magnitude of urban poverty because of "un-accounted" for, unrecognized squatter settlements and other populations residing on pavements, construction sites, fringes etc[3,4,5] . Table 2 shows that the percentage of urban poverty in Rajasthan is higher than rural poverty.

Table 2: Poverty Rates in Rajasthan 1999 - 2000

Region	Number of Poor (in Lakhs)	1999-2000 (% of Poor Population
Rajasthan	81.83	15.28
Rural	55.06	13.74
Urban	26.78	19.85

Source: Planning Commission. 2001. National Human Development Report, 2001, New Delhi : Planning Commission, Government of India.

The rate of decline of urban poverty in the state is slower than that of rural poverty[6] .The state is characterised by scanty and irregular rainfall leading to frequent drought which has a significant bearing for poverty in Rajasthan. During periods of such crisis and under employment, migration to the cities is widespread. The higher urban poverty rates could be attributed to some extent to this phenomenon in addition to the usual migration intended for employment in mining, quarrying, construction (the major absorbers of rural surplus). In Rajasthan, the migration rates from rural areas are among the highest of all Indian states[7].

Not only does the state has a heavy burden of urban poverty, it also ranks low in terms of other social indicators among the states in the country. As per the National Human Development Report, 2001 released by the Planning Commission, the Human Development Index (HDI) for urban Rajasthan was ranked 27th among the urban population of 32 states and union territories of India (1991). The position of urban Rajasthan in terms of human development has not improved since 1981.The Human Poverty Index (1991) of urban Rajasthan is high, the State is ranked 29th among all Indian states[8].

Poverty in Select Cities of Rajasthan

Table 3 shows that there is a wide variation in the proportion of slum population between cities of the state.

3 Department of Medical Health and Family Welfare, Government of Uttaranchal. 2003. Five Year Urban Health Proposal (Under RCH II) for Dehradun. Dehradun: Government of Uttaranchal.

4 Taneja S, Agarwal S. 2004. Situational Analysis for Guiding USAID/India and EHP/India: Technical Assistance Efforts in Indore, Madhya Pradesh, India. Arlington VA: Environmental Health Project.

5 Health and Family Welfare Department, Government of West Bengal. 2004. Five Year Urban Health Proposal (Under RCH II) for Bally, West Bengal, Kolkata: Government of West Bengal.

6 Government of Rajasthan. 2002. Rajasthan Human Development Report, 2002, Government of Rajasthan. Also available at URL: http://hdrc.undp.org.in/shdr/rhdr/

7 Mosse, D., Sanjeev, G., Mona M., Vidya S., Julia R. and KRIBP team, 2002, 'Brokered Livelihoods: Debt, Labour Migration and Development in Tribal Western India', Journal of Development Studies,Vol. 38, No. 5, 59-88.

8 Planning Commission.2001.National Human Development Report.2001.New Delhi: Planning Commission, Government of India.

Table 3: Poverty Profile of Big, Medium, Small sized Cities of Rajasthan

City / Town	Total Population (2001)	Decadal Growth Rate(%)	Total Slum Population (2001)	Slum Population to City Total (%)
Ganganagar (M Cl)	210,713	30.49	45,570	21.63
Hanumangarh (M)	129,556	56.60	25,121	19.39
Bikaner (M Cl)	529,690	27.24	98,035	18.51
Sardarshahar (M)	81,394	19.78	29,887	36.72
Ratangarh (M)	63,486	15.26	5,177	8.15
Sujangarh (M)	83,846	18.35	11,374	13.57
Nawalgarh (M)	56,491	10.36	205	0.36
Alwar (M Cl)	260,593	24.01	15,945	6.12
Bharatpur (M Cl)	204,587	36.35	29,494	14.42
Sawai Madhopur (M)	97,493	25.49	2,190	2.25
Jaipur (M Corp)	2,322,575	59.25	368,570	15.87
Sikar (M Cl)	185,323	24.99	7,226	3.90
Fatehpur (M)	78,462	18.19	19,551	24.92
Nagaur (M)	88,828	30.26	9,548	10.75
Makrana (M)	83,329	24.89	2,651	3.18
Jodhpur (M Corp)	851,051	27.73	154,080	18.10
Barmer (M)	83,591	21.81	23,430	28.03
Pali (M Cl)	187,641	37.12	35,602	18.97
Kishangarh (M)	116,222	41.82	43,490	37.42
Ajmer (M Cl)	485,575	20.58	120,315	24.78
Beawar (M Cl)	123,759	15.96	3,797	3.07
Udaipur (M Cl)	389,438	26.21	44,867	11.52
Banswara	85,665	26.15	10,331	12.06
Chittaurgarh (M)	96,219	34.44	11,529	11.98
Kota (M Corp)	694,316	29.21	152,588	21.98
Baran (M)	78,665	36.29	23,533	29.92

(M) *- Municipality,* ***(M Cl)*** *- Municipal Council,* ***(M Corp)*** *- Municipal Corporation*

Source: Office of the Registrar General and Census Commissioner. Slum Population India, Series I, Census of India 2001

Total slum population is high in large cities while the proportion of slum population is higher in certain relatively smaller cities.

Rajasthan has worsened in key health indicators over the last decade

It is evident from the table that

- **Total slum population** among the cities is highest in Jaipur, Jodhpur and Kota. Largest number of slum dwellers is living in the limits of Jaipur Municipal Corporation which alone account for 29 percent of slum population of the state.

- **Proportion of slum population** is noted high in certain relatively smaller cities of Sardarshahar, Kishangar, Barmer, Fatehpur owing to fast growing industries such as marble, granite and tourism .In these cities, nearly one in every three to four residents live in slums, indicating that large part of the migrants find their way into slums.

Slum population was reported to be 'Nil' by the Municipal Authorities of few cities/towns namely Jhunjhunu, Churu, Bhilwara, Bundi, Dhaulpur UA, Gangapur City, Hindaun and Tonk (Census, 2001). However, this may be read with caution since some of these cities are major industrial sites of Rajasthan. It maybe kept in mind that towns below 50,000 population were not included in Census 2001 slum survey.

2.2 Policies and Programs for Urban Poor in Rajasthan

Rajasthan is one of India's least developed states[9].Compared to the National averages, health situation is worse-off in Rajasthan. The state is exceptional in that, unlike almost all other states in India, it has not experienced improvements but worsened in key health indicators over the last decade. NFHS 2 data of Urban Rajasthan also revealed similar alarming trends related to MCH, especially among the urban poor (Table 4).

Table 4: Health Status Indicators comparison between NFHS-1 and NFHS-2 for Rajasthan

	Rajasthan NFHS 1 (1992-93)	Rajasthan NFHS 2 (1998-99)	Rajasthan Urban Poor NFHS 2* (1998-99)
IMR	72.6	80.4	98.2
U5MR	102.6	114.9	162.3
TFR	3.63	2.98	4.18

Source: IIPS and ORC Macro.2001. National Family Health Survey (NFHS-2), India 1998-1999: India IIPS, Mumbai

** USAID-EHP.2003.Standard of Living Index based reanalysis of National Family Health Survey (NFHS 2), India 1998-1999.*

9 Planning Commission.2001.National Human Development Report, 2001, New Delhi: Planning Commission, Government of India.

In an attempt to improve health of urban poor, the Government of Rajasthan has introduced several policies and schemes for urban poor. Apart from policies which are directly aimed at improving health of the population, policies related to housing, land tenure, employment, slum improvement, women's empowerment, food security etc also impinge on the health of the population.

Rajasthan Population Policy outlines a specific strategy for urban programme

Policies Aimed at Improving the Health Status of Urban Poor

The state government has formulated its own policy level mandate related to issues of mother and child health. The realisation of need for urban focus by the State government is evident from separate strategy for urban areas in the State Population Policy[10]. Rajasthan government also recognises women and those under poverty line as vulnerable groups[10,11] . Role of the private sector in the health improvement is furthermore gaining support by the state[10,12] .

The **Rajasthan Population Policy** sets out specific targets with a goal of reaching replacement level fertility by 2016. It aims to increase the current rate of contraceptive use of 48.2 percent to 68 percent by the year 2016 by creating an encouraging environment for greater demand and access to RCH services.

The policy specifically affirms major components of *urban programme management* strategy as:

- Provision of one ANM or a nurse for 20,000 population.
- One Reproductive Health Centre for a population of 200,000.
- Such centres will also be set up in slums and areas of deprived sections of society.
- Encourage industrialists for ensuring private sector's participation in this endeavour.

Medicare Relief Card Scheme (1999): The scheme was initiated by the State Government to provide free medical and health facilities in all government hospitals, to families below poverty line suffering from serious illnesses both in rural and urban areas. A total of 23,01,058 selected families were distributed the Medicare Relief Cards. Funds for the scheme are availed from the *Mukhya Mantri Jeevan Rakshya Kosh*. Persons who have an annual income of not more that Rs.24,000 and who are not in the BPL list can seek assistance from the *Chief Minister's Relief Fund* for treatment of life

10 Government of Rajasthan. 1999. *Population Policy of Rajasthan,1999*. Department of Family Welfare, Government of Rajasthan.
11 Government of Rajasthan. 2002. *State Policy for Women, 2000*. Women and Child Development Department, Government of Rajasthan
12 WHO. Health Sector Reforms in India Initiatives from nine states: Rajasthan. Also Available from URL: www.whoindia.org/EIP/HSR/Report/Rajasthan/raj_BW.pdf

The urban provisions within NRHM aim to bring health services closer to slum dwellers.

Primary health care services and community linkages need to be strengthened for improved reach of services to urban poor in Rajasthan.

threatening ailments according to certain rules or 40 percent of the amount spent in the treatment, whichever is less. Later this amount is returned to the Chief Minister's Relief Fund by the Jeevan Raksha Fund.

Medicare Relief Society (1995): Medical Relief Society was established by the State governmnent to provide the citizens of Rajasthan with latest health detection and treatment facilities without any hindrance.Till January 2003 a total of 304 Medicare Relief Societies have been established in medical college hospitals and the district hospitals, effectively in urban areas. Twenty five per cent of the total income acquired from the Medicare Relief Societies is utilized in providing free medicines to the people below poverty line posessing a Medicare Relief Card. The society provides health services free of cost to widows, orphans, senior citizens above 70 years of age and to the prisoners[13] .

Comprehending the level of **participation of private sector in health**, the Government of Rajasthan has initiated a series of policy measures[14]. These include:

- Policy on private sector participation for installation of sophisticated medical technology in public sector hospitals
- Rules regarding the acceptance of donations and charities from private individuals or public bodies for medical purposes
- Policy of medical colleges/ dental colleges in private sector,
- Policy for setting up nursing institutions in the private sector and
- Policy to encourage private investment in medical institutions, diagnostic centres and nursing homes.

Janani Suraksha Yojana (JSY 2005) is a centrally sponsored scheme, under the overall umbrella of NRHM, replaces the existing National Maternity Benefit Scheme (NMBS). JSY integrates the cash assistance with antenatal care during the pregnancy period, institutional care during delivery and immediate post-partum period in a health centre by establishing a system of coordinated care by field level health workers.Pregnant women in urban areas are given an amount of Rs 600 per live birth on registeration for ANC with the ASHA/ANM/PHC and the cash benefit is to be disbursed at the time of delivery, irrespective of the place (institutional or home) of delivery. Women who deliver in health institutions get an additional amount of Rs 100 if they belong to urban areas of low performing states including Rajasthan[15].

Though the state government has attempted various reforms and innovations targeting some of the challenges that the health sector faces in urban areas, efforts have been mainly for development of secondary and tertiary level of services. Primary health care and community linkages need to be strengthened for service delivery to urban poor in Rajasthan.

13 Government of Rajasthan. Programs Initiated by Medical and Health Department of Rajasthan Available at http://tdil.mit.gov.in/healthy/programs.asp

14 WHO.Health Sector Reforms in India Initiatives from Nine States: Rajasthan. Also Available at URL: www.whoindia.org/EIP/HSR/Report/Rajasthan/raj_BW. pdf

15 Ministry of Health and Family Welfare (2005). Janani Suraksha Yojna-its modified parameters. Government of India. Available at URL: mohfw.nic.in/

Policies Aimed at Improving Housing for Urban Poor

Housing problem has reached considerable proportions in urban areas of Rajasthan, especially in slums, with rapid natural population growth and rapid migration. 3.8 lac families are living in 'Kacchi Bastis' 'temporary slum settlements' in various cities of Rajasthan[16].The State and Central government have started several schemes to ensure housing to urban poor in the State. These schemes are however not operating under one roof.

Policy for regularisation and conversion of agricultural lands in urban areas has been introduced by amending five State Acts: Rajasthan Land Revenue Act, 1956; Rajasthan Tenancy Act, 1955; Rajasthan Municipalities Act, 1959; Rajasthan Urban Improvement Trust Act, 1959; and Jaipur Development Authority Act, 1982. As a result of this a large number of unauthorized colonies that had developed on agricultural lands during the last over 20 years in various cities of Rajasthan are being regularized and development works are being taken up in these colonies[17].

Housing Schemes for the Urban Poor: Under the State Tenth Five Year Plan (2002-07) 'Social Housing' programme covering houses for economically weaker sections, low income group is being implemented in Rajasthan. Under this programme, financial assistance is being provided to the needy persons in the form of 'Long Term Loan' for helping them to construct houses with their own efforts. The income limits for economically weaker sections is upto Rs 1250 per month cost of land, the ceiling cost of construction is Rs 22,000 on which the ceiling of government assistance is 19,500 and the period of repayment is 30 years[18] . These schemes are being financed through loans from Life Insurance Corporation (LIC) for granting loan viz. collectors. The Gharonda Scheme is being launched for the urban poor on plot area 30 sqm with ceiling cost Rs 70,000- 75,000. Monthly installment is only Rs 18/- per day for twenty years[16]. The Urban Improvement Trust (UIT) will construct 300 houses for weaker sections of society in Bhilwara in southern Rajasthan as part of an ambitious "Apna Ashiana" (our haven) scheme.

Integrated Housing and Slum Development Programme (2005): The scheme aims at combining the existing schemes of VAMBAY* and NSDP# for having an integrated approach in ameliorating the conditions of urban slum dwellers who donot possess adequate shelter and reside in dilapidated conditions. The components for assistance under the scheme will include all slum improvement/upgradation/relocation projects including construction of new houses and infrastructural facilities, such as water supply and sewerage for slum dwellers in identified slum areas**.** This scheme is applicable to all

16 Government of Rajasthan.Rajasthan Urban Housing and Habitat Policy 2006 and Guidelines for action Plan-Draft 2. Urban Development and Housing Department.Available at URL: www.rajasthan.gov.in/Microsoft%20Word%20-%20final-report-2-final.pdf

17 Bureau of Investment Promotion, Rajasthan. Invest in Rajasthan.Policy Initiatives. Available at URL: http://www.investrajasthan.com/businesspol5251.htm

18 Government of Rajasthan. State Tenth Five Year Plan: Housing and Urban Development. Also Available at URL: http://www.rajasthan.gov.in/five%20year%20plan_files/chap23-hud.pdf

cities and towns except those covered under the Jawaharlal Nehru National Urban Renewal Mission, 2005. The sharing of funds are in the ratio of 80:20 between Central Government and State Government/ULB/Parastatal. Allocation of funds among states are on the basis of the States' urban slum population to the total slum population in the country. for towns where elections to local bodies have been held. The States will prioritize towns taking into account the existing infrastructure, economically and socially disadvantaged sections of slum population and difficult areas[19].

Previous schemes have however been underutilized in Rajasthan (Table 5a and 5b). Detailed analysis and learning from the gaps in implementation of previous schemes of VAMBAY* and NSDP[#] will assist better implementation of the existing scheme.

Table 5a: Details of VAMBAY schemes Rajasthan from 2001-02 to 2004-05 with physical progress as on 30-6-2004

Cumulative Central Allocations (Rs in lakhs)	4462.41
GOI subsiby released (Rs in lakh)	1240.00
No. of Dwelling Units covered	5700.00
No. of Toilet seats covered	0
Dwelling Units completed / in progress as on 30-6-2004	4478.00
Toilet Seats completed / in progress as on 30-6-2004	0

Source: Ministry of Urban Employment & Poverty Alleviation. 2004.

Table 5b: Release and Expenditure under NSDP in Rajasthan from inception of the scheme in 1996 till 2004 *(Rupees in lakh)*

Released	Expenditure	Unspent Balance
9768.62	7641.06	2127.56

Source: Ministry of Urban Employment and Poverty Alleviation, 2004

** VAMBAY (Valmiki Ambedkar Awas Yojana) introduced in 2001-02, aimed to meet a longstanding gap in programs for slum-dwellers, namely, provision of a shelter or upgrading the existing shelter of people living below the poverty line in urban slums. Provision of sanitation and water supply is also included in the scheme [19]*

[#] The National Slum Development Program (NSDP) The objectives of this program is up gradation of urban slums by providing physical amenities such as water supply, storm water drains, community bath, widening and paving of existing lanes, sewers, community latrines, street lights etc. Besides, the funds under NSDP can be used for provision of community infrastructure and social amenities like pre school education, non formal education, adult education, maternity, child health and primary health care including immunization etc. The program also has a component of shelter up gradation or construction of new houses. A provision of Rs.8948.50 lacs has been kept for NSDP in Tenth Plan (2002-07) for Rajasthan.

19 Ministry of Urban Employment and Poverty Alleviation. Schemes for Urban Poverty Alleviation. Available at URL: http://muepa.nic.in/programs/index2.htm

Draft Rajasthan Urban Housing and Habitat Policy (RUHHP) (2006): The draft RUHHP policy mentions policy guidelines for improving housing in slums with a main focus towards up-liftment of urban poor including slum dwellers. It includes components to i) to redevelop slum with active 3 tier community participation, with least disturbance to existing housing, on parallel lines of Kudumbashree Kerala model. It will involve community participation in at the levels of NHG (Neighbourhood group) - at slum level, ADS (Area Development Society)-at ward level and CDS (Community Development Society) at municipal level.CDS will be responsible to get funds from authority designated by the State Government and get slum redevelopment works executed. District Urban Development Authority or the State Urban Development Authority will monitor the participants ii) grant security of tenure with active participation of community. Katchi bastis on forest land, govt and private land will be regularised. Land provided to slum dwellers will be made non-transferable for 10 years iii) provide basic amenities in slums in order of priority i.e. water supply, sanitation and drainage, roads, power and social facilities.Financing for upgradation of existing housing will be through the funds from central, state / ULBs and beneficiary shares as mentioned under IHSDP/ JNNURM iv) provide training input in housing / infrastructure development/income generation/ health etc. to community through ULBs or outsourced through ULBs. Technical officers from various departments will be involved to develop city development plans. v) develop guidelines for slum policy. Based on the policy guidelines a State Slum policy will be prepared and an independent and centralized agency will act as a single window system for resolving all slum activities. A slum survey will be carried out by the GOR in six months and each ULB shall list all slums[20].

The draft Rajasthan Urban Housing and Habitat Policy empasises active commnity participation and updating slum list. It also includes components to develop State specific Slum Policy guidelines and establish a single window system to resolve all slum activities.

Night Shelter for Urban Shelterless: Shelter and Sanitation Facilities for the Footpath Dwellers in Urban Areas scheme for Urban Footpath Dwellers was launched in 1989-90 by the Ministry of Urban Affairs and Employment. Under this scheme, night shelters and 'pay-and-use' toilets for pavement dwellers were provided on a nominal charge to the absolutely shelterless urban population, including street children, destitute women, and migrant labourers. Since October, 2002 the scheme has been renamed as Night Shelter for Urban Shelterless and the component of Pay and Use Toilets has been withdrawn[21] .

