



SLUM FREE CITY PLAN FOR GWALIOR CITY
PREPARED BY
GWALIOR MUNICIPAL CORPORATION

**Revised Draft Final Report – Volume I –
Report and Appendices**

May 2013



**With Technical Support from
Mehta and Associates, Indore
Urban Planners**



Preface

Urban India is undergoing a transition in terms of physical form, demographic profile and socio-economic diversity. The important role of cities in national economic process and their global linkages demand more attention for their development, than being hitherto given. Cities are expected to perform efficiently in keeping with emerging demands for employment, commerce, trade, industry and other services. Cities have to attract investments for improving their efficiencies by way of up to date infrastructure, improved governance and affordable housing/living with modern amenities. Urban renewal of Indian cities has been initiated to achieve the objectives.

According to census of India, the urban population in the country as 2011 was 377 million. This constituted 31.16% of the total population of 1210 millions. The net addition of population in urban areas during the decade 2001-2011 was about 91 million. The slum census, 2001 in towns with more than 50,000 population, numbering 607, reported 40.606 million slum dwellers which amounted to 22.76% of the population living in those 607 towns/cities. This implies, nearly one out of every four persons reside in slums in our cities & towns. Slums generally lack basic infrastructure, housing, social amenities and this has implications on health and productivity of the people living in such areas. This also has serious implications for future generation of people residing in such areas.

“Socially slum is a way of life, a special character which has its own set of norms and values reflected in poor sanitation, health values, health practices, deviant behavior and social isolation.” (Planning Commission)

Slums and Squatters, as observed by the Working Group on Slums and Squatters which submitted its report to the Planning Commission in May 1998, are known by different names in different cities — katras or juggi jhompri in Delhi, jhompadpatti or chawls in Mumbai, basti in Calcutta, cheris in Chennai and keris in Bangalore. “[But their basic characteristics remain the same i.e. dilapidated and infirm housing structures, acute overcrowding, faulty alignment of streets, poor ventilation, inadequate lighting, paucity of drinking water, water-logging during rains, absence of toilet facilities and non availability of basic physical and social services].

Slums and Squatters form about 23% of population of Gwalior. Though staying in such informal settlements they contribute significantly to the economic, social, political and cultural characteristics of the city.

These settlements have emerged as manifestations of poverty and inequality. In spite of the pro-poor policies of Government of Madhya Pradesh, these settlements are growing faster than population growth rate of Gwalior. Despite various policies, which have been pronounced by the central government such as VAMBAY, BSUP JNNURM and Ayodhya Basti





by State Government from time to time and implemented by the local agencies, population in Slums and Squatter settlements continues to swell.

City Specific Strategic Interventions to make cities Slum Free are of Significance. With the same objective Government of India has Launched Rajeev Awas Yojana (RAY) envisaging “Slum Free India” through encouraging States and Union Territories to tackle the problems in Slums in definitive Manner. The Programme envisages that each State will prepare a Slum Free State Plan of Action identifying Priority Cities Intended to be covered under RAY in First Five Years for Preparation Slum Free City Plan. It is expected to commit for a “Whole City” and “Whole Slum” Approach in preparing Slum Free City Plans.

Government of Madhya Pradesh has Identified Indore, Bhopal, Gwalior, Jabalpur, Ujjain and Sagar as Priority City and Initiated actions to prepare Slum Free City Plans.

It is in this context the Consultancy assignment for the support in preparation of Slum Free City Plan of Gwalior has been entrusted to Mehta and Associates Indore by the Gwalior Municipal Corporation. Mehta and Associates is group of Urban Planners and Technocrats and also are one of the Consultants empanelled by Ministry of Urban Development (MoUD) and Ministry of Housing and Urban Poverty Alleviation (MoHUPA), Government of India for preparation of City Development Plans under Jawaharlal Nehru National Urban Renewal Mission.

This is Draft Final Report of Slum Free City Plan for Gwalior.





Acknowledgement

The Consulting Team Acknowledges the Support of Officers of Gwalior Municipal Corporation, Urban Administration and Development Department Government of Madhya Pradesh, MPUSP and District Administration Gwalior the Preparation of Slum Free City Plan for Gwalior.

Planning Team

Mehta and Associates, Indore





Planning Team





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Appendix B – Household Survey Format

Appendix C – Filled up Survey Format

Appendix D – Drawings





Abbreviations

APL	- Above Poverty Line
BPL	- Below Poverty Line
CBD	- Central Business District
CBO	- Community Based Organisation
CDP	- City Development Plan
CIP	- City Investment Plan
CAA	- Constitutional Amendment Act
DFID	- Department for the International Development, Government of United Kingdom
DGPS	- Differential Global Positioning System
DPR	- Detailed Project Report
EWS	- Economically Weaker Section
FAR	- Floor Area Ratio
FGD	- Focused Group Discussion
FOP	- Financial Operating Plan
ft	- Feet
GDP	- Gwalior Development Plan
GDA	- Gwalior Development Authority
GDP	- Gross Domestic Product
GIS	- Geographical Information System
GMC	- Gwalior Municipal Corporation
GoI	- Government of India
GoMP	- Government of Madhya Pradesh
Govt	- Government
GPS	- Global Positioning System
ha	- Hectare
HH	- Household
HIG	- Higher Income Group
IHSDP	- Integrated Housing and Slum Development Programme
JnNURM	- Jawaharlal Nehru National Urban Renewal Mission





Km	- Kilo Meter
LIG	- Lower Income Group
LPCD	- Litres Per Capita per Day
M-I-C	- Mayor in Council
MIG	- Middle Income Group
MIS	- Management Information System
MLD	- Million Litres per Day
MoUD	- Ministry of Urban Development
MoHUPA	- Ministry of Housing and Urban Poverty Alleviation
MP	- Madhya Pradesh
MPHB	- Madhya Pradesh Housing Board
MPPWD	- Madhya Pradesh Public Works Department
MPUSP	- Madhya Pradesh Urban Services for Poor
NGO	- Non-Governmental Organisation
NSDP	- National Slum Development Programme
NSS	- National Sample Survey
OBC	- Other Backward Class
PHED	- Public Health and Engineering Department
PPHA	- Persons Per Hectare
PPP	- Public Private Partnership
PSP	- Private Semi-public
PUF	- Private Utilities and Facilities
RAY	- Rajeev Awas Yojana
RCC	- Re-inforced Cement Concrete
Rs	- Rupees or Indian National Rupees
SC	- Scheduled Caste
SEZ	- Special Economic Zone
Sqkm	- Square Kilo Meter
SQL	- Structured Query Language
ST	- Scheduled Tribe
STP	- Sewage Treatment Plant
SWM	- Solid Waste Management





TCP	- Town and Country Planning Department
TPD	- Tonnes Per Day
UDPFI	- Urban Development Plan Formulation and Implementation Guidelines
ULB	- Urban Local Body
ULC	- Urban Land Ceiling Act
UT	- Union Territory
VAMBAY	- Valimiki Ambedkar Awas Yojana
WFPR	- Work Force Participation Rate





Introduction – Chapter –

1







Introduction - Chapter 1

1.1 Background

According to census of India, the urban population in the country as on 1st March 2001 was 286 million. This constituted 27.8% of the total population of 1028 millions. The net addition of population in urban areas during the decade 1991-2001 was about 68 million. The slum census, 2001 in towns with more than 50,000 population, numbering 607, reported 40.606 million slum dwellers which amounted to 22.76% of the population living in those 607 towns/cities. This implies, nearly one out of every four persons reside in slums in our cities & towns. Slums generally lack basic infrastructure, housing, social amenities and this has implications on health and productivity of the people living in such areas. This also has serious implications for future generation of people residing in such areas.

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1.1.1 Definition of Slum (Census, Slum Act and Dr. Pranab Sen Committee)

■ **Slums Definition: 'Slums' have been defined under Section 3 of the Slums Areas (Improvement and Clearance) Act, 1976 as areas where buildings**

- Are in any respect unfit for human habitation or
- Are by reason of dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and morals.

■ **Census of India 2001 has adopted the definition of 'Slum' areas as:**

- All areas notified as 'Slum' by State/Local Govt. and UT Administration under any Act;





- All areas recognized as 'Slum' by State/Local Government and UT Administration, which have not been formally notified as slum under any Act;
- A compact area of at least 300 populations or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.

■ **Dr. Pranab Sen Committee define 'Slum' as:**

- It has defined a slum as “a compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions”.

1.2 Growth of Slums in Urban Areas

After independence in 1947, commercial and industrial activity resulted in demand for labour in the cities. In order to meet this demand people from rural areas were encouraged to move to the cities and work. This migrant work force later brought their relatives, friends and rest of the families to the cities. Unable to find cheap housing, they built their shelter closer to work places. Gradually the number of shelters grew and resulted in a 'slum'. Over a period of time Governments provided electricity and drinking water. Thus began the vicious cycle of urban population growth, opportunities in the cities, migration from rural areas, poverty with low incomes, tendency to be closer to work hence occupying any land in the vicinity etc.

For the First time in Census of India, 2001 has provided the Slum information in respect of the cities having urban population of 50,000 or more. As per National Sample Survey (NSS) the total numbers of households living in slums have increased from 5.93 million in 1993 to 8.23 million in 2002.

1.3 Slum Development Initiatives in India

1.3.1 National Slum Development Programme (NSDP)

To improve the situation of lack of improvement activities in urban slums under EIUS, Government of India introduced the National Slum Development Programme as an additional Central assistance scheme with the objective to upgrade urban slums. Major components/activities under NSDP include:

- (i) Provision of physical amenities like water supply, storm water drains, community bath, widening and paving of existing lanes, sewers, community latrines, street lights, etc.
- (ii) Community Infrastructure: Provision of Community centers to be used for preschool education, non-formal education, adult education, recreational activities etc.





- (iii) Community Primary Health Care Centre Buildings: With support of Registered Medical Practitioners/Government Doctors in the State/NGOs/CBO/Philanthropic Associations to man these centers.
- (iv) Social Amenities: Pre-school education, non-formal education, adult education, maternity, child health and Primary health care including immunization etc.
- (v) Provision for Shelter: Not less than 10% of the allocation to States under this assistance to be utilized for construction and/or up gradation of houses for the urban poor.

Under this component, States were required to work out their specific schemes for housing construction/up-gradation which shall not be an entirely subsidy based scheme but the funding shall contain a loan component as well. It was also expected that the scheme would make adequate provision for achieving convergence between different Sectoral and departmental programmes so as to achieve the social sector goals similar to those envisaged in this scheme.

Since inception in 1996-97 up to 2004-05, the amounts allocated and released to the States and UTs under this programme were 3494.90 Cr and 3089.63 Cr Respectively. Out of the total funds of Rs.3089.63 Cr released by the Central Government, an amount of Rs. 2466.34 crores has been spent and about 4.58 crores of slum dwellers have benefited from this programme.

The scheme did not have much emphasis on housing component even though it included provision for housing up gradation. In the absence of well-defined scheme structure for recovering cost of infrastructure provisions under the scheme, the agencies who have implemented this scheme operated it more as a total subsidy scheme. Other major shortcomings observed include - funds not reaching the local bodies and targeted poor meagre budget allocations vis-à-vis slum population, institutional weaknesses to bring about convergence of resources and efforts envisaged in the scheme.

1.3.2 VAMBAY

Government of India launched Valmiki Ambedkar Awas Yojana (VAMBAY) Scheme as a centrally supported scheme with inbuilt subsidy for undertaking construction of dwelling units and sanitation units specially focused for slum dwellers, which are economically below the poverty line and belong to socially disadvantaged group.

Since inception in 2001-02 up to 2005-06, the amounts allocated and released to the States and UTs under this programme were 1093.93 Cr and 933.63 Cr Respectively benefiting 4.42 Lakhs Households

In terms of the scheme structure, VAMBAY scheme proved to be better than previous initiatives since it had a grant component of 50%, thus making houses affordable to the poor. The advantages are also in terms of targeting the urban poor and EWS as the major urban housing shortage is in EWS and LIG categories. With the launching of JNNURM, the





VAMBAY scheme has been discontinued. However, the elements of this scheme have been incorporated in JNNURM.

1.3.3 JNNURM and IHSDP

The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) has been launched by Government of India from December, 2005 for an initial period of seven years with a central outlay of Rupees 50,000 crores. 63 cities including 35 cities with Million + population are designated to be eligible for investment under this Mission based on the priorities indicated by the State Governments. All the State Capitals of North Eastern States and other cities including cities of religious and tourist importance have been included in the overall list of 63 cities. The City of Gwalior narrowly missed to be included in the JnNURM due to not being million plus city. The Non-JnNURM Cities were continued to be included in the IHSDP Programme.

The Mission aims to provide incentives to the cities included in this Mission for undertaking institutional, structural and fiscal reforms, necessary to improve service delivery systems that are sustainable, enhance local economic performance, and bring about transparency and accountability in the functioning of municipal governments.

The Mission comprises two sub-missions namely: Sub-Mission for Urban Infrastructure and Governance; and Sub-Mission for Basic Services to the Urban Poor.

Sub-mission Basic Services for Urban Poor of JNNURM focuses on integrated development of slums through projects that provide shelter, basic services and other related civic amenities to the urban poor. To compliment this activity in smaller non-mission towns, the centrally supported scheme of Integrated Housing and Slum Development Programme (IHSDP) has been launched. This scheme will replaced the earlier launched schemes of Valmiki Ambedkar Awas Yojana (VAMBAY) and National Slum Development Programme (NSDP).

The target Group under the scheme is slum dwellers from all sections of the community through a cluster approach and allocation of funds will be on the basis of States' urban slum population to total urban population in the country. States in turn may allocate to Town's/Cities basing on similar formula. However, funds will be provided only those towns and cities where elections to local bodies have been held and elected bodies are in position. The State Governments may prioritize the towns and cities on the basis of their felt-need by taking into account existing infrastructure, cities with concentration with slum population and such other criteria.

1.4 Rajiv Awas Yojana (RAY)

Government of India announced Rajiv Awas Yojana (RAY) for the slum dwellers and the urban poor on 6th August, 2009 with a vision of "Slum Free India". The Scheme is aimed at providing support to states that are willing to provide property rights to slum dwellers





The Programme envisages that each State will prepare a Slum Free State Plan of Action identifying Priority Cities Intended to be covered under RAY in First Five Years for Preparation Slum Free City Plan. It is expected to commit for a “Whole City” and “Whole Slum” Approach in preparing Slum Free City Plans.

The Programme calls for a multi-pronged approach focusing on:

- **Bringing existing slums within the formal system and enabling them to avail of the same level of basic amenities as the rest of the town;**
- **Redressing the failures of the formal system that lie behind the creation of slums; and**
- **Tackling the shortages of urban land and housing that keep shelter out of reach of the urban poor and force them to resort to extra-legal solutions in a bid to retain their sources of livelihood and employment.**

1.4.1 Planning Methodology

The **Figure 1-1** Describes the Conceptual Framework of Methodology for Preparation of Slum Free City Plan. As per the RAY guidelines, the process of preparation of Slum-free City Plan will broadly involve Slum Redevelopment / Rehabilitation Plans based on

(a) Survey of all slums – notified and non-notified

During this stage, delineation of the areas under slums will be undertaken along with demographic and social profiling of the slum dwellers. The most important information gathered during this stage of the study would be the type of housing in the slums (Katcha or Pucca). The survey would also include data gathering about several important parameters like land ownership pattern (patta or encroachment), Land use and FSI pattern, Adequacy of physical infrastructure facilities like water supply, sewerage, drainage, solid waste management system, roads, electricity etc. Yet another important parameter that would emerge from this survey is the tenurial pattern of the dwellers. Lastly, the social infrastructural facilities like education, health, banking, community hall, livelihood centers would be covered in the survey.

(b) Mapping of slums using the state-of-art technology

All the slums are to be mapped using GIS technology with detail filling through total station survey. Satellite images will be used, as appropriate in order to generate the base map of the city/slum under consideration.

(c) Integration of geo-spatial and socio-economic data

In this stage the data collection in steps (a) and (b) above is integrated in to a single entity using GIS platform. This will enable ushering of greater accessibility and transparency thereby making the entire exercise responsive to public needs.





(d) Identification of development model proposed for each slum

At this stage the selection of development model for the slums is to be taken up. The choice of the model may be Public-Public Partnership model or public-private partnership model.

(e) Implementation strategy

The implementation strategy consists of three components: Prioritization, phasing and measures for preventing future growth of slums. The first two components are important because the scheme extends for a period of five years and the total slums in the city have to be taken up under the scheme for development in a phased manner.

Figure 1-1 Conceptual Framework of Methodology for Preparation of Slum Free City Plan as per Rajeev Awas Yojana Guidelines



**April 1,
2011**

**SLUM FREE CITY PLAN FOR GWALIOR CITY
PREPARED BY
GWALIOR MUNICIPAL CORPORATION**

**Revised Draft Final Report
Volume I – Report and Appendices**



(f) Preparation of Detailed Project Report

The Detailed Project Report is to be prepared by encompassing all the components of Slum-Free City Plan. The DPR would include detailed designs and drawing along with detailed costing of the project.

Capacity building and training will be critical for the preparation and implementation of slum-free city action plan. This will need to cover both institutional and HR capacity needs. The Slum-free City Plan will specifically include the Plan for Capacity Building which will be supported by the Centre under the scheme following the guidelines and scales approved under the Toolkit .

Slum Free City Plan for Gwalior City

Gwalior Municipal Corporation Initiated the Task for Preparation of Slum Free City Plan for Gwalior. The Preparation of Slum Free City Plan was helped by already carried out GIS mapping of the City and 100% Socio-economic Survey of Slums under MPUSP Technical Assistance.

The Consultancy assignment for the support in preparation of Slum Free City Plan of Gwalior City has been entrusted to Mehta and Associates Indore by the Gwalior Municipal Corporation. Mehta and Associates is group of Urban Planners and Technocrats and also are one of the Consultants empanelled by Ministry of Urban Development (MoUD) and Ministry of Housing and Urban Poverty Alleviation (MoHUPA), Government of India for preparation of City Development Plans under Jawaharlal Nehru National Urban Renewal Mission.

1.5 Approach and Methodology

The Approach and Methodology for Preparation of Slum Free City Plan for Gwalior City has been divided in two stages namely

- **Preparatory Phase**
- **Slum Free City Planning Phase**

1.5.1 Preparatory Phase

The various Tasks under the Preparatory Phase have been presented in the **Figure 1-3** and the same has been broadly categorized as

- **Geo-Referenced City Base map and Slum Mapping**
- **Slum Socio-economic Survey & Preparation of GIS Enabled Slum MIS**

Preparation of Geo-referenced City Base Map and Mapping of Slums

The Preparation of the Geo-referenced City Base Map for Gwalior City has been completed under MPUSP Technical Assistance. The City Base map has been prepared using latest





technology such as use of high-resolution satellite imageries – QuickBird satellite data and DGPS.

