



# Template – Concept Note for Knowledge Products

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Regional Urban Database

## **I. INTRODUCTION**

Reliable and timely database is a basic necessity for research and any sound and systematic planning. Moreover, the availability of detailed information, preferably at micro level is the key to effective planning. Non-availability of adequate and reliable data has often been cited as one of the main hurdles for planning and academic and policy research by planners, administrators and researchers working on diverse aspect of urban development in South Asia in general and India in particular. The main problem in this regard is not that the data do not exist or are not collected at sufficient levels of disaggregation, but that much of the information has problems of coverage and definitional anomalies and are not rendered comparable or made accessible to potential users. Also, there exists data on various socio-economic indicators with various utility agencies, crowd sourcing of which could be of immense help to decision makers and planners and facilitate evidence based and outcome oriented research. This calls for establishment of a centralized urban database system where standardized data would be made available in a user friendly format.

Information of quantitative nature is available from national data gathering agencies that bring out data sets at regular intervals. Besides, enormous information of both quantitative and qualitative nature is generated by government departments, public and semipublic agencies, municipal bodies etc., engaged in urban development activities. However, these do not become inputs in programme formulation or policy research as these data sets are not standardized and made available to potential users in a user friendly manner. Since the basic concepts used for data collection are not standardized and no rigorous format is designed for their compilation, it takes quite an effort and resources to make these temporally and cross-sectionally comparable and useful for research or policy making. Importantly, the Government of India has launched a Mission for creation of 100 Smart cities in the country. Availability of detailed information from various secondary data agencies may help in the formulation

of smart city plans. Also, the Prime Minister has stressed the need to address two key indicators, viz, reduction of poverty and creation of jobs. Moreover, there is a proposal of setting up urban observatories in Smart Cities. The KP will help to assess the development targets of the government and assist the observatories with city level data. This reinforces the need for setting up the regional database.

There are different sources of urban data base in the country. These are the Central Statistical Organization, National Sample Survey Organization, Population Census of India, Economic Census of India, National Family and Health Survey, Annual Survey of Industries etc. Also the Central Finance Commission brings out data on Municipal Finance at the state and aggregated at town levels. The National Urban Information System under TCPO is engaged in collating spatial and attribute data of select towns/cities.

The Central Statistical Organization has launched an annual survey on “Basic Statistics for Local Level Development”. This data would be collected at the district, city, town and ward levels for all the statutory towns of India. Data on 77 small and medium towns has been collected on a pilot basis. Also, the Ministry of Urban Development under “The Information and Services Need Assessment Study” has collected information from all the statutory towns as per the 2011 Population Census on demography, level of computerization and availability of services, finance, governance issues etc. The analysis of this information may be useful in assessing the e-preparedness of ULBs in the country and formulating plans for the urban development missions.

## **II. PROPOSED TOPIC/PRODUCT**

The knowledge product, which is the **Regional Urban Database** will facilitate promotion of evidence based urban research in South Asia and particularly in India for better policy making, project planning and implementation, monitoring and evaluation through

standardisation and analysis of regional data on demographic, social and economic indicators. It will be an open platform of dynamic database so that the public can access the data.

### **III. RATIONALE**

Information of quantitative nature is available from national data gathering agencies that bring out data sets at regular intervals. Besides, enormous information of both quantitative and qualitative nature is generated by government departments, public and semipublic agencies, municipal bodies etc., engaged in urban development activities. However, these do not become inputs in programme formulation or policy research as these data sets are not standardized and made available to potential users in a user friendly manner. Since the basic concepts used for data collection are not standardized and no rigorous format is designed for their compilation, it takes quite an effort and resources to make these temporally and cross-sectionally comparable and useful for research or policy making.

The database once established would complement the available knowledge base existing in this sector by collating and standardising the available data sets on various socioeconomic indicators which could help in informed policy decision and evidence based planning. This pertains to the 100 Smart Cities programme of the government in addition to other Urban Development Missions. The database could be made available to the potential users through the NIUA website. The dissemination of this knowledge product could be done at various forums and workshops for a larger audience.

**Scope:** The scope of the database will be restricted to the urban sector only. Indicators on urbanisation, economic and social indicators will be worked out for all India, state, district and town levels. If possible, ward level indicators would also be worked out for select cities. The town level data on certain indicators will be worked out at the size

class level. For million plus cities, indicators will be constructed at the city and size class levels.

