



Mapping and listing
Series v.2.0

PURPOSE:

This tool helps in identifying all the slums (registered/ unregistered) and poverty clusters, and categorizing them based on their vulnerability to achieve better planning of health services including Family Planning (FP). This will enable Urban Accredited Social Health Activists (ASHAs/Sahiya) and Sahiya facilitators/ Auxiliary Nurse Midwives (ANMs) to better understand their respective operational areas, including vulnerable groups/ communities.

AUDIENCE:

- State FP Coordinator, State Urban Manager - Community Process, State Urban Health Manager - Planning, State Program Coordinator - Community Mobilization
- Additional Director/Joint Director/Deputy Director
- Chief Medical Officers (CMO)/Additional Chief Medical Officer (ACMO)/DRCHO
- Nagar Swasthya Adhikari
- Divisional Urban Health Consultant (DUHC)/Nodal Officer – Urban Health & Family Planning/District Program Managers (DPM)/Hospital Manager
- Urban Health Coordinators (UHC)
- City Urban Health Manager (CUHM) - Planning /City Urban Health Manager (CUHM) - Community Process Medical Officer In-Charge (MOIC)
- Health Education Officers/Project Officer, District
- Urban Development Agency (DUDA)/Child Development Project Officer, Urban, Integrated Child Development Services (ICDS)
- Public Health Manager (PHM)
- State Training Team (STT)
- Block Training Team (BTT)

BACKGROUND:

Rapid urbanization in India is estimated to account for 46% urban population by 2030. This is owing to a high influx of people moving into big cities for livelihood opportunities but choose to reside in slum dwellings due to the high cost of living in big cities. India has 505 cities with 227 million populations and it is estimated that around 40% of the urban slum population is not visible as slums.

The accessibility of health care facilities is a major concern among the slum and vulnerable population. Awareness of location of this population segment is critical for positioning the health facilities as per National Urban Health Mission (NUHM) guidelines and also for allocating resources to serve identified population under the Program Implementation Plan (PIP). To identify these locations, mapping and listing of poverty clusters and unregistered slums is a key exercise under the NUHM. This mapping exercise is also critical for Sahiya and ANMs to provide services to vulnerable individuals in their coverage areas.

EVIDENCE OF IMPACT

The government officials of 19 high priority cities of Uttar Pradesh and Madhya Pradesh conducted mapping and listing exercise with the coaching and mentoring support of The Challenge Initiative (TCI) India to identify all the slums and poverty clusters. The NUHM officials of these cities triangulated mapping and listing data with existing multiple government data sources and analysed to identify the difference.

As a result, the listing and mapping exercise in 19 cities indicated 38% increase in slum numbers and 39% increase in slum population. The bar graph shows the hidden areas and population identified in slums which were not visible in any of government planning processes earlier.

The findings helped the government to modify its urban health service delivery plan to cover invisible populations. This enabled better allocation of community volunteers and resources for meeting the needs of the entire slum population. Similarly, the data was used by several other stakeholders to plan and reach hidden population once they were added through a government list.

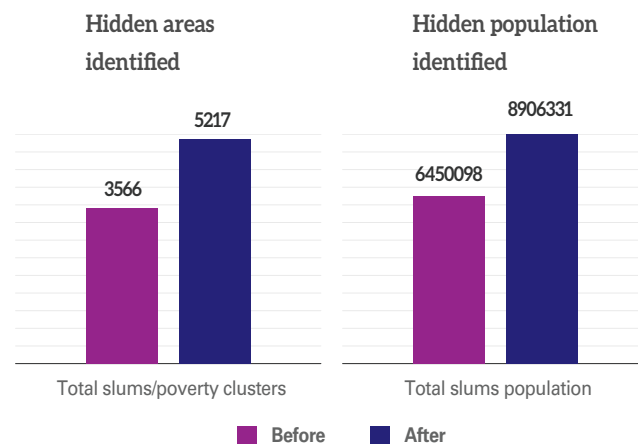
It also helped the program advocate with government to make these invisible populations visible through listing and mapping exercise.

Indore, a TCI India supported city of Madhya Pradesh utilized mapping and listing exercise. Dr. Pravin Jadia, Chief Medical and Health Officer, Indore said- “For the first time in Indore, all health facilities have been mapped with a defined catchment area. This has helped in uncovering the left out and underserved areas. Now, we will be able to cover the entire slum population as all the facilities have equal distribution of popula-

tion. Now, each ward has one facility and each facility has one MOIC and ANM. We initiated monitoring of Sahiya and ANMs for outreach activities. As a result, Madhya Pradesh saw an 18% rise in immunization data within a short span of four-months. The credit of this magical transformation goes to TCI India.”