The scheme is a demand driven scheme and progress of the Scheme depends on the proposals mooted by the State. Under the scheme a Central Government subsidy @ 50 percent of the cost of construction subject to cost ceiling of Rs. 20,000/- per bed is provided through HUDCO. The balance is required to be arranged by the State Government/implementing agency.

20 Government of Rajasthan.Rajasthan Urban Housing and Habitat Policy 2006 and Guidelines for action Plan-Draft 2, Urban Development and Housing Department. URL: www.rajasthan.gov.in/Microsoft%20 Word%20-%20final-report-2-final.pdf

21 Ministry of Urban Employment & Poverty Alleviation. Schemes for Urban Poverty Alleviation. Available at: http://muepa.nic.in/programs/index2.htm

As per the 2001 Census there are 11,002 houseless households consisting of 55,631 persons in urban Rajasthan. The highest percentage (17 percent) was in the city of Jaipur. Table 7 shows the poor status of sanction and release of actual funds under the Shelters and Sanitation Facilities for Footpath Dwellers scheme in urban Rajasthan.

Table 6: Status of Sanctions of Shelters and Sanitation Facilities for Footpath Dwellers in Urban Areas of Rajasthan as on July 2004 (Rs in Lakh)

Schemes Sanctioned	Project Cost	Loan Amount	Subsidy Sanctioned	Units Sanctioned				Loan Released	Subsidy Released
				Beds	WC	Bath	Urinals		
10	636.85	0	266.85	426	1282	368	228	0	97.43

Source: Ministry of Urban Employment and Poverty Alleviation, 2004

The description above shows that certain schemes have fewer resources while others remain underutilized. A nodal agency may be constituted to conduct a needs assessment and channelise the funds under different Central and State specific housing schemes in urban areas. As envisaged in the draft RUHHP (2006) active community participation is critical in slum development programmes.

Policies Aimed at Improving Access to Water Supply and Environmental Sanitation in Slums

Living environment in slums is often characterized by poor availability of basic services i.e lack of piped water supply, no or few toilets leading to open air defecation, poor or no drainage with drainage water stagnation, irregular garbage collection, unhygienic and unclean surroundings, presence of mosquitoes and overcrowding making a disease prone environment. The the following section discusses the various policies and schemes that make provision for slum improvement and their status in Rajasthan.

Jawaharlal Nehru National Urban Renewal Mission (JNNURM) - Sub-Mission on Basic Services for the Urban Poor (2005): a sub-mission under the JNNURM has been initiated with an integrated approach to provide basic services to the urban poor in 60 identified cities in the country, covered under the Mission. The sub-mission will cover projects for providing housing at affordable costs, projects on water supply/ sewerage/ community toilets, construction and improvement of drains, environment improvement of slums and solid waste management, street lighting, civic amenities like community halls, child care centers and slum rehabilitation etc. Jaipur (million-plus city) and Ajmer-Pushkar (city of religious importance) have been identified as the cities to be

covered under the sub-mission in Rajasthan. The duration of the sub-mission would be seven years beginning from 2005-06[22].

Urban Infrastructure Development Scheme for Small & Medium Towns (2005): aims at improvement in urban infrastructure including components of water supply, sanitation and sewage in towns and cities in a planned manner.The scheme shall subsume the existing schemes of Accelerated Urban Water Supply Programme (AUWSP)* and Integrated Development of Small and Medium Towns (IDSMT)# and shall apply to all cities/towns as per 2001 census, excepting cities/towns covered under Jawaharlal Nehru National Urban Renewal Mission (JNNURM). Funds would be provided to only those towns and cities where elections to local bodies have been held and elected bodies are in position. The sharing of funds would be in the ratio of 80:10 between Central Government & State Government and the balance 10 per cent could be raised by the nodal/implementing agencies from the financial institutions. The scheme will be implemented through a designated State level nodal agency. While sanctioning projects for slums, State Level Sanctioning Committee would ensure that there has not been any duplication of efforts from other sources[23].

The Rajasthan Urban Infrastructure Development Project (RUIDP): The project costing a total of approximately Rs.1530 crores funded by Asian Development Bank, GOR and Urban Local Bodies (ULBs), is being implemented in 6 major towns of Rajasthan i.e. Jaipur, Jodhpur, Ajmer, Bikaner, Udaipur and Kota. Under this project, besides others key sectors included are water supply, sewerage, roads, slum upgradation, solid waste disposal, capacity building, public awareness etc. The poverty reduction programme addresses the current deficiencies and future requirements in sanitation, solid waste management and sanitation for slum habitations and development of new residential sites. In addition, the objective of the project is to help in building up the capacity of ULBs and related sector institutions to ensure the sustainability of Urban Development[25] . A provision of Rs.1200.00 crores has been kept for this project in Tenth Plan (2002-07).

There is a need for synergy among different development programs for the Urban Poor.

** **Accelerated Urban Water Supply Programme (AUWSP)** is centrally sponsored scheme, launched during the Eighth Plan in the year 1993-94. The objective of this scheme is to solve drinking water problem in towns having population less than 20,000.*

*# **Integrated Development of Small and Medium Towns** The Integrated Development of Small and Medium Towns (IDSMT) scheme was initiated in 1979-80 to provide sufficient infrastructure facilities in these towns, generating employment by creating resource generating ventures in the small and medium towns and reducing the migration of population from rural areas to large cities. The scheme makes the towns with a population of 20,000 to 50,000 the prime target, while the inclusion of towns in 50,000 to 3,00,000 category and less than 20,000 category is on a selective basis[24] .*

22. Ministry of Urban Employment and Poverty Alleviation. Guidelines for the projects on basic services to the Urban Poor 2005. Available at URL:http://muepa.nic.in/programs/bsup.pdf
23 Ministry of Urban Development. Urban Infrastructure Development Scheme for Small and Medium Towns Guidelines 2005. Available at URL:http://urbanindia.nic.in/moud/programme/ud/uidssmt.htm
24 Ministry of Urban Development and Poverty Alleviation. Urban Development Programs: Integrated Development of Small and Medium Towns. Available at URL: http://urbanindia.nic.in/moud/programme/ud/main.htm

The **Programme of Liberation and Rehabilitation of Scavengers** has three necessary components. These are: (1) Legislative back up to prohibit dry latrines and manual scavenging in the form of 'the Employment of Manual Scavengers' and Construction of Dry Latrines (Prohibition) Act. 1993; (2) an alternative to dry latrines in the form of low cost sanitation units for which loan and subsidy are provided under the '*Centrally Sponsored Scheme of Low Cost Sanitation Scheme for Liberation of Scavengers'*; and (3) the *National Scheme for Liberation and Rehabilitation of Scavengers and their Dependents* for training and rehabilitation in alternative occupations. There is a separate scheme of *scholarships for children of families practicing unclean occupations* under which children of families engaged in manual scavenging are eligible for pre-matric scholarships.

Urban Malaria Scheme (1971): Urban malaria poses problem in urban areas. Passive surveillance and anti larval measures are the main components of the scheme. All towns having more than 40,000 population are to be covered. This centrally sponsored scheme is being implemented in 132 towns in the country. Under the scheme, the centre provides assistance in kind which includes larvicide and 2 per cent Pyrethrum Extract. The operational cost and the cost of MLO and equipment are borne by the states [26] .

Policy for Solid Waste Disposal: A policy for disposal of solid waste and Bio-medical Waste in 20 Class-I towns of Rajasthan has recently been announced[27] . Under this policy, private sector would be invited to install solid waste disposal and bio-medical waste disposal plants in these towns. State Government gives incentives to promote setting up of these plants such as allotment of land at a token rate of Re.1 per square meter, no property tax payable on land and buildings to be created, no sales tax payable on by-products made from solid waste or bio-medical waste, etc. Utilization of existing schemes may be strengthened to target and include the most needy.

Policies Aimed at Generating Employment for the Urban Poor

The NSS round on unemployment, conducted in 1993-94, estimated that chronic unemployment in Rajasthan was 1.8 per cent in urban areas compared to the national unemployment rates of 5.2 per cent for urban areas. Rajasthan had the lowest rate of unemployment in the country. However, focusing on people in the age group 15-29 years, the level of unemployment appears to be far more than that for the entire population (4.6 per cent in urban areas)[28] . Clearly this cohort requires special attention

25 Government of Rajasthan. Rajasthan Urban Infrastructure Development Project. Available at:www.ruidp.org/

26 Ministry of Health and Family Welfare. National Malaria Eradication Program, Government of India. Available at http://mohfw.nic.in/kk/95/i9/95i90101.htm

27 Bureau of Investment Promotion, Rajasthan. Invest in Rajasthan. Policy Initiatives.Available at: http://www.investrajasthan.com/business/pol5251.htm

from manpower planners. While under employment for males is only marginal in urban areas (2 percent), it is much more for females (14 per cent). Most women usually withdraw from labour force when employment opportunities are scarce, especially during the summer months. The Government efforts to improve income have been ongoing. Minimum wages in the State have been increased from Rs.44 to Rs.60 per day[29].Existing Government initiatives to target unemployment are discussed in this section.

The Swarana Jayanti Shahari Rojzgar Yojana (SJSRY): This programme was started from Ist December, 1997 in place of earlier Urban Poverty Alleviation Schemes namely NRY, UBSP and PMI-UPEP with a 75:25 Centre / State share. The basic objective of the programme is to provide self employment opportunities and to develop the various basic and physical amenities and social services for BPL families. This programme has two components namely Urban Self Employment Programme (USEP) and Urban Wage Employment Programme (UWEP). The USEP has three different components namely Self Employment Programme, Training and Skill Development of Women & children in Urban Areas (DWCUA). The scheme rests on a foundation of Community empowerment. The CDS is the focal point for the purpose of identification of beneficiaries, preparation of applications, monitoring of loan recoveries, and providing other support to the programme. The C.D.S. also identify viable projects suitable for the area. A provision of Rs.412.50 lacs has been kept for SJSRY in the State Tenth Five Year Plan (2002-07).

Urban Self Employment Programme (USEP) includes assistance to individual urban poor. The Maximum unit cost of the project for individual self employment is Rs. 50,000/-(Maximum Subsidy will be 15 per cent of the Project Cost Subject to maximum of Rs. 7500/-). The beneficiary is required to contribute 5 per cent of the Project Cost. Besides Govt. Subsidy and contribution of the beneficiary, rest of the project cost is financed by Banks as loan. This programme is being implemented in all 183 ULBs of the State.

Urban Wage Employment Programme (UWEP) applies to local bodies, the population of which was less than 5 Lakh as per 1991 census. The Programme seeks to provide wage employment to beneficiaries living below the poverty line within the jurisdiction of urban local bodies by utilizing their labour for construction of socially and economically useful public assets. The material and labour components ratio for works under this programme are 60:40. The prevailing minimum wage rate for each area is paid to the beneficiaries.

28 Ministry of Finance, 2004. Economic Survey 2003-2004. New Delhi, Government of India

29 Government of Rajasthan. Rajasthan Government Undertakes Bold Initiatives for Systemic Reforms Available at: http://www.rajasthan.gov.in/reforms_files/reforms.pdf

Development of Women and Child in Urban Areas (DWCUA) scheme is distinguished by the special incentive extended to urban poor women, who decide to set up Self-employment ventures in a group as opposed to individual effort. Groups of urban poor women take up an economic activity suited to their skill, training, aptitude and local conditions. DWCUA group should consist of at least ten urban poor women, one of whom shall be organizer. DWCUA group is entitled to a subsidy of Rs. 125,000/- or 50% of the cost of Project, whichever is less. For setting up of Thrift & Credit Society, the DWCUA group is entitled to a lump sum grant of Rs. 25000/- as revolving fund @ Rs. 1000/- per member only after one year of its formation. These funds will be used by the Group/Society for income generating activities. Where an individual member of the society saves Rs. 500/- and Rs. 750/- in fixed deposit for 12 months, she is entitled to a subsidy for Rs. 30/- and Rs. 60/- respectively for being paid as insurance premium.

Table 7a: Cumulative Physical Progress of SJSRY in Rajasthan (1997-2006)

No.of beneficiaries assisted under USEP (sub.)	41063
No.of DWCUA groups formed	270
No.of women beneficiaries under DWCUA groups	2848
No.of persons trained under USEP (Training)	17577
No.of Threft &Credit Societies formed	404
No.of mandays of work generated under UWEP (in lakhs)	22.82
No.of beneficiaries covered under Community Structure component (in lakhs)	9.46

Source: Ministry of Urban Employment & Poverty Alleviation. 2004.

Table 7b: Rajasthan Funds Position under SJSRY(2006)
Rs in lakh

Unspent balances of old schemes as on 30.11.97	3160.17
Total funds (Central and State) released from 1997-2006	3801.05
Total Funds available with the State	6961.22
Expenditure reported	5471.27
Unspent funds available with the State	1489.95
% of expenditure	78.6%

Source: Ministry of Urban Employment & Poverty Alleviation. 2004.

Chief Minister's Employment Schemes (CMES): Under CMES, "Kiosks" are to be provided to unemployed youth to carry out their self employment activities. At present, the "Kiosks" are being constructed in the vacant side lands (Khancha Bhumi) in the 14 towns of the Rajasthan. 6000 Kiosks have

been constructed upto December 1999. The procedure and process of allotment has been formulated by the government[30] .

Separate schemes that have been initiated for youth and women may be strengthened further and extended to left out cities. Government should focus on providing work opportunities for sustenance of urban poor during lean summer months.

Policies Aimed at Improving the Status of Women

Rajasthan is acknowledged to be one of the states where women's status is particularly low. The state is influenced by a feudal culture in which patriarchal structures are deeply embedded while power and land ownership have remained largely vested in men.Patriarchy has also been enforced through practices such as purdah, child marriages, female infanticide, sati and lack of productive opportunities for women[31] .The social status of women has an important bearing on the process of health care seeking both as a child and mother.

The Government of Rajasthan announced a **Women's Policy** on March 8, 2000[32]. The stated objectives of the policy include implementation of policies and programmes which promote gender equality and social justice, to enable women to realise their rights, to recognise and improve the productive role of women in the household economy, society and state as well as ensuring equal access to resources and development. It recognises the cycle of ill-health – poor nutrition and health, early child bearing and high mortality among women and facilitates strategies for greater control over her reproductive health and greater reproductive choice.

The **State's Women Commission** was constituted on May 15, 1999 and accorded constitutional status[33] . The commission has the power to investigate complaints and recommend the line of punishment to the Government.

The State Government has decided to include the **name of the wife in the 'Patta'** issued after land in Kacchi Basti as well, even in the cases of allotment of land to the landless persons. This will have a far-reaching impact in ensuring security and safety to women. Special schemes for deserted women and the empowerment of widows are two of the progressive initiatives of the government. Widows, divorced, deserted and other exploited women shall be helped for self-employment through loan facilities of Khadi and Gramodyog. Self-help groups are being encouraged in the State to uplift women economically by providing loan facilities[33].

30 Government of Rajasthan. Memorandum for Tenth Five Year Plan (2002-2007) and Annual Plan (2002-2003). Jaipur: Government of Rajasthan.

31 Government of Rajasthan. 2002. *Rajasthan Human Development Report*, 2002, Government of Rajasthan Also available at URL: http://hdrc.undp.org.in/shdr/rhdr/

32 Government of Rajasthan. 2002. *State Policy for Women, 2000*. Women and Child Development Department, Government of Rajasthan

33 Government of Rajasthan. Rajasthan Government Undertakes Bold Initiatives for Systemic Reforms.Available at: http://www.rajasthan.gov.in/reforms_files/reforms.pdf

The GOI launched the **Balika Samridhi Yojana** in 1997. Under this scheme if a girl child is born in a family below the poverty line as defined by the Government of India, the parents are entitled to a post-birth grant amount of Rs 500/- and the girl child is entitled to annual scholarships for each successfully completed year of schooling. Subsequently in 1999 the BSY was reviewed and modified. Instead of cash payment now the amount is deposited in the Bank/ Post Office in the name of girl child. Deposited amount can be withdrawn for insurance premium and incremental graded scholarship to girl child as she graduates from different grades. The implementation of this scheme is being started in all ULBs of Rajasthan and an amount of Rs. 63.31 lakhs has been allotted to ULBs for this purpose[34].

To support working women and provide care to their children **Creches/Day Care Centres for Children** scheme was started in 1975. Children in the vulnerable age group of 0-5 of mainly migrant, casual and agricultural labourers and construction workers are provided with day-care services. The Scheme is being implemented by Central Social Welfare Board, Bhartiya Adimjati Sewa Sangh, Indian Council for Child Welfare[35]. **The National Creche Fund (NCF)** was set up during 1993-94 to meet the growing demand for creches. Under this scheme, assistance is given to registered voluntary organizations / mahila mandals to open and run creches.

Policies Aimed at Improving Food Security of the Urban Poor

Under the **Mid-Day Meal Scheme** a nutritious meal is provided to children of primary schools and nursery schools inter-alia for meeting the nutritional deficiency of the children especially to those who cannot afford to have a balanced diet. As per provision mentioned in the program, the meal is to be provided for 200 working days in a year at the rate of Rs. 2.00 per child per day. States have been permitted to construct kitchen shed in urban schools using funds of National Slum Development Program and Urban Wage Employment Programme, a component of Swarna Jayanti Shahri Rozgar Yojana .Any further gap in urban areas can be covered using Sarva Shiksha Abhiyan (SSA) funds by constructing kitchen sheds in new schools[36].

The **Antyodaya Anna Yojana** launched in December 2000 targets the poorest of the households for distribution of subsidized rations. Each family having a red card is entitled to 25 kg of food grains each month at subsidized rate of Rs. 2.5 per kg for wheat and Rs.3 per kg for rice.

The **Annapoorna Yojana** targets people 65 years of age and older who live

34 Directorate of Economics and Statiistics Rajasthan. Economic Review. 1999-2000. Social Infrastructure Developmrnt. Government of Rajasthan.Available at URL: www. rajasthan. net

35 Department of Women and Child Development. Child Development. Available at URL: http://wcd.nic.in childdet.htm#intro

36 Department of Women and Child Development. National Programme of Nutritional Support to Primary Education. Recent Initiatives. Government of India. Avaialable at URL: http://www.education.nic.in/htmlweb/middaymeal1.htm

in BPL families. 20 per cent of those receiving eligible under Age old pension scheme are given 10 kg of rice free of cost.

The capacity of Urban Local Bodies needs to be enhanced for them to manage health services effectively.

Initiatives in Decentralisation and Policy for Strengthening the Capacity of Urban Local Bodies

Apart from the above mentioned sector specific policies, the **74th Amendment** to the Indian constitution has endowed urban local bodies with substantially increased powers and have constitutionally mandated a number of vital functions, placed in the Eleventh and Twelfth schedule of the constitution, relating to poverty alleviation, local planning, primary and secondary health and education to be carried out by the local bodies.

In addition **Task Forces** have been set up to address policy and implementation related issues in the area of strengthening Urban Local Bodies[37] .