#### **IV. METHODOLOGY**

The steps that will be undertaken to develop the knowledge product will be as follows:

##### **Methodology:**

Keeping in view the above concern, the National Institute of Urban Affairs proposes to set up a comprehensive Urban Data Base System at the national level. The following steps need to be taken up for establishing the national database:

- Preparation of a format for collection of data on demography, social and economic indicators at the national, regional/provincial levels for the K-Hub countries.
- The format will be shared by the identified user groups like ADB, Ministry of Urban Development (MoUD), UNDP, Cleaner Asia, K-hub partner countries and others. The feedback will be incorporated to strengthen the format.
- The data will be collected from the partner countries for at least for two time periods through the national centers on the prescribed formats .
- To bring in the consistency across the countries, the collected data will then be standardized.
- To create an open platform of dynamic database so that the public can access the data
- The data will then be analysed by working out correlations and regressions among indicators to understand the interdependencies and causal relationship. Based on that, a brief write-up will be prepared on the demographic and socio-economic conditions of each country. A cross- country analysis will also be done taking inputs from partner countries.
- The socio-economic profile of the region (with particular emphasis on India) will then be shared with decision makers.

The available urban data sources are the Population and Economic Census, National Accounts Statistics, Central Statistical Organization, National Sample Survey, Annual Survey of Industries, and Ministry of Surface Transport. Data on various indicators pertaining to socio-economic development of urban India is available at the national and

state levels. In addition, CMIE data is another source of information. Standardized formats need to be prepared for making data sets and relevant indicators comparable over time<sup>1</sup>. The urban database may be prepared under the following broad categories:

## **I. Available Secondary Database**

### **1. Demographic Data: Population Census of India**

The Census of India is conducted once in a decade, following an extended *de facto* canvasser method. Under this approach, data is collected from every individual by visiting the household and canvassing the same questionnaire all over the country, over a period of three weeks. The count is then updated to the reference date and time, by conducting a Revision Round.

The Census is much more than a mere head count of the population. It gives information on not only the demographic but also the economic, social and cultural profile of the country at a particular point of time. It is the only available source of primary data at the level of the town. The Census provides a basic frame for conduct of other surveys in the country. The unit of enumeration for this database is household/ population.

A – Series Tables: General Population Tables, Primary Census Abstracts (including rural- urban distribution)

B – Series Tables: Economic Tables

C – Series: Social and Cultural Tables

D – Series: Migration Tables

F – Series: Fertility Tables

HH – Series: Household Tables

H – Series: Tables on Houses, Household Amenities and Assets

SCST - Series: Tables on Individual Scheduled Castes (SC) and Scheduled Tribes (ST)

Town Directory of Census ( Details of Physical and Social Infrastructure at the Town Level)

**Source:** Census – Provisional Population Totals, Rural – Urban Distribution, and Town-level Directories, Social and Cultural Tables, Migration Tables, Fertility Tables, Economic Tables, Household Tables, Tables on Individual Scheduled Castes (SC) and Scheduled Tribes (ST)

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<sup>1</sup> For some indicators, the level of disaggregation is at the district, town and ward levels.

## **2. Gross Domestic Product (GDP)**

GDP figures are made available by the Central Statistical Organization annually at the national and state levels. At the national level, the data is available from 1961 onwards until 2012. At the state level, state domestic products are available from 1980 onwards.

The data is divided into the following subsectors:

1. Agriculture, Forestry & Fishing (Primary Sector)
2. Mining & Quarrying
3. Manufacturing
4. Electricity, Gas & Water Supply
5. Construction
6. Trade, Hotels & Restaurant
7. Transport, Storage & Communication
8. Financing, Insurance, Real Estate & Business Services
9. Community, Social & Personal Services

The sectors no. 2 to 9 (as indicated in the list above), or these eight sectors, would thus comprise the non-primary sector GDP. The Central Statistical Organization has also been compiling estimates of Rural and Urban income of the Indian economy along with the exercises for revising base year of National Accounts Statistics (NAS) series, since the 1970-71 series. These estimates have so far been compiled for the years 1970-71, 1980-81, 1993-94, 1999-2000 and 2004-05. Here also, the contribution of the GDP into the various sectors can be traced for each of the years.

District domestic product (DDP) data are compiled by the Planning Commission, based on the work done by the Directorate of Economics and Statistics of the respective states. The data series was started in 1999-2000, and the latest we have is for 2008-09. But, this is not available for all the states and all the years. The DDP data is available for 23 states and the Union Territory of Andaman & Nicobar Islands. DDP data is yet not

available for any of the years for Goa, Gujarat, Jammu & Kashmir, Nagaland and Tripura. The sector and sub-sector wise break-up of the DDP is also available for a few states and for a few years, and a detailed analysis of this could be carried out.