Refer to Most Significant story - TCI's Mapping and Listing Approach Helps Indore, India, More Accurately Allocate Health Resources

Listing and mapping to make “Invisible” “Visible”



Source: Mapping & listing data of 19 TCI India supported cities



GUIDANCE ON CORRECT ESTIMATION OF URBAN SLUM POPULATION TO ENSURE HEALTH PROVISIONS

As UHCs are the point person for looking after health concerns of the urban poor population, hence UHC's must ensure regular mapping of unregistered slums and poverty clusters under the guidance of Nodal Urban Health/(appropriate authority). UHC can capitalize City Health Coordination Committee (CCC) forum to sensitize representatives of other departments such as DUDA, ICDS, National Polio Surveillance Program (NPSP), Municipal Corporations, NGOs, etc. on the significance of mapping and listing exercise. The listing of households is undertaken by the Sahiya, they can take the support from the frontline workers of other departments.

Steps for mapping and listing of unregistered slums and poverty clusters

1. Identify local data points

Identify locally available data and maps of the urban slum population from the NUHM GIS maps, DUDA, ICDS, NPSP, micro plans for urban routine immunization and any other available data sources including the post office, Municipal Corporations, NGOs and information collected by the Sahiya. In addition, GPS coordinates of the slums can be utilized to update digital maps periodically wherever applicable. (Refer to: GIS maps of UP cities)

2. Review data

Review data from these sources to determine the locations where vulnerable populations resides, including registered slums, unregistered slums, temporary settlements (Brick kiln, Nomads etc.) and poverty clusters.

3. Create lists and maps

Create lists and maps of slums, poverty clusters/temporary settlements from these data sources. Compare these data among each other (triangulation).

4. Verify and finalize lists

- 4.1 Physically verify the existence of slums (Registered/Non Registered) and poverty clusters that are listed only once.
- 4.2 Check the community maps and lists with community residents for their completeness.
- 4.3 Finalize the lists of locations of vulnerable population and share it with the district authorities.
- 4.4 Support the Sahiya to list all the households in their coverage areas in the Urban Health Index Register.
- 4.5 These lists need to be concurrently updated and regularly revised.
- 4.6 Additionally, mapping other community resources such as anganwadi centres, UPHCs, private providers and chemists can also be useful.

5. Using the mapping and listing data

The data insights from the mapping and listing exercise should be presented to the district health authorities and other departments by sharing comparative data of identified slum population versus current resources available in forums like CCC meetings, FP review meetings, NUHM review meetings, District Health Society meetings. Based on mapping and listing exercise data relocation of resources can be done to cater to the health needs of the urban poor population like redefining catchment areas of Sahiya, relocation of UPHCs, activating defunct UPHCs and request can be made for necessary funds under the PIP.



ROLES AND RESPONSIBILITIES TOWARDS MAPPING AND LISTING OF URBAN SLUMS

1. Joint director/Additional director/Deputy Director/State FP Coordinator, State Urban Manager - Community Process, State Urban Health Manager - Planning, State Program Coordinator - Community Mobilization

- 1.1 Include review of mapping and listing data in district/division level meetings.
- 1.2 Issue guidance to all the cities to refer this tool as a guidance documents to identify unserved population in need of health services.

2. Chief Medical Officer/Additional Chief Medical Officer/DRCHO

- 2.1 Issue directives to ensure that all registered and unregistered slums and poverty clusters are mapped
- 2.2 Ensure meeting of all relevant stakeholders (CCC members) for finalization of mapping process (registered and unregistered slums and vulnerability analysis)
- 2.3 Ensure that planning is based on mapping and listing of all slums and poverty clusters
- 2.4 Ensure availability of additional funds in PIP considering new identified population

3. Divisional Urban Health Consultant/Nodal Officer- Urban Health and FP/District Program Manager

- 3.1 Ensure the provision of budget for carrying-out the necessary field work to improve maps and lists of slums and poverty clusters
- 3.2 Ensure that the UHC triangulates the list of registered and unregistered slums and poverty clusters so that on the basis of this data, adequate funds are available through the PIP
- 3.3 Review data from the slum mapping process and use it to plan for additional UPHCs, Sahiya, Information Education Communication (IEC) materials and other activities provided for in the PIP
- 3.4 Share updated lists of registered and unregistered slums with other urban stakeholders and departments, namely ICDS, Municipal Corporation, Water and Sanitation among others, in order to prioritize the desired health services in unserved and underserved areas.