Figure 1-2 Approach and Methodology for Preparation of Slum Free City Plan for Gwalior City

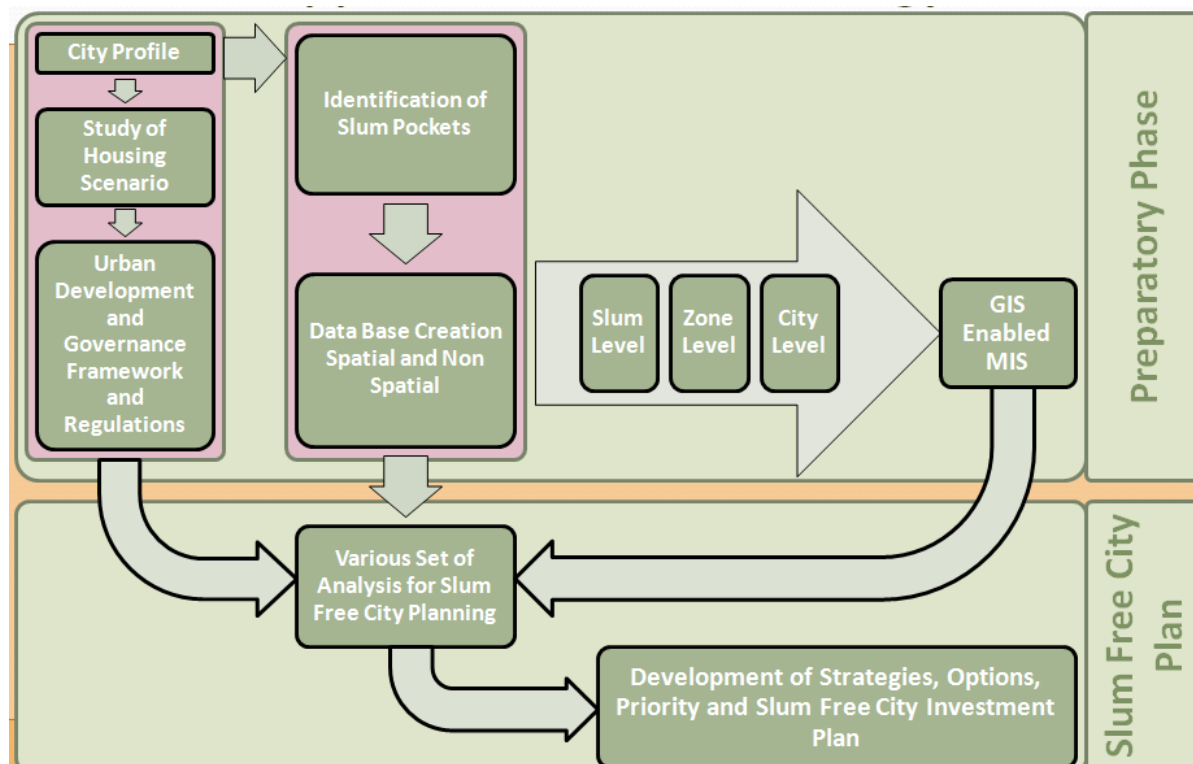
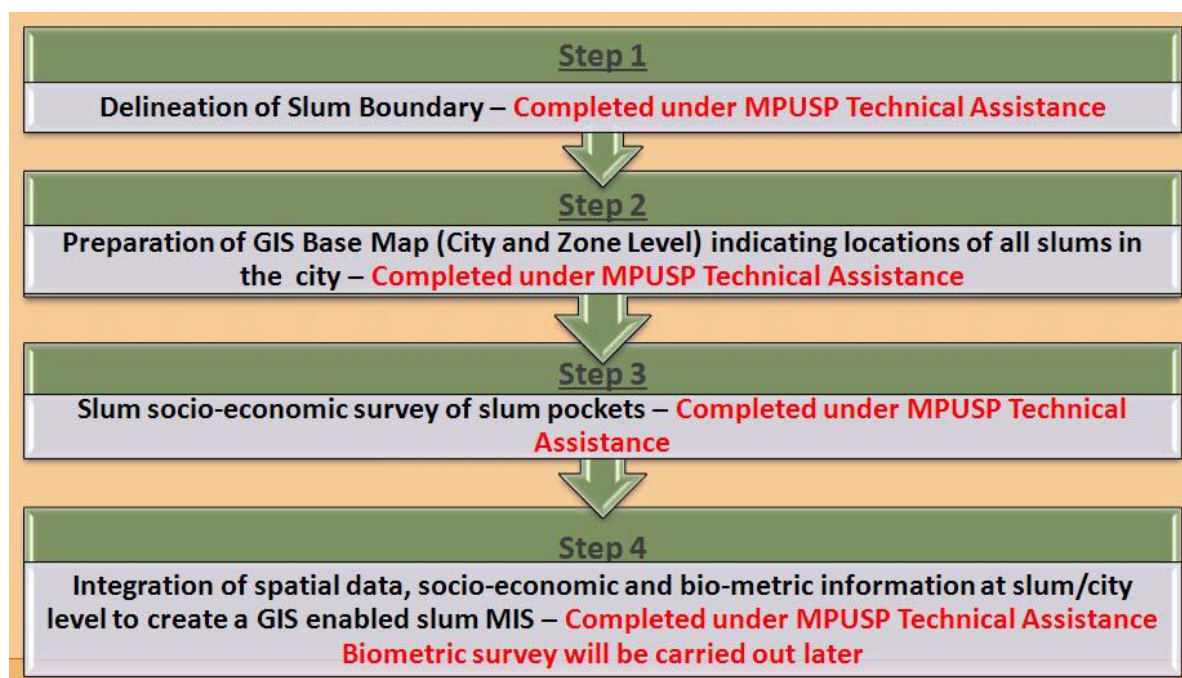


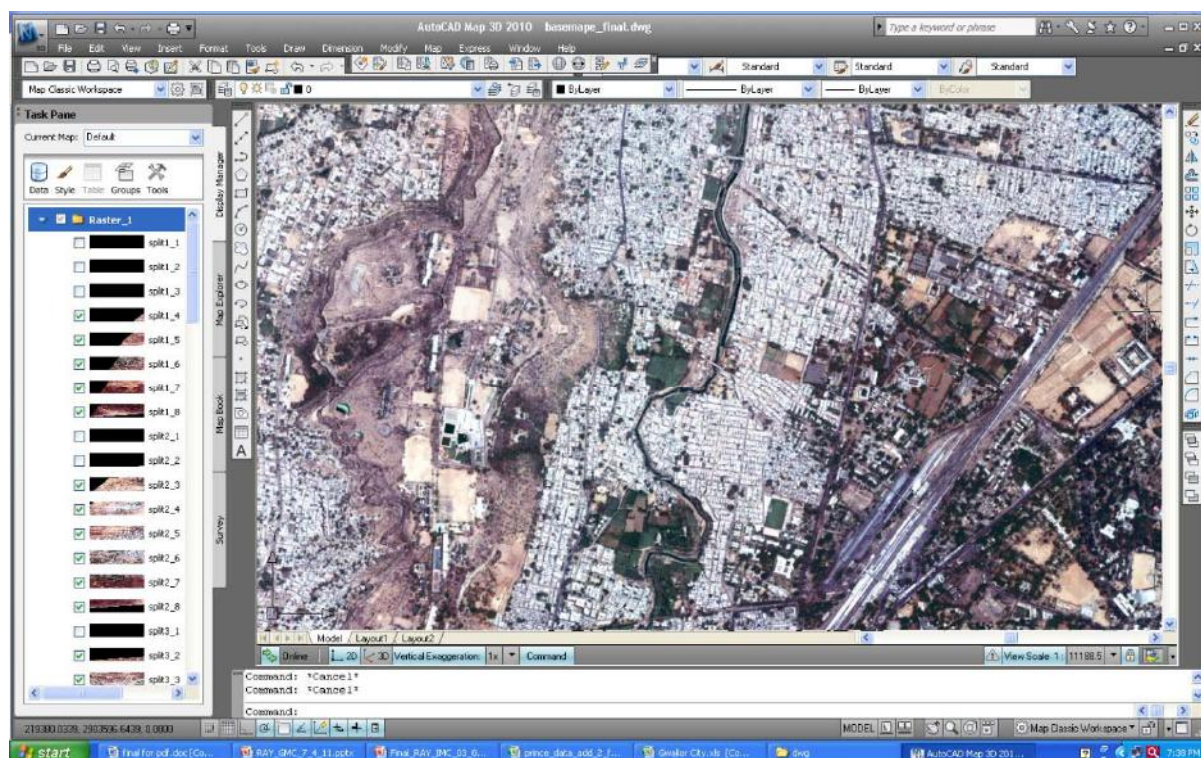
Figure 1-3 Approach and Methodology for Preparation of Slum Free City Plan Gwalior City – Preparatory Phase





The base map contains all key physical features such as, main roads, railways, airport, important land-marks, water bodies, canals, rivers, location of GPS points and administrative boundaries. The Various Slum Pockets identified (Both notified and non-notified) have been mapped on the Geo-referenced Base Map. The base map also contains the boundaries of each plot and building (structure) and its unique identification number and spatial distribution of slums. **Figure 1-4** and **Figure 1-5** shows a snapshot view of Geo-referenced City Base Map and Slum Mapping respectively

Figure 1-4 Snapshot View of Geo-referenced City Base Map



Slum Socio-economic Survey & Preparation of GIS Enabled Slum MIS

Detailed Socio-economic survey has been carried out to capture the details of slums and slum households in various slum pockets - land status, demographic profile, housing status, economic status, occupational status, access to infrastructure, household level information etc. A Sample Questionnaire of Socio-economic Survey is attached as **Appendix A**

The socio-economic household survey in slums and poor households is carried out as 100% Survey of 243 was conducted in April 2011. Slum identified after April 2011 will be taken up in next review of SFCP along with the other slums which would have settled after April 2011 and FGD's up to level of 50 Households to assess the Urban Service Delivery at slum level.

All the data's from survey have been fed in to a customized Database and a GIS enabled MIS has been created through integration of Slum MIS with the GIS Base Map.



Figure 1-5 Snapshot View of Slum Mapping on Geo-referenced City Base Map

Figure 1-6 Socio-economic Survey Data Base Design and MIS

City Profile and Housing Scenario

The City Profile of Gwalior has been studied in Terms of its Historical Background, Location, Linkages and Regional Setting, Physical Setting, Demographic and Socio-economic Profile, Urban Land Use and Spatial Growth, Urban Infrastructure Status and Future and ongoing

Proposals. Based on the City Profile of Gwalior the Strengths and Weakness of Gwalior were indentified.

The Housing Scenario of Gwalior City was also studied with assessment of Housing Supply Demand and Shortage. An Assessment of Projected Housing Demand for Gwalior was carried out for Population of Gwalior in General and EWS in Particular. The Poverty profile of Gwalior and basic characteristics of slums and Poverty Pockets were also studied.

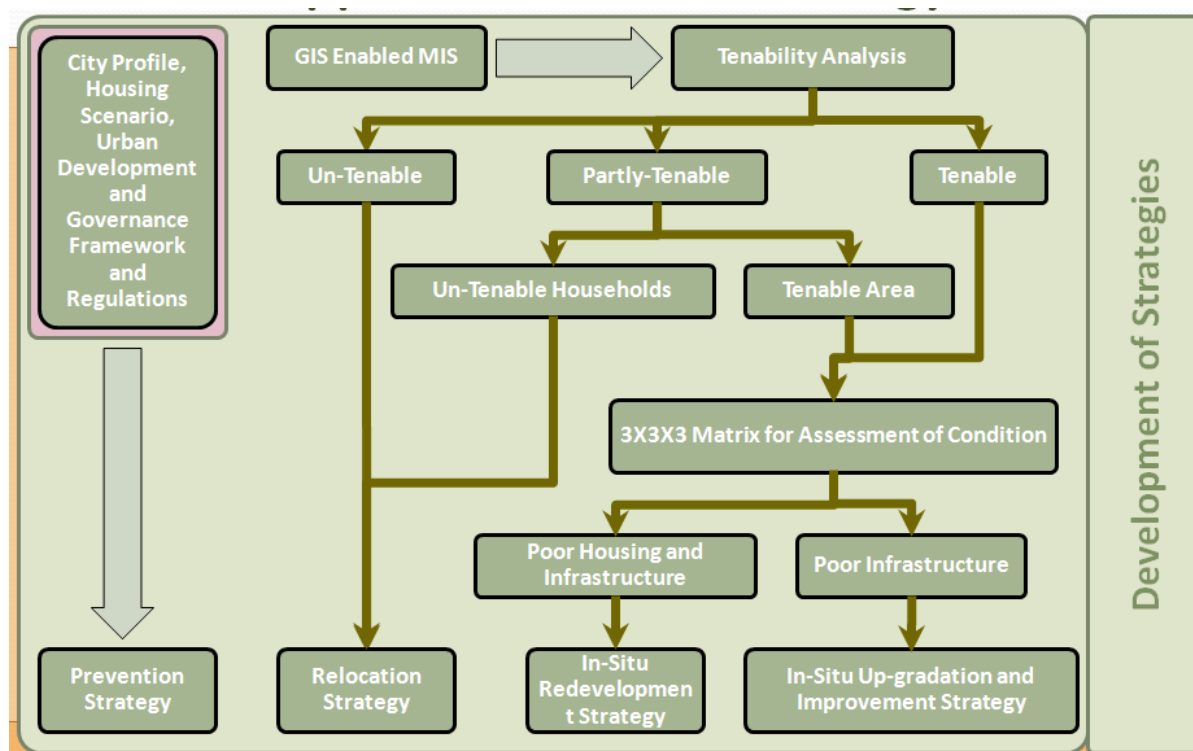
Urban Planning, Development & Governance Framework and Regulations

Urban Planning Development & Governance Framework and Regulations were studied in order to understand the Institutional and Regulatory Mechanism for Urban Development and Governance in Madhya Pradesh and Gwalior.

1.5.2 Slum Free City Planning Stage

The Findings and Results of the preparatory Tasks were carried forward for Development of Strategies in the Slum Free City Planning. The Strategies were developed based on Categorization of Slums based on Spatial Analysis and options were identified under various strategies based on the same Spatial Analysis.

Figure 1-7 Approach and Methodology for Preparation of Slum Free City Plan Gwalior City – Development of Strategies



Categorization of Slums

Categorization of Slums is most significant step in Slum Free City Planning. Slums were categorized based on various parameters such as Tenability, Tenure Status, Land Ownership



of Slum Pockets, Household Density, Land Value and Three Dimensional Matrix Analysis for Assessment of Housing, Infrastructure and Socio-economic Conditions of Slums.

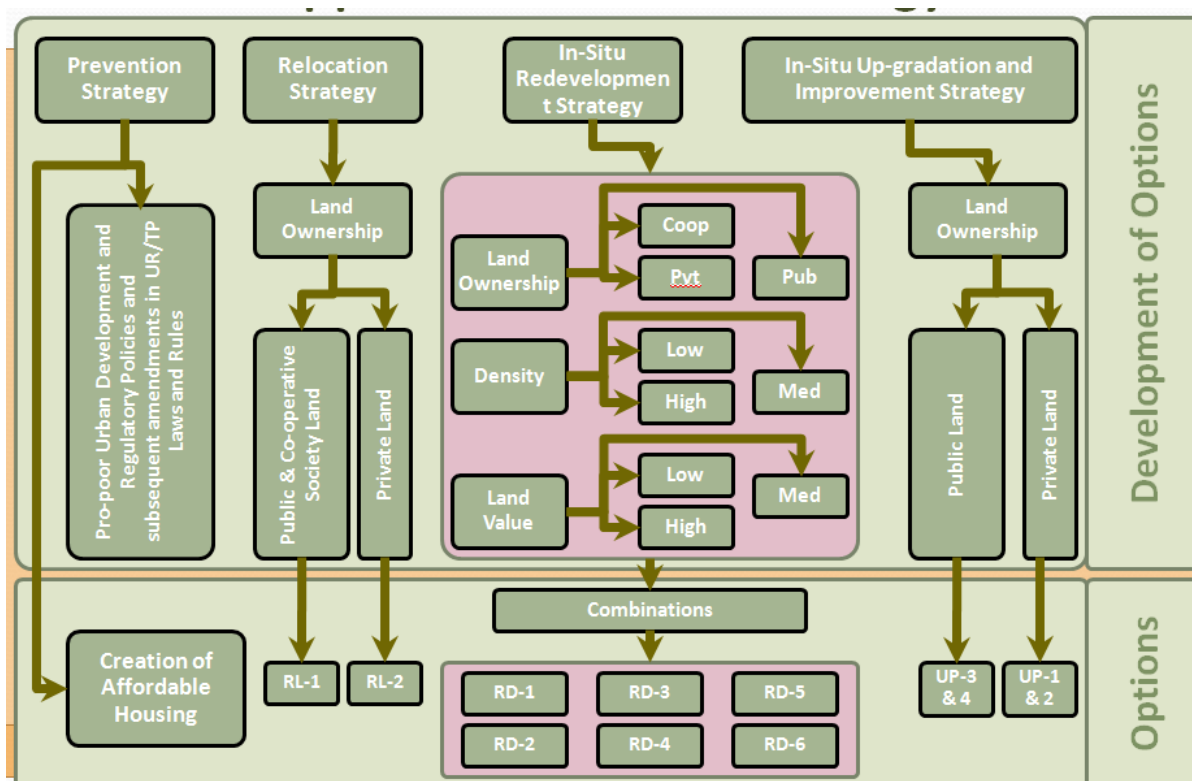
Development of Strategies

Various Strategies were assigned to every slum based on the Categorization as per Tenability Analysis and Three Dimensional Matrix Analysis on Housing, Infrastructure and Socio-economic Conditions of Slums. A Prevention Strategy was also identified as per the study of City Profile, Housing Scenario and Urban Development and Governance Framework and Regulations

Development of Options

Various Options were identified for every slum under different strategies based on the Categorization as per Three Dimensional Matrix Analysis on Housing, Infrastructure and Socio-economic Conditions of Slums, Tenure Status, Land Ownership of Slum Pockets, Household Density and Land Value. While under Prevention Strategy Options were identified to create Housing Stock for Economically Weaker Section.

Figure 1-8 Approach and Methodology for Preparation of Slum Free City Plan Gwalior City – Development of Options under various Strategies



Prioritization of Slums

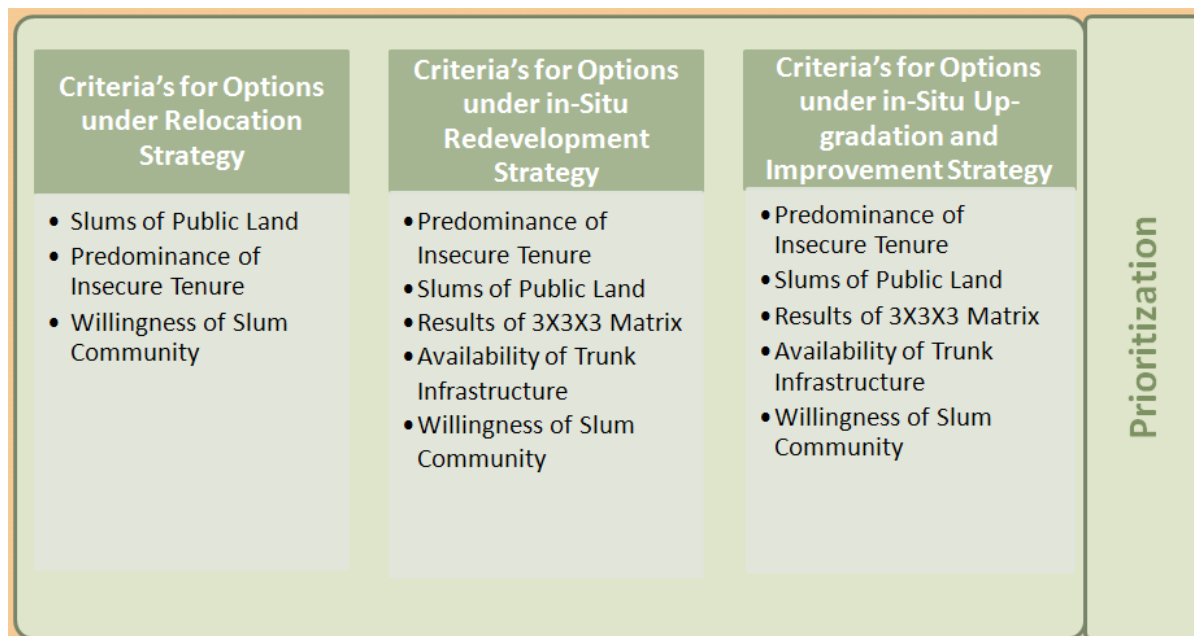
Slums were prioritized for Implementation Based on Tenure Status, Land Ownership of Slum Pockets, their Condition as per the Categorization in the Three Dimensional Matrix Analysis on Housing, Infrastructure and Socio-economic Conditions of Slums, Their willingness to





avail the benefits and contribute and Availability of Trunk City Infrastructure. The Slums were phased in 5 years as per their priority from 2011-12 to 2015-16. The Criteria's used for prioritization of Slums under various strategies and Options are presented in **Figure 1-9**.