The **Urban Reforms Incentive Fund (**URIF) scheme was approved by the GOI in June 2003 with an annual allocation of Rs 500 crore during the 10th Plan. The fund seeks to provide incentives to States to have urban reforms. The state-wise allocation of funds has been made on the basis of percentage of urban population of each state with reference to total urban population. A memorandum of agreement is signed between the state and this Ministry that commits a State to the reforms specified in the Memorandum. During the year 2003-04, Memorandum of Agreement was signed between GoI and Rajasthan State. During the year 2004-05, second generation reforms (URIF-II) and their weight age is under consideration. Some of the possible reform areas listed are- implementation of all decentralized measures as envisaged in the 74th Constitutional Amendment, Reduction in number of slums, to make the land or shelter provided to slum dwellers strictly non-transferable and to promote private sector and cooperatives for undertaking housing construction for all segments with focus on EWS/LIG in urban areas[38] .

Apart from this, an **Urban Renewal Fund** has been created for all the urban areas of Rajasthan. This fund would help in taking up certain works/ projects which are of importance and are of urgent nature in the towns. With the help of this fund, it would be possible to get assistance from financial institutions also for some of the bigger infrastructural projects.

Other schemes like IUDSSMT, RUIDP have an objective and funds to promote resource-generating schemes for the ULBs to improve their overall financial position and ability to undertake long-term infrastructure devel-

37 Government of Rajasthan. *Rajasthan Government Undertakes Bold Initiatives for Systemic Reforms*. Available at: http://www.rajasthan.gov.in/reforms_files/reforms.pdf

38 Ministry of Urban Employment & Poverty Alleviation. 2004. *Conference of Ministers of Housing of States/Union Territories, September 27-28, 2004*. Srinagar: Ministry of Urban Employment & Poverty Alleviation and Government of Jammu & Kashmir.

opment programmes on their own as well as to repay the borrowed capital and usher in necessary municipal reforms. Programmes such as the IHSDP, BSUP-JNNURM also have a component and funds for training elected representatives.

Following the 73rd and the 74th Constitution Amendments, the Government of Rajasthan constituted District Health Societies (DHS) by merging – Malaria, Tuberculosis, Leprosy and Blindness into a District Health Society. Similarly, the **District RCH societies** were registered in 1999. The District Society has a Governing Board (GB) chaired by District Collector. The Chief Medical & Health Officer / District RCH Officer (RCHO) is the Member Secretary of the GB. The Executive Committee (EC) of the DRCHS meets every month to develop operational plans, review progress and ensure project implementation.

Prashasan Shaharon Ke Sang – Through campaigns in urban areas a whole host of activities related to the interface between citizens and the local and Rajasthan Government were taken up in open camps to bring about greater transparency and accountability in governmental functioning from January 2002 to February 2002. The campaigns were focussed on local problems and involved the departments dealing with the public, creating an awareness about the various welfare schemes of the State government among the masses; reaching the benefits for the poor through social security schemes; and, above all, ensuring people's participation in the implementation of the schemes. Some 12 lakh urban families benefited during this campaign and the sections that directly gained from this were Dalits, tribal people, Backward Classes, women and members of other weaker sections[39] .

Policy Analysis and Suggestions

Though a policy level mandate exists, the inadequate allocation and utilization of resources along with multiplicity of departments at the district, hampers the efforts for improving the conditions of the urban poor. To make the Policies have greater impact the following programmatic suggestions can be made:

1. **Increased Coordination and Convergence**:
It is evident from the previous discussion that improvement in the conditions of the urban poor requires coordinated efforts of multiple departments. Hence, a functional urban taskforce under the chairmanship of the District Magistrate that reviews all programmes and schemes regularly would bring in more synergy and improve the impact of the various programs.

39 Rajalakshmi, T.K. 2003. For Meaningful Governance. Special Feature: Rajasthan. Frontline Vol 20(19).

2. Regular Revision and Updation of Slum Lists

The problem of resources is further compounded by rapid urbanization which results in the addition of new slum clusters. The list of slums are not updated on a regular basis. The district authorities in collaboration with the elected ward members should create mechanisms for updating the slum list. This would help in correct estimation of population and strengthen the argument for more resources.

3. Improving Capacity of Urban Local Bodies

Though constitutional provisions have been made and the government has shown keen enthusiasm to implement the 74th Amendment the capacity of the urban local bodies remains severely restricted. There is a need to chart out a plan for improving the capability of the local elected representatives and improve the performance of ULBs for better management of urban poverty alleviation efforts.Greater transparency needs to be ensured in municipal functioning.

4. Develop Model Municipal managed Health Programmes in 1-2 cities

Currently, there are no health programmes managed by municipalities in Rajasthan. Model programs developed in a few cities could serve as learning sites. A few municipalities having the requisite capacity can be identified and handed over the management of urban health programmes in their cities using the funds of the health department. This can be then replicated in more muncipalities after incorporating lessons learnt from the initial experiments.

5. Strengthening Policy Implementation

Policy provisions and programmes for the improvement of the socio-economic status of the urban poor are known to have a number of operational weaknesses. The identification of BPL families is beset with inaccuracies originating in the baseline surveys. Personal and political influences also play a part while review of the BPL list is kept in abeyance for long. It is essential to make the identification of BPL families accurate so that the development programmes reach the intended beneficiaries.Training could be provided to relevant officials and elected representatives on respective government schemes including cross visits to other states. Information on schemes and programmes could be provided to the urban poor. Management and financial capacity could be strengthened at state level in various departments to improve utilization of funds which often lapse unutilised.

2.3 Reproductive and Child Health Services in Urban Rajasthan

Unlike in the rural areas, where the health department has a wide network of primary health care facilities providing reproductive and child health services, the urban slums lack basic health infrastructure and outreach services. Thus, they remain inadequately reached even by national programmes providing immunization, safe motherhood and family planning services. Health coverage is provided by urban institutions like urban family welfare centers, health posts facilities that are often far from their service area, poorly staffed, with inadequate space and supply of medicines and equipment. Urban local bodies like municipal corporations and Nagar Panchayats are also expected to provide health care, but resource scarcity often restricts this. NGOs and private trusts are also few and far between.

Public Health Services

First and Second Tier Health Services :

Urban areas donot have a wide network of primary health care facilities unlike rural areas

The efforts of Government of Rajasthan to make provisions for health care services to its population have been primarily rural centric though some efforts have also been made to improve the delivery of primary health care services to the urban population. The Department of Family Welfare and the Department of Medical and Health provide health services in the State. While the primary health services for rural areas are available at village level, the secondary level health services are provided at district level, effectively in urban areas, through District General Hospital, District Women's Hospitals. For primary level health services in urban areas, the Department of Family Welfare has established Health Posts, Urban Family Welfare Centers and Mother and Child Welfare Centers. Urban dispensaries and Aid posts have been established by Medical and Health Department. Few Urban dispensaries have been upgraded to include outreach facilities and renamed Urban PHCs. Table 8 gives the total number of primary urban health facilities in the State.

Table 8: Primary Urban Health Facilities in Rajasthan

State Urban Health Facility	Number 2004-05
Health Posts	90
Urban Family Welfare Centers	61
Mother and Child Welfare Centers	118
Urban PHCs	29
Dispensaries	208
Aid Posts	13

Source: Directorate of Medical and Health Services, Rajasthan Progress report 2004-05

Maternal and Child Health and Curative services are provided through the primary health infrastructure in urban Rajasthan (Table 9).

Table 9: Primary Urban Health Facilities in Class 1 cities of Rajasthan, 2005

	TYPE OF SERVICES							
	MCH Services					OPD/ Curative Services		
Name of Cities (population > 1 lakh)	Health Posts	Urban Family Welfare Centers	Mother Child Welfare Centers	Urban PHCs	Total	Urban Dispen-saries	Aid Posts	Total
Jhunjhunu	0	0	0	0	**0**	2	1	**3**
Kishangarh	0	0	0	0	**0**	0	0	**0**
Beawar	0	0	0	0	**0**	1	1	**2**
Hanumangarh	0	0	1	1	**2**	1	0	**1**
Tonk	0	0	0	0	**0**	4	0	**4**
Sikar	7	1	1	1	**10**	2	0	**2**
Pali	0	1	1	1	**3**	2	0	**2**
Bharatpur	12	0	1	1	**14**	2	0	**2**
Ganganagar	7	1	1	1	**10**	1	0	**1**
Alwar	5	1	0	0	**6**	2	0	**2**
Bhilwara	12	1	0	0	**13**	3	0	**3**
Udaipur	4	2	0	0	**6**	10	0	**10**
Ajmer	8	3	0	0	**11**	7	0	**7**
Bikaner	13	2	1	1	**17**	10	0	**10**
Kota	4	4	0	0	**8**	9	0	**9**
Jodhpur	3	6	1	1	**11**	12	4	**16**
Jaipur	15	5	8	8	**36**	32	2	**34**

Source: *Data received from the Department of Family Welfare and Department of Medical and Health. Government of Rajasthan, 2005.*

A large section of urban poor remain outside the purview of health care services

Though health infrastructure is adequate in a few cities like Jaipur, Bikaner, Jodhpur and Ajmer (Table 9) in most of the other cities, the health infrastructure is grossly insufficient to cater to the total population or the urban poor. For instance, cities like Kota, Udaipur, Kishangarh, Pali have high total population (Table 3) but meager or no infrastructure (Table 9). In contrast, cities such as Sikar, have less urban poor population and good infrastructure resources. Health Posts initally planned for a population of 50,000, currently serve a larger population in most cities of Rajasthan. The location of health centre is often not in or proximate to slums. UFWCs and MCWCs are not independent entities, but are often attached to an Urban PHC / District Hospital / Female Hospital. Thus their utility and access by the urban poor is severly restricted.The situation gets compounded due to lack of adequate medical staff, doctors and ANMs. High population- staff ratio results in poor service coverage with some areas being underserved or unserved. Integrating MCH services in Urban Dispensaries and Aid Posts can help to reach the urban poor quickly and effectively.

ICDS Services

The ratio of one Anganwadi centre to the total population in urban areas is 1:6298 vs 1:1208 in rural areas of Rajasthan.

MCH services are also delivered through Anganwadi centers, the norm being one for population of 1000.The ICDS programme is designed to provide the first interface between health care service providers and disadvantaged young children. Studies have shown maternal and child health to be better in ICDS areas compared with non-ICDS areas [40, 41]. In Rajasthan, the ICDS operates in 20 urban areas having one lakh or more population[42].The ratio of one AWC to total population in rural areas is 1:1208 vs.1:6298 in urban areas of Rajasthan[43]. With the growth of population over the years and rapid urbanization, the population in ICDS center catchment area has increased serveral times and there is a pressing need for more Anganwadi Centers within the existing projects, to cover the population as per the schematic norm. According to recommendations on ICDS by the National advisory council, another 13,860 Anganwadi Centers are required in urban Rajasthan to universalize ICDS[44].

Private Health care providers

Public health services available often do not percolate to slum habitations, forcing people to avail private health care through out-of-pocket expenditure.The formal private sector includes licensed hospitals, nursing homes, pharmacies and qualified medical practitioners. Informal sector comprises unlicensed nursing homes, unqualified medical practitioners such as TBAs and quacks. Most health care needs of the poor are met by informal providers.

About 60 per cent of private hospitals and nursing homes are concentrated in five districts with less than 35 per cent of the total population of the state, namely Jaipur, Ganganagar, Jodhpur, Ajmer and Udaipur[45]. Dependence on the public health care system and non-qualified practitioners is high in desert and tribal districts[46].The 1994-95 NSS data on morbidity indicates that people in urban Rajasthan prefer private providers or other non-government sources for out-patient treatment.However, in case of hospitalisation government hospitals are preferred over private hospitals.

NGOs

About 430 voluntary organizations are active in various development fields in Rajasthan. Data given in Table 10 shows that most of NGOs work in the sectors of rural development, HRD and social justice. This may be a reflection of the larger resources being channelised through the NGOs in these sectors.

40 Agarwal, K. N, et al., 2000. Impact of the Integrated Child Development Services (ICDS) on Maternal Nutrition and Birth Weight in Rural Varanasi. Indian Pediatrics; 37: 1321-1327

41 Sarma, K.V.R., et al., 1990.ICDS - An Epidemiological and Qualitative Study, NIN Scientific Report Hyderabad: National Institute of Nutrition.

42 Government of Rajasthan, IX Plan Status. Available at:http://www.rajasthan.gov.in/five%20year%20plan_files/chap27-nut.pdf

43 Number of Health Facilities in Urban Rajasthan. 2005. Details provided by Department of Family Welfare and Department of Medical and Health. Government of Rajasthan.

44 National Advisory Council. 2004. Recommendations on ICDS, based on deliberations of National-Advisory-Council,28th August, 2004. Available at: http://nac.nic.in/communication/icds1.pdf

45 Winfrey W. et al., 2002.The Role of Private Sector in Child Health Delivery in Rajasthan. Financing Reproductive and Child Health Care in Rajasthan. IIHMR, The Policy Project, The Futures Group International.

46 Sharma S. et. al , 2002.*Financing Reproductive and Child Health Care in Rajasthan: The Sources and Uses of Funding*. Financing Reproductive and Child Health Care in Rajasthan. IIHMR, The Policy Project, The Futures Group International.

The number of NGOs in the Health & Family Welfare sector is comparatively fewer. Most of these NGOs are engaged in training activities instead of service delivery. The government should encourage voluntary agencies to provide health services to the urban poor through appropriate grants, schemes and incentives.

Table 10 : Number of NGOs in Rajasthan, 2006

Rural Development	Human Resource & Development	Social Justice & Empowerment	Health & Family Welfare	Youth Affairs & Sports	Others
210	59	79	21	16	48

Source: *National Informatics Center. Planning Commission, Voluntary Organisations database.*

Access and Utilization of RCH Services

The access to and availability of services among urban poor in Rajasthan is poor when compared to all India average or to other better performing states such as West Bengal and Tamil Nadu (Fig 2).

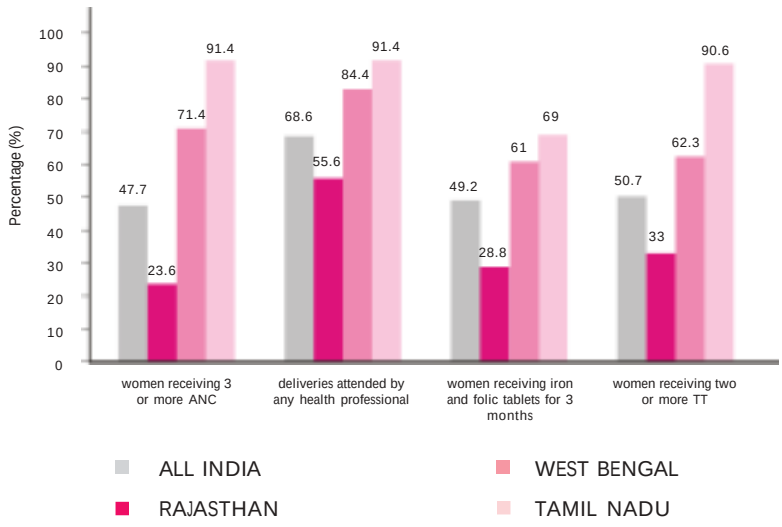


Fig 2: Access to and Availability of RCH Services in Urban Rajasthan (NFHS II)

Studies conducted in urban Rajasthan[47] indicate that though public sector plays an important role in provision of RCH services among urban poor, one-third (33.3 per cent) and one-fifth (24.1 per cent) of urban low income group population (poorest 50 per cent) access private sector for child health care and family planning services, respectively (Table 11).

47 Winfrey W. et al., 2002. *The Role of Private Sector in Child Health Delivery in Rajasthan*. Financing Reproductive and Child Health Care in Rajasthan. IIHMR, The Policy Project, The Futures Group International.

It is evident from Table 11 that more than 60 per cent of high-income users (richest 25 per cent) frequent the public sector. This may often be at the expense of urban poor not receiving the services.

A study of household expenditures on RCH Services in Udaipur city of Rajasthan revealed that households spend 28 per cent of the total household health expenditures for RCH services[48].

Table 11: Use of Health Services by Different Income Groups in Urban Rajasthan

	Poorest 50%	Middle 25%	Richest 25%
Birth Delivery			
Private	5.9	12.1	27.6
Public	64.8	66.7	65.5
Traditional	29.4	21.2	6.9
Child Health Care			
Private	33.3	21.7	37.5
Public	66.7	78.3	62.5
Family Planning			
Private	24.1	33.4	39.8
Public	75.9	66.6	60.2

Source: W. Winfrey et. al. 2002. *The Role of Private Sector in Child Health Delivery in Rajasthan.* IIHMR, The Policy Project, The Futures Group International.

Resource Allocation for RCH care in Rajasthan

The Planned budget does not take into account the internal differences between the urban-rural allocations of the social and developmental programs. Household expenditures comprise the largest source of financing in Rajasthan's health care system.80 per cent of total RCH spending in Rajasthan comes directly from the pockets of the beneficiaries (their direct payments to private and public providers). The remaining 11 per cent is health spending is from the Central Government and 6 percent is from donors. The smallest contributor is the Government of Rajasthan which accounts for just 3 per cent of all RCH spending in the State though it finances 24 per cent of overall health care[49].

The overall public spending on health care in Rajasthan is low.The GOR spends as low as 1.72 per cent of its State Domestic Product on health care services. 90 per cent of this expenditure is on salaries and the remaining is on medicines, other recurrent and capital expenditure. The very substantial dependence on direct household financing for RCH services combined with the apparent under financing of the sector as a whole suggest that government

48 Hotchkiss D.R. et. al., 2002. *Household Expenditures on Reproductive and Child Health Care Services in Udaipur, Rajasthan*. Financing Reproductive and Child Health Care in Rajasthan, IIHMR, The Policy Project, The Futures Group International.

49 Sharma S. et. al , 2002.Financing Reproductive and Child Health Care in Rajasthan: The Sources and Uses of Funding. Financing Reproductive and Child Health Care in Rajasthan. IIHMR, The Policy Project, Tahe Futures Group International.

funding of this important area could be increased. If the GOR agreed to fund RCH care as it funds heath spending as a whole, it would add about 15 per cent to the state's health budget and only about 1 per cent to its total budget. This small increment might be a worthy starting point to consider for increased funding for RCH[49].

Options for improving the health care delivery for urban poor

1.Integrating RCH services into available primary health care infrastructure in urban areas - Integrating MCH services into various available first tier-health facilities can help target urban poor effectively.

2. Augment urban health infrastructure and services - An analysis of overall government expenditure on health care indicates that it is inadequate and less pro-poor. Unless an adequate and reliable supply of medicines and medical supplies flows to the primary health care facilities on a regular basis, these facilities will continue to be under-utilized by intended beneficiaries and the poor. Adequate funding of the personnel cost is another critical constraint. Besides filling of staff vacancies, allocations are also needed for improving the capacities and performances of practitioners now working in public health service delivery.

3. Improve quality and reach of existing services - a) Provide motivational training to health providers (ANMs, MOs, Supervisors) to be more sensitive towards the disadvantaged and to coordinate with Community Health Volunteers and CBOs b) regularize outreach services in slums c) Provide health card to every urban child to ensure basic health services.

4. Co opt private sector services - The large presence of private providers makes it imperative that that the private sector plays a key role in the delivery of health services in Rajasthan. The need is to build a system which promotes effective participation of private with dignity as an equal partner. The GOR should initiate model public private partnerships. Existing policies such as private investment in medical institution should be effectively implemented.