4. Urban Health Coordinator

- 4.1 Gather city-specific information about all slums from various departments and organizations like the DUDA, ICDS, WHO, UNICEF, Postal Department, NGOs etc.
- 4.2 Compile the information in a database
- 4.3 Facilitate monthly meetings of Sahiya and ANMs at the UPHC level in order to support their work on mapping and household listing

5. Nagar Swasthya Adhikari/Project officer, DUDA/Health Education Officers/ Child Development Project Officer, ICDS

- 5.1 Share the list of all slums as well as other locations
- 5.2 Support community listing of households by the Sahiya
- 5.3 Participate in the CCC meetings and provide required support
- 5.4 Periodically update information on anganwadi centers and staff (for ICDS)

6. City Urban Health Manager (CUHM) - Community Process/Medical Officer in-Charge

Coach BTT, ANMs and Sahiya on the following:

- 6.1 Sahiya complete mapping and listing exercise of each slum area/pocket and update their household list
- 6.2 Based on new identified slum area, Sahiya work in assigned/uncovered areas
- 6.3 Sahiya record and update the household data in the Urban Health Index Register (UHIR)
- 6.4 Take support of MAS members in mapping and listing of households, and identifying those in greatest need of information and services
- 6.5 Periodically conducting mapping and listing process



MONITORING PROGRESS IN CREATING AN ACCURATE DATABASE FOR URBAN HEALTH

The mapping and listing data should be updated on an annual basis. The following indicators should be monitored:

1. Percentage of Sahiya who have visited all the households in their coverage area and updated their household lists over a period of last three months.
2. Number of annual requests for PIP are based on updated population data.
3. Number of allocations based on current mapping and listing exercise data



COST ELEMENTS

Though no additional funds are required for mapping and listing, however in case need arises then current PIP should be checked. And in case, this need is long-term or perpetual, then it can be requested for inclusion in the next PIP.



SUSTAINABILITY

Concurrent updation of mapping and listing will sustain if the need and significance is established in platforms like CCC. UHC lead the exercise under the guidance and support of Nodal urban/appropriate authority. In addition, Sahiya must be oriented on the mapping and household listing process during their initial training, the coaching, periodic Sahiya and ANM meetings and during the supervision visits. Since the required budget for supporting updating of city maps is available or can be requested through the PIP, the mapping and listing exercise can sustain if CMO takes initiative to issue a directives for this activity annually or as required.

Available resources

- Slum list from National Pulse Polio Immunization program
- Slum list of Agra- <https://tciurbanhealth.org/courses/india-advocacy/lessons/mapping-urban-slums/topic/listing-of-slums-in-agra/>
- Urban Health Index Register (UHIR)
- Guidelines and tools for vulnerability mapping and assessment for urban health 2017
- Implementation framework NUHM 2013, section 4, page 27-29
- NUHM orientation module for planners, implementers and partners, 2015, section 3 point 2, page 27-31
- NHM PIP guideline for a particular financial year
- Poster presented in International Conference on Urban Health (ICUH) - "Making invisible, visible by mapping and listing exercise which help in correct estimation of urban slum population to ensure their health provisions".
- Most Significant story - TCI's Mapping and Listing Approach Helps Indore, India, More Accurately Allocate Health Resources- <https://tciurbanhealth.org/tcis-mapping-and-listing-approach-helps-indore-india-more-accurately-allocate-health-resources/>

For downloading and referring this tool visit <https://tciurbanhealth.org/lessons/enabling-social-health-activists/> and to refer other tools visit: <https://tciurbanhealth.org/india-toolkit/>

Disclaimer: This document is based on the learnings collated from The Challenge Initiative India, supported by Gates Institute under the first grant of BMGF and USAID from the period October 2016 to October 2021. It is not prescriptive in nature but provides overall guidance on how this particular aspect was dealt with in this project for possible adoption and adaptation.

For further details, please contact: Population Services International (PSI) India | C-445, Chittaranjan Park, New Delhi- 110019

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