Figure 1-9 Approach and Methodology for Preparation of Slum Free City Plan for Gwalior City – Prioritization of Slums under various Strategies and Options



Estimation of Proposed Investment

Estimation of the Proposed Investment needs under various strategic Interventions was calculated and phased as mentioned above.

Financing Strategies

Financing Strategies were developed based on the Options identified for every slum under various Strategies.

Implementation and Post Occupancy Management Mechanism

Implementation and Post Occupancy Management Mechanisms were developed again based on the Categories of Slums and Options identified under various strategies for them.

1.6 Community Participation & Public Consultation

Prior to Launch of Rajeev Awas Yojana Gwalior had already took Steps under MPUSP Project. 100% Socio-economic Survey of Slums and Preparation of GIS Base Map with Slum Mapping was carried out under MPUSP Project. The Socio-economic Survey and Slum Mapping was completed in Nov 2010 with participation from the Community and Elected representatives.

Thus Environment Building at City level and Slum level under the purview of Slum Free City Plan under RAY was carried out after the Preparatory Tasks mentioned above. In the process





of Environment Building for Slum Free Gwalior, consensus among various Stakeholders was developed through briefing of programme Objectives, Methodology and the roles and responsibilities of State government, ULB, NGOs and slum communities for SFCPoA preparation at various stages, including planning, implementation, monitoring, evaluation and social audit.

Identification, demarcation of slum areas on the Geo-referenced City Base Map with the help of Urban Poverty Alleviation (UPA) Cell and Community Development Officers (CDOs). In Later Stages Participatory process with Political & Community representatives was conducted for Prioritization of Strategies & Development option for all the Slums.

Community Participation in form of Focused Group Discussion (FGD) in Micro planning during preparation of DPR was also carried out, which includes

- Preparation and orientation for micro-planning or environment building
- Review of Infrastructure related issues in the participatory problem analysis
- Identification of slum level infrastructure to be rehabilitated and additional infrastructure if and when required
- Community feedback and agreement and finalization of the dwelling units and settlement plan and the environmental infrastructure plans.
- Consent and Endorsement for the Slum Development proposals
- Identification and listing of beneficiaries.

1.7 Structure of the Report

The Draft Final Report has been presented in 6 chapters. Following are the contents of the Report

- **Chapter 1** introduces to the Overview of various Intervention related Slums and Squatters, Slum Free City Planning, Its Approach, Methodology and Process adopted for Slum Free City Planning for Gwalior City and structure of the Draft Final Report.
- **Chapter 2** presents an Overview of the city in Terms of its Historical Background, Location, Linkages and Regional Setting, Physical Setting, Demographic and Socio-economic Profile, Urban Land Use and Spatial Growth, Urban Infrastructure Status and Future and ongoing Proposals, Urban Planning Development & Governance Framework and Regulations and It finally concludes to City's Strengths and Weakness.
- **Chapter 3** deals with Housing and Urban Poverty Profile of the City. It puts light of existing Housing Subsystems, Household Profile, Housing Shortage and Future Demand and Demand for EWS Housing. It describes poverty Profile of Gwalior and Slum Profile of Gwalior. It also briefly analyses the findings from socio-economic Surveys and FGDs.
- **Chapter 4** Presents the various analysis of Slums and Squatters in Gwalior for Categorization of Slums such as, Tenability Analysis, Tenure Status of Slum





Households, Density of Slums, Land Value of Slums, 3X3X3 Matrix Analysis for assessment of Housing, Infrastructure and Socio-economic Conditions.

- **Chapter 5** discusses the various strategies developed for various categories of Slums and their Details. It also describes the Options identified under various categories and Prioritization Criteria's and establishes prioritization of Slums in Five phases.
- **Chapter 6** Provides the Proposed Investment plan for Slum Free Gwalior and phasing of Investment.
- **Chapter 7** Financing Strategies, Implementation and Post Occupancy Management Mechanisms for the Slums.





City Profile – Chapter

2



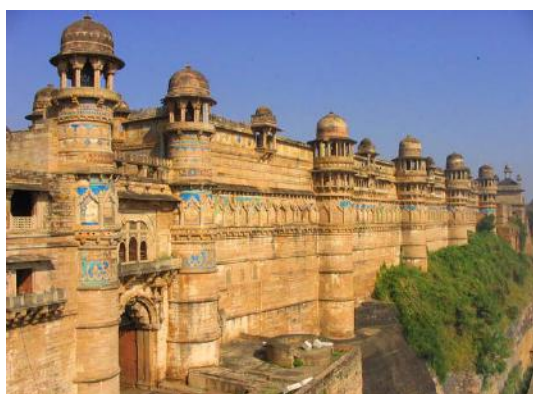


City Profile - Chapter 2

2.1 Introduction

Gwalior is one of the important cities in Madhya Pradesh. It was a former state, in pre-independent India, now it is a part of Madhya Pradesh state. Its capital was Lashkar and Gwalior was one of the five chief Indian states, which were dominated by the Sindhia family of Marathas. It has larger part between Rajputana on West and United Provinces and Central India on East, with Chambal River forming its North and Northwest boundary; other smaller sections in Southwest Central India. Gwalior occupies a strategic location in the “Gird” region of North India, and the city and its fortress have served as the center of several of North India's historic kingdoms. Gwalior is the administrative headquarters of Gwalior District and Gwalior Division. Rich tradition and history of Gwalior have made city full of palaces and other masterpieces of architecture.

Figure 2-10 Gwalior Fort



2.2 Historical Background

The period of first settlement in Gwalior is matter of debate, from historical point of view; this is one of the oldest cities of India with a glorious past, with rich spiritual and cultural heritage. Some archeologists have discovered implements of Paleolithic age in Gwalior. It was ruled by Nagvans in 2nd century. Beginning of legendary Gwalior fort found its roots in the 5th Century

during the rule of a Kachhwaha Rajput prince, Suraj Sen. It is believed that Gwalior was also under the rule of Mihir Bhoj (836-882 AD) in the 10th Century. In 1021 AD Mahmud of Gazni attacked on Gwalior. One of his lieutenants Malik Bahauddin Tughluq won Gwalior fort after lot of hard work.

In the Medieval Period in 1195 it was ruled by Mohammad Ghouri ally Sallachan. Later on Qutbuddin Aibak appointed Iltutmish as its Kiledar (In-charge of Fort). During the later period of 14th Century Tomar clan took advantage of weak position of Islamic rulers, and Vir Singh Dev established Tomars as rulers of Gwalior. Udhwaraddev, Vikramdev, Dungrandra Singh were the subsequent rulers of Gwalior. Tomars ruled Gwalior from AD 1486 to AD 1526. The most famous of its kings was Man Singh Tomar who rebuilt many important parts of Gwalior fort. Ibrahim Lodhi had defeated son of Man Singh, Vikramaditya. Vikramaditya was killed in the first battle of Panipat. Thereafter Gwalior was mostly a part of the Mughal Empire.

During the third battle of Panipat, 1761, Maratha Empire received a severe jolt. Jat ruler Lokendra Singh took over Gwalior after the battle of Panipat. Yet again in 1765 an able





Scindhia ruler Mahadji scindhia regained Gwalior. Soldiers of Morar cantonment took part in the first freedom struggle of India on 14th June 1857 soldiers cut off the communication between Gwalior and Shivpuri. Frightened Maharaja Scindhia sent British and his family members to Agra.

In the Post Independence Period after merging Gwalior, Indore, Malwa and other small states, Madhya Bharat State was formed in April 1948, during the meeting of rulers of Madhya Bharat in Delhi. On May 28, 1948 Pt. J.L.Nehru inaugurated this State and Jiwaji Rao Scindhia took oath as the chief of the State.

2.3 Physical Growth and Regional Setting

2.3.1 Location and Linkages

Gwalior the capital of former State of Scindia's and the premier city of erstwhile Madhya Bharat still continues to maintain its status as one of the important regional center of the state and the country. Its cardinal points are latitude 26°-12' N and 76°-18' E. Altitude of the city is 212 meters above mean sea level (at Railway station).

Figure 2-11 Location of Gwalior





Gwalior is located in the influence area of strategic transport corridors of India. It lies on the North- South Corridor and about 50km north of the East-West Corridor. The Delhi-Mumbai Industrial Corridor influence area lies about 50km to the west of the city which further enhances the city's importance. The presence of Delhi Mumbai dedicated Freight Corridor to the west and the Ludhiana- Kolkata Dedicated Freight Corridor to the east of the city would further strengthen movement of cargo in the region. It is strategically located between major tourist destinations lying on the Delhi-Mathura-Agra-Jaipur-Ranthambore-Gwalior-Shivpuri, Orcha-Khajuraho tourist circuit.

Roadways: Roads play a significant role in linking Gwalior to other towns and cities in the country. The national highways no 3, 92 and 75 connects the city with Mumbai, Agra, Ranchi, Mathura, Jaipur, Jhansi, Khajuraho and Shivpuri.

S N	Town/Cities	Distance of Gwalior (Km)	Major Connecting Highways
1	Delhi	321	NH3 & NH2
2	Agra	118	NH3
3	Mumbai	1086	NH3
4	Jhansi	97	NH75
5	Shivpuri	114	NH3
6	Chanderi	239	NH75 & NH26, NH3 & SH10
7	Khajuraho	275	NH75
8	Bhopal	423	NH75, NH26 & NH86
9	Ujjain	455	NH3 & SH27
10	Indore	486	NH3

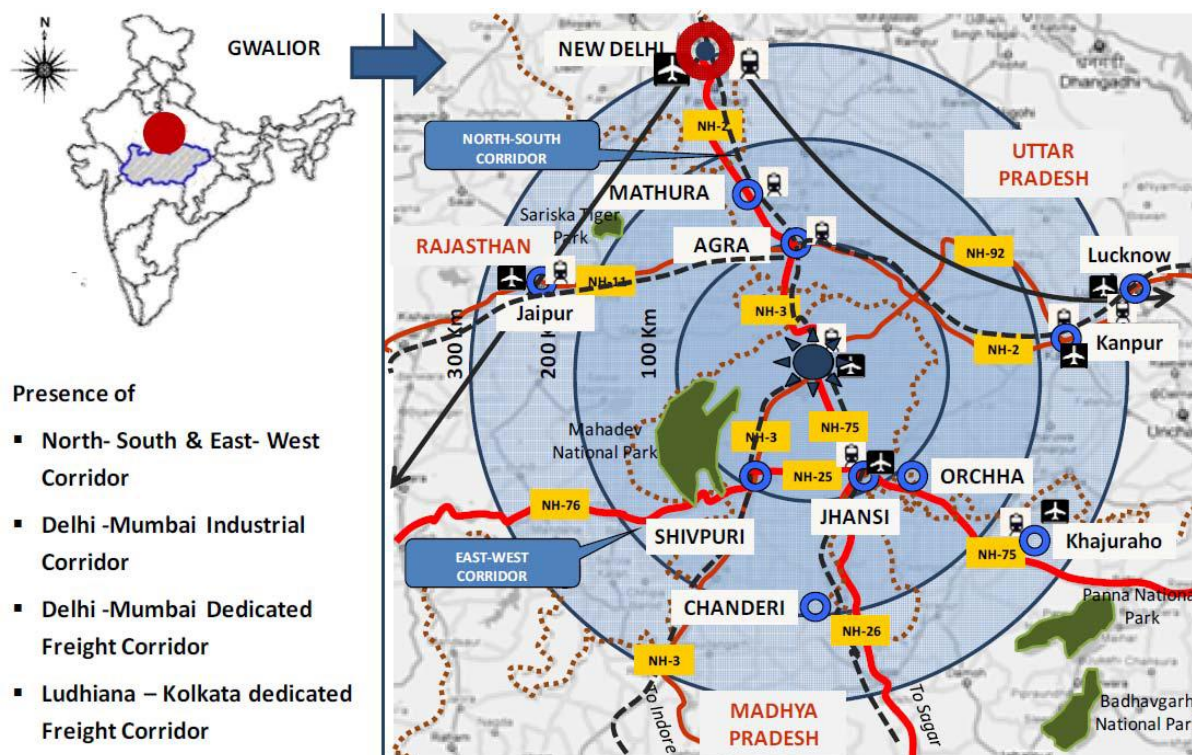
Railway Linkage: The city lies on the broad gauge railway line connecting Delhi to Bhopal. A narrow gauge line connects the city to sheopur. The station is located on the main Mumbai-Delhi and Chennai-Delhi rail link.

The two major train services that operate in the region connecting Gwalior to Delhi are Shatabdi Express and Taj express. Other trains connecting Delhi and Gwalior are the Goa Express, Jhelum Express, Kerala express, Karnataka Express, Tamil Nadu Express and Andhra Express.





Figure 2-12 Location, Linkages and Regional Setting of Gwalior



Airways: Gwalior has a domestic airport providing services to the region. The airport is located to the north east of the city at a distance of about 8km from the city centre. The two flights operating are

- Delhi-Gwalior-Indore-Gwalior-Delhi
- Delhi-Gwalior-Jabalpur-Gwalior-Delhi

2.3.2 Regional Setting

This city is the largest urban centre in the Gwalior Agro Region which comprises the districts of Gwalior, Bhind, Morena, Sheopur, Guna, Datia and Shivpuri. Gwalior is also been considered as counter Magnet for National Capital Region (NCR). Its economic base is constituted of trade and commerce, small-scale industries, tourism and until recently, textiles. There are two large industrial estates within easy proximity: Malanpur-Ghirungi to the North East and Banmore to the North West; both are within 20km radius of the city. Important industries include engineering, chemicals, consumer appliances, food manufacture, and automobiles. Gwalior is reported growing as a service centre, particularly for banking, finance and insurance services, technical services, transport and communication.





2.3.3 Physical Setting

Terrain

The city is located on plains sloping from southwest to north and northeast. The plains extend from Chambal River in the extreme north, where it joins a number of rivers flowing from the southwest to finally join the Gangetic river system.

Distinct barren hill forms with steep slopes and elevations rising to 300m above the plain, determine the topography of the area, in particular in the southwest quarter of the city. Fort hill (305m) dominates the centre of the three townships, crowned by the 17th century historical fort area, of international significance and renowned Satyanarayan Hill (244m) adjacent to the Fort, Hanuman Hill (260m) and Gupteshwar Hill (280m) further west provide the limits of present urban development. Guda-guda Hill and Amkhoa Hill to the south create a natural southern boundary. The hills at present act as a constraint for contiguous urban development to the west and south, but simultaneously provide a unique landscape feature and visual element.

Natural Drainage

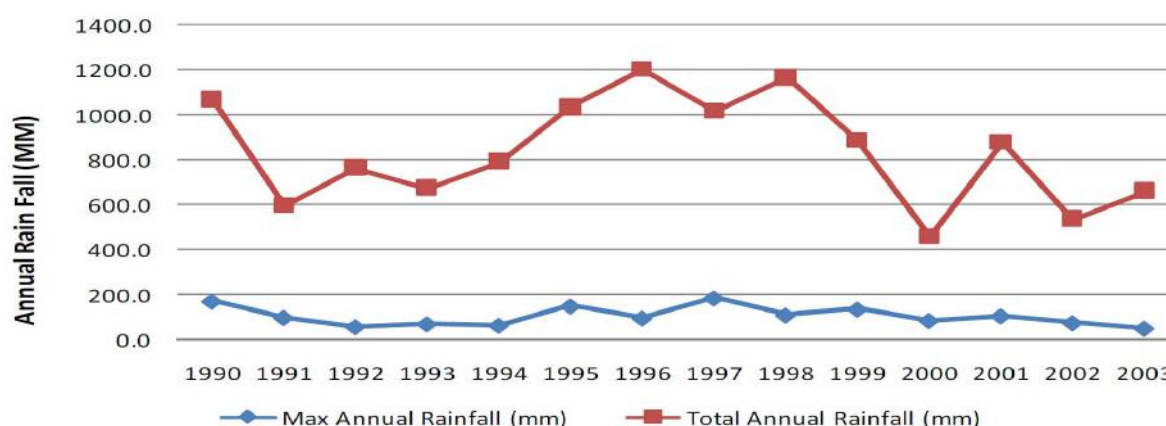
The natural drainage of the Gwalior urban area is dominated by Swarnarekha River, flowing south to north through the urban area for about 14km. Storm water and a considerable amount of untreated sewage drains naturally through this stream.

Climate

Temperature: The climate is typical of central India with mean temperatures ranging between 40°C before the monsoon and falling to minimum of 10°C during the winter. But the temperature can fall as low as 1°C to -3°C.

Seasons: The rainy season lasts from mid June to September, the winter from November to February, and summer from March to mid June.

Figure 2-13 Annual Rainfall in Gwalior over last decade



Rainfall: The average annual rainfall is around 839mm, falling predominantly during July and August. The average number of rainy days is about approximately 43.





In summer season the climate is very hot. The maximum temperature during the summer months can touch as high as 46°C. Winter months (from November to February inclusive) are usually temperate, but for short periods temperature goes down below 5°C. Monsoon starts from the first week of June and ends in August/September.

2.4 Demographic and Socio-economic Profile

2.4.1 Demography

Gwalior is the fourth largest city in the state with a population of 827,026 in 2001 (GMC).

As per the Census 2011, Gwalior has a population of 1,053,505. Males constituted 53% of the total population. Gwalior has registered an average growth rate of 28.59% per decade over the past Six decades (from 1961 to 2011), with the highest of 34.88 % during 1961-1971 and lowest of 19.68% during 1991-2001. The population growth rate of Gwalior was declining over the past years but suddenly raised to 27.45% in 2001-2011

Figure 2-14 Population of Gwalior Planning Area during last 4 decades

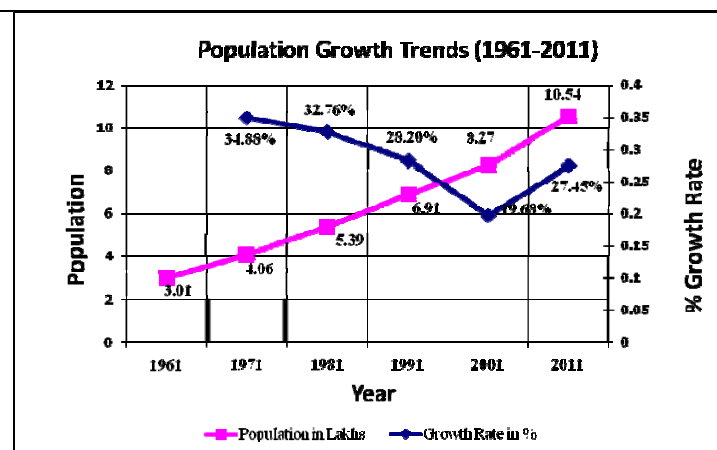


Table 2-2 Population of Gwalior Municipal Area during last 5 decades

SN	Year	Population in Lakhs	Growth Rate in %
1	1961	3.01	
2	1971	4.06	34.88%
3	1981	5.39	32.76%
4	1991	6.91	28.20%
5	2001	8.27	19.68%
6	2011	10.54	27.45%

Source: various Census Data





Population Density

The Gross Density of the Gwalior Municipal Corporation Area as per Census 2001 is 28.53 ppha which is low as compared to other cities in Madhya Pradesh and similar cities in Country. But the density of 28.53 ppha of the Gwalior Municipal Corporation Area is much higher than the density of peripheral planning area (rural area) of 4.50 ppha. High density is observed in the core area or old city Lashkar area. Areas to the north east or south east of the fort have population density more than 150 ppha.