5. Improve ICDS coverage in urban slum settlements – Coverage of ICDS has been found to be significantly lower in urban areas. Improving ICDS coverage in urban poor localities can be an important strategy to improve health conditions of the urban poor.

6. Strengthen community capacity and access to services - Efforts must also be made to improve the access of public health care facilities. Link

workers selected from the community and provided appropriate training can improve access to health services and improve the health status of the community. Strengthening community based organizations like SHGs is an effective mechanism to strengthen linkages between the community and the health system. Such groups can complement the efforts of health workers in generating awareness about health issues and counseling for family planning.

Key Messages

- In Rajasthan, 13 million people comprising one-fourth of the total population live in urban areas.
- 20 per cent of this urban population lives below the poverty line.
- The Government of Rajasthan has initiated various policies and programmes aimed at improving the living conditions of the urban poor.
- There is a need for coordination and convergence among different development programmes for greater impact.
- Capacity building of urban local bodies for mobilizing local resources and better financial management would result in better implementation and initiation of more need based programmes at local level.
- The government first tier services in urban areas of Rajasthan have not grown in proportion to growth of urban population resulting in large areas being underserved or totally left out.
- The GOR spends just 1.72 per cent of its SDP on health. Eighty per cent of health spending in the state is out of pocket.

SECTION 3

Reproductive and Child Health conditions among Urban Poor in Rajasthan

(Reanalysis of NFHS 2, 1998-99 data)

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Reproductive and Child Health conditions among Urban Poor in Rajasthan

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3.1 Overview and methodology

India, long considered a land of villages, is projected to become predominantly urban by 2015 with a significant proportion of people living in poverty. There is very limited information available regarding the health conditions of urban poor in India. Most available information including the National Family Health Survey (NFHS)[#] provides for only rural–urban comparisons.This commonly leads to false conclusions about the conditions of the urban poor as the *urban averages tend to mask the inherent inequalities* that exist. Therefore it is necessary to disaggregate the existing urban health data by economic status to unreveal the disparities which exist in the health status among different economic groups. The Standard of Living Index (SLI)[*] , an asset based indicator provided in the NFHS datasets presents an opportunity to analyze health information by economic groups.

There is limited information available regarding health of the urban poor in India.

Urban average data mask the inherent inequalities that exist within urban areas

In this section, health information provided by the NFHS-2 is disaggregated by the Standard of Living Index (SLI)[*] (for detailed methodology see Annex 1). Various studies and a consultation with a panel of experts have validated the use of SLI as indicative of the economic status of the household. **The figures for the 'low SLI segment of urban population' have been taken as representative of 'Urban Poor'. The remaining two categories of SLI – the medium and high SLI – are representative of the middle and high income groups respectively.** This endeavor of disaggregating health data by economic status is aimed at providing a better picture of reproductive and child health in urban slums and other underserved urban settlements. This will help

[#] *The NFHS is a national level household survey to gather information on fertility, family planning, infant and child mortality, reproductive health, child health, nutrition of women and children, and the quality of health and family welfare services. The first survey was conducted in 1992-93 and the second round was done during 1998-99. The NFHS-2 sample represented more than 99 percent of India's population living in all 26 states. It covered approximately 90,000 ever-married women in the age group 15–49 at the national level.*

** The SLI used in the NFHS is a summary measure calculated by considering the house type, toilet facility, source of lighting, main fuel for cooking, source of drinking water, separate room for cooking, ownership of house, ownership of agricultural land, ownership of irrigated land, ownership of livestock and ownership of durable goods by the household.*

policymakers and program administrators in planning and implementing more effective strategies for improving population, health, and nutrition programs for the urban poor.

3.2 Distribution of urban sample of Rajasthan based on Socio-economic profile

Table 12 shows the weighted sample size for number of households, currently married women, ever-married women and children under age 3 across different economic groups. The analysis shows that sample for all categories are large enough to provide statistically valid estimates by economic groups.

Table 12: Distribution of Urban Sample by economic groups covered in NFHS-2 in Rajasthan

Urban Population	Category by SLI			
	Poor	Medium	High	Total
Number of households	160	708	705	1573
Number of currently married women	129	667	766	1562
Number of ever married women	141	705	785	1631
Number of children under age 3	68	311	244	623

The actual and reanalysed data in this report is based on NFHS (1998-99), unless credited to an alternated source.

Background Characteristics

The composition of the urban poor in Rajasthan is different from the rest of the state. The socio-demographic composition of any population based on aspects such as caste, religion, age and schooling independently effect the

As this report was being finalized (March-April 2006), the database of the District Level Household Survey (DLHS) conducted during 2002-04 was released. This survey funded by the Ministry of Health and Family Welfare and carried out by the International Institute of Population Sciences, Mumbai aimed to provide district level estimates of RCH conditions among the population. In Rajasthan, the survey covered a sample of 23,315 currently married women of which 9,596 resided in urban areas of the state.

With the objective of presenting more recent data on the health of the urban poor population in the state, we have analyzed this data by the Standard of Living Index (SLI) and presented in Annex 3.

health outcomes and hence it is necessary to understand the composition of urban poor to better understand health interventions.The composition of the urban poor and its associated challenges in Rajasthan follow:

- 43% of the urban poor population (male and female) is below 15 years of age. This young age structure of the population highlights the momentum of continued population growth in urban areas. The unique needs of adolescents who would be shortly entering the reproductive ages should be catered through specific programmes so that desired behaviours are practiced by them in the coming years.

- A vast majority (85.9 per cent) of the urban poor women are illiterate compared to 20.4 per cent of women from urban high income families. School attendance especially among girls is also much lower among the urban poor. The low level of education poses a number of challenges in the adoption of recommended behaviors pertaining to care of mothers and babies.

- Urban poor in Rajasthan have a higher proportion (63.2 per cent) of people belonging to socially disadvantaged classes (SC/ST/OBCs)* in comparison to the urban rich (Fig 3). It is to be noted that the proportion of these disadvantaged classes in urban poor is higher than the rural average for Rajasthan. The SC/ST/OBC groups differ greatly and are worse-off in their fertility levels, family planning acceptance rates, infant and child mortality and utilization of ma-

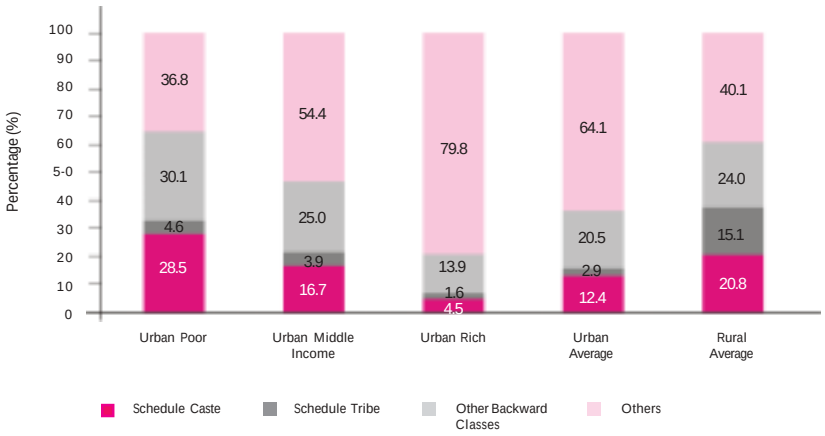


Fig 3: Caste Composition of Urban Rajasthan by Economic Groups

One-third of the Urban population in Rajasthan is below 15 years.

86 percent of the urban poor women are illiterate.

Urban poor have a higher proportion of SC/STs/OBCs than the urban or rural averages.

* Scheduled Castes (SC) and Scheduled tribes (ST) are the castes and tribes which are specified under the Article 341 of the Indian Constitution. The Other Backward Castes (OBCs) are those castes/communities that are notified as socially and educationally Backward Classes by the State Governments or those that may be notified as such by the Central Government from time to time

Neonatal and Infant mortaility rates among the urban poor in Rajasthan are almost twice that of the urban rich and worse off than the rural averages.

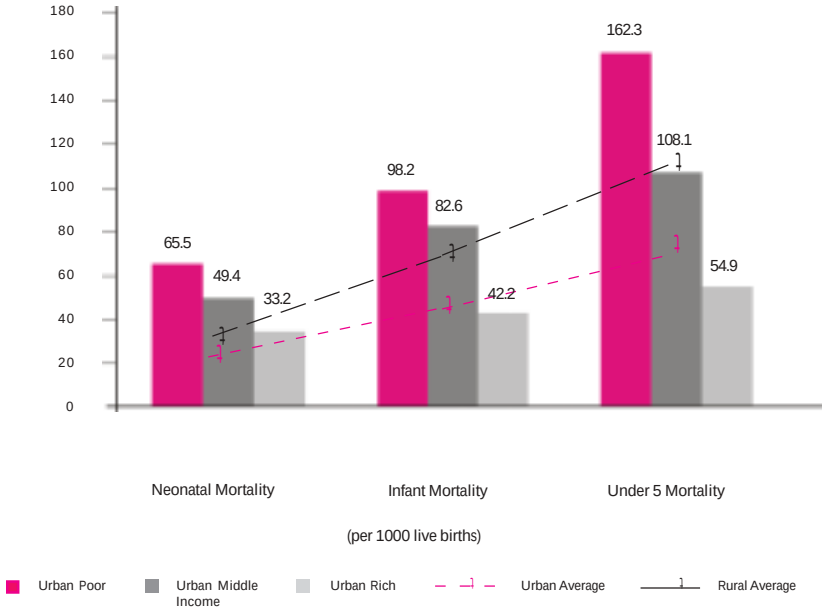
ternal and child health services[1]. Though the State Government is making efforts for upliftment of these weaker sections of the society, social welfare department in Rajasthan has mainly concentrated its activities / programs towards their educational, economic and social development but have overlooked health[2]. Government efforts to focus on improving health of these weaker groups need special attention.

- The proportion of Muslims is also higher (30.2 per cent) among the urban poor compared to urban rich (12.1 per cent). As health care provision to this group poses certain unique challenges, higher concentration of Muslims in underserved urban localities needs to be factored in while designing health and population stabilization interventions.

3.3 Neonatal, Infant and Child Mortality

Infant and child mortality* rates reflect the level of socio-economic development and quality of life. They have been used for monitoring and evaluating population and health programs and policies. These rates are higher in Rajasthan as compared to the national average. Though neonatal, infant and under five mortality rates have seen a decline in recent years in India, this trend infact reversed in Rajasthan.The situation with respect to urban poor is far worse.

Fig 4: Neonatal, Infant and Child Mortality by Economic Groups



** Mortality rates as defined in NFHS:*
Neonatal mortality: The probability of dying in the first 28days of life
Infant mortality: The probability of dying before the first birthday
Child mortality: The probability of dying between the first and fifth birthdays
Under 5 mortality: The probability of dying before the fifth birthday

1 International Institute of Population Science (IIPS) and ORC-Macro (2001), National Family Health Survey (NFHS-2), India 1998-99. India IIPS, Mumbai.

2 Government of Rajasthan. Rajasthan Tenth Five Year Plan (2002-07). Welfare of Backward Classes, Scheduled Castes/Scheduled Tribes, and Social Welfare. Available at URL: http://www.rajasthan.gov.infive%20year%20plan_files/chap26-sw.pdf.

- **Neonatal mortality** is high among the urban poor at 65.5 per thousand live births in comparison to the urban average of 45.6 (Fig 4). Neonatal mortality among urban poor is almost twice that of urban rich.The contributing factors of high neonatal mortality are poor maternal health, high proportion of domiciliary deliveries, many of which are attended by untrained health personnel in unhygienic conditions. Other than this, adverse economic circumstances and the informal nature of employment results in mothers returning to work immediately after child birth placing further stress on the health of the mother and her new born child. In the absence of social support networks, children often accompany mothers to the workplace and are exposed to health hazards.

- The **infant mortality** rate among the urban poor is 98.2 as against the urban average of 68.9. This reflects a) poor availability and utilization of health services, b) delay in recognition of early warning signs and prompt treatment of childhood ailments (owing to lack of awareness) and c) continued deprivation of resources to secure normal growth as well as catch up growth in cases of low birth weight, which is common occurrence among the urban poor.

- **Under 5 mortality rates** (U5MR) vary dramatically among the various categories of urban areas. The U5MR is 162.3 among the urban poor as compared to the urban average of 93.3. The high U5MR among urban poor is a consequence of the inability to recover in the existing limiting environment, paucity of time to seek health care as parents/ caretakers are daily wagers, mothers being pre-occupied with younger (often more vulnerable) children and low health awareness.

Promoting safe delivery practices and addressing early and closely spaced births will reduce neonatal mortality among urban poor in Rajasthan

Policy provisions and program recommendations:

The high NMR and child mortality rates emphasize the need for focusing on integrated programs for reproductive and child health and evolving life cycle approach as women are anemic prior to conception and throughout pregnancy. Among the low income groups in Rajasthan, 39 percent of urban poor women gave birth to their first child when they were less than 18 years of age and birth interval in 35 per cent of the births was less than 24 months. Early and closely spaced child bearing depletes the mother's limited stores resulting in sub optimal fetal growth and low birth weight babies. This also contributes to high maternal mortality which at 670 maternal deaths per 100,000 live births is the second highest in India only after Uttar Pradesh[3] . Integrated programs for maternal and child health are vital for improving maternal health and reducing incidence of low-birth weight babies with the long-term objective of improving child survival and health.

3 Registrar General, 2002. SRS Bulletin. Sample Registration Syste. Vol 33 (1).

Skilled attendance at birth, timely referral for sick babies and services such as immunization are simple interventions being implemented through RCH programs for addressing the multiple causes of childhood mortality. The reach of such high impact interventions needs to be improved through training and participation of *dais* (traditional community based birth attendants) and community health workers. While institutional deliveries need to be encouraged, keeping in view the dependency on the proximate "dai" and the community's faith in utilizing her services, a comprehensive dai training program for urban set ups needs to be planned and implemented.

Son preference and neglect of girl child additionally contributes to the high neonatal mortality. Rajasthan has the highest prevalence of female foeticide, contributing to one-fifth of the total cases of female foeticide in India[4]. Access to safe abortion is also limited in the State, with per capita availability of legal abortion services of one per 157,354 individuals in Rajasthan[5]. The girl child is thus disadvantaged right from conception. If born and allowed to live, she must bear the brunt of poor care compared to her male siblings. The number of females in the State has decreased from 916 to 909 per thousand males in 10 years from 1991 to 2001. A further disturbing child-sex ratio of 901 among urban poor is indicative of gross neglect of the girl child.

Taking cognizance of the link between pre-natal sex determination tests and the declining sex ratio among children the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, came into existance in 1996. Easy access to sex-determination techniques in urban areas, and declining sex-ratio necessitate improved enforcement of the Act.

Finally, child care schemes implemented under the National Crèche Fund may be strengthened to ensure better care of children of working slum dwelling women.

KEY MESSAGES

- Neonatal and infant mortality rates among urban poor in Rajasthan are almost twice and the Under five mortality rates are thrice that of the urban rich. The mortality rates among the urban poor are worse-off than their rural counterparts.
- Child sex-ratio of 901 among urban poor in Rajasthan is indicative of gross neglect of the girl child. One-fifth of the total cases of female foeticide in India have been reported from the State. This necessitates for greater focus on girl child among urban poor and better enforcement of the PNDT Act in urban areas.
- It is essential to increase coverage of antenatal care services and deliveries by trained personnel.

4 Centre for Child Rights. Says a Child...who Qestions for my Rights? Parliament in Budget Session 2003. New Delhi.

5 Johnston HB, 2002. *Abortion Practice in India: A Review of Literature*. Mumbai, India: Centre for Enquiry into Health and Allied Themes (CEHAT) and Research Centre for Anuradha Trust.

3.4 Childhood Morbidity and Health Services

The greatest risks to life are in its beginning, but they do not disappear as the newborn grows into an infant and a young child. Programs to tackle vaccine preventable diseases, malnutrition, diarrhea or respiratory infections still have a large unfinished agenda.

Reach of preventive health services to urban poor children is limited.

Only 7 percent of the urban poor children receive all childhood vaccines in Rajasthan.

Immunization leftout rates among the urban poor in Rajasthan is almost five times that among the urban rich.

Immunization Status:

Vaccination of children against six serious preventable diseases (tuberculosis, diphtheria, pertussis, tetanus, polio and measles) has been a cornerstone of the child health care system in India. The reanalysis of NFHS 2 indiates that only 7.4 per cent of all children aged 12-23 months had received complete immunisation* (Fig 5) and a meager 11.9 per cent of children from urban poor households had been vaccinated against measles by the age of 12 months as compared to the urban average of 39.3 per cent. Outbreaks of Vaccine Preventable Diseases such as Measles and Diptheria, which are highly contagious, are more common in urban slums owing to high population density and continuous influx of a new pool of infective agents with the immigrating population[6,7,8]. Resurgence of diphtheria in slums is being increasingly reported in recent literature[9].

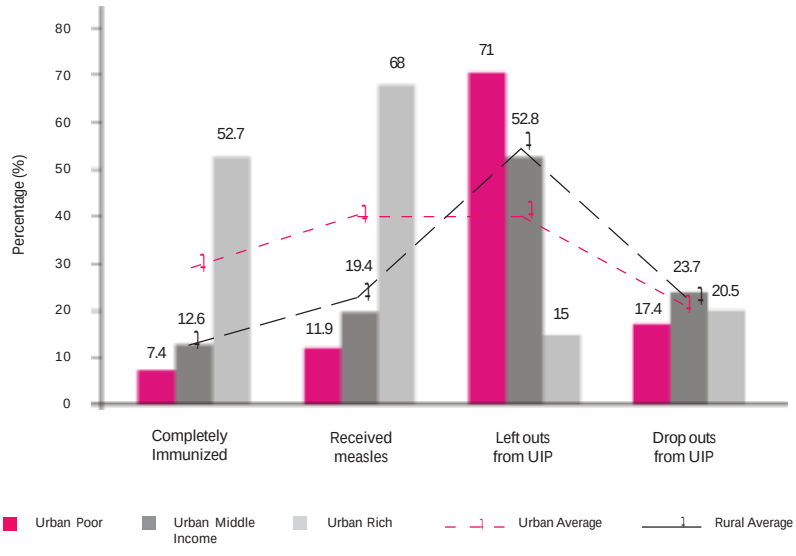


Fig 5: Immunization Coverage among children aged 12-23 months by Economic Groups

* *Complete Immunization - one dose of BCG, three doses of DPT and OPV, and one dose of Measles as per the GOI guidelines.*

♣ *Dropout rate is the proportion of eligible children who received DPT1 but did not received DPT3 and left out rate is the proportion of eligible children did not receive any vaccination in first nine months of life.*

6 Loening W and Coovadia H. 1983. Age specific occurrence rates of measles in urban, peri-urban, and rural environment: Implications for time of vaccination. *The Lancet*; 322 (8345): 324-6.

7 Lal, S. et al., 2003. Innovative approaches to Universalize Immunization in rural areas. *Indian Journal of Community Medicine*. 28 (2) : 51-56.

8 AFP Alert. National Polio. Surveillance Project. A Govt. of India - WHO Initiative volume 6, No. 3, July 2002-Dec. 2002.

9 Lodha R. et al, 2000. Diptheria in urban slums in north India. The Lancet.355:204.

It is necessary to extend immunization coverage to all slums including unlisted slums and children of temporary migrants in Rajasthan.