### ***3. Urban Employment***

The main objective of the employment-unemployment surveys conducted by NSSO at periodic interval is to get estimates of level parameters of various employment and unemployment characteristics at national and state level. These statistical indicators on labour market are required for planning, policy and decision making at various levels, both within the government and outside. The critical issues in the context of labour force enquiries pertain to defining the labour force and measuring participation of labour force in different economic activities. The activity participation of the people is not only dynamic but also multidimensional; it varies with region, age, education, gender, level of living, industry and occupational category. These aspects of the labour force are captured in detail in the NSS survey on employment and unemployment and estimates are generated for labour force participation rate, worker population ratio, unemployment rate, wages of employees, etc. The indicators of the structural aspects of the workforce such as status in employment, industrial distribution and occupational distribution are also derived from the survey. Besides, from the data collected on the particulars of enterprises and conditions of employment, the aspects of employment in the informal sector and informal employment are reflected through the conceptual framework of the survey.

The quinquennial survey on employment-unemployment is one of the important surveys conducted regularly by the NSSO. The first such survey was done during September 1972 – October 1973 corresponding to the 27<sup>th</sup> round of NSSO. The present survey is the eighth in the series.

The National Sample Survey Office (NSSO) during the period July 2009 – June 2010 carried out an all-India household survey on the subject of employment and unemployment in India as part of 66<sup>th</sup> round of its survey programme. The latest round of this data set pertains to the year 2011-12 in its 68th round. In this survey, the nation-wide enquiry was conducted to generate estimates of various characteristics pertaining to employment and unemployment and labour force characteristics at the national and State levels. Information on various facets of employment and unemployment in India was collected through a schedule of enquiry (Schedule 10) adopting the established concepts, definitions and procedures.

In addition, information on the Informal Sector, Housing Conditions, Urban Slums, Status of Education and Vocational Training in India, The Aged in India and Domestic Tourism in India etc. may also be obtained from the quinquennial rounds of the NSSO. The NSSO provides disaggregated unit level data up to the household level.

## **II Municipal Finance**

Municipal finance is one area where standardization of the database is of utmost importance. The ULBs across the country have different methods of budget preparation which renders comparison across and within size class of cities difficult. Reliability of the data is questionable in some cases. Also, definitional and classification issues need to be sorted out. Moreover, the issue of audited and unaudited accounts needs to be addressed. Further, this data is not available in a centralized place. Collection of data from all ULBs needs to be done on a standardized format on an annual basis. For this activity, the NIUA would require the help of the MOUD by making available the municipal budgets of the relevant cities for specific years.

- Revenue income: tax, non-tax, transfers, and grants

- Revenue expenditure: Establishment, operations and maintenance, others

*Source: Municipal, Budgets, Finance Commission, and State Finance Commission*

### **Tentative list of Indicators:**

The following indicators will be calculated<sup>2</sup>.

1. Urbanisation (level and rate)
2. Population density of towns/cities
3. Sex ratio
4. Child sex ratio
5. Percentage literates by sex
6. Share/Per Capita Tax/receipts by the local bodies
7. Share/Per Capita Revenue from Municipal properties
8. Share/Per Capita Grant
9. Share/Per Capita Loan
10. Share/Per Capita Advance
11. Share/Per Capita Total Receipts
12. Share/Per Capita Total Expenditure
13. Share/Per Capita Expenditure on Gen. Admn.
14. Share/Per Capita Expenditure on Public Safety
15. Public Health and convenience
16. Public works and public institutions
17. % share of Scheduled Caste
18. % share of Scheduled Tribe
19. Road Density (Kutcha)
20. Road Density (Pucca)
21. Main system of Sewerage
22. Latrines per 1000 population (Water Borne)
23. Latrines per 1000 population (Service)
24. No. of electric connection per 1000 population (Domestic)
25. No. of electric connection per 1000 population (Industrial)
26. No. of electric connection per 1000 population (Commercial)
27. No. of hospitals per 1000 population
28. No. of Medical colleges per 1000 population
29. No. of Engineering colleges per 1000 population
30. No. of School/College (Higher secondary/Intermediate) per 1000 population
31. No. of School/College (Middle) per 1000 population
32. No. of School (Primary) per 1000 population
33. Work Participation Rate by Age groups/social groups

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<sup>2</sup> The list is not exhaustive but only suggestive. More indicators will be added based on the available data or requirements by the government or clients.

34. Industrial classification of workers
35. Poverty Ratio

The following sections details out the indicators from the *quinquennial* National Sample Survey.

### **Data on Employment and Unemployment Situation in India National Sample Survey Organization**

Data on Workers are available at all India level and for all states with male –female rural urban bifurcation. The data pertains to mainly these indicators.