2.4.2 Social Profile

Literacy Rate

The data obtained from census of India 2011, shows relatively low rates of literacy then the state and India in rural and urban areas of the district, Table 2-3 present the comparison of literacy rates

Table 2-3 Comparison of Literacy Rates			
Item	% Literacy		
	Total	Male	Female
All India 2001	79.9	86.3	72.9
M.P Urban 2001	76.56	80.52	72.25
Gwalior City (GMC 2011)	75.97	80.73	70.55
Source: Census of India			

Sex Ratio

Gwalior has shown a continuous improvement in Sex Ratio. According to 2001 Census, the city had 847 females per 1,000 males which. The Sex Ratio in 2011 got improved to 878.

A lower female ratio indicates difficult housing situation prevailing in the city. The migrant worker has a tendency to leave his family behind unless he is hopeful of obtaining a house within his rent paying capacity. Increased supply of Housing for all sections of the society will certainly improve social and cultural life of the city.

Social Structure

Gwalior City is represented by mix of various social groups and communities. The data on exact representation is not available but as per the census 2001, 16.62 percent of the population was of Scheduled Caste Category whereas 1.64 percent of the Population was of Scheduled Tribes Category. Rest 81.74 percent of the Population is General Population.





2.4.3 Economic Base

Gwalior can be seen as Industrial Growth center, Counter Magnet to NCR, Tourist place and Regional Commercial and Service Center. Economic Base of Gwalior is constituted of trade and commerce, small scale industries, tourism and until recently, textiles. There are two large industrial estates within easy proximity: Malanpur-Ghirungi to the North East and Banmore to the North- west; both are within 20 km radius of the city. Important industries include engineering, chemicals, consumer appliances, food manufacture, and automobiles. Gwalior is reported growing as a service center, particularly for banking, finance and insurance services, technical services, transport and communication.

As with many cities, recent years have seen the decline of traditional industries, particularly those located within the urban area, mainly cotton manufacture. Of the city's 14 medium and large manufacturing units, half have closed and many smaller units within have either closed or been declared 'sick'. Gwalior economy has been suffering since late 80's due to closure of large industrial units with no new investments forthcoming, which was the main reason for the decline in population growth rate. Actions have been initiated to revive the economy, which induces establishment of the new industrial growth centers near Gwalior. It is expected that this will lead to further employment opportunities and that in-migration will push up the growth rate in the coming decades.

The city has potential to attract large number of tourists. The majestic Fort buildings of architectural elegance the city square "BADA" the buildings of historical importance such as Tansen Ka Makbara, Tombs of Mohammad Ghaus, Gigantic Jain sculptures, Museum, Zoological park, Agriculture Mela, Tansen Samaroh draws large number of tourists to Gwalior.

Work Force Participation

Gwalior is essentially an administrative city with large number of population is engaged in various state and central government organizations. The number of total workers in Gwalior district was 30.23 per cent of total population in 1991, whereas it was 32.51 percent in 2001. So as far as the total employment is concerned Gwalior has 10.27 percent of population engaged in primary sector of economy, 30.05 percent are in secondary sector while 59.68 percent are engaged in tertiary sector. Participation of females in economic activities is lowest in Gwalior district as compared to other districts of Madhya Pradesh. The work force participation is presented in **Table 2-4**. Gwalior Municipal Corporation has the lowest work force participation rate (WFPR) as compared to national urban average. WFPR is recorded at 28% indicating high dependency rate.





Table 2-4 Comparison of Work Force Participation Rate

S N	Area	Total Workers	WFPR (%)
1	Urban India	92278654	32.25
2	M.P Urban	4893293	30.65
3	Gwalior District (2001)	282082	28.70
4	Gwalior City (GMC 2001)	231656	28.01

Source: Census of India

Figure 2-15 Occupational Structure

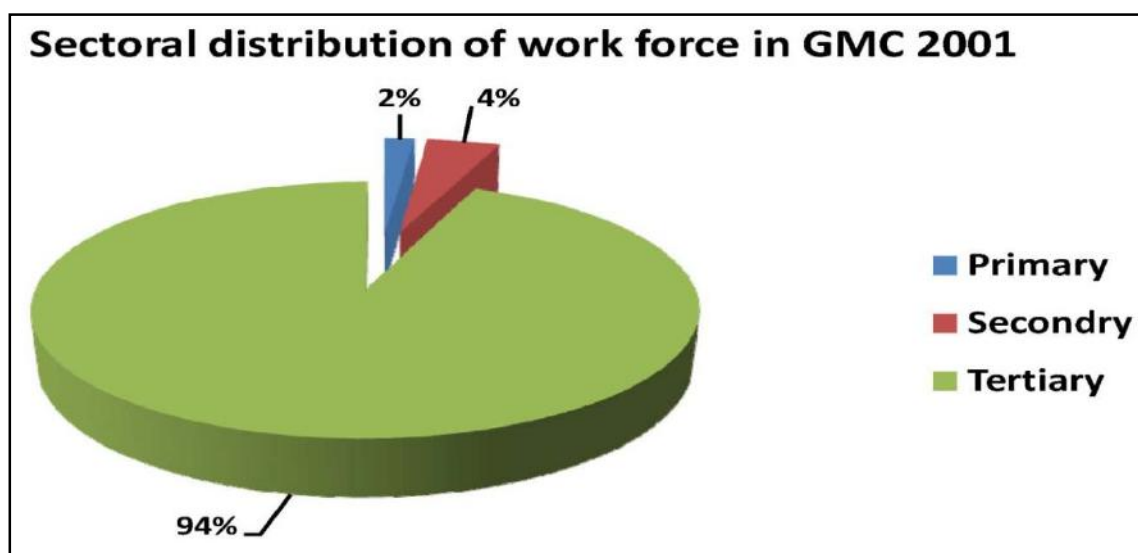


Table 2-5 Occupation Structure

Sector	% in 1971	% in 1991
Primary Sector:		
Primary	07.50	10.27
Primary	07.50	10.27
Secondary Sector:		
Household Industries	01.95	2.30





Table 2-5 Occupation Structure		
Sector	% in 1971	% in 1991
Manufacturing	29.80	20.53
Construction	04.57	7.22
Secondary Total	36.32	30.05
Tertiary Sector:		
Trade and Commerce	15.08	18.50
Transport	6.80	6.50
Services	34.30	34.68
Tertiary Total	56.18	59.68
<i>Source: Gwalior Development Plan 2005</i>		

2.5 Population Forecast

The population of Gwalior has been forecasted till the year 2031. This has been done taking into account the population of past decades and looking into factors governing the future growth and development of Gwalior city. Future population of the city has been forecasted by four different methods and the most suitable method was adopted for population of Gwalior City for the year 2031.

- Arithmetic Method: Increase of population of each decade is calculated & then the average increase in population per decade is calculated by dividing total increase in population with the number of decades considered.
- Geometric Method: Since the growth of Gwalior City is expected to be speedy, Geometric Method was applied for population projection. Geometric Method of calculation does not take into account the continuity of growth. It only compounds population decannally. Hence the population projected by this method may be faulty.
- Incremented Increase Method: In this method the increment in arithmetical increase is determined from the past decades and the average of that increment is added to the average increase. Although this method increases the figures obtained by the arithmetical increase method. As in Geometric method this method too does not take into account the continuity of growth.





- **Exponential Method:** In this method a graph between time and population is plotted from the available data and curve is plotted. The equation of curve is being derived which satisfy the pair of variables i.e., the population against the time.

Population Forecast					
Year	Arithmetic	Geometric	Incremental	Exponential	Best Fit Curve
1961	301000	301000	301000	301000	301000
1971	406000	406000	406000	406000	406000
1981	539000	539000	539000	539000	539000
1991	691000	691000	691000	691000	691000
2001	827026	827026	827026	827026	827026
2011	1053505	1053505	1053505	1053505	1053505
2021	1204006	1349427	1234376	1402068	1253965
2031	1354507	1728472	1445617	1865957	1567232
Source: Various Censes & Analysis					

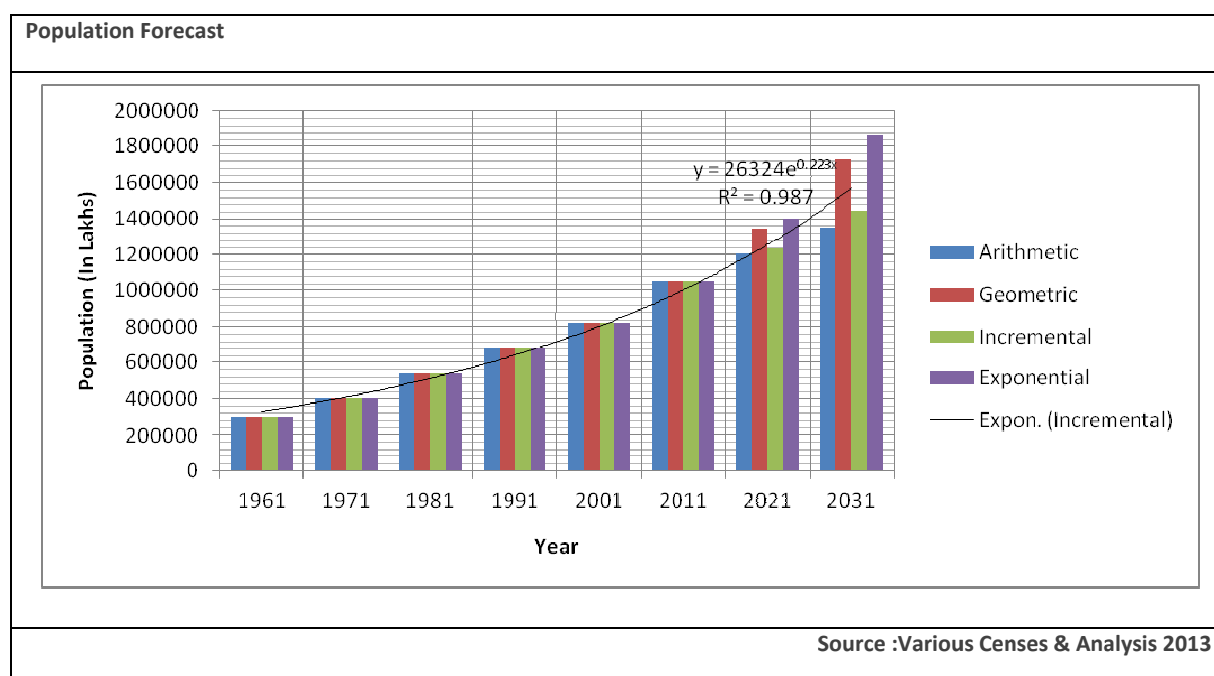


Table and Graph above gives the population projections over the next few decades. The population of Gwalior is projected up to 2031, using different methods. The best fit Curve by





Incremental method was found to have most appropriate fit with the actual population of Gwalior during 1961-2011. So best fit curve method by Incremental method has been used to extrapolate population up to 2031.

2.6 Urban Land Use and Spatial Growth

2.6.1 Urban Land and Physical Growth of Gwalior

Urban land is a scarce resource, which is subject to competing claims of various Land Uses. In Last 4 decades, the predominant planning interventions in respect of Urban Land have been through statutory Development Plans formulated to earmark and allocate developed land in appropriate quantities and locations to cater the various urban needs.

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The data on the Physical Growth of Developed Area/Urban Sprawl is available from 1975 to 2005. The Table below presents the Physical Growth of Gwalior Urban Area and outgrowths.

Table 2-6 Physical Growth of Gwalior Urban Area and Outgrowths				
S N	Year	Total Sprawl in Ha	Addition in Ha	% Decadal Growth
1	1976	3056	-	-
2	1995	4647	1591	52.06%
3	2005 (Planned)	5842	1195	25.72%
Source: Gwalior Development Plan 2005				

The Table suggests that there is continuous increase in Growth of Urban Sprawl. In spite of the Technological Interventions of Multi Storied Construction and growing permissible FAR Provisions there has been considerable increase Growth of Urban Sprawl. The Average Decadal Population Growth in the last decade has only been 15% while the urban sprawl in the last decade is of 25%.

Spatial Growth

Gwalior is a single nucleus city with Bada as a central Business district (CBD). All major commercial and trade related activities are concentrated in the Bada area resulting in high density residential and commercial development. Consequently any new developments coming in the city heeds directly to the existing CBD to achieve maximum economies of the scale. The impact is vivid in the existing spatial development.



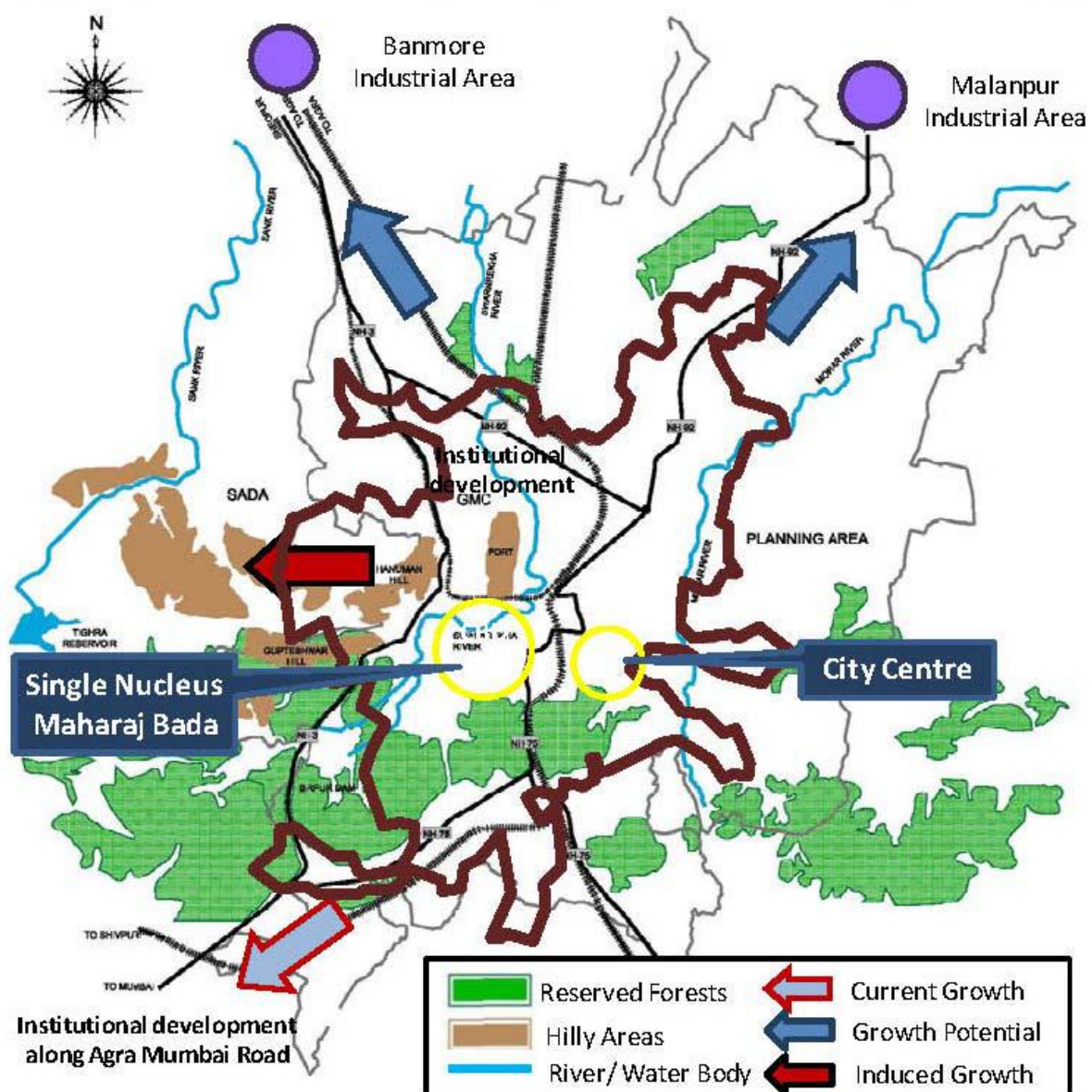


Over the years the city has failed to grow beyond the old city area. The inner and the old areas i.e. Bada is getting denser and environmentally critical. In a recent planning initiative, a city centre has been developed to off the load of the pressure on CBD. But no major success has been achieved. Development has been induced to the west that is with the development of the Special Area Development Authority or SADA area which has been created as the NCR counter magnet.

As a counter magnet the city of Gwalior is expected to play two major functions:

- To stem the migration from the less developed area of Madhya Pradesh to the capital city of Delhi.
- To act as a regional growth centre and to help attain a balanced pattern of urbanization in the sub region.

Figure 2-16 Spatial Growth of Gwalior





For implementation of the counter magnet project, the Government of Madhya Pradesh in the year 1992, Constituted a Special Area Development Authority (SADA). The jurisdiction of SADA covers an area of 30,000 Ha of which 6,500 Ha is Government property, 9,000 Ha is privately owned and 14,500 ha is reserve forest. This SADA area is also referred to as Gwalior west because of its location in the western side of Gwalior. In future the city has a potential to grow towards the north and north east side due to the following reasons.

- The city's proximity to Delhi and good connectivity via National Highway and Railways.
- Due to the presence of industrial growth centers.
- Suitable land between NH3 and NH 92

The major development in the city includes the following:

Commercial Developments

- Multiplex by RLDA on Mandir Chauraha on an area of 3.5 Acres.
- Development of multiplex by Bhaskar Group near the railway station.
- Madhav Plaza Multiplex in Lakshar is under construction with a total area of 1 lakh Sq. ft, Rs. 100 Crores has been invested in the project.
- IT Park 60 Ha, 20 Ha constructed under STPI (Administrative Building constructed by MPHB)

Residential Developments

- Residential colonies by GDA include Shatabdipuram and Mahadjinagar City Centre.
- Jaderua Kalan Colony on 150 Bhigas
- Windsor City by Assotech, Putli Ghar, City centre
- Residential development at Loha Mandi

Institutional Developments

- Upgraded 1000 bed Hospital at Kampoo Road by PWD
- Construction of new Collectorate by PWD
- Development of Medical College – Nav Uday Education Society at Morena Link Road.

2.6.2 Gwalior Development Plan 2005

The total planning area covers 52,652 Ha out of which the current developed area is 5842 Ha (11%). This indicates towards a low growth pattern. The table below highlights the existing land use pattern of the planning area.





Table 2-7 Proposed Developed Area GDP 2005

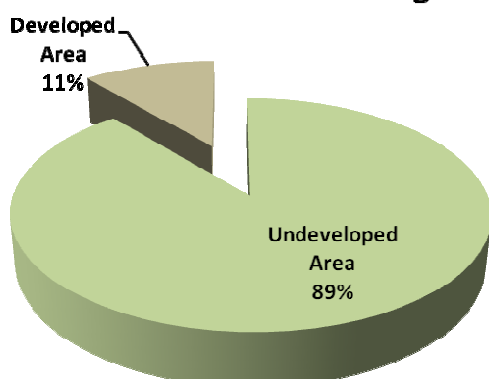
S N	Use	Area in Ha	% Share
1	Developed Area	5842	11.10%
2	Undeveloped Area	46810	88.90%
	Total	52652	100.00%

Source: Gwalior Development Plan 2005

Within the current developed area, 48% of the total land use is residential. A large area (17% of the total land use) is under road followed by 16% as public and semi public area. In the planning area, 88% of the land is under agricultural use which indicates low urbanization rate in the area.