Dropout and left out rates* are high among urban poor households (Fig 5). Leftout rates among the urban poor are almost 5 times (71 per cent) that among the urban rich (15 per cent) and higher than rural averages (55.9 per cent) indicating that most urban poor children are not reached by health services.The birth registration system primarily for the urban slums is very weak; many of the births, particularly domiciliary deliveries which account for 79 per cent of the births in the urban poor of Rajasthan, remain unregistered. This is compounded by lack of outreach services, inefficient monitoring of service quality, lack of reach of a delivery system in unlisted slums, migratory nature of slum dwellers, lack of information about immunization services (dates and venue) and families resistant towards immunizing children amongst other reasons. Of those few children that are reached, about one out of every five (17.4 per cent) dropout. This highlights a need to enhance and strengthen reach of preventive health services to urban poor.

Strengthening community-provider linkages can help in improving immunization coverage.

Factors that need attention to improve immunization coverage among the urban poor include the following: (i) The catchment area of health centers are often not updated to respond to the dynamic character of urban growth. (ii) There are grey 'border areas' between zones of the service delivery units, which are then missed out owing to this 'dispute'. (iii) National events (such as pulse polio campaign) divert ANMs efforts away from routine immunization programs.(iv) Often planners and service providing personnel harbor the perspective that slums are 'illegal' and hence should actually be evicted or uprooted and that providing them services contributes to giving them legal sanctity. This perception also deprives a large number of children from essential vaccines and other preventive care, contributing to the colossal presence of disease causing pathogens in their environment (v) Providers often continue to practice the concept of waiting for an optimum number of children to arrive or collect before opening a multi dose vial such as measles or BCG. This usually leads to a large number of missed opportunities of timely immunization.

Policy provisions and program implications

The National Rural Health Mission "Guidelines for strengthening immunization outreach in slums and under-served areas" mentions provision of Rs.1400 per month per slum for organizing four immunization outreach sessions. Identification, assessment and plotting of all listed and unlisted slums on city maps is required to define catchment areas of Urban Health Centres and comprehensive planning for outreach camps by ANMs. Emphasis should be on updating slum clusters on a regular basis to include new cluster and conducting outreach camps in these slums to improve

immunization coverage. Strategy should be build in to cover temporary settlements, pavement dwellers regularly eg. through mothly mobile teams that cover all such temporary populations in a defined area.

A mechanism for supportive supervision to ensure quality of immunization services needs to be established since the overworked ANM cannot provide good quality service to all beneficiaries throughout the immunization session. Staff sensitization and motivation workshops may be planned on a regular basis to identify emerging needs for support and training of the health staff.

It is essential to improve awareness about health issues in the community, build collective negotiation capacity and strengthen linkages of the community and the health system. There is a need for making special IEC efforts to cover all eligible children in the urban slums for immunization focusing with an inbuilt sensitization strategy addressed to mothers.

Diarrhea: prevalence, practices and treatment

Diarrhea is the second most serious cause of mortality among children under age five world wide, following acute respiratory infection[10]. A comparison of all economic groups in urban Rajasthan indicates that diarrhea is most common among the urban poor with 27.1 per cent cases reporting it in the past two weeks preceding the survey (Fig 6). High prevalence of diarrhea in slums can be attributed to the near absence of sanitation and drainage facilities. More than four-fifths of urban poor households in Rajasthan have no access to any toilet facility or piped water supply.

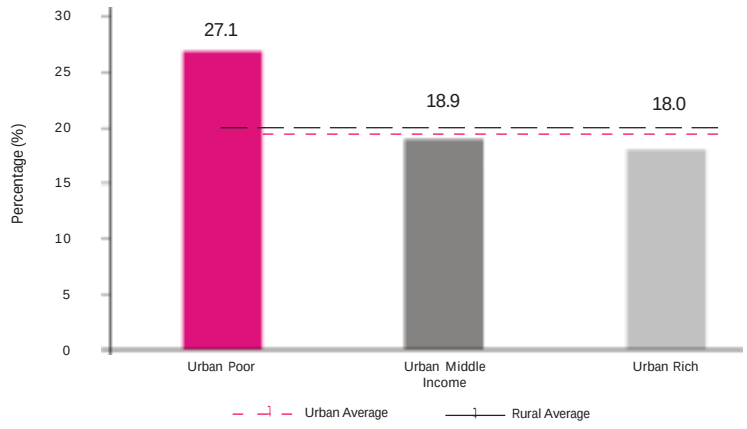


Fig 6: Prevalence of diarrhea 2 weeks preceding the survey by Economic Groups

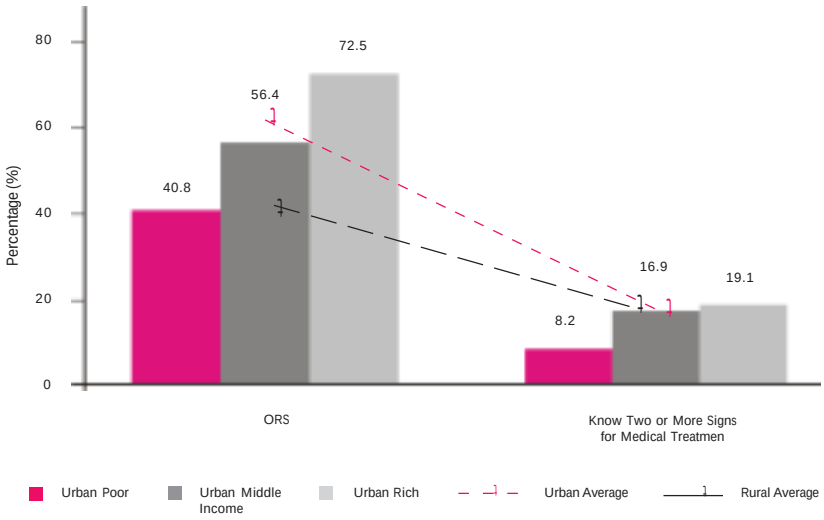
10 Gordon, B. et al., 2004. Inheriting the World : The Atlas of Children's Health and the Environment. Geneva : World Health Organization.

Making private providers counselors and ORS depot holders will improve availability and use of ORS.

Knowledge and Practices during Diarrhea

Oral Rehydration Therapy (ORT) a simple, cost-effective treatment given at home using either packets of Oral Rehydration Salts (ORS) or a simple home solution of sugar, salt and water, has shown to contribute significantly to reduce child mortality due to diarrhea[11]. In Rajasthan, the level of knowledge about treatment of diarrhea by using ORS is low (40.8 per cent) among the urban poor (Fig 7). The low knowledge is further compounded by improper formulation and infrequent feeding of ORS solution.

Fig 7: Knowledge about treatment during diarrhea by Economic Groups



There is evidence to support that mother's exposure to mass media increases awareness and use of ORS[12]. Since availability and access of mass media is higher in urban areas than in rural areas, urban poor can be easily reached for communication activity and maybe more likely to embrace change. While on one hand the benefits of ORS could be reinforced through mass media, this demand generation needs to be adequately supported with supplies of ORS, at the facilities and at slum level. Health programmes could tie up with other community based programmes such as ICDS to improve access at the community level. Non-qualified private practitioners, who are consulted for treatment by the urban poor, could serve as depot holders for ORS.

Acute Respiratory Infections

Acute respiratory infections, mostly pneumonia, are a major cause of illness among young children throughout the world. In developing countries, an estimated 4.1 million children under age five die from acute respiratory infections every year[13]. In India, ARI is the leading cause of childhood death[14]. Slums settings with overcrowding, use of indoor fuel like wood

11 Victora CG, Bryce J, Fontaine O, Monasch R. 2000. Reducing Deaths from Diarrhea through Oral Rehydration Therapy. *Bulletin of the World Health Organization*, 78:1246-1255.

12 Agarwal, K. N, et al., 2000. Impact of the Integrated Child Development Services (ICDS) on Maternal Nutrition and Birth Weight in Rural Varanasi. *Indian Pediatrics*; 37: 1321-1327

13 WHO (World Health Organization). 1995. *The world health report 1995: Bridging the gaps.* Geneva: World Health Organization.

14 Murray, C. J. L., and A. D. Lopez, eds. 1996. *The global burden of disease*. Cambridge, Massachusetts: Harvard University Press.

and kerosene for cooking, inadequate water supplies and sanitation systems, contribute to a higher incidence of ARI[15]. The morbidity prevalence due to ARI is high among all economic groups in urban Rajasthan. One out of every four children is affected among the urban poor (Fig 8).

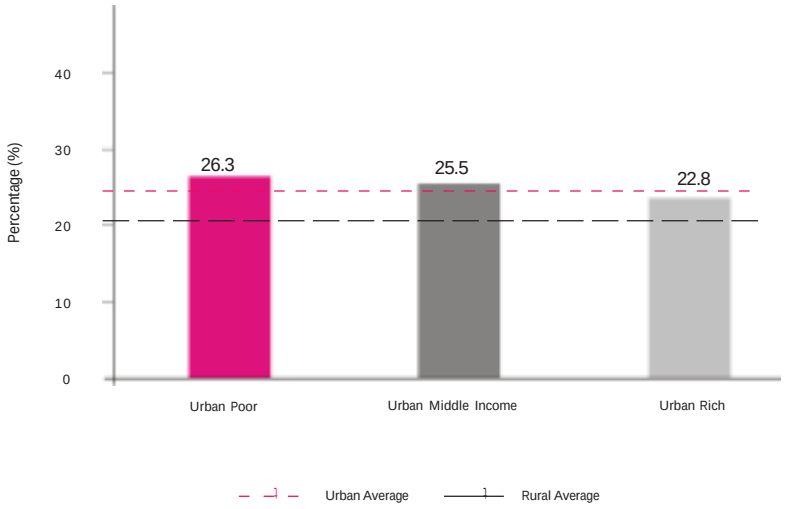


Fig 8: Prevalence of ARI 2 weeks preceding the survey by Economic Groups

Studies provide strong evidence that case management of ARI is feasible even in the poorest settings.In such settings it was found that health workers who had been appropriately trained were able to recognize clinical signs of pneumonia in children, administer correct dose of an oral antimicrobial , refer severe cases and instruct families on essential supportive measures[16]. It is essential to train community based volunteers on management of ARI to tackle high ARI diseases burden.

Policy provision and program implications

- Resources of the National Slum Development Program, Low Cost Sanitation scheme and other schemes should be utilized for the construction of community toilets for the urban poor and slum dwellers. This will improve environmental hygiene and decrease diarrhea.
- There is also a clear need for the urban health improvement program to build functional linkages with the sanitation program and actively advocate for augmenting sanitation services.
- There is a need to focus on hygiene promotion at the household level in the absence of sanitary facilities. This is particularly relevant for slum conditions for diarrhea prevention.
- The community level workers' capacity for early identification and prompt treatment or referral for diarrhea and ARI should be enhanced.

15 Sharma, S. et al., 1998. Indoor Air Quality and Acute Respiratory Infection in Indians. *Environmental Health Perspectives*, Vol 106, No. 5.

16 Rasmussen, Z. et al, 2000. Case management of childhood pneumonia in developing countries: recent releavant research and current initiatives. Int J Tuberc Lung Dis.4 (9);807-826

Poor hygienic conditions in slums need to be improved to address high childhood morbidity

The link worker proposed in the GOI guidelines for the urban health programming may perform this role with appropriate training and communication tools.

- Community Based Organizations, active women from the community or local shops could serve as depot holders for ORS, selective antibiotics to improve access for diarrhea, ARI affected children in slums.
- Adverse economic conditions and lack of social support networks results in women taking infants and children to their work place which exposes them to health hazards. There is also a need to expand day care services for children of poor working women.

KEY MESSAGES

- Tthe outbreaks of vaccine preventable diseases are more common in slum settings owing to high population density and continuous influx of a new pool of infective agents.
- Only 7.4 per cent of the children are completely immunized by the age of one year amongst the urban poor population.
- Supply, demand and policy issues plague immunization coverage among the urban poor.
- Strengthened outreach and promoting use of fixed facilities for immunization services holds the key to reaching the urban poor children.
- The capacity of community level workers in slums for early identification and prompt treatment or referral for diarrhea and ARI should be enhanced.
- Community based organizations, in urban slums can become depot holders for ORS, nutritional supplements and should be trained in effective counseling.
- The capacity of community level workers for early identification and prompt treatment or referral for diarrhea and ARI should be enhanced.

3.5 Nutritional Status of Women and Children

Malnutrition is an important factor contributing to high morbidity and mortality among children [17]. Malnutrition among children is often caused by the synergistic effects of inadequate or improper food intake, repeated episodes of parasitic or other childhood diseases such as diarrhoea, and improper care during illness [18,19]. Nutritional status of girls is compromised by unequal access to food, by heavy work demands, and by special nutritional needs (such as for iron). Anemia among women is an important cause of maternal and perinatal mortality by contributing to increased risk of premature delivery and low birth weight [20]. Under nutrition is more common for children of mothers who are malnourished.

Urban poor children in Rajasthan are twice as likely to be undernourished as compared to urban rich children.

Malnutrition is higher among urban poor children as compared to urban and rural average. The rich-poor divide in urban areas of Rajasthan is marked since the children from poor urban families are twice as likely to be undernourished as compared to children from rich families (62 percent vs. 32 percent) (Fig 9).

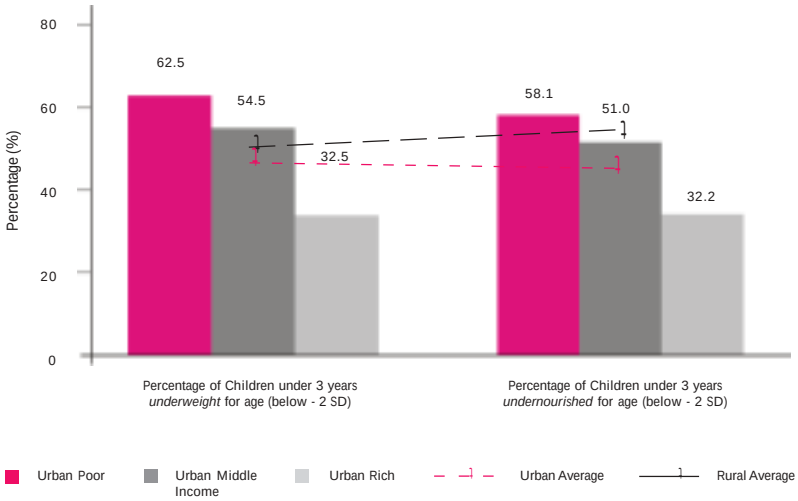


Fig 9 : Nutritional status of children under 3 years by Economic groups

- Almost two-third (62.5 percent) of the urban poor children are underweight, a measure of short term and acute under nutrition. This is worse in comparison to other urban categories and the urban average of 46 percent.
- Indicators of long term and continued undernutrition are as worse with more than half (58.7 percent) of the urban poor children stunted compared to 32.2 per cent among the urban rich.

17 Briend, A., B. Wojtyniak, and M. G. M. Rowland. 1988.Breast feeding, nutritional status, and child survival in rural Bangladesh. *British Medical Journal* 296(6626): 879–82.

18 Pelletier DL et al. 1995. The effects of malnutrition on child mortality in developing countries. *Bulletin of the WHO* 73:443-448.

19 Ruzicka, L. T. and P. Kane. 1985. Nutrition and child survival in south Asia. In K. Srinivasan and S. Mukerji, eds. *Dynamics of population and family welfare*, pp. 333–57. Bombay: Himalaya Publishing House.

20 Seshadri, Subadra. 1997. Nutritional Anaemia in South Asia. In Stuart Gillespie (ed.), Malnutrition in South Asia : A Regional Profile. Katmandu : Regional Office for South Asia : UNICEF.

Only 2 percent of urban poor neonates are breast fed within the first hour of birth while none of the urban poor children (0-3 months) are exculsively breast fed in Rajasthan.

Infant Feeding practices

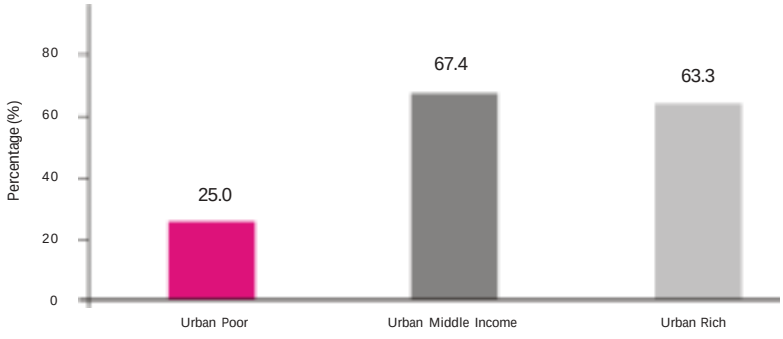
Appropriate infant feeding practices have significant beneficial effects on both mothers and children. Early and exclusive breast feeding up to 6 months of age improves nutritional status, immunity and provides warmth resulting in better chances of survival and growth of the child. Mothers are benefited due to lactational amenorrhea (LAM) or contraceptive effect of breast feeding enabling longer birth interval, reduced risk of ovarian cancer and emotional bonding with the child. Only 2.4 per cent of the urban poor neonates

Fig 10: Breast feeding practices by Economic Groups

in Rajasthan are breastfed within one hour of birth as against the urban average of 8.0 per cent. It is frightening to note that none of the children (0 to 3 months) belonging to the urban low economic group are exclusively breastfed (Fig 10).

The timing and type of complementary foods introduced in an infant's diet also has a bearing on his nutritional status. Recent literature has proved that breastfeeding and complementary feeding are most valuable interventions for improving child survival[21]. Three-fourth (75 per cent) of urban

Fig 11: Percentage of Children who Receive Complementary Food By 7 - 9 Months by Economic Groups



21 Jones et al., 2003. How many child deaths we can prevent this year? *Lancet* 2003; 362: 65-71.

poor children of Rajasthan do not receive complementary foods by 7-9 months of age, compared to about one-third (36.7 per cent) in the urban rich (Fig 11).

Anemia among children

Anemia is a serious concern for young children because it can result in impaired cognitive performance, behavioral and motor development, coordination, language development as well as increased morbidity from infectious diseases [22]. One of the most vulnerable groups for anemia is children in the age group of 6-24 months [23]. Four out of five children in urban poor households of Rajasthan are anemic and are at increased risk to disadvantaged health (Fig 12).