1. Labour Force Participation Rate: Principal Status(PP); Principal and Subsidiary Status (PP+SS), Current Weekly Status (CWS), Current Daily Status (CDS)
2. Age-specific LFPR (PP+SS)
3. Workforce participation Rates: Principal Status(PP); Principal and Subsidiary Status (PP+SS), Current Weekly Status (CWS), Current Daily Status (CDS)
4. Age-specific WPR (PP and PP+SS)
5. WPR by MPCE decile classes and Work Status (self-employed, regular salaried and casual labourers) by decile classes (PP and PP+SS).
6. Education level specific WPR (pp and PP+SS).
7. Industrial Division of Workers (PP+SS) by NIC 2008.
8. Occupational Classification of workers (NCO 2004)
9. Average wage earning per day by regular salaried workers (15-59 years)
10. Average wage earning salary per day by casual labourers (except NGNREG) (15-59 years).
11. Average wage earning per day by MGNREG workers (15-59 years).
12. Unemployment Rate (PP, PP+SS, CWS, CDS).
13. Age-specific unemployment rate (PP, PP+SS, CWS, CDS): 15-19, 20-24, 25-29 and 15-29.

### **Data on 'Migration in India' National Sample Survey Organization**

Data on Workers are available at all India level and for all states with male –female rural urban bifurcation: The data pertains to mainly these indicators.

1. Migration Rate
2. Migration Rate by social Groups: Scheduled Tribe, Scheduled Caste, Other Backward Caste and Others (All India)
3. Migration Rate and Distribution of migrants by MPCE decile Classes

4. Nature of Movement: Temporary - less than 12 months and more than 12 months) and permanent
5. Location of last usual place of residence (same district, different district, different state, another country with rural urban bifurcation)
6. Migration Streams: Rural to rural, rural to urban, urban to urban, urban to rural.
7. Reasons of Migration: Employment, studies, forced migration, marriage, movement with parents, others
8. Usual activity status before and after migration (self-employed, regular salaried, casual labourers, unemployed, not in labour force)
9. Percentage of Return Migrants
10. Short term Migration Rate
11. Percentage of Out-migrants
12. Percentage of migrants classified by reasons of out-migration
13. Out-migrants by their present place of residence: (within same district, another district, another state, another country)
14. Percentage of economically active out-migrants
15. Percentage of remitter out-migrants
16. Frequency and amount of remittances during last 365 days
17. Percentage of household reporting out-migrants, receipt of remittance e and average remittance received during last 365 days
18. Net Migration (in numbers) and Net Migration Rate

**Outputs:**

- Database on Urbanization (level and rate) at the National, state, district and size class levels
- District profile of states (on demographic, social and economic indicators)
- Size class profiles at all India and state levels (on demographic, social and economic indicators)
- Per capita GDP at national, state, district and city levels (million plus cities)
- Poverty ratios at the national and state levels
- Indicators on Urban Employment (Self-employed, regular and casual workers) based on 61st, 66th and 68th Rounds from NSSO at all India, state, and million plus cities (unit level data)
- Indicators on Migration (National and state level)

- Detailed indicators on Municipal Revenue and Expenditure of select Million Plus Cities (municipal budgets, if made available)
- Indicators on Access to Basic Amenities (housing, water supply, sanitation, electricity, solid waste management and ownership of assets etc.) at National, State and town levels (2001-11)
- Indicators on Enterprises (Economic Census): Location of the enterprise (with or without premise), Description of the economic activity (NIC), Nature of operation, Type of ownership (OAE, NDE and DE), Social group of the owner, Power/fuel used for the activity, Type of registration, Type of finance at the National and state levels
- Indicators on slum characteristics at the National, state and size class levels (restricted to cities above 100,000 population)
- Indicators on pollution at the state and city levels (160 cities)

## **V. AUDIENCE**

Policy makers, researchers, think tanks, city managers, students, academicians and national and international agencies working on data and those engaged with evidence based research would be the audience for this knowledge product. A few of the agencies are part of the peer review team like MOUD, ADB and the K-hub partner countries. Also, formal and informal meetings with various stake holders would help in disseminating the research agenda and specifically the knowledge product. Initial discussion on the urban database has happened with the MOUD, ADB, UNDP and Clean Air Asia.

## **VI. PEER REVIEW**

The peer review will be done at two levels. At first level it will be done within the organisation (the Director) by experts from the Ministry of Urban Development and ADB. At the second level it will be done by the subject matter specialists from K-Hub

partner countries. The comments from the reviewers will be considered while finalising the knowledge product.

## **VII. REGIONAL PERSPECTIVE**

A standardised template will be shared with each of the K-Hub countries, requesting them to share data on demographic, social and economic indicators for at least two common points of time on a standardised format. The entire database will be based on available secondary data. No primary survey would need to be conducted.

VIII: Sustainability: Sustainability is linked to generating demand. It may draw on emerging demand in each of the new urban missions for evidence based planning and quantification of outcomes, programme monitoring, impact assessment and bench marking.