Figure 2-17 Developed Area and Land Use of Developed Area

Landuse Distribution of Planning Area



Landuse Developed Area

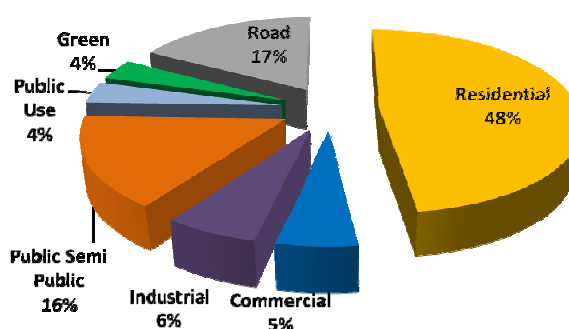


Table 2-8 Planning Area Land Use

Land Use	Area in Ha	% Share
Residential	2803	5.32%
Commercial	319	0.61%
Industrial	367	0.70%
Public Semi Public	922	1.75%
Public Use	222	0.42%



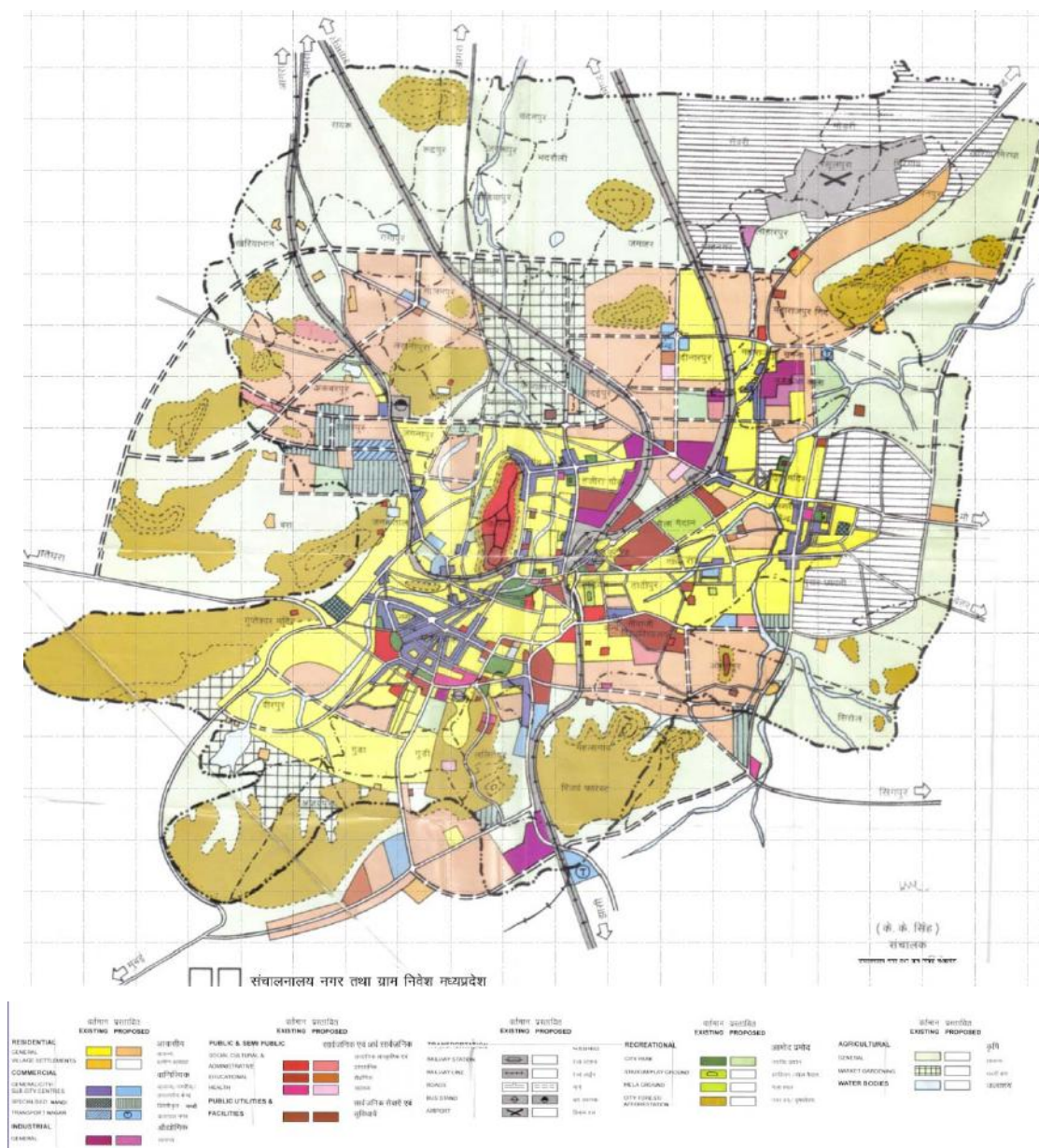


Table 2-8 Planning Area Land Use

Land Use	Area in Ha	% Share
Green	212	0.40%
Road	997	1.89%
Total Developed Area	5842	11.10%
Agriculture	46320	87.97%
Other Land use	260	0.49%
Water bodies/River/ Nallah	230	0.44%
Total Undeveloped Area	46810	88.90%
Total Planning Area	52652	100.00%
<i>Source: Gwalior Development Plan 2005</i>		



Figure 2-18 Gwalior Development Plan Proposed Land Use 2005



2.7 Urban Infrastructure

The proposed interventions in the Existing slums will have a symbiotic relationship with the present infrastructure status of the city in activities like Water, Sewerage, Solid waste, Transport and other such related activities. The present status of this activities and its influence on the Slum free city Planning is being discussed in brief below.

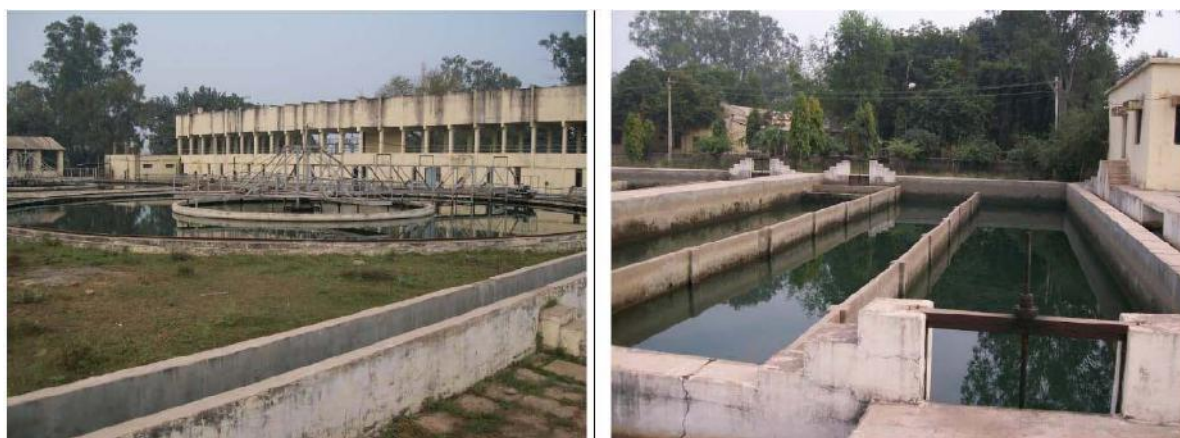


2.7.1 Water Supply

Sources & Supply

The main source of water for the City is Tighra Dam. The supplies from Tighra dam located on the Sank River are supplemented by supply from another reservoir of the Kaketo dam on Narver River. The total treated water availability, including supplies from the two WTPs and groundwater supplies, is about 1466 MLD (68 MLD + 788 MLD), which theoretically indicates sufficient amount of per capita availability, considering no losses with equitable distribution.

Figure 2-19 Existing Water Treatment Facility in Gwalior



A significant volume of ground water is also extracted through a network of borewells and hand pumps. There are around 1,0000 tubewells which are connected to pumps of different capacities extracting about 20 MGD of water every day. The quality of groundwater is fairly good but the groundwater level is depleting rapidly. The current groundwater level is at 100 m. GMCC is in charge of operations and maintenance. According to the preliminary survey, one hand pump is used by 250 Persons approximately. This estimates for ground water extracted is arrived on the basis of the number of tube wells reported for different zones. The following table illustrates the volume of water supplied in Gwalior from different sources.

Table 2-9 Source of Water and its Installed Capacity for Gwalior		
S N	Source	Capacity (MLD)
1	Moti Jheel Old Water Treatment Plant	77.28
2	Moti Jheel Old Water Treatment Plant	68.19
3	Ground water	27
Source: Project UDAY Report on Water Supply, 2006		





The water supply network in Gwalior city has been divided into four zones namely Lashkar (East), Lashkar (West), Morar, Gwalior. The details have been tabulated below. Total length of sewer network in city is 800 Km. After completion of project UDAY, 95 % of the city area shall be covered with piped water supply.

Table 2-10 Details of Installations – Water Supply			
S N	Zone Name	Treatment Plant	Mains
1	Lashkar East	Old Moti Jheel Treatment Plant	600 mm dia Transmission main
2	Lashkar West	Moti Jheel Treatment Plants & Tubewells	600 mm dia Transmission main
3	Gwalior	Moti Jheel Treatment Plants, Tankers, Handpumps	750 mm & 457 mm CI pipes
4	Morar	New Moti Jheel Treatment Plant & Tubewells	500 mm dia CI pipes
Source: Project UDAY Report on Water Supply, 2006			

Water Supply Connections: There are 1.45 Lakhs households in the city (Source: Census of India, 2001). There are only 88,235 domestic connections which account for only 61% of the total coverage. 659 are non domestic connections, 345 Industrial, 25 Bulk Connections and 127 are other types of connections.

Analysis of Service level: Production of water supply from all sources in Gwalior is an average of 145 MLD. The current estimated population of Gwalior is about 10 Lakhs (2009), the per capita supply of 144 litres per day is estimated under the supply system. Thus compared to the prevalent national standards (135 lpcd) and assessing the water supply systems in most of the large urban cities including metros, water supply system of Gwalior in 2001 and at presently can be termed satisfactory.

These figures however, represent only the production from all sources. Actual quantity reaching the consumers is lower due to high Unaccounted for Water (UFW). Assessment of UFW and reduction showed that UFW was as high as 45% on account of various reasons like water theft, leakage, poor pipe fixtures etc. Due to water loss the water pressure at higher locations in the city is affected e.g. Gausspura no.1, Guddi, areas around Gwalior Fort and Abukhana. This indicates that out of 144 MLD of water supply, the actual quantity reaching the consumer is only about 79 MLD. In per capita terms, availability at the consumer end is only 79 LPCD. This perhaps is the major cause why the general population feels that supply is inadequate against the requirement.





Treatment

For the production from Tighra, treatment plants of 77 M LD & 68 MLDD capacity is situated at Moti jheel, these filter Plants are working on the technology of slow sand filters.

Distribution

Treated water from Clear Water Reservoirs (CWRs) is pumped into Overhead Tanks (OHTs) which feed the distribution system. There are 22 existing OHT's in the city feeding different supply zones. These OOHT's have been constructed at various points of time.

Water Supply Augmentation Proposals

ADB funded project UUDAY is underway in the city. The work has been divided into 12 packages. Among the project packages Completed portions are supply and installations of bulk meters, Rehabilitations of WTPs. And various ongoing packages are Distribution system of Lashkar (East & west) and Gwalior & Morar, Consumer Meter installation, Rehabilitation of 600mm dia CI transmission main from old WTP, overhead reservoir at Lashkar (East & west) and Gwalior & Morar,, New water supply scheme from Tighra dam, Rising mains and Feeder mains installation.

Water Demand

The population within the Gwalior Urban Agglomeration was 8.27 lakhs according to 2001 census. Estimated increase in population shall be 4.033 lakhs following the past trends. Out of this, population in the city is 10.35 lakhs and the rest about 1.95 lakhs residing in the villages outside the city which are considered as future expansion areas under Master Plan 2021. According to PHED estimates, about 10 lakhs population is being served by PHED water supply system; a small percentage of population is dependent on hand pumps, Tube wells and other sources. As per the projected population the water demand has been estimated till 2031.

Table 2-11 Projected Water Requirement			
Year	Projected Population	Water Supply (LPCD)	Water Requirement (MLD)
2011	10.35 lakhs	135	139.73
2021	13.02 lakhs	135	175.77
2031	15.57 lakhs	135	210.20
Source: Gwalior CDP under MPUSP TA			





2.7.2 Storm Water Drainage system

Existing Drainage System

Topography and natural drainage pattern of city is from south west to north east. Gwalior has three natural water channels which are the Swarnarekha River, Morar River and Jhinsy Nallah.

The site has well marked physiographic features which provide it with a strong sense of place and create discrete physical areas of varying shapes and sizes. The land forms offer opportunities for creating an interesting cityscape in an undulating landscape punctuated by moderate sized hills

The western boundary of the site is formed by the Gupteshwar and Hanuman hills. The Land features in the south which include hills and valleys are ideally suited for conservation. To the south also lies Cancer hill. This is reinforced by their designation as reserve forest land. There are several table top plateaus, which can provide visual nodes in the urban landscape.

The city land area is predominantly drained by the Swarnarekha and Morar River which flows from south to north. The Swarnarekha River runs toward the northeastern segment of the side and drains a smaller portion. The surface run off is mostly toward north and northeast. There are several ponds and agricultural tanks which are formed by construction of dams on the drainage channels. The area is not vulnerable to floods.

In addition there are number of nallahs which have their outfall into these natural water channels. These small water channels discharge runoff from the surrounding areas. Most of the drains are in the poor condition which requires desilting, channelisation and lining.

Drainage Network

The city lacks an efficient drainage system which is a major cause of flooding even during short spells of rainfall. The drainage condition survey conducted in the city indicates that the network in Gwalior is unorganized and scattered which leads to unchannelised flow during the rainy season. Major portions of these drains require desilting and repairs.

Approximately 88 nallahs (major and minor) are discharging into Swarnarekha River. In addition to this 300 small drains and nallahs are also present. According to reconnaissance survey all the drains are kutcha type and need desilting and lining. Only 300 Km of road length have drains hence new drains need to be constructed along the 482 kms of roads where drains are absent. (Source: PWD, Div.2, Gwalior)

At present GMC is responsible for operation and maintenance of drainage system in the city.

Runoff & Recharge Conditions: The monsoon season in the city lasts for approximately 3 to 4 months. Generally, the monsoon showers begin in the third week of June and last till September. The average annual rainfall is recorded around 700 mm.

Groundwater Recharge & Rainwater Harvesting: Long term water level declines as a result of injudicious exploitation of groundwater resource has lead to several vexing problems.





Some of these problems are reduced well yields, low water level and leakage into the aquifer of highly mineralised water. In order to overcome these serious environmental implications the recharge potential of groundwater resource has to be given utmost importance. In Gwalior city, no importance has been given to ground water recharge during the last decade. As a result ground water is deteriorating at a very faster pace. It is very important for all upcoming new developments to have rain water harvesting measures. Even government can improve the urban environment by providing recharge wells at suitable locations.

Swarnarekha River – Condition Survey: With passage of time, population growth and unauthorized construction in the city resulted entry of sewage and siltation into Swarnrekha River. It has been polluted to such an extent that the river has turned into a nallah. The stretch from Hanuman Bandh to Jalalpur pickup weir (133.65Km) passes through highly urbanized area. Several smaller tributaries meet and discharge into the river. Dumping of garbage and wastage on the bank has also contributed to the pollution.

River Nallah Improvement Works: Existing nallahs running through the city should be improved to increase the efficiency of natural channels. Improvement works shall consist of desilting of channel, development of banks, improvement of side slopes, and development of green belt around the nallahs and provision of culverts at road crossings.

Augmentation Projects underway in the city: Projects related to drainage that area underway in the city is Construction of two new secondary drains (50km each), renovation of existing primary and secondary drains.

2.7.3 Sewerage System

Sanitation has become a yardstick of socio-cultural development of the nation. Improved sanitation results in improvement of health, reduced child mortality /morbidity, improved water quality, environment and economic growth of a country. The major source of sewage is from Domestic, Commercial, Industrial and Institutional areas within the city. The sewage generated as per total water supply accounts to 116 MLD however as per actual water consumption of 80 MLD sewage generated accounts to about 64 MLD.

Sewerage Collection System

Sewerage system in Gwalior was laid back in the late 1920's which covered core central areas of Gwalior. Since the network has been laid in various stages covering approximately 800 Km of total network. There are approximately 315 Km of trunk mains .

The sewerage system of Gwalior has been laid in various stages by PHED. At most of the places system has been laid in the late 1920s and 1985. Taking into consideration of the service life of 30 years of the water pipes, the network would require replacement. However, according to the discussions with various authorities, the system would require minor repairs only.





Gwalior is divided in two sewerage zones wherein Zone I includes Gwalior and Lashkar Areas while Zone II covers Morar area.

Gwalior–Lashkar Zone (Zone I) – Zone I covers 60% of the total area of GMC. Sanitary sewers ranging from 150 mm diameter to 1800 mm diameter are laid in this zone. The outfall sewer of 750 mm diameter was laid during the year 1928 and the wastewater pumping station was also commissioned during the year 1929. With the development of the town an intercepting/outfall sewer of 1600 mm and 1800 mm diameter was laid along the alignment of Swarnarekha River.

Morar Zone (Zone II) — Zone II covers 40% of the total area of GMC.

According to the GMC, 80% of the city area is connected to sewers. The areas which are not connected through sewer lines use septic tanks, drains and open defecation as an alternative. However, in absence of a complete network plan along with year of laying, material and pipe dimensions it is difficult to quantify.

Treatment & Disposal

There is an existing treatment plant of 50 MLDD capacities in the city based on Waste Stabilisation Pond. It is located to the north of the city. Waste Stabilisation Pond Method is used to treat the waste. Treated waste is finally disposed into Swarnarekha River. Another treatment plant of 90 MLD was proposed under ADB funding too cater for the remaining areas but could not be completed due to lack of funds.

Pumping station of 60 MLD was constructed which is used to pump sewer into Swarnarekha River. The sewage collected is directly pumped into the river even without primary treatment.

The sewage from the Gwalior Lashkar Zone is pumped and partially treated before disposing into the Swarnarekha River while the wastewater/ sullage water from the Morar Zone is being disposed of through wastewater pumping station into Morar River without any treatment.

Estimation of Sewage Load

There is requirement to provide 100% coverage sewerage network in Gwalior city and the adjoining villages which are proposed to be part of Gwalior city by 2031.

Table 2-12 Projected water Requirement

Year	Projected Population	Per Capita Supply (LPCD)	Water Required (MLD)	Sewage Generated @ 80% of water Supplied
2011	10.35 lakhs	135	140	112
2021	13.02 lakhs	135	176	141





2031	15.57 lakhs	135	210	168
<i>Source: Gwalior CDP under MPUSP TA</i>				

Gap and Future requirement assessment

Present coverage = 80% GMC area covered by sewerage system

Present sewerage network gap = 20% of GMC area

Length of present sewerage network = 800 km (315 km of trunk mains)

Additional future sewer network requirement in urban area = 220 kms (source: Project UDAY assessment)

Present sewage treatment capacity = 50 MLD

Present Sewage treatment capacity requirement = 64 MLD

Gap in treatment capacity = 14 MLD

Future treatment capacity requirement in 2031 (of STPs) = 225 MLD

2.7.4 Solid Waste Management

Solid Waste Generation

The total estimated solid waste generated in the city is about 357 Tons per day (Source: GMC, 2009). As per the GMC data, Gwalior generates about 2.5 Tons per day of Bio medical waste. At present waste from medical / healthcare establishments are either mixed with municipal waste or indiscriminately dumped. Thus it is estimated that about 1 Ton per day of hazardous industrial waste is generated.