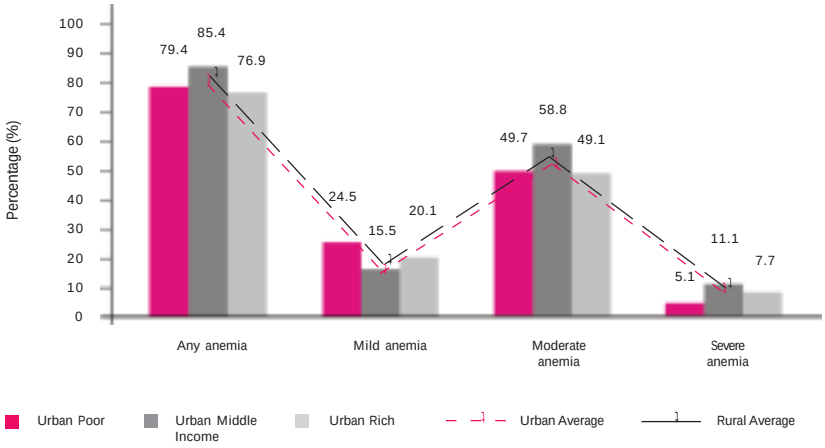


Fig 12: Prevalence of Anemia among Children by Economic Groups

Vitamin A supplementation

Vitamin A deficiency, which is one of the most common nutritional deficiency disorders in the world, is associated with night blindness and

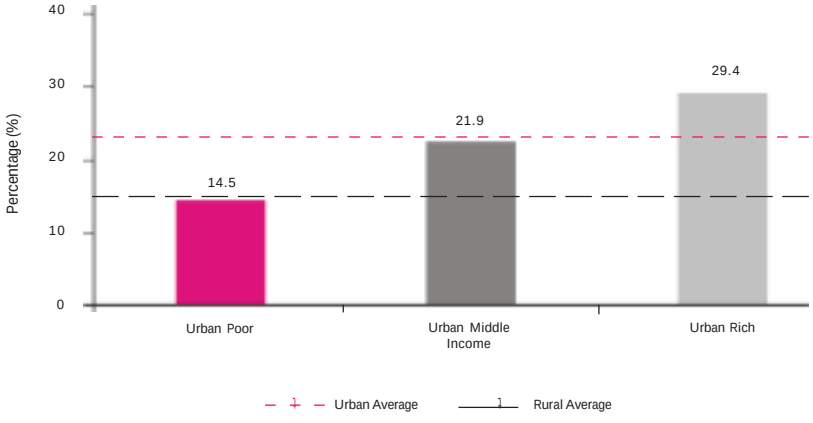


Fig 13: Percentage of children (12-35 Months) who received atleast one dose of Vitamin A by Economic Groups

22 Seshadri, Subadra. 1997. Nutritional Anaemia in South Asia. In Stuart Gillespie (ed.), *Malnutrition in South Asia : A Regional Profile*. Katmandu : Regional Office for South Asia : UNICEF.

23 Stolzfus, Rebecca J. and Michele L. Dreyfuss. 1998. *Guidelines for the Use of Iron Supplements to Prevent and Treat Iron Deficiency Anemia.* International Nutritional Anemia Consultative Group. Washington D C. : International Life Sciences Institute Press.s

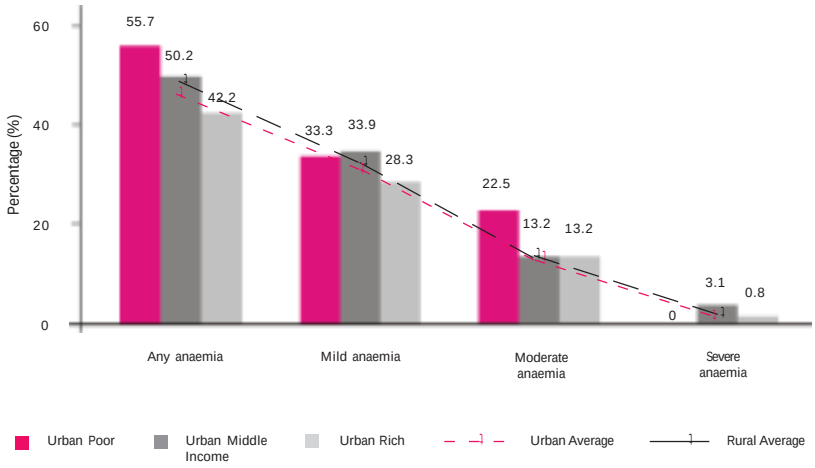
High prevalence of anemia contributes to high maternal morbidity and mortality

compromised immune capacity to battle infections. Among the urban poor in Rajasthan only 14.5 per cent of children aged 12-35 months, had received at least one dose of vitamin A (Fig 13). Inefficiencies in the supply chain of Vitamin A are a key impediment to the widespread reach of Vitamin A which needs to be addressed.

Anemia among women

The occurrence of anemia is high across all economic groups though measurably higher among the urban poor women (55.7 per cent) in comparison to the urban average of 46.7 per cent (Fig 14).

Fig 14: Prevalence of Anemia among Women by Economic Groups



Among pregnant women, anemia is significantly associated with low birth weight infant and limited reserves of iron at birth. The high prevalence of anemia is attributed to dietary factors such as limited intake of iron / folate rich foods, high intake of iron absorption inhibitors or low intake of iron absorption facilitators or behavioral causes such as improper hygiene and consequent helminthic infections.

Though IFA consumption may provide immediate relief from symptoms and improve blood hemoglobin profile, sustained improvement in anemia status can be achieved only through nutritional and behavioral modifications such as enhancing overall food intake (staple food being a very important source of iron especially among the poor), increasing consumption of iron rich foods.

High prevalence of anemia emphasizes the need for effective distribution and ensuring consumption of Iron Folic Acid (IFA). Regular and timely

ANC should ensure receipt along with reassuring counseling and follow up to enhance IFA consumption.Early registeration of pregnancy will ensure that IFA is initiated early in pregnancy and give the woman a longer time period to consume IFA. Link volunteers and active women groups can also help in ensuring regular consumption of IFA tablets by providing counseling and helping the mother perceive its importance for her own and her baby's health .

Policy provisions and program implications

The National crèche scheme may be able to address the unmet/ unattended need for health and nutrition of young children of working mothers.The coverage of ICDS should be expanded to the urban slums as many studies have pointed to the positive correlation between the existence of an *aganwadi* center and improved nutritional status [24]. It is essential that the growth promotional activities and programs target children in their early years (0-3 years), when malnutrition sets in.

Promotion of optimal feeding practices including exclusive breastfeeding for six months, timely initiation of complementary feeds and good cooking and hygiene practices need to be undertaken at the slum level through enusred visits and counseling by CBOs and other slum health volunteers. Counseling of key decision makers in the family, in addition to the mother, and involvement of men in attending to children's health should be taken up earnestly.

KEY MESSAGES

- Every two out of three children among urban poor in Rajasthan are underweight.
- Nutrition and health education of caretakers and increased involvement of men in attending to children's health needs should be taken up earnestly as is evident from the low awareness about identification and management of major childhood illnesses and feeding practices.
- The low reach of vitamin A supplementation across the different economic groups demands an investigation into supply and usage.
- The high prevalence of anemia should be addressed by improving IFA distribution and better counseling for ensuring consumption and improved diet.

24 Agarwal, K.N. et al., 2000. Impact of Integrated Child Development Services (ICDS) on maternal nutrition and birth weight in rural Varanasi. Indian Pediatrics; 37: 1321-1327.

3.6 Maternal Health

Pregnancy and child birth are leading causes of death, disease and disability among women of reproductive age. They account for at least 18 per cent of the burden of disease in this age group- more than any other single health problem[25]. Maternal health interventions in the form of antenatal care, skilled attendance during delivery and helping women prevent unwanted pregnancy are among the most cost-effective and life saving investments in public health.

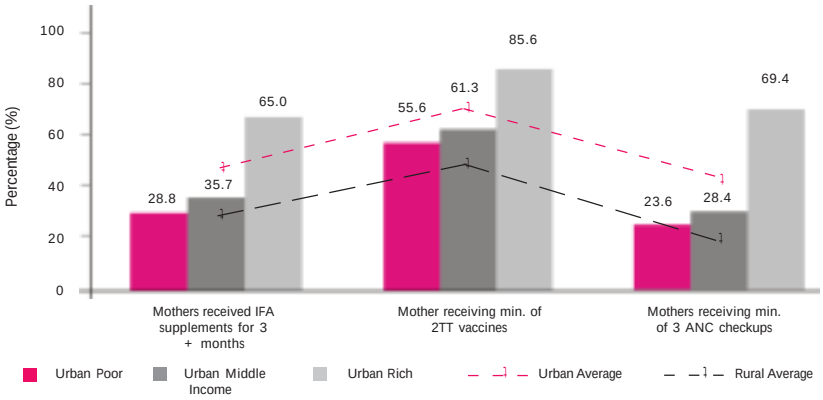
Antenatal care

Only one in five women in urban slums received three or more antenatal checkups

The RCH program recommends that as part of antenatal care, pregnant women should be provided at least three antenatal check ups, two doses of tetanus toxoid vaccine and iron and folic acid supplementation for at least three months during pregnancy.

- Among urban poor in Rajasthan, only 28.8 per cent urban poor mothers received the recommended iron and folic acid tablets for more than 3 months (Fig 15) and 55.6 per cent received two or more doses of TT vaccine.
- Only 23.6 per cent of the mothers received the recommended three or more antenatal check ups as against the urban average of 43.8 per cent (Fig 15).

Fig 15: Antenatal care Received by Mothers During Pregnancy by Economic Groups



The low ANC coverage reflects the inequalities in the health care delivery system where large pockets of slums are completely uncovered by health services. Local RMPs who have significant presence in the community can be trained and provided incentives to deliver antenatal care to women. Link workers, SHG's, CBO's can facilitate provision of health services

25 World Bank.1993.World Development Report 1993: Investing in Health.Washington, DC: World Bank.

including ANC by increasing information and demand for services, serving as depot holders for essential medicines and contraceptives and by developing linkages between the community and health providers.

There is a continued influx of migrants into urban areas owing to better economic opportunities in cities. RCH services should be better planned such that each ANM and MPW has a defined catchment area and is mandated through official circulars to (i) add new migrants into the program as they come in and provide a report of new migrants every quarter (ii) conduct special counseling sessions for new migrants to inform them about available services at UHCs and providing them a Family Health Card.

Four out of five deliveries among urban poor take place at home

Care during delivery

Skilled care during childbirth is important because a significant proportion of women and newborns develop serious and hard to predict complications during or immediately after delivery. Skilled attendants- doctors or midwives possessing requisite midwifery skills can recognize these complications timely and either treat or refer women to health centers or hospitals if advanced care is needed. Once a major obstetric complication develops a trained birth attendant or nurse can do little at home because surgical intervention is often necessary.

- Among the urban poor in Rajasthan, domiciliary delivery is still the norm with four out of five of deliveries taking place at home.
- The deliveries attended by a health professional at home or at a health facility among the urban poor households is only 33 per cent in comparison to the urban average of 62.4 per cent (Fig 16).

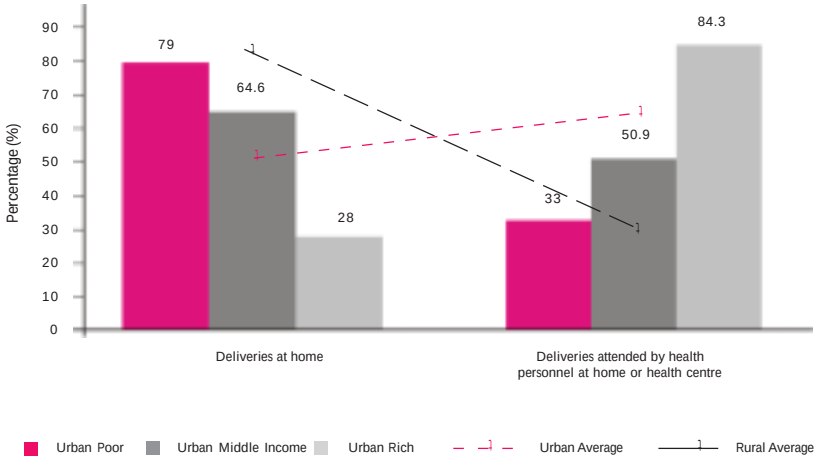


Fig 16: Place and Assistance During Delivery by Economic Groups

Policy Provisions and Program Implications

Schemes such as Janani Suraksha Yojna may bring slum population closer to health services.

- Institutional deliveries should be promoted by increasing the number of health facilities providing round the clock maternity services and encouraging slum communities to avail of such services. Effective implementation of the Janani Suraksha Yojana (JSY) such that it proactively reaches out to the most vulnerable will also help in increasing the percentage of institutional deliveries.
- Though promoting institutional deliveries is the ideal option for ensuring safe delivery, the lack of adequate public health facilities in urban areas is a constraint. Home deliveries are likely to continue for a long time and a comprehensive training package for the *dais* therefore needs to be formulated and implemented. The curriculum for dai training should cover i) skill and practice of clean delivery, ii) early identification of sickness and prompt referral and iii) promoting early initiation of breastfeeding and provision of warmth to the newborn. Follow up is also necessary to ensure practice of training inputs.
- It is also observed that a large number of slum women return to their native villages for delivery. In order to ensure that these women adhere to safe delivery practices, specific communication strategies should target such temporary migrants and supplemented by attractive pictorial cards which depict recommended behaviors and which could also be used for referral at their native villages.

KEY MESSAGES

- Only one in four pregnant women received the recommended three antenatal visits. Low ANC coverage reflects gaps in the preventive health care delivery system especially for the urban poor.
- Four out of five deliveries among urban poor in Rajasthan are domiciliary. This indicates an urgent need to identify and train TBAs in slum settlements.
- Large scale migration and rapid mobility of population needs to be factored in while planning the delivery of health services.

3.7 Fertility and family planning

High population growth rate in urban slums is not only because of rapid immigration but also because of large families and limited use of family planning methods among urban poor. Rajasthan recorded the third highest Total Fertility Rate (TFR)* at 3.78 among the major states in India[26].

Rajasthan recorded the third highest TFR among major states in India.

- Among low urban poor in Rajasthan TFR is 4.18 which is higher than the urban average of 2.98 and the rural average of 4.06.
- Mean number of children ever born to ever married women age 40-49 among the urban poor in Rajasthan is 6.0 as against the urban average of 4.9.

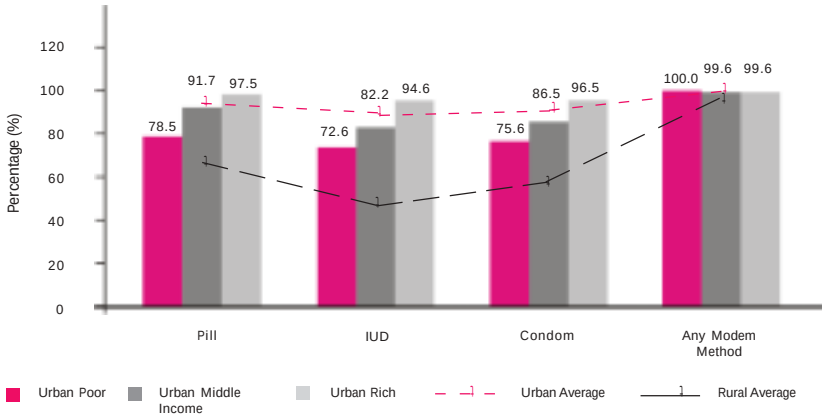
Fig 17: Total Fertility Rate by Economic groups

The current TFR across different economic groups in Rajasthan calls for urgent and intense efforts with a unified multisectoral approach to achieve the medium and long term objectives of State Population Policy 2000, to bring TFR to 2.1 by 2016 . Addressing the high fertility is important not only for reducing the rapid growth of population but also to reduce the high number of and closely spaced births that have a significant bearing on maternal and child health. The current efforts should target raising the age at co habitation and child bearing. More than one-third (36.5 percent) of Rajasthan's urban population is below 15 years of age which will shortly be entering the reproductive age groups. Special efforts should be made to inform this young age group to make informed reproductive decisions.

** Total Fertility Rate is the average number of children that will be born to a woman if she experiences the current fertility pattern throughout her reproductive period span (15-49 yrs)*

26 The International Institute of Population Sciences (IIPS) and ORC-Macro (2001), National Family Health Survey- (NFHS2), India 1998-99.

Fig 18: Knowledege of methods of Contraception by economic groups



The use of spacing methods is only 2.5 percent among the urban poor.

Programs need to target men to address low usage of family planning methods.

Though knowledge about temporary methods of contraception ranges from 73 to 98 percent (Fig 18), only 30 per cent of all currently married urban poor women are using any contraceptive method (Fig 19).

The use of spacing method (Pill/IUD/Condoms) is extremely low (2.5 per cent) among the urban poor. Even though the use of female sterilization method is about 25 per cent among the urban poor, most of these women would have already had > 4 pregnancies. This indicates the need to help families realize the significance of using temporary spacing methods to

Fig 19: Current Use of Contraceptives by Economic Groups

postpone pregnancy and increasing inter-pregnancy interval. Also encouraging adoption of permanent methods after 2 children is necessary if the target of replacement fertility is to be reached. In India, gender inequalities favor men and sexual and reproductive health decisions are usually made by them. However, the Indian family welfare programme has targeted only women who have little decision making authority. Reproductive and Child Health Programme and the Rajasthan Population Policy envisages to pay

increased attention to men in order to have more impact on contraceptive prevalence. The government should make efforts to involve other community based programmes for improving the availability of family spacing methods to fulfil unmet need of 17.6 per cent in the state.

Program Implications

1. There is an urgent need to promote the use of spacing methods in the wake of high proportion of closely spaced births (inter-pregnancy interval of less than 24 months) and high TFR among the urban poor.

    - Building on existing networks that have strong linkages with the community can be a useful strategy for improving usage of family planning services. Dairy cooperative based community based distribution channels in Uttar Pradesh by SIFPSA has resulted in significant increases in contraceptive prevalence in project areas. The method has also changed from an almost exclusive reliance in sterilization to greater use of spacing methods. Similar channels such as the use of contractors or *thekedaars* who mobilize a large informal sector workforce could also be a possible medium of intervention for involving men in promotion of family planning practices.
    - Training community members to function as link workers can help in extending outreach services to the door steps of the slum dwellers resulting in better demand for health and family welfare services and ensuring clients satisfaction. In the Calcutta Slum Improvement Project, honorary female health workers played a significant role in bringing about health improvements of the community due to their accessibility, low cost of health care, home visits, and positive attitude[27].

2. Strengthening community based organizations like SHGs is an effective mechanism to strengthen linkages between the community and the health system. Such groups can complement the efforts of health workers in generating awareness about health issues and counseling for family planning and acting as depot holders for temporary methods. They can also increase accountability of the government health services. Such groups can negotiate for better resources through their elected municipal representatives (ward councilors), by using vote bargaining and also through lower level bureaucratic channels[28].

3. The Saadhan franchise of private health clinics, developed by PSI under its social marketing strategy is being used to make 'Preventol' , an emergency contraceptive, available through the Saadhan clinics in 32 towns of Rajasthan[29]. Private doctors receive urban referrals and provide clinical family planning services such as IUD, Sterilizations, injectables,

Link workers and community based organisations can help in increasing knowledge, demand and use of family planning methods

29 Population Services International. Update of Social Marketing of Emergency Contraception in Rajasthan 2004.
27 Institute of Reseach in Medical Statistics.2003 India Population Project.-VIII, Endline Survey.New Delhi: IRSM
28 Gill, K. 1999. If We Walk Togethe: Communities, NGOs and Government in Partnership for Health- The Hyderabad Experience.Washington D.C: World Bank

pregnancy tests and safe abortions at subsidised rates. This network could be extended to other cities.The existing network could also be used for delivering other relevant RCH products thereby reducing project costs.

4. It is essential to target IEC efforts towards men and solicit their support as in a patriarchal society such as Rajasthan, men make most of the important decisions related to family size and use of family planning. Studies have shown that men's lack of reproductive health knowledge can have dangerous implications for women, who often must defer to male family members in matters of health. Ensuring that men understand the basic facts about fertility and reproductive health, as well as the importance of appropriate care is vital to women's health and well-being [30] .