Figure 2-20 Status of Solid waste Management near Hospital nallah, Gwalior





Collection

Out of the total waste generated, 140 Tons per day is biodegradable waste, 122 Tons per day accounts for Non Biodegradable and 2.5 Tons per day is composed of medical waste. (Source: Master Plan, Gwalior Development Authority). Primary Collection takes place manually through wheel barrows and dustbins. Municipal waste collected is mixed, where bio waste, slaughter house waste and carcass waste are all mixed together and stored in the open. The waste collection efficiency is 75%.

Storage

The waste collected is usually stored in the open. Storage facilities are inadequate. Waste is usually seen accumulated and not cleared regularly.

Transportation

Loading and unloading is done manually and waste is transported through open trucks and by dumper placers. However, the city is not properly equipped with solid waste handling or transportation equipments.

Disposal

The waste collected is sent off to an aerobic compost plant at Guda Gudi Ka Naka. The integrated solid waste processing plant has been built and operated by A.K.C Developers Ltd. in partnership with Gwalior Municipal Corporation. The site includes a Weigh Bridge, Vermi compost plant and Mechanical Compost Plant. The vermin compost plant is not functional. Manual segregation is done at the site into plastics, oversized particles, glass, paper etc. The first phase of the landfill site is almost complete at Kedarpur Chandoha Kurd.

Figure 2-21 Integrated Municipal Solid Waste Processing Plant and Fuel Plant at the Processing Plant



The landfill site is located at Village Chandoha Khurd on an area of 25.8 Ha at a distance of 12 Km from the city. The Vermi compost Unit has a total capacity of 20 MT per day while the Mechanical Compost plant has a capacity of 110 MT per day. (Source: Master Plan, Gwalior Development Authority)





Practice Adopted for Solid Waste Management

The Solid Waste Management practices highlighted below was being practiced in the Gwalior Municipal Corporation area however it lasted only for a year. The same system should be continued thus the same system of management has been proposed for the city with improvements in the in earlier system.

Primary and secondary collection

- Daily door to door collection from houses, hotels and restaurants, all commercial establishments, institutions, offices etc in the area covered within the Gwalior Municipal Corporation.
- Collection of waste from bins existed at different places in the service area.
- Operating and maintaining a separate collection mechanism for bio-degradable waste from restaurants, hotels, bulk producers, vegetable and fruit markets, garden waste, dung, dairies and tree branches etc.
- Operating and maintaining a separate collection mechanism for slaughter houses, meat and fish markets.

Pre Operating and maintaining of transportation

- Operating and maintaining a transportation system including equipments and vehicles for Municipal Solid Waste collected from door steps of houses, institutions, offices, hotels, restaurants and commercial establishments to the transfer stations /designated place near landfill site/disposal ground in a segregated mannner.
- Maintaining hygienic conditions in and around containers and spraying of disinfectants at the time of lifting the containers.

Transportation

- Municipal waste in covered containers/vehicles with colour coding as defined in Municipal Solid Waste (Management and Handling) Rules, 2000 for bio degradable and non biodegradable waste.
- Safe transportation of the collected Municipal Solid Waste to the designated place near landfill site/disposal ground.
- Transportation of road waste resulted from road sweeping and drain silt separately to the designated place near landfill site or disposal ground.
- Transportation of inert waste to the designated place near landfill site or disposal ground.
- Operating and maintaining a separate transportation mechanism for biodegradable/compostable waste from dairies, restaurants and vegetable & fruit markets and from other generators of biodegradable waste.





- Operating and maintaining a separate transportation mechanism for non biodegradable waste from different generators.

Segregation

- Segregation of Municipal Solid Waste into recyclable, biodegradable/compost able and inert waste at source, transfer stations and designated place near landfill site/disposal ground.

Apart from the above, procurement / arrangement of equipments, vehicles and other accessories for collection, storage and transportation of municipal solid waste has also been done including their maintenance. GMC has provided new handcarts with 4 bins for door to door collection and tricycles, vehicles/bins etc. for transportation as well as storage of waste. Metal sheet, baskets, long – handled brush/ bamboo brooms etc are also procured and carried out regular repairing and maintenance of transport vehicles/carriers/containers/ handcarts etc.

Gaps and future requirement assessment

Total waste generated from urban area = 357 Tonne/day

Waste collected and disposed = 267 Tonne/day

Gap = 90 Tonne/day waste is not collected properly

GMC has already constructed Sanitary Landfill Site and Vermi Compost Site for solid waste disposal and treatment to meet the requirements for solid waste treatment till 2031. However, the solid waste collection and transportation vehicles and equipments of GMC are old and worn out which needs to be replaced.

2.7.5 Urban Transport

Old Gwalior city developed all around the foot hills of Gwalior Fort. New localities emerged towards South, South East, East and South West directions of the Gwalior Fort. Expansion of new localities was guided by the presence of major roads and natural features like forests and dispersed hillocks. Ribbon Development can be seen along NH 3 and Bhind Road. Most of the localities have rectangular road pattern in the city unlike old city areas of Lashkar e.g. Maharaj Bada, Shinde Ki Chawni, Lohia Bazaar, Dal Bazaar, Sharafa Bazaar, Falka Bazaar etc. There have been commendable efforts till now to improve traffic mobility and road network in the city by GMC, PWD and GDA in their respective jurisdiction areas. Primary concern in this sector is improvement of traffic mobility, road condition, public transport, decongestion and enhancement of traffic management efficiency etc.





2.8 Urban Development & Governance Framework and Regulations

2.8.1 Overview

At the state Level the Department of Housing and Environment (DoHE) and Department of Urban Administration and Development Department (DoUAD) GoMP are the two government departments involved in the issues related to Urban Planning, Development and Governance. The DoHE deals with Urban Planning and Development while the DoUAD deals with Urban Administration and Development (Governance). It has been observed that there is overlapping of functions related to urban areas between these two Departments of Government of Madhya Pradesh.

Under the DoHE the Directorate of Town and Country Planning (T&CP), Gwalior Development Authority (GDA) Madhya Pradesh Housing Board (MPHB), Madhya Pradesh Pollution Control Board (MPPCB), Environmental Planning and Coordination Organization (EPCO) work in various sectors in respect of Urban Development and Planning. Under the DoUAD the Directorate of Urban Administration and Development (DUAD), acts as a nodal agency to guide and direct Gwalior Municipal Corporation in the matters related to Urban Administration and Development and also runs projects such as Madhya Pradesh Urban Services for Poor (MPUSP – Project Utthaan) and Urban Water Supply and Environment Improvement Project (UWSEIP – Project UDAY). Furthermore DoUAD also runs some Urban Development programmes through District Urban Development Authority (DUDA)

The interventions in the Planning and Development in Gwalior are under the statutory provisions of the Madhya Pradesh Nagar tatha Gram Nivesh Adhiniyam 1973 and rules formulated there under while the interventions in the Urban Governance and Development in Gwalior are under the statutory provisions of the Madhya Pradesh Nagar Palika Nigam Adhiniyam 1956 and rules formulated there under. The Directorate of Town and Country Planning Bhopal is the Nodal Agency for Town and Country Planning in the State acting through Office of Joint Director Town and Country Planning Gwalior. Under the same legislation Gwalior Development Authority has been established to implement the provisions of Statutory Development Plans in Gwalior. Gwalior Municipal Corporation is Local Government empowered by Madhya Pradesh Nagar Palika Nigam Adhiniyam 1956 and rules there under for Urban Governance. Further the Madhya Pradesh Nagar Palika Nigam Adhiniyam 1956 and rules there under such as Madhya Pradesh Municipal Corporations (registration of colonizer, terms and conditions) Rules – 1998 etc. also have bearing on Urban Development in Gwalior. The Madhya Pradesh State Housing Policy 2007 provides guidelines for Housing related matters in the Urban Planning, Development and Governance.





2.8.2 Institutions and Organizations

Gwalior is managed and governed by a number of institutions and agencies. This chapter lists the various agencies involved in urban governance and an assessment of the functions of Gwalior Municipal Corporation (GMC) and Gwalior Development Authority (GDA) as well as lists the reforms adopted till date to strengthen the governance mechanism.

Gwalior Municipal Corporation (GMC)

Gwalior Municipal Corporation came into existence in 1887. It was established by the Council of Regency which was responsible for administration of the Gwalior Estate. The main purpose of this establishment was to facilitate the citizens by addressing their problems through the mechanism of local administration.

Post Independence, Gwalior Municipal Corporation was established under the Madhya Pradesh Municipal Corporation Act, 1956 during which the corporation's jurisdiction extended over an area of 46.62 Sq. km or 4,662 Ha. GMC was divided into 334 blocks and was governed by 40 elected members and 10 members of Central India Municipal Corporation. In 1969 the area further increased to 289 Sq. km, the current area of the GMC which is divided into 21 Zones and 60 wards.

Directorate of Town and Country Planning Bhopal

Directorate of Town and Country Planning (Directorate of T&CP) Bhopal is a State level Authority established under the provisions of and with powers, responsibilities and obligation under the Madhya Pradesh Nagar tathaa Gram Nivesh Adhiniyam 1973. Directorate Functions under the directions of the Department of Housing and Environment GoMP. Directorate of T&CP acts through Office of Joint Director T&CP Gwalior for the District of Gwalior and other attached Districts. The Primary function of T&CP is Formulation of Regional/Development Plans with Zoning and Sub-division Regulations, Development Controls and Building Bye-laws and enforcing the Sub-division Regulations and Development Controls by issuing layout permissions as per the provisions of GDP-2005 and the Madhya Pradesh Bhumi Vikas Rules 1984.

Gwalior Development Authority (GDA)

The major function of the GDA is to develop the Planning area through notified schemes. In these notified schemes, GDA is responsible for housing and infrastructure development. Once these colonies are developed it is handed over to GMC for operation and maintenance.

Gwalior Development Authority was established and incorporated on 05th October 1979 with an aim of well planned and balanced development of Gwalior City. The authority is structured under the town and country planning act 1973 of MP State Govt. and it works under the administration of Housing and Environment Department of MP Govt.





District Administration

District Administration is most crucial Organization in the Purview of Urban Planning and Development in Gwalior. The Sections in the District Administration such as Diversion Section, Land Records, District Planning Committee, Nazul, Land Acquisition, District Urban Development Agency etc.

Madhya Pradesh Housing Board (MPHB)

Madhya Pradesh Housing Board (MPHB) is established under the provisions of and with powers, responsibilities and obligation under the Madhya Pradesh Griha Nirman Mandal Adhiniyam, 1972. MPHB Functions under the directions of the Department of Housing and Environment GoMP. MPHB acts through Office of Additional Housing Commissioner MPHB Division Gwalior for the District of Gwalior and other attached Districts. The Primary function of MPHB is Housing Supply to all sections of the Society by taking up Housing Schemes under the Provisions of the Madhya Pradesh Griha Nirman Mandal Adhiniyam, 1972. MPHB doesn't have any Regulatory or Enforcement Powers under any Legislation.

Madhya Pradesh Audyogik Kendra Vikas Nigam (Gwalior) Limited (MPAKVN)

Madhya Pradesh Audyogik Kendra Vikas Nigam Gwalior Limited (MPAKVN Gwalior) is a subsidiary Public Limited Company of Madhya Pradesh State Industrial Development Corporation (MPSEDC) established under the provisions of The Indian Companies Act 1956. MPAKVN Gwalior Functions under the directions of the MPSEDC and Department of Commerce, Industries and Employment (DoCIE) Government of Madhya Pradesh. MPAKVN Gwalior acts through its Managing Director. The Primary functions of MPAKVN Development of Industrial Growth Centres and their Operation and Maintenance.

Madhya Pradesh Public Works Department (MPPWD)

Madhya Pradesh Public Works Department (MPPWD) is Department of Government of Madhya Pradesh. MPPWD acts through Office of Chief Engineer MPPED Gwalior Circle for the District of Gwalior and other attached Districts. The Primary function of MPPWD is Constructions of State Highways, Surrendered Sections of National Highways, Other District and Village Roads etc. and Operation and Maintenance of Government Buildings under their Control. MPPWD is mainly an Execution/Implementation Agency which further has its subsidiaries such as Madhya Pradesh Road Development Corporation, Madhya Pradesh Rural Road Development Corporation, and Madhya Pradesh Bridge Development Corporation.

Madhya Pradesh Public Health Engineering Department (MPPHED)

Madhya Pradesh Public Health Engineering Department (MPPHED) is Department of Government of Madhya Pradesh. MPPHED acts through Office of Chief Engineer MPPHED Gwalior Circle for the Division of Gwalior. The Primary function of MPPHED is taking up Water Supply, Sewerage, Sanitation and Environment Improvement Projects for Urban and Rural Areas and Operation and Maintenance of such systems under their Control. Though





MPPHED is an Execution/Implementation Agency; its role in the Larger Cities like Gwalior is limited to advisory and Technical Support Agency. MPPHED has deputed its staff to Municipal Corporations and other Local Bodies to help develop, operate and maintain the Water Supply, Sewerage, Sanitation, and Environment Improvement Projects by Municipal Corporations and other Local Bodies.

Madhya Pradesh Pollution Control Board (MPPCB)

Madhya Pradesh Pollution Control Board (MPHB) is established under the provisions of and with powers, responsibilities and obligation under the Water (Prevention & Control of Pollution) Act, 1974. MPHB Functions under the directions of the Department of Housing and Environment GoMP. MPPCB acts through Regional Office Gwalior for the District of Gwalior and other attached Districts. The Primary function of MPPCB is Implementation of various provisions of the Various Acts such as Water (Prevention & Control of Pollution) Act, 1974, Water (Prevention & Control of Pollution) Cess Act, 1977, Air (Prevention & Control of Pollution) Act, 1981, Environment Protection Act, 1986 (certain sections) etc.

Other Departments and Organizations

Apart from above mentioned Departments and Organizations there are many other organizations which have bearing on the issues related to Urban Planning, Development and Governance. They are

- Krishi Upaj Mandi Samiti (KUMS) constituted by Madhya Pradesh State Agricultural Marketing Board (MPSANB) under the Provisions of and with the responsibility under Madhya Pradesh Krishi Upaj Mandi Adhiniyam 1972
- District Trade and Industries Centre (DTIC) which is a District Office of Department of Commerce, Industries and Employment (DoCIE) GoMP
- Department of Health, Government of Madhya Pradesh
- Department of Education, Government of Madhya Pradesh
- Madhya Pradesh State Electricity Board,
- Regional Transport Authority,
- Fire Department,
- Madhya Pradesh Police and
- Traffic Department

2.8.3 Urban Planning, Development and Governance Legislations

There are many Urban Planning, Development and Governance related Legislations, which are in force in the State of Madhya Pradesh. The Most crucial Regulations related to Urban Planning, Development and Governance with specific Reference to Housing, Slums and Poverty Pockets are





- Madhya Pradesh Nagar tathaa Gram Nivesh Adhiniyam 1973 and rules framed there under are
 - Madhya Pradesh Nagar tathaa Gram Nivesh Niyam 1975 – **(Town Development)**
 - Madhya Pradesh Nagar tathaa Gram Nivesh Vikasit Bhumiyan, Grihon, Bhawanon, tathaa anya Sanrachanaon ka vyayan Niyam 1975 – **(Disposal of Public Housing Stock)**
 - Madhya Pradesh Bhumi Vikas Rules 1984 – **(Zoning Regulations, Subdivision Regulations, Building Bye Laws, Various Norms and Standards and Administrative Procedures and Rules for Urban Development)**
 - Gwalior Development Plan 2005 – **(Land Use Control, Zoning Regulations, Subdivision Regulations, Building Bye Laws, Various Norms and Standards and Administrative Procedures and Rules for Urban Development)**
- Madhya Pradesh Nagar Palika Nigam Adhiniyam 1956 and rules there under are
 - Madhya Pradesh Municipal Corporations (registration of colonizer, terms and conditions) Rules – 1998 – **(Registration of Colonisers and Reservation of Land for EWS and LIG)**
 - And other Rules
- Madhya Pradesh Zila Yojana Samiti Adhiniyam, 1995 and rules there under – **(District Statistical and Budgetary Plans)**
- Madhya Pradesh Griha Nirman Mandal Adhiniyam, 1972 and rules there under – **(Development, Supply and Disposal of Housing Stock)**
- Madhya Pradesh Gandhi Basti kshetra (Sudhaar tathaa Nirmulan) Adhiniyam 1976 and rules there under are
 - Madhya Pradesh Gandhi Basti kshetra (Sudhaar tathaa Nirmulan) Rules 1978 – **(Notification of Slums, Improvement, Upgradation and Rehabilitation of Slums)**
 - And other Rules
- Madhya Pradesh Nagariya kshetron ke Bhumiheen vyakti (Pattadhriti Adhikaaron ka pradhan kiya jana) Adhiniyam 1984 and rules there under are
 - Madhya Pradesh Nagariya kshetron ke Bhumiheen vyakti (Pattadhriti Adhikaaron ka pradhan kiya jana) Rules 1998 – **(Provision of Security of Land Tenure to Slum Dwellers and Urban Poor)**
 - Madhya Pradesh Nagariya kshetron ke Bhumiheen vyakti (Pattadhriti Adhikaaron ka pradhan kiya jana) Rules 2008 – **(Provision of Security of Land Tenure to Slum Dwellers and Urban Poor)**





Apart from this there is the Madhya Pradesh State Housing Policy 2007 provides Policy Guidelines for Housing and Habitat.

The Urban Planning and Development Regulation for Gwalior are governed by Gwalior Development Plan 2005 and Madhya Pradesh Municipal Corporations (registration of colonizer, terms and conditions) Rules – 1998.

2.9 Strengths and Weakness of Gwalior

2.9.1 Strengths of Gwalior

- **Connectivity and Strategic Location** - The strategic location of the city in the central India with excellent connection by Road to other parts of country is best suited as intermediate growth center and distribution hub. Further located in the influence of area of strategic transport corridor of India and Delhi- Mumbai freight corridor to its west and Ludhiana- kolkata dedicated freight corridor to the west further strengthen movement of cargo in the region.
- **Geology** – Gwalior Lies in the geologically safe seismic zone.
- **Economic Base** - Gwalior can be seen as Industrial Growth center, Counter Magnet to NCR, Tourist place and Regional Commercial and Service Center. Economic Base of Gwalior is constituted of trade and commerce, small scale industries, tourism and until recently, textiles. Gwalior is reported growing as a service center, particularly for banking, finance and insurance services, technical services, transport and communication.
- **Educational Hub** - Gwalior has been successful in establishing itself as the education hub of India. It has Asia's largest physical education institute and two national institutes which are pioneers in their respective fields. In addition to this there are several colleges of national repute.
- **Urban Infrastructure Feasibility** – Number of water sources are available, Ground water quality is good. Favourable natural slope for good drainage through Swarnarekha and Murar River. Vermi Compost site and Landfill site has already been developed by GMC
- **Land Availability** – Land is available for development as the city has grown very less physically as planned.

2.9.2 Weakness of Gwalior

- **Low sex ratio** – Gwalior has a low sex ratio of 870 female per 1000 males.
- **High Density in old City Area** – High density of (150-200 persons/ha) is causing congestion and pressure of existing infrastructure.
- **Single Commercial Centre** – Single commercial centre Bada is over congested leading to traffic management problem.





- **Urban Infrastructure** – Low waste collection (75%) and lack of efficient disposal of hazardous waste, poor condition of existing roads.
- **WFPR**- Gwalior has a very low workforce participation ratio which makes it with high dependency ratio.
- **Slums Squatters and Un-authorised Development** – a high percentage of the population lives in informal housing in the absence of basic services and unhygienic conditions.
- **Industries** – Sick industries and closed industrial units shows a weak health of industries.
- **Inadequate Technical and Financial Capability of Local Authority** – makes the Local Authorities weak in performing the functions and responsibilities delegated to them regarding Urban Planning, Development and Governance
- **Interdepartmental Co-ordination and partial Decentralization of Functions** – There are many functions regarding Urban Planning, Development and Governance which are performed by state level departments and corporations. Local authorities not been part of the actual decision making of those departments share only functional relation with them. There has been lack of Interdepartmental Co-ordination which has hampered Urban Planning, Development and Governance.
- **Planning Framework** – Absence of Tools for Implementation of Development Plans such as Zonal Plans has resulted in un-coordinated Urban Development. Gwalior Development Authority having sole responsibility for the implementation of the Gwalior Development Plan is handicapped in many ways such as No enforcement and Regulatory Powers, Lesser Revenue Income Base etc.





Housing and Urban Poverty- Chapter

3





Housing and Urban Poverty - Chapter 3

3.1 Housing

Rapid urbanization and population explosion have been responsible for the growth of cities and towns. With the growth of cities, the housing that is required, has not kept pace, leading to shortage of high magnitude. Due to low economic capabilities, the housing shortage is more among the lower income population. All the institutional or public efforts to provide housing with one's affordability have been rendered ineffective. Due to the inefficiency of the public effort to provide housing for the masses, people have found ways and means of providing housing for themselves.

The gap between the supply and demand is widening day by day this gives way to unplanned developments like unauthorized colonies and squatter settlements.

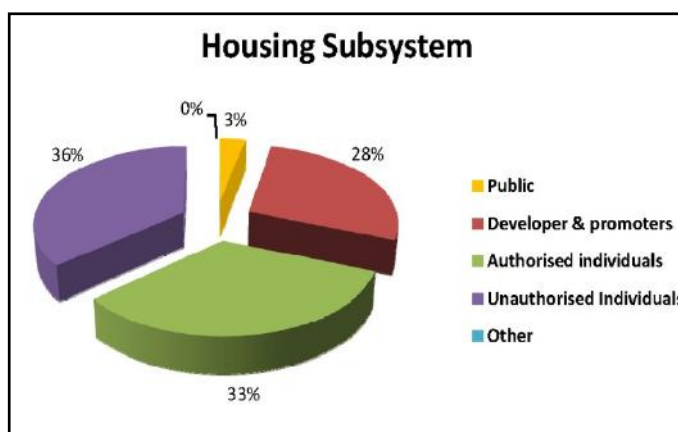
This calls for a careful study of the existing housing conditions in Gwalior in terms of types of development or housing sub-systems that should be evolved/ promoted to meet the housing needs of the people. The roles of various agencies and institutions in the process could also be decided so that the objective of providing housing for people according to their preferences and within their affordable means is achieved in an organized manner.

3.1.1 Housing Sub Systems in Gwalior

In any city all housing conditions are not same always. They differ from each other in characteristics like income level, residential densities, ownership status etc. These create different typology of living, which we can be categorized as housing subsystems.

The types of Housing Subsystem exist in Gwalior area.

Figure 3-22 Distribution of Households in Various Housing Subsystems in Gwalior



■ Public Housing Schemes (GDA / MPHCB)

■ Plotted/Group housing by Private Developers & promoters

■ Housing by Authorised Individuals

■ Housing by Authorised Individuals (Slums/Squatter)

■ Others

Source: National Urban Database & Indicators (NUDB&I)





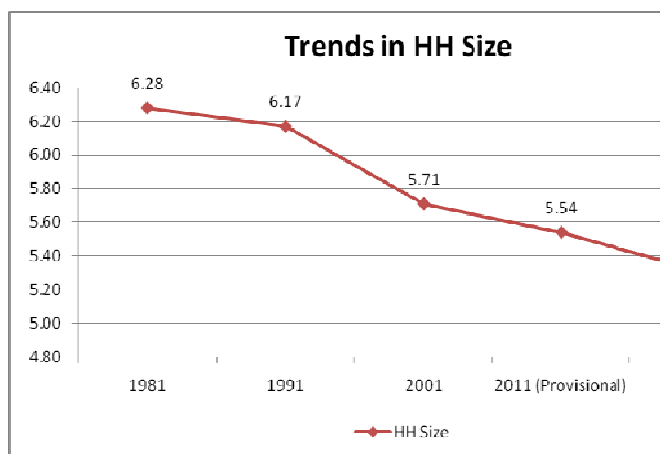
Distribution of Population in the Various Housing Subsystems is presented in the figure above.

3.1.2 Household Profile

Household Size

The average House Hold size had continuously decreased during last four decades. According to census of India 2011 the average Households size of Gwalior was 5.54 and it is further likely to get reduced because of change in social phenomenon existing in the society. This may be because of increasing trends of urbanization, which has lead to lot of migration and disintegration of family structure. The Decade wise Households Size has been presented in Figure above

Figure 3-23 Trends in Household Size in last four decades in Gwalior



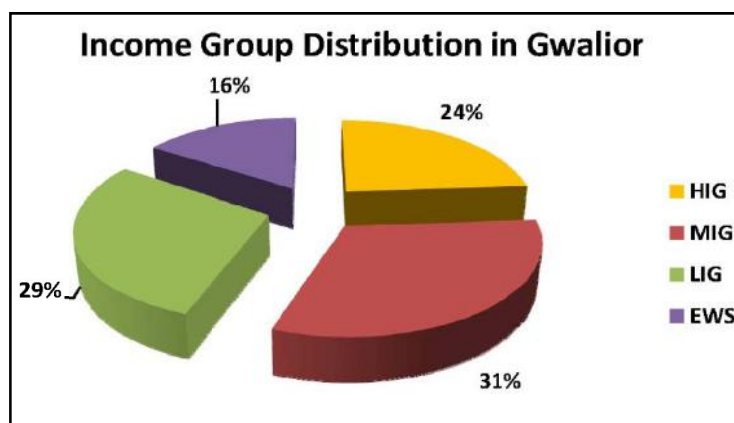
Source: Various Census Data

Income Groups

The Income Classification in Gwalior has been based on City Reports – Gwalior – Integrated Urban Development in Madhya Pradesh (IUDMP) as follows

- **HIG household** - 23.9%
- **MIG households** - 31.6%
- **LIG households** - 28.8%
- **EWS households** - 15.8% (9.9% Below Poverty line)

Figure 3-24 Income Group Distribution in Gwalior



Source: Various Census Data

Tenure Status

74% of the Households in Gwalior own their Plot or House. 22% of the Houses are rented and remaining 4% fall into other type of ownership.



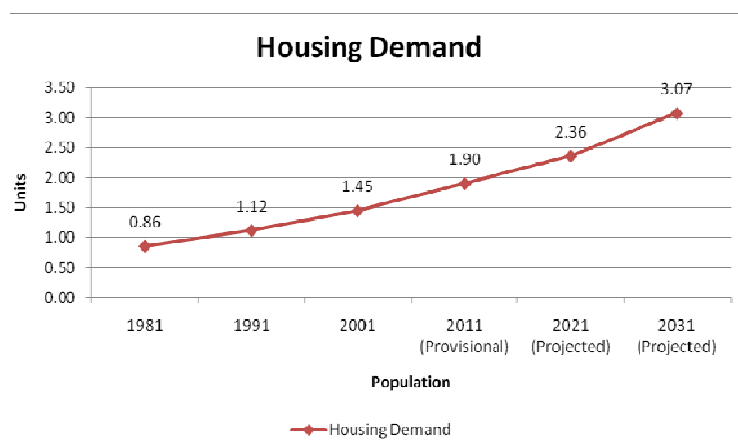


3.1.3 Housing Need Supply and Shortage

Gwalior suffers from housing Shortage particularly for low and economically weaker sections of the society. It has 23.4% of its population staying in Slums and Squatters and another 12% of the population staying in the un-authorised settlements.

Reasons being- availability of vacant land near work areas, lack of access of land for LIG, EWS, high prices of land, lesser affordability and housing shortage has led to squatting. The complexities in developmental procedure for colonizers have together resulted in increase in squatting and unauthorized developments. The Table below shows Housing Need Supply and Shortage in Gwalior.

Figure 3-25 Trends in Housing Demand and Supply



Source: Various Census Data

As per calculations the total estimated households in 2011 are 1.90 Lakhs, the Total Housing Stock available in Gwalior is 1.65. Considering the Units need Replacement every year the total effective housing stock in 2011 is 1.61 Lakhs.

Table 3-13 Housing Need, Supply and Shortage in Lakh Units							
Year	Population	No of HH	HH Size	Total Housing Stock in Lakhs	Units Need Replacement	Effective Housing Stock	Housing Shortage
1981	5.39	0.86	6.28				
1991	6.91	1.12	6.17				
2001	8.27	1.45	5.71				
2011 (Provisional)	10.54	1.90	5.54	1.65	0.04	1.61	0.29

Source : Analysis

3.1.4 Population and Housing Demand Projections

The Population of the Gwalior Municipal Area has been estimated for 2011 and projected for 2031 based on the Provisional census 2011 figures. The Projected Housing Demand in 2021 and 2031 is 2.36 and 3.07 Lakhs Respectively.





Table 3-14 Projected Housing Demand

Year	Population	No of HH	HH Size	Total Housing Stock in Lakhs	Units Need Replacement	Effective Housing Stock	Housing Shortage
1981	5.39	0.86	6.28				
1991	6.91	1.12	6.17				
2001	8.27	1.45	5.71				
2011 (Provisional)	10.54	1.90	5.54	1.65	0.04	1.61	0.29
2021 (Projected)	12.54	2.36	5.32				
2031 (Projected)	15.67	3.07	5.10				
<i>Source : Analysis</i>							

A Quantitative analysis was conducted to assess additional Housing demand in 2016, 2021, 2026 and 2031. Further the subsequent Housing Demand for EWS Housing was calculated to take up preventive measures against squatting and proliferation of slums.

Table 3-15 Projected Housing Demand for EWS

Particulars	2011	2012	2013	2014	2015	2016	2017	2018	2021	2026	2031
Population	10.54	10.72	11	11.10	11.30	11.50	11.70	11.90	12.54	14.02	15.67
Avg HH Size	5.54	5.52	5	5.47	5.45	5.43	5.41	5.38	5.32	5.21	5.10
Total Households	1.90	1.94	2	2.03	2.07	2.12	2.16	2.21	2.36	2.69	3.07
Housing Stock	1.65										
Additional Households		0.04	0	0.04	0.04	0.04	0.05	0.05	0.15	0.33	0.38
Units Need Replacement	0.04	0.04	0	0.04	0.04	0.04	0.05	0.05	0.15	0.29	0.33
Effective Housing Stock	1.61										





Current Housing Shortage	0.29										
Total Additional Demand		0.08	0	0.09	0.09	0.09	0.09	0.09	0.29	0.63	0.71
Total Additional Demand for EWS		0.03	0	0.03	0.03	0.03	0.03	0.03	0.09	0.19	0.21
Cumulative Additional Demand	0.29	0.38	0	0.55	0.64	0.73	0.82	0.91	1.21	1.83	2.54
Cumulative Additional Demand for EWS	0.16	0.19	0	0.24	0.26	0.29	0.32	0.35	0.44	0.62	0.84
<i>Source; Analysis based on various source data such as Census of India,</i>											

Gwalior requires about 9000 Housing Units per Year during 2014-18, while it requires 3000 Housing Units for EWS Per Year during the same period.

3.2 Urban Poverty

In India, they who fail to reach a certain minimum consumption standard are regarded as poor. To define poverty quantitatively, it is difficult to agree on the amount of income that will ensure the minimum consumption standard at a point of time. Living costs are higher in urban areas as compared to the rural areas. Thus the criterion for defining poverty in urban and rural areas varies.

3.2.1 Definitions of Poverty

Households are considered poor when the resources that they command are insufficient, to enable them to consume sufficient goods and services for reasonable minimum level of welfare.

- **Relative poverty:** Relative poverty is a poverty measure based on a poor standard of living or a low income relative to the rest of society.
- **Absolute Poverty:** Absolute poverty is a level of poverty at which certain minimum standards - for example nutrition, health & shelter cannot be met. The term "Absolute poverty" is perhaps slightly misleading, since there is no "absolute" standard that defines absolute poverty: the level of income necessary for these minimum standards is often referred to as the poverty line which various institutions and individuals define differently.





- **Housing Poverty:** Individuals and households who lack safe, secure and healthy living environment with basic infrastructure such as piped water and adequate provision of sewerage, sanitation, drainage and removal of household waste.

The first concept of Poverty Line came in 1962. Poverty Line is not constant; it varies from country to country and time to time. Goods and Services i.e. consumption, whether purchased, gifts or self-produced, is converted in monetary terms to define the Poverty Line. The nutritional intake requirement is considered as constant i.e. 2250 calories/day(avg.). The average median income in squatters is considered as Rs. 600/capita/month.

3.2.2 Urban Poverty in Gwalior

It is now widely understood that poverty is experienced through a variety of dimensions of which low income is only one. Further that within the poor, there are important differences in depths of poverty, the ability of poor households to graduate from poverty and the relative vulnerability of different groups to withstand risks to livelihood such as unemployment, sickness and eviction. Madhya Pradesh Government defines poverty line as Rs 365 per capita per month. A typology of three groups has been defined by the ADB as:

- **Transitional Poor** - those households, whose monthly per capita income is between the Poverty Line and 1.5 times the Poverty line, are likely to own productive assets and have access to basic services. They move in and out of poverty depending on particular and periodic circumstance.
- **Intermediate Poor** - those households whose income is between half the Poverty Line and the PL itself, and have limited access to basic services.
- **Core Poor** - those households whose income is less than half of the Poverty Line and who live in extreme poverty and vulnerability.

In Gwalior, 9.9% of total household were living below poverty line. 25.2% of households were in the transitional, intermediate and core poor income groups.

3.3 Slums and Squatters

Large percentage of population in any Indian city belongs to the lowest economic strata i.e. economically weaker section. Majority of this urban poor Population belongs to people who have migrated from the nearby rural areas in search of work and employment. The land holding of any family in the rural region is no longer able to support the entire family, due to the dwindling land resources and increase in the population. This encourages the exodus of rural population to the nearby city. Most poor immigrants to the city can find access to shelter only by squatting on public or private land. These squatters over the period of time continue to come and settle on this land thus creating a neighborhood, more generally called as a SLUM.





These vital factors for creating harmonious symbiotic and self sustainable communities at optimal location are generally ignored and in fact in many cases no provision of habitat is made for such population in the planning of housing development. This deficiency in the formal planning leads to development of Slums and Squatter Settlements to assimilate such population. According to the estimates, 23.5% of Urban India lives below poverty line. Urban poor in live under acute unhygienic conditions in the urban slums.

The concept of slums and its definition vary from country to country depending upon the socioeconomic conditions of each society. The term slum (squatter) describes a wide range of low-income settlements or poor living conditions. Slum (Squatter) at its simplest is a heavily populated area characterized by substandard housing. The squatter settlement often takes place along regional, linguistic, religious and caste affiliations of the migrants, although there are many settlements, which are more cosmopolitan in their composition. Inter-household solidarity within a squatter settlement provides some measure of social security among the residents although dissensions and conflicts over trivial issues are very common. In situations of distress and challenges they exhibit tremendous degree of unity and resilience to work and live together.

Slums are generally neglected parts of cities where housing and living conditions are appallingly lacking. These range from high density, squalid central city tenements to spontaneous squatter settlements without legal recognition or rights, sprawling at the edge of cities. Some are more than many years old; some are land invasions just underway

1.7.1 Definition of Slums (Census, Slum Act and Dr. Pranab Sen Committee)

■ **Slums Definition: 'Slums' have been defined under Section 3 of the Slums Areas (Improvement and Clearance) Act, 1976 as areas where buildings**

- Are in any respect unfit for human habitation or
- Are by reason of dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and morals.

■ **Census of India 2001 has adopted the definition of 'Slum' areas as:**

- All areas notified as 'Slum' by State/Local Govt. and UT Administration under any Act;
- All areas recognized as 'Slum' by State/Local Government and UT Administration, which have not been formally notified as slum under any Act;
- A compact area of at least 300 populations or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with





inadequate infrastructure and lacking in proper sanitary and drinking water facilities.

■ **Dr. Pranab Sen Committee define ‘Slum’ as:**

- It has defined a slum as “a compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions”.

3.3.1 Slums in Gwalior

Provisional results from the 2001 census indicate that Gwalior had a slum population of 193,635 or 23.42% of the total population. This is lower compared with the national average of 21.25% but much higher than the state average of 15.16%. It may be mentioned that actual slum estimates depend much on how Municipalities have defined and notified informal settlements within their urban areas.

There are about 218 notified slum locations and 256 illegal colonies in Gwalior city with population of 478000, which is about 57.8 per cent of the city’s population.

3.3.2 Socio-economic and Service Level Survey of Slums

To obtain the current scenario of urban poor a detailed socio-economic and Service Level survey was conducted in all 243 notified slums of Gwalior under MPUSP Technical Assistance Programme under following components

- Socio-economic household survey (slum areas)
- Survey of service levels in slums
- Socio-economic household survey of sample households in non-slum areas.

The Sample survey format is presented in Appendix A. Close to 62000 households were surveyed and a Database was created. The slums were also marked on GIS Base map and a GIS Enabled Slum MIS was created.

Based on this data, zone wise analysis of all 243 notified slums is done.

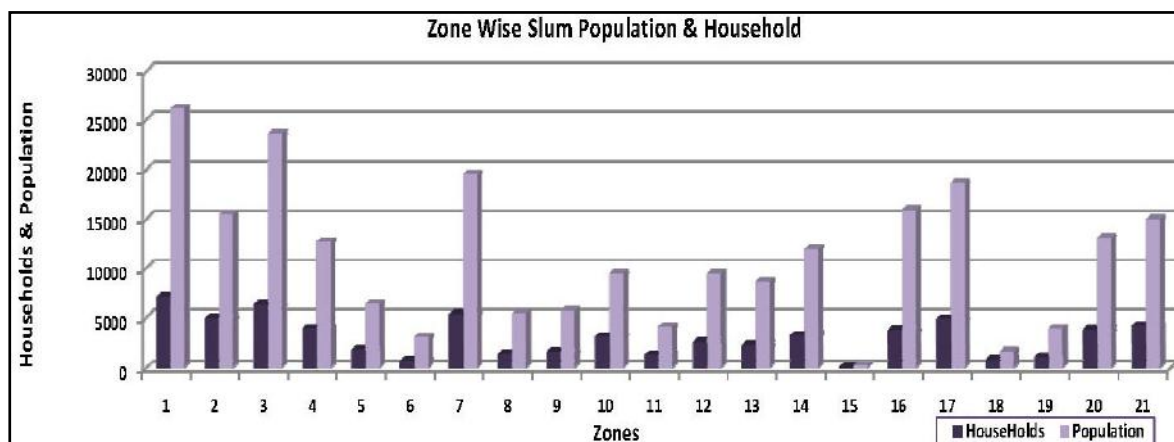
3.3.3 Demographic Profile

Overall, there are 21 zones, 60 wards and 243 slums which have been surveyed. The spread of slum households indicates a high concentration (7078 households) in zone – 1 while zone – 15 is having the least concentration (61 households).





Figure 3-26 Zone Wise Households and Population



Source: Socio-economic Survey of Slums

Migration

It is observed that, about 89 percent of the slum households in the 21 zones are living in the slums for more than 5 years prior to 2010. In other words, the slums are quite old.

3.3.4 Socio-economic Profile

Religion

Overall, about 89 percent of the slum households in the 21 zones of Gwalior city practices Hinduism, 10.5 percent practices Islam and the rest consists of marginal groups who are followers of Sikhism, Christianity and others.