5. Adolescence is a crucial period of life when attitudes towards sexuality, reproductive health and contraceptive methods are formed. This is also a period when ignorance on these issues is common and there exist a huge information needs. Programs such as the Kishori Shakti Yojana of the Department of Women and Children, directed at adolescents can help prepare them for parenthood and increase usage of contraception.Strenthening RCH related education components in schools should be made a priority area of action.

6. Linking education programs such as Sarva Shiksha Abhiyans which have components of adult education with messages on family planning can improve knowledge and improve attitudes and usage of contraception.

Key Messages

- The high TFR of 4.2 among the urban poor emphasizes the need for increasing current age at marriage and the use of family planning methods.
- Among the urban poor, the use of spacing methods is extremely low (2.5 percent) and there is a high unmet need for limiting methods. This needs to be addressed by improving information about the methods and access to family planning services.
- The use of community based distribution and social marketing channels can improve the usage of spacing methods.
- As men are the primary decision makers, it is essential to target messages specifically to them.

30 Mahler, K.2000. Indian men with higher socioeconomic status are more likely to be knowledgeable about reproductive health. *International Family Planning Perspectives*.

3.8 Environmental Health Conditions

Access to safe water and sanitary means of excreta disposal are basic human rights and form an indispensable components of primary health care. Provision of adequate sanitation services and safe water supply represent an effective health intervention which has shown to reduce the mortality caused by diarrhoeal disease by an average of 65 per cent and related morbidity by 26 per cent[31]. Inadequate sanitation, hygiene and water result not only in more sickness and death but also in higher health costs, lower worker productivity and lower school enrollment and retention rates.

90 percent of urban poor lack piped water supply and 81 percent donot have any toilet facility.

Lack of safe drinking water and toilet facilities contribute to a high disease burden among the urban poor

Access to water

The poor in urban areas bear a disproportionately higher burden of the non-availability of water as well as its poor quality. Approximately 87 per cent of the urban low income households have no access to piped water. Nearly 64.7 per cent of the urban low and 49.4 per cent of medium income households derive their drinking water from public taps/hand pumps (Fig 20).

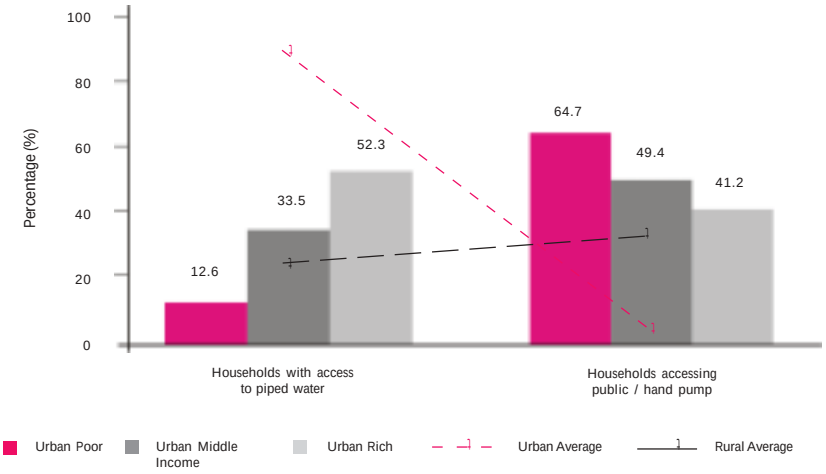


Fig 20: Access to Water Supply by Economic Groups

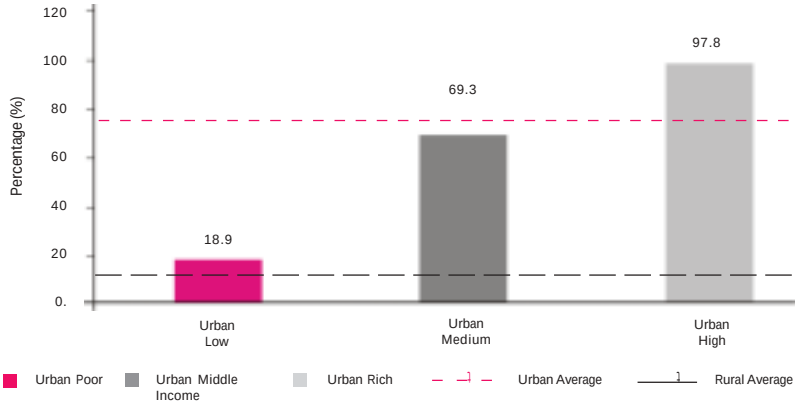
Sanitation facility

Only 18.9 per cent of the urban low income households use a private sanitary facility (Flush/pit toilet) for the disposal of excreta as compared to the urban average of 77.0 per cent (Fig 21).

Data from NSS 58th Round indicates that none of the slums in Rajasthan has an underground drainage system[32]. The government garbage disposal system for urban slums was also found grossly inadequate.

31 WHO and UNICEF, 2000 : *Global Water Supply and Sanitation Assessment 2000 Report*. WHO and UNICEF.

Fig 21: Households Having Access to Private Sanitation Facility by Economic Groups



Policy provisions and program implications

A number of policy provisions and programmes exist for the improvement of amenities in slums. JNNURM's sub-mission on Basic Services for the Urban Poor, IHSDP, Low Cost Sanitation scheme, RUIDP and others deal with improving the conditions of urban slums by providing physical amenities like water supply, storm water drains, community bath, widening and paving of existing lanes, sewers, community latrines, street lights etc. according to their mandate. Other schemes such as Urban Malaria Scheme, policy for solid waste management if implemented fruitfully could improve the hygienic conditions within slums.

Key Messages

- Improved environmental health conditions can result in significant improvements in health conditions
- Only one-tenth and one-fifth of the urban poor in Rajasthan have access to safe water supply and private sanitary facility respectively
- Funds available under various projects such as Sub Mission on Basic Services for the Urban Poor - JNNURM, IHSDP, LCS and others need to be effectively utilized to provide water supply and sanitation services to the urban poor

Subsequent, to the second round of the National Family Health Survey, other surveys have been conducted to assess the RCH conditions in Rajasthan. Prominent among them has been the second round of District Level Household Survey (DLHS) conducted during 2002-04 by the Ministry of Health and Family Welfare, Government of India. This survey also reveals the dismal state of health of the urban poor in Rajasthan and the stark differences which exist between the urban poor and the rest of the urban population.

The reanalyzed data of the DLHS by Standard of Living Index (SLI) for Rajasthan is presented in Annex 3. This analysis was a quick attempt to provide more recent data on health of the urban poor in Rajasthan. The methodologies adopted by the NFHS and DLHS have some differences which should be noted while making comparisons between the findings of the two surveys.

32 NSS 58th Round. 2002. *Condition of Urban Slums*. NSSO, Ministry of Statistics and Programme Implementation, Government of India, December 2003.

CONCLUSION

Conclusion

Growing Urban Poverty: Rajasthan, the largest Indian state in terms of area, is home to 56.5 million persons. Urban population comprises nearly one-fourth of the total population and 20 per cent of this population is estimated to be living below the poverty line.

Poor Health Conditions: The health conditions of the urban poor population in Rajasthan as in the rest of the country are masked by the urban average figures. The U5MR is 162.3 among the urban poor as compared to the urban average of 93.3. Only 7.4 per cent of the urban poor children are completely immunized by the age of one year. Seventy nine per cent of the deliveries among the urban poor in Rajasthan take place at home in the absences of a trained health professional.

Weak Policy Implementation: In an attempt to improve access to health care for urban poor, the Government of Rajasthan has formulated several policies, schemes and programmes. Apart from policies which are directly aimed at improving the health of the population, several Central and State policies related to housing, land tenure, employment, slum improvement, women's empowerment, food security etc have been introduced for urban poor. Despite this, health conditions of urban poor remain abysmally poor. Multiplicity of departments hampers the efforts for improving the conditions of the urban poor. The reasons for low impact of the schemes are inadequate allocation, poor targeting and deficient utilization of resources.

Inadequate Public Health Services: The efforts of Government of Rajasthan to make provisions for health care services to its population have been largely rural centric. Rapid urbanization has impacted the primary health care infrastructure in urban areas making it woefully inadequate. Because of rapid migration into cities and the burgeoning slum population, health centers in urban areas cater to much larger population than what they were initially envisaged. This results in several slum pockets either being underserved or totally uncovered by health services.

Poor Environmental Conditions: The health vulnerability of the slum dwellers is further accentuated by the poor environmental conditions in which they reside. Eighty seven percent lack access to safe drinking water and 81 per cent lack toilet facilities which expose the residents to increased risk of contracting a host of diseases.

Possible Options for Improving Health Care of Urban Poor in Rajasthan

Several factors such as the inadequate health services, poor reach of existing services and lack of demand for services exist resulting in poor health outcomes among the slum dwellers. In order to strengthen services and improve health of the urban poor the following measures are suggested:

Need to target the underserved: Several studies have shown that there is a large number of unlisted slums which remain outside the purview of basic services including health. Further, the slums of the city are not alike and there exists considerable differences in the health vulnerability of its residents. Disparities in health indicators across different slums exist owing to differing socio-economic, environmental and infrastructural conditions. It is essential to identify and plot all slums and undertake a vulnerability assessment of all slums in a city and provide extra focus to the more needy slums.

Functional Convergence of all stakeholders needed: There are various policies and programmes which are aimed at improving the conditions in urban slums. There are various stakeholders like health department, ICDS, Urban local bodies, water supply department, public distribution system, education, slum development whose work impinges on the health of slum dwellers. It is generally observed that these departments operate in isolation with little or no coordination. There is a need for greater coordination and convergence among the various government departments and other non-governmental agencies which are working for the urban poor. A functional taskforce aimed at improving the health of the urban poor under the chairmanship of the District Magistrate that reviews all programmes and schemes regularly would bring in more synergy and improve the impact of various programmes.

Need to augment and strengthen urban health infrastructure and services: The lack of public health infrastructure makes it imperative that the private sector which has a large presence in the health service delivery in the disadvantaged urban settlements can be effectively utilized to improve the health conditions of the poor. It has been observed that partnerships with organizations having prior presence in slums results in improved and more cost effective health services. NGO partners can help the government in scaling up health services rapidly and in a sustained manner.

Improve the capacity of Urban Local Bodies: In order to effectively manage health services in challenging situations such as in urban slums and to initiate new models of service delivery like PPP, it is essential to enhance

the capacity of the urban local bodies (who are responsible for health services in urban areas after the 74th constitutional amendment). There is evidence to suggest that municipal bodies can effectively manage health programs (eg India Population Project-VIII).There exists a need to chart out a plan for improving the capability of the local elected representatives and improve the performance of ULBs for better management of urban health and poverty alleviation efforts.

Migratory Trends need to be considered for planning of RCH services: An important challenge in planning and delivering health services in urban slums is the rapid mobility of population. City landscapes change rapidly because of rapid immigration resulting in the creation of new slum clusters. Government slum records should be updated on a regular basis and new slums should be included in the service areas of health and other civic amenities. Slums also witness temporary migrations for certain months of the year. It is also common for most slum women to go back to their native villages for delivery. Such movement complicates the process of maintaining and tracking of beneficiaries. Behavior promotion activities also get disrupted because of such movements. It is necessary to factor in the rapid mobility of population in slums while planning for health services in slums. Steps to make the services reach the migrant population could include (i) distribution of pictorial cards among migrants which emphasize desirable behaviors and which can be used at health facilities at the place of destination (ii) sensitizing health providers to offer services to even temporary migrants without discrimination (iii) Encouraging temporary migrants to avail services from nearby health facility after they return to the slum even if camp has been already held.

Strengthen community networks and their linkages with health providers: Building on existing networks that have strong linkages with the community can be a useful strategy for improving coverage of health services. Strengthening community based organizations like SHGs is an effective mechanism to strengthen linkages between the community and the health system. Such groups can complement the efforts of health workers in generating awareness about health issues and counseling for family planning. They can also increase accountability of the government health services and ensure regularity of health services. The negotiation capacity of slum dwellers needs to be enhanced by promoting collective and organized efforts such as the mohalla samitis and SHGs for socio-economic empowerment and ability to best utilize available resources through NSDP, VAMBAY, housing and other schemes.

ANNEXURE

Annex 1

The Standard of Living Index

The Standard of Living Index (SLI) used in the NFHS has been developed by considering many socioeconomic parameters. The SLI is a summary household measure and is calculated by adding the scores* for house type, toilet facility, source of lighting, main fuel for cooking, source of drinking water, separate room for cooking, ownership of house, ownership of agricultural land, ownership of irrigated land, ownership of livestock and ownership of durable goods. The index is calculated by summing the weights, which have been developed by International Institute of Population Sciences, Mumbai. These weights are based upon the relative significance of ownership of these items, rather than on a more formal analysis.

Validity of using low SLI as representative of the poor

Possession of items at household levels has been used for developing many standard of living indices. Possession of consumer durables and housing facilities has been shown in all countries to be associated with standard of living e.g., the higher the standard of living of a household, the more possessions they tend to have and the better their housing conditions are. In general, the 'rich' do not choose to live like the 'poor' in any country and the 'poor' generally lack possessions due to a lack of resources rather than out of choice. It is also fairly evident that the possessions used in the two indices ('possession of durables' and 'housing facility') are relevant measures of standard of living in the Indian context.

The possession of durable goods is an indicator of a household's socioeconomic level, though these goods may also have other benefits[1]. Current estimates from a number of sources suggest that about 30 per cent of urban Construct validation is based on assessing how well a '*particular measure*

* *House type*: 4 for pucca, 2 for semi-pucca, 0 for kachha; *Toilet facility*: 4 for own flush toilet, 2 for public or shared flush toilet or own pit toilet, 1 for shared or public pit toilet, 0 for no facility; *Source of lighting*: 2 for electricity, 1 for kerosene, gas, or oil, 0 for other source of lighting; *Main fuel for cooking*: 2 for electricity, liquid petroleum gas, or biogas, 1 for coal, charcoal, or kerosene, 0 for other fuel; *Source of drinking water*: 2 for pipe, hand pump, or well in residence/yard/plot, 1 for public tap, hand pump, or well, 0 for other water source; *Separate room for cooking*: 1 for yes, 0 for no; *Ownership of house*: 2 for yes, 0 for no; *Ownership of agricultural land*: 4 for 5 acres or more, 3 for 2.0–4.9 acres, 2 for less than 2 acres or acreage not known, 0 for no agricultural land; *Ownership of irrigated land*: 2 if household owns at least some irrigated land, 0 for no irrigated land; *Ownership of livestock*: 2 if owns livestock, 0 if does not own livestock; *Ownership of durable goods*: 4 each for a car or tractor, 3 each for a moped/scooter/motorcycle, telephone, refrigerator, or color television, 2 each for a bicycle, electric fan, radio/transistor, sewing machine, black and white television, water pump, bullock cart, or thresher, 1 each for a mattress, pressure cooker, chair, cot/bed, table, or clock/watch.
Index scores range from 0–14 for a low SLI to 15–24 for a medium SLI and 25–66 for a high SLI.

relates to other measures consistent with theoretically derived hypotheses concerning the concepts (or constructs) that are being measured[3] . In the case of the concept of SLI, it is predicted that those who are the 'poorest' are more likely to suffer from ill health than those with a higher standard of living. Therefore, it would be expected that areas with high levels of poverty would also be areas with high levels of ill health (all other things being equal). Similarly, the concept predicts that people suffering from a low standard of living are also likely to suffer from a range of deprivations, for example, food deprivation (e.g., food of insufficient quantity and/or quality). Consequently, an area with low standard of living is also likely to contain food-deprived households. Hence, indicators of ill health and severe deprivation can be used as validation criteria for assessing the construct validity of SLI indices, e.g., the most valid (accurate) indices are likely to be those with the highest correlations with ill health and severe deprivation.

Reanalysis of NFHS data by SLI used in this report helps disaggregate the average data in a manner that shows consistency among the different indicators. This means that, for example, if IMR among low SLI is high as compared to average, then access to services such as TT and measles immunization is also consistently low. This further corroborates the reliability of SLI as an index representative of the economic status of households.

Comparisons of SLI and other Indices of poverty:

The Principle Component Method was used to compare the SLI with state level estimates of people living below the poverty line. This analysis revealed that low SLI captured all population proportions below poverty line for most states.

An alternative SLI was calculated using a different method of weighting the indices. Proportionate Possession Weighting (PPW) is an adjustment that reflects the differences between various social and demographic groups and, as a result, takes account of these differences within population. Unlike the NFHS SLI, this PPW index refers entirely to a household's possessions. A good measure of the validity of each component of the NFHS and PPW, standard of living show the results of a criterion validity exercise at the individual level, they display the results from a series of bivariate logistic regression analyses for the odds of stunting in children, if a household lacks a standard living item. The analysis shows that a household that does not have a telephone or a color TV is 3.5 times more likely to have a stunted child than a household that owns a telephone. Households, which own a color television, are three times less likely to have stunted children than

1 Supriti, Barnhardt S and Ramanathan R. 2002. *Urban Poverty Alleviation in India: A General Assessment and a Particular Perspective*; Bangalore : Ramanathan Foundation.

2 Subramaniam. 2003. Inequalities in health in India: The methodological construction of indices and measures- Draft report, Department of health and social behavior, Harvard School of Public Health.

3 Carmines EG, Zeller RA. 1991. *Reliability and Validity assessment*. Newbury Park : Sage Publications.

households that do not. Similarly, children in households that possess refrigerators or mopeds or pressure cookers are half as likely to suffer from stunting as households, which do not own these items. The comparison of NFHS SLI and PPW indices through the Pearson's correlation coefficients shows a very high positive correlation. These consumer durables seem to be valid measures of standard of living.

Both NFHS and PPW indices were found reliable based on Cronbach's alpha coefficients. The alpha coefficient is the average correlation between the set of questions asked (the standard of living index) and all other possible sets of deprivation questions (standard of living indices) of equal length (equal number of questions). Cronbach's alpha coefficients score is 0.86 for 20 items used in PPW SLI and 0.79 for 27 components of NFHS SLI. According to Nunnally (1981) in the early stages of research, "... one saves time and energy by working with instruments that have modest reliability, for which purpose reliabilities of 0.70 or higher will suffice". For basic research, it can be argued that increasing reliabilities much beyond 0.80 is often wasteful of time and funds, at that level correlation are attenuated very little by measurement error[4].

Review of methodology for re-analysis by expert group

A one day expert group consultation was organized to review the process of NFHS 2 data reanalysis by SLI on April 22, 2003¨ . The expert group recommended that reanalysis of NFHS 2 data by Standard of Living Index would be a valuable exercise that would present representative data describing the health status of the urban poor at the state level as well as national level. NFHS SLI is well-accepted by development experts, academic institutions and Government of India institutions. It was also recommended that the disaggregating of data provided very good analysis to indicate the disparity between the low SLI population and the mean and will unmask the inequities that exist. It will also help understand further correlation with a range of variables. The experts cautioned against using reanalyzed NFHS data for comparing the urban poor with the rural poor or vice versa. To the extent possible, analysis should also provide the confidence intervals for important estimates in the disaggregated data. Findings of such an exercise should be disseminated at larger platforms for use in planning and programming, sooner rather than later, as such information is currently sparse.

¨ The experts participated in the meeting were Dr. Arvind Pandey, Director, IRMS, ICMR, New Delhi; Dr. HPS Sachdev, Professor, Department of Pediatrics of Maulana Azad Medical College, New Delhi; Dr. PM Kulkarni, Professor, Centre for Studies in Regional Development, School of Social Sciences, JNU, New Delhi; Dr. Massee Bateman, Senior Advisor in Child Health, USAID/India, New Delhi; Dr. Laveesh Bhandari, Director, Indicus Analytics, New Delhi; Mr. Jyoti Tewari, Program Management Specialist, PHN, USAID/India

4 International Institute for Population Sciences (IIPS) and ORC-Macro (2001), *National Family Health Survey (NFHS-2), India 1998-1999: India* IIPS, Mumbai.

Re-analysis of NFHS-2 data using ISSA Package:

Standard of Living Index of NFHS-2 is the basis for the disaggregation of the data in the reanalysis used in this report. Data have been disaggregated for urban areas by using ISSA (Integrated System for Survey Analysis) developed by ORC MACRO International. This software package originally developed for Demographic and Health Surveys conducted in other developing countries which are similar to the NFHS. ISSA provides complete processing for survey data including data entry, secondary processing, tabulation, report generation, data file documentation. It uses dictionaries to describe data, and applications to define what to do with the data. The re-coded NFHS-2 data of the respective states and all India is used for the reanalysis. As the first step, the data was analyzed for rural and urban areas. Subsequently urban data was separately disaggregated into three groups each by low, medium and high SLI. For conducting the aforementioned analysis of the recoded data, a set of programs was developed in the ISSA package which generated the required tables by standard of living index.

Annex 2

Selected health indicators by Standard of Living Index- Rajasthan NFHS 2, 1998-99

	URBAN				RURAL			
Health Indicator	**LOW**	**MEDIUM**	**HIGH**	**Total**	**LOW**	**MEDIUM**	**HIGH**	**Total**
Mortality								
Neonatal Mortality (for the five-year period preceding the survey)	65.5	49.4	33.2	45.6	62.3	57.9	36.8	56.3
Infant Mortality (for the five-year period preceding the survey)	98.2	82.6	42.2	68.9	105.9	93.2	63.9	93.1
Under-5 Mortality (for the five-year period preceding the survey)	162.3	108.1	54.9	93.3	164.7	128.6	80.0	133.2
Malnutrition								
Percentage of children under 3 years underweight for age – Below –2 SD (includes children below – 3 SD)	62.5	54.5	32.5	46.0	57.2	51.9	40.7	51.9
Percentage of children under 3 years underweight for age – Below –3 SD	27.1	19.4	7.2	15.1	30.1	20.2	13.7	22.3
Percentage of children under 3 years undernourished (stunted) for age – Below – 2 SD (includes children below – 3 SD)	58.7	51.0	32.2	44.0	38.6	55.2	40.3	54.1
Percentage of children under 3 years under-nourished (stunted) for age – Below –3 SD	37.3	28.6	1.1	21.4	37.7	2.0	1.7	31.1
Child Health Determinants								
Breast feeding								
Percentage of infants breast fed within one hour of birth	2.4	6.0	11.9	8.0	2.3	4.5	5.1	3.9
Percentage of infants whose mother squeezed first milk from breast	64.9	66.9	65.8	65.7	72.9	69.9	64.0	70.0
Percentage of children 0-3 months who are exclusively breastfed	0.0	42.4	42.4	-	56.4	57.1	61.3	-
Complementary feeding								
Percentage of children 7-9 months who receive breast milk and solid/mushy food	25.0	67.4	63.3	-	32.2	53.9	66.9	-

Selected health indicators by Standard of Living Index- Rajasthan NFHS 2, 1998-99

	URBAN				RURAL			
	LOW	MEDIUM	HIGH	Total	LOW	MEDIUM	HIGH	Total
Immunization rates								
Percentage of children completely immunized among 12-23 months children	7.4	12.6	52.7	29.3	5.7	14.6	31.2	13.8
Percentage of children receiving measles immunization among 12-23 months children	11.9	19.4	68.0	39.3	12.4	26.1	42.4	23.7
Percentage of children left out from UIP (Children not receiving DPT 1) among 12-23 months children	71.0	52.8	15.0	39.1	68.9	53.7	22.5	55.9
Percentage of children dropping out from UIP (DPT 1 to DPT 3) among 12-23 months children	17.4	23.7	20.5	21.3	19.2	24.1	18.8	21.8
Vitamin A								
Percentage of children 12-35 months of age who have received at least one of vitamin A	14.5	21.9	29.4	24.2	11.5	14.8	30.0	15.9
Percentage of children 12-35 months of age who have received at least one of vitamin A within last 6 months	11.5	17.5	17.9	17.0	8.4	11.0	18.8	14.4
Morbidity								
Percentage of children suffering in past two weeks from:								
ARI	26.3	25.5	22.8	24.5	21.6	20.8	22.5	21.3
Fever	19.9	27.6	31.0	28.3	26.8	24.2	25.8	25.2
Any diarrhea	27.1	18.9	18.0	19.2	22.9	19.2	16.7	19.9
Percentage of mother who know about ORS	40.8	56.4	72.5	61.3	32.0	40.5	61.1	40.6
Percentage of mother who know two or more signs for medical treatment of diarrhoea	8.2	16.9	19.1	17.1	20.8	16.2	20.6	18.1

Selected health indicators by Standard of Living Index- Rajasthan NFHS 2, 1998-99

	URBAN				RURAL			
	LOW	MEDIUM	HIGH	Total	LOW	MEDIUM	HIGH	Total
Percentage of children taken to health facility for diarrhea	63.1	70.8	61.3	66.0	55.8	53.5	69.5	56.3
Percentage of children treated with ORS or recommended home fluid	29.0	23.5	33.1	28.0	29.1	18.9	36.0	20.3
Care seeking								
Percentage of children taken to health facility for symptoms of ARI (fever, cough, rapid breathing)	48.1	72.0	81.6	73.3	45.0	59.5	72.0	56.7
Antenatal care								
Percentage of births whose mothers received iron-folic acid supplements for 3 + months	28.8	35.7	65.0	46.5	17.5	29.9	40.7	27.5
Percentage of births whose mothers received tetanus toxoid vaccines (minimum of 2)	55.6	61.3	85.6	70.3	35.5	47.3	74.9	47.4
Percentage of births whose mothers had ante-natal visits (minimum of 3)	23.6	28.4	69.4	43.8	13.0	15.9	34.6	17.5
Birth Spacing								
Birth Interval (median number of months between current and previous birth)	28.5	31.2	32.0	31.0	29.8	29.1	27.8	29.1
Any method Contraceptive prevalence rate (currently married women)	30.0	42.2	60.8	50.4	26.6	38.2	49.5	37.1
Any modern method Contraceptive prevalence rate (currently married women)	28.5	39.6	56.6	46.9	25.1	36.4	47.0	35.3
Permanent female sterilization method rate	25.3	30.2	36.8	33.0	22.9	31.8	35.4	30.1
Permanent male sterilization method rate	0.7	1.8	2.2	1.9	0.6	1.1	3.3	1.3
IUD	0.0	0.5	3.9	2.1	0.6	0.7	1.9	0.9
Pill	1.6	2.2	2.9	2.4	0.5	1.4	1.8	1.2
Condoms	0.9	4.9	10.9	7.6	0.5	1.4	4.6	1.7

Selected health indicators by Standard of Living Index- Rajasthan NFHS 2, 1998-99

	URBAN				RURAL			
	LOW	MEDIUM	HIGH	Total	LOW	MEDIUM	HIGH	Total
Safe delivery								
Percentages of deliveries at home	79.0	64.6	28.0	51.5	89.0	84.9	72.7	84.5
Percentages of deliveries at a health center (public/private/NGO)	21.0	34.2	71.6	47.6	10.4	14.4	26.3	14.8
Percentage of deliveries attended by a heath professional at home or at a health facility	33.0	50.9	84.3	62.4	20.2	28.7	51.2	29.1
Anaemia								
Among women								
Any anaemia	55.7	50.2	42.2	46.7	52.8	48.6	44.5	49.1
Mild anaemia	33.3	33.9	28.3	31.1	34.0	33.0	29.0	32.7
Moderate anaemia	22.5	13.2	13.2	13.9	16.7	13.4	12.5	14.2
Severe anaemia	0.0	3.1	0.8	1.7	2.0	2.2	3.0	2.2
Among children								
Any anaemia	79.4	85.4	76.9	81.3	81.8	83.4	81.5	82.6
Mild anaemia	24.5	15.5	20.1	18.9	22.0	20.1	18.5	20.4
Moderate anaemia	49.7	58.8	49.1	53.4	50.9	54.4	49.5	52.5
Severe anaemia	5.1	11.1	7.7	9.0	8.9	8.8	13.6	9.6
Environmental health conditions								
Water Supply and Sanitation								
Percentage of Households with access to piped water supply at home	12.6	33.5	52.3	89.3	3.3	4.1	17.6	28.4
Percentage of Households accessing public tap / hand pump for drinking water	64.7	49.4	41.2	6.2	68.2	72.9	69.5	32.7
Percentage of Household using a sanitary facility for the disposal of excreta (flush / pit toilet)	18.9	69.3	97.8	77.0	2.1	14.9	77.7	11.3
Distribution of Sample								
Percentage of Household not having any toilet facility	81.1	30.7	2.2	22.9	97.1	85.0	22.3	88.3
Number of households (weighted)	160	708	705	1573	1492	2634	561	4687
Number of currently married women (weighted)	129	667	766	1562	1298	2863	797	4958
Number of ever- married women (weighted)	141	705	785	1631	1352	2957	817	5126
Number of children under age 3 (weighted)	68	311	244	623	745	1368	325	2438

Age distribution of population by standard of living–Rajasthan NFHS 2, 1998-99

	URBAN			RURAL		
	LOW	MEDIUM	HIGH	LOW	MEDIUM	HIGH
Population by age (male)						
< 1.....	2.6	2.2	2.0	3.0	2.6	2.9
1-4.....	12.0	9.9	8.3	12.8	11.6	11.1
5-9.....	16.0	13.2	12.2	16.9	15.4	12.6
10-14.....	14.7	14.7	11.4	13.4	12.5	11.4
15-19.....	8.6	12.3	10.3	9.0	10.6	10.3
20-24.....	6.9	9.5	10.1	6.2	8.0	9.7
25-29.....	6.5	7.2	7.5	5.6	6.4	8.9
30-34.....	9.1	5.5	7.5	6.6	5.9	5.3
35-39.....	5.4	6.0	6.4	6.1	5.7	5.4
40-44.....	4.8	4.5	6.1	4.4	4.3	4.2
45-49.....	2.9	4.1	3.8	3.2	3.6	3.9
50-54.....	3.8	2.5	3.5	3.2	2.9	3.7
55-59.....	1.6	2.8	2.7	2.1	2.6	2.4
60-64.....	2.6	2.1	2.6	3.4	3.5	3.2
65-69.....	0.5	1.3	2.3	1.2	1.7	1.8
70-74.....	0.7	1.2	1.3	1.5	1.5	1.5
75-79.....	0.3	0.5	1.1	0.5	0.6	0.9
80 +.....	1.0	0.6	0.8	0.9	0.6	0.7
Missing /DK	0.0	0.0	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Total male population	396	2,110	2,280	4,020	8,509	2,118
Population by age (female)						
< 1.....	3.5	2.7	1.7	3.1	2.8	2.7
1-4.....	11.6	10.3	7.5	12.2	11.5	10.1
5-9.....	16.1	13.7	10.6	15.8	14.4	12.5
10-14.....	9.5	13.0	10.7	12.1	11.8	10.2
15-19.....	9.6	11.9	11.8	8.7	9.6	11.6
20-24.....	7.5	8.6	10.7	7.0	9.1	11.3
25-29.....	9.0	7.1	9.1	8.7	7.7	7.6
30-34.....	5.8	6.7	6.7	7.6	6.4	6.3
35-39.....	7.7	6.1	7.3	5.3	5.4	5.7
40-44.....	4.1	4.0	4.3	3.6	3.9	4.3
45-49.....	2.2	4.5	4.5	3.0	3.6	4.4
50-54.....	2.3	2.4	2.8	2.9	3.1	3.1
55-59.....	3.0	2.1	4.2	2.9	3.4	2.9
60-64.....	3.1	2.0	3.0	2.6	3.3	2.3
65-69.....	0.7	1.7	2.1	1.6	1.3	1.7
70-74.....	1.7	1.5	1.7	1.7	1.4	1.7
75-79.....	0.8	0.7	0.4	0.5	0.4	0.6
80 +.....	1.4	0.9	0.8	1.0	0.7	1.0
Missing /DK	0.3	0.0	0.0	0.0	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Total female population	380	1,935	2,139	3,791	7,978	2,004

Population Profile by Standard of Living Index –Rajasthan NFHS 2, 1998-99

	URBAN			RURAL		
	LOW	MEDIUM	HIGH	LOW	MEDIUM	HIGH
Religion of HH						
Hindu.....	68.5	72.3	79.5	91.7	93.9	92.1
Muslim.....	30.2	25.4	12.1	7.6	4.9	3.9
Christian..	0.7	0.2	0.1	0.1	1.1	0.2
Other.....	0.7	2.2	8.3	0.6	0.1	3.8
Caste/tribe of HH						
Scheduled caste.....	28.5	16.7	4.5	28.2	19.0	9.8
Scheduled tribe.....	4.6	3.9	1.6	22.2	13.2	4.7
Other backward class...	30.1	25.0	13.9	21.1	25.9	23.9
Other (none).....	36.8	54.4	79.8	28.5	41.9	61.6
Missing	0.0	0.0	0.2	0.1	0.1	0.0
Mean HH size	5.1	5.9	6.5	5.3	6.4	7.6
School attendance Age group (male)						
6-10.....	64.0	84.3	97.7	78.0	90.5	96.7
11-14.....	57.5	87.1	98.3	69.9	85.7	96.8
15-17.....	42.5	51.1	85.3	41.9	61.4	90.0
School attendance Age group (female)						
6-10.....	57.3	77.0	95.8	47.8	68.9	92.2
11-14.....	37.8	61.7	94.0	28.4	44.8	82.0
15-17.....	12.5	37.2	77.0	7.3	17.4	46.8
Lifestyle Indicators						
Percentage of usual household members age 15 and above who						
Male						
Chew paan masal or tobacco	18.6	20.0	14.3	14.3	12.5	11.8
Drink alcohol	8.8	6.3	4.4	10.0	8.4	5.8
Currently smoke	32.8	20.0	11.0	34.6	31.8	22.1
Ever smoked	34.0	22.0	13.0	36.7	34.1	24.6
Female						
Chew paan masal or tobacco	13.4	8.8	3.8	2.3	1.6	1.4
Drink alcohol	0.0	0.1	0.0	0.3	0.2	0.0
Currently smoke	1.3	1.4	0.3	4.0	4.5	1.3
Ever smoked	1.3	1.5	0.4	4.1	4.7	1.3

Annex 3

Select Health Indicators by Standard of Living Index –Rajasthan, District Level Household Survey (2002 – 04)

	URBAN				RURAL			
Health Indicator	**LOW**	**MEDIUM**	**HIGH**	**Total**	**LOW**	**MEDIUM**	**HIGH**	**Total**
Immunization rates								
Percentage of children completely immunized among 12-23 months children	19.6	26.7	57.8	44.8	11.1	24.1	45.4	18.1
Percentage of children receiving measles immunization among 12-23 months children	27.7	39.2	69.4	56.2	22.1	36.6	56.6	29.5
Percentage of children left out from UIP (Children not receiving DPT 1) among 12-23 months children	46.4	35.5	10.6	21.6	53.4	34.6	19.3	44.8
Percentage of children dropping out from UIP (DPT 1 to DPT 3) among 12-23 months children	24.1	24.9	19.5	21.5	25.4	29.4	19	25.8
Childhood Morbidity								
Percentage of children suffering in past two weeks from:								
Any diarrhoea	20.5	16.3	17.1	17.2	16.1	16.8	17.2	16.4
ARI	15.2	13.7	14.8	14.6	14	14.6	12.6	14.1
Percentage of children taken to health facility for diarrhea	62.3	68.1	72.6	70	54.7	62.1	66.5	58
Percentage of children treated with ORS or recommended home fluid	16.9	26.4	52	40.4	19.7	27.1	39.6	23.8
Percentage of children taken to health facility for symptoms of ARI (fever, cough, rapid breathing)	59.6	79.7	83.3	79.6	61.7	74.5	80	66.9
Breast feeding								
Percentage of infants breast fed within two hours of birth	14.4	16.3	24.4	21	11.7	13	17.1	12.6
Percentage of infants whose mother squeezed first milk from breast	63.6	64.5	59.7	61.5	62.7	61.7	56.8	61.8

Select Health Indicators by Standard of Living Index –Rajasthan, District Level Household Survey (2002 – 04)

	URBAN				RURAL			
	LOW	MEDIUM	HIGH	Total	LOW	MEDIUM	HIGH	Total
Vitamin A Supplementation								
Percentage of children 12-35 months of age who have received at least one of vitamin A	17.7	26.8	48.6	39.2	13.1	23.2	35.3	18
Antenatal care								
Percentage of births whose mothers received iron-folic acid supplements for 3 + months	2.3	6.1	17.4	12.4	4.9	7.3	12	6.2
Percentage of births whose mothers received tetanus toxoid vaccines (minimum of 2)	54.8	71.3	86.1	78.2	42	63.7	77.2	51.1
Percentage of births whose mothers had ante-natal visits (minimum of 3)	18.4	32.9	58.5	46.4	12.3	22.5	39.9	17.6
Safe delivery								
Percentages of deliveries at home	67.6	56.5	30.2	42.2	82.9	73.3	56.9	77.9
Percentages of deliveries at a health center (public/private/NGO)	32.4	43.5	69.8	57.8	17.1	26.7	43.1	22.1
Percentage of deliveries attended by a heath professional at home or at a health facility	45.7	58.9	82.9	71.6	28.2	42	61.9	35
Fertility and the Use of contraception								
Mean Children Ever Born (CEB)	3.56	3.13	2.48	2.74	3.23	2.79	2.56	3.01
Birth Interval (median number of months between current and previous birth)	29	28	30	30	28	28	28	28
Contraceptive prevalence rate (any method, currently married women)	45.2	53.2	68.6	62.9	39.5	53.6	64.2	46.8
Permanent sterilization method rate	31.1	35.3	33.8	34	30.5	40.8	43.7	35.2
Use of Spacing methods	8.8	13	29.3	23.5	4.1	8.2	16.2	6.9

Select Health Indicators by Standard of Living Index –Rajasthan, District Level Household Survey (2002 – 04)

	URBAN				RURAL			
	LOW	MEDIUM	HIGH	Total	LOW	MEDIUM	HIGH	Total
Environmental health conditions								
Percentage of Households with access to piped water supply at home	18.4	55.5	87.7	71.8	5.5	23.3	53.2	15.1
Percentage of Households accessing public tap / hand pump for drinking water	64.3	38.4	10.7	23.8	56.7	52.3	34.2	53.3
Percentage of Household using a sanitary facility for the disposal of excreta (flush / pit toilet)	10.6	56	96.2	76.4	4	20.8	70.4	15.1
Percentage of Household not having any toilet facility	89.4	44	3.8	23.6	96	79.2	29.6	84.9
Number of households	1038	2891	6429	10358	14831	6309	2334	23474
Number of currently- married women	761	2551	6284	9596	13497	6984	2834	23315
Number of children under age 4	373	988	2061	3422	6119	2630	948	9697

URBAN HEALTH RESOURCE CENTRE

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