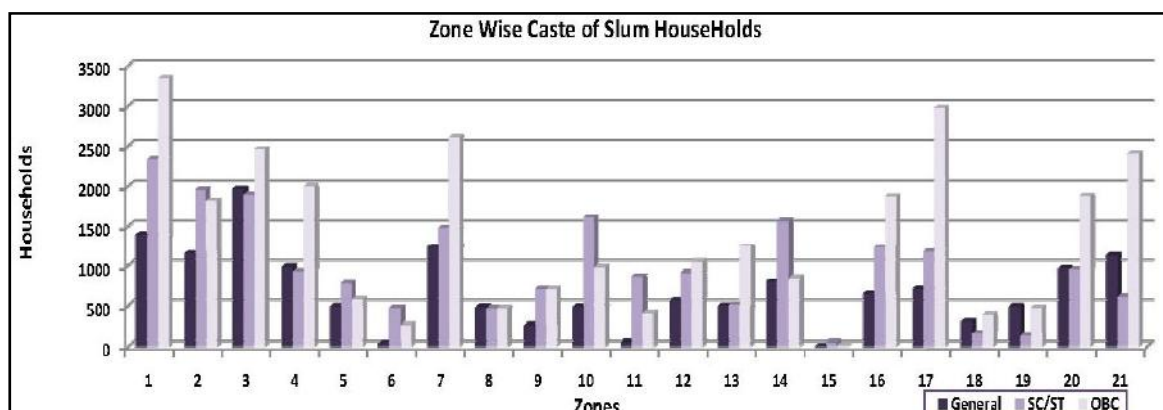
Caste

The distribution of households by caste in the slums across 21 zones shows wide variations. Thus zone – 19 has the highest proportion (44.3 percent) of households in general category while zone – 15 has the highest proportion (90.16 percent) of households in SC / ST category and zone - 17 has the maximum of 61.28 percent households in OBC category. Overall, the proportion of households in the slums over 21 zones consists of general category (22.82 percent), SC / ST (32.37 percent) and OBC (45.28 percent).





Figure 3-27 Zone Wise Caste of Slum Households

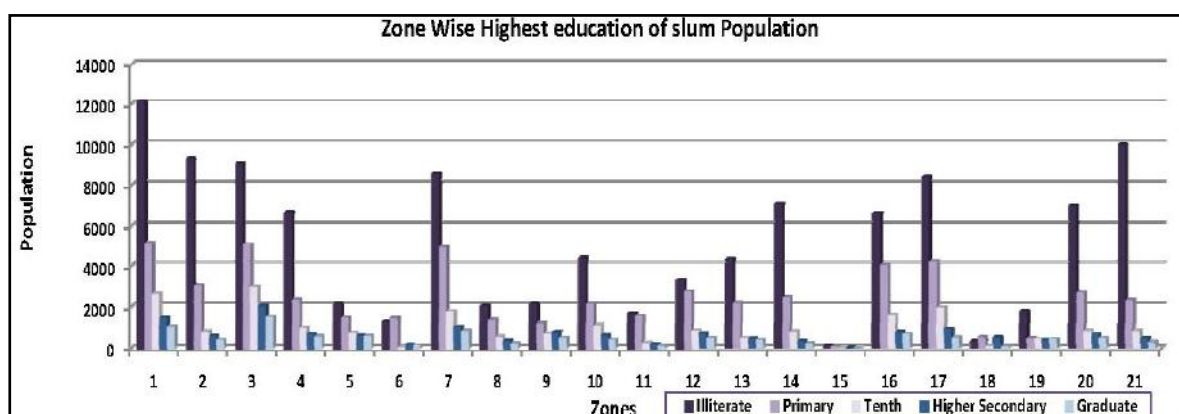


Source: Socio-economic Survey of Slums

Literacy – Level of Education

The level of education of the slum population in 21 surveyed zones was lower than all India average of 61 percent. Overall, around 47 percent of the population was not literate and the rest 53 percent was literate. Among the literate, the highest number (about 42 percent) has attended primary level education followed by about 22 percent having completed middle school. About 17% have passed tenth class standard. The percentage of population who has passed secondary and graduate level education is about 11 percent and 8 percent respectively.

Figure 3-28 Zone Wise Highest Education Pursued by Slum Population



Source: Socio-economic Survey of Slums

There is considerable inter zone variation in education level of population. For instance, zone - 21 has the highest illiteracy (about 67 percent) while zone 18 has the lowest illiteracy of 18 percent. Zone 6 has the highest percentage (46 percent) of population who has attained primary level education compared with only 12 percent in zone 19.

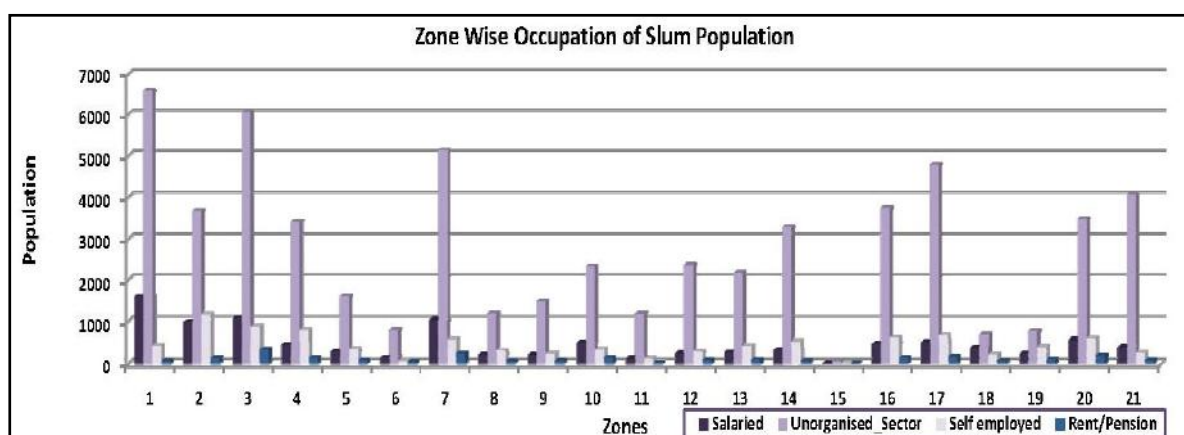




Occupation Pattern

The general living standard of the slum population is indicated by the occupation pattern of slum households and the household income. It is indeed striking that about 65 percent of slum population has no stable source of income as they are unemployed. Only about 4 percent of population is having a stable source of income either in the form of salary or wage, while another about 4 percent is dependent on self employment in petty trade and sundry jobs. Further, about 26 percent is employed in unorganized sector which reportedly does not provide a stable source of income. Figure above shows the zone wise occupation pattern of slum dwellers which does not reveal significant inter zone variation.

Figure 3-29 Zone Wise Occupation of Slum Population



Source: Socio-economic Survey of Slums

There is considerable inter zone variation in occupation pattern of population. For instance, zone - 18 has the highest Salaried persons (about 22 percent) while zone 21 has the lowest salaried of 3 percent. Zone 18 has the highest percentage (41 percent) of population who work in unorganized sector compared with 20 percent in zone 19.

Income

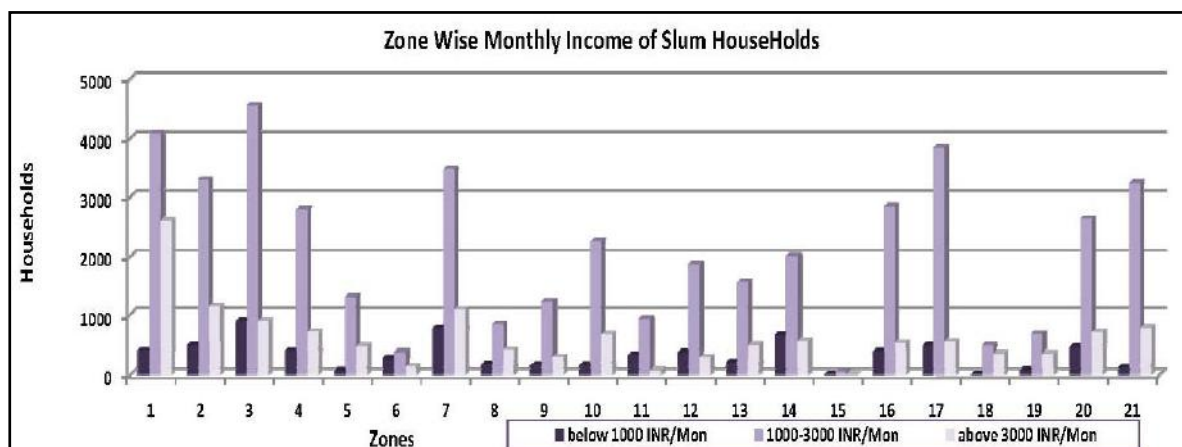
Even though a large section of population in the slums is having no regular source of income, it is found that about 20 percent of the households were having monthly income above Rs.3000, A Major percentage (69%) of the household have an income in the range of Rs.1000 – 3000. followed by another about 11 percent of households in monthly income below Rs.1000.

Poverty

It is observed that about 13 percent of the total slum households (64072) were having BPL cards while about 20 percent of the households were having APL. A large number of households (67 percent) didn't have any card.

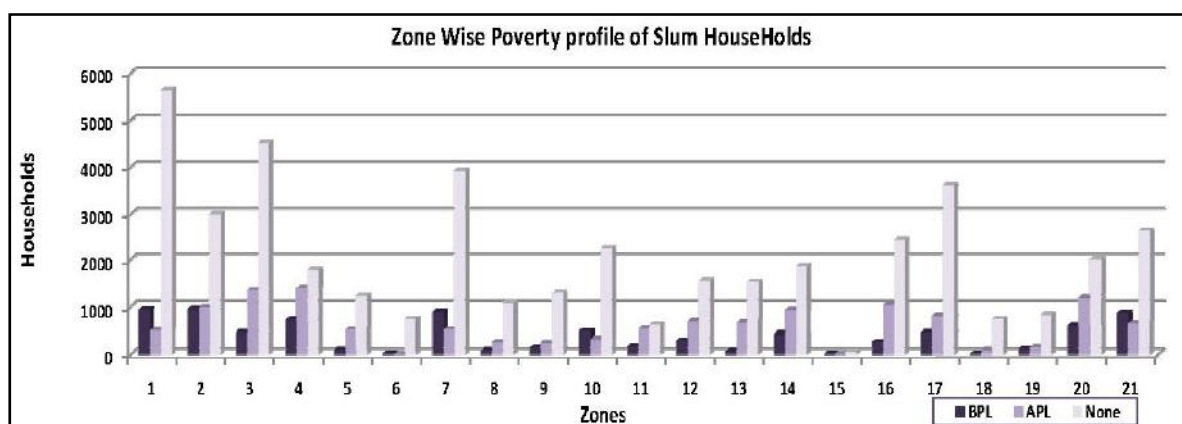


Figure 3-30 Zone Wise Monthly Income of Slum Households



Source: Socio-economic Survey of Slums

Figure 3-31 Zone Wise Poverty Profile of Slum Households



Source: Socio-economic Survey of Slums

3.3.5 Housing Condition

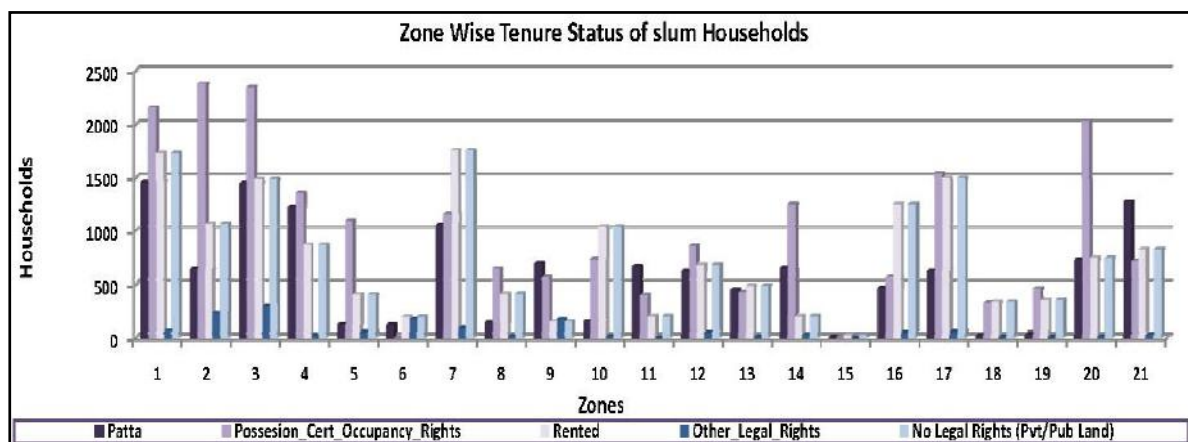
Tenure Status

Overall, 19.5 percent of the households in slums were holding patta to their property, 32.7 percent were having possession certificate occupancy rights, 24.5 percent were on rented basis and another 2.1 percent held other legal rights. A significant 21.2 percent of the households didn't have any legal right to their property as they have either encroached upon public or private land. It may be noted that there is considerable variation in title holding across different zones. For instance, a high percentage (54.1 percent) of households in zone – 15 and about 4 percent in zone – 11 doesn't have any legal rights.

Figure 3-32 Zone Wise Tenure Status of Slum Households



Figure 3-32 Zone Wise Tenure Status of Slum Households

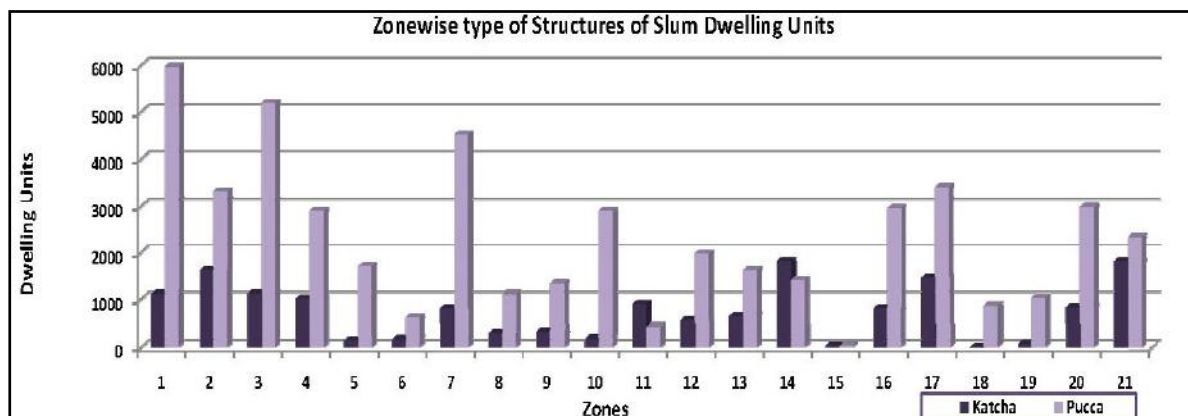


Source: Socio-economic Survey of Slums

Housing Structure Condition

It was found during the survey that pucca dwelling units were about 75.7% whereas katcha dwelling units were about 24.3%. A High of about 68% houses are pucca in zone-11 and in zone 18 almost 100% dwelling units are katcha.

Figure 3-33 Zone Wise Type of Structure of Slum Dwelling Units



Source: Socio-economic Survey of Slums

3.3.6 Basic Services Level

Water Supply

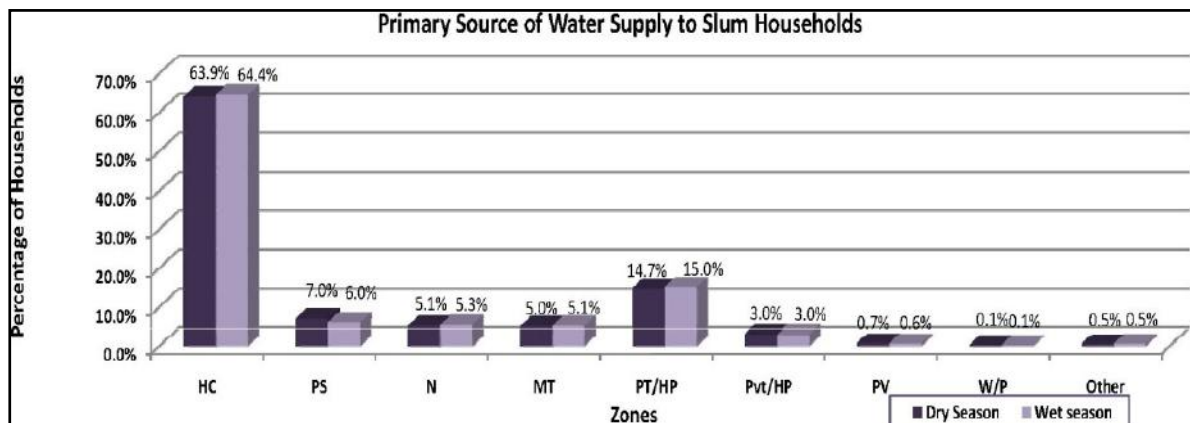
In the surveyed households located in 21 zones of Gwalior city, it is observed that the major primary sources of water supply to households both in dry and wet seasons are house connection (pipd water supply), public stand post (PS) and public tube well / hand pump (P





T / Hp). These three sources together service water supply to around 86 percent of the households in the slums.

Figure 3-34 Zone Wise Primary Source of Water Supply to Slum Households



Source: Socio-economic Survey of Slums

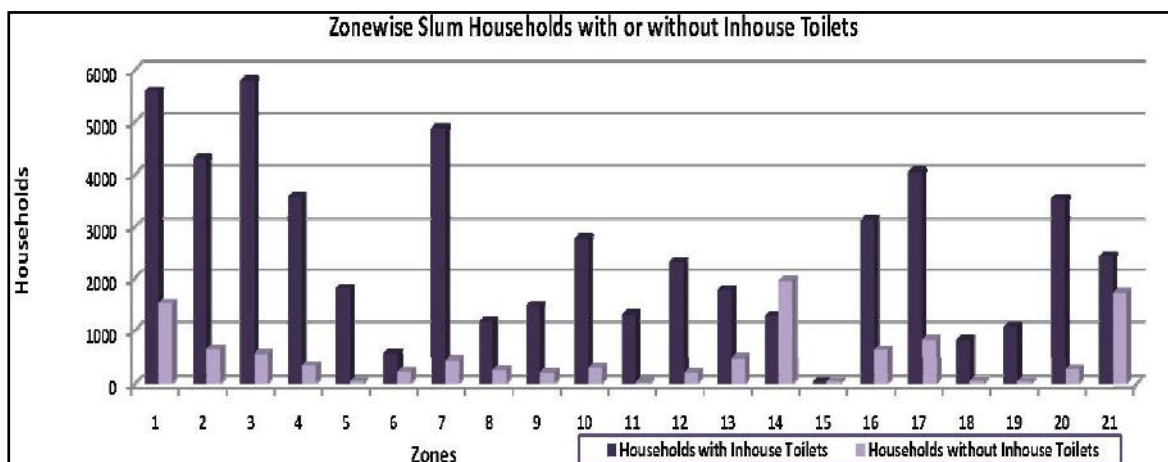
Only 21 percent of the households in zone – 14 depend on house connection (Piped water supply) for drinking water while in zone – 5, 9, 12, 16 and 18 about 80 percent or more of the households draw water from house connection. 15percent or more of household in zone – 6, 8 and 10 depend on public stand post for getting water. About half (47%) of the 21 zones have more than 90% connection through reliable public connections like house connection (piped water supply), public stand post (PS) and public tube well / hand pump (P T / Hp).

Sanitation

84 percent (53489 HH) out of total slum households (64072HH) are having in house toilets facilities of different types while the remaining 16 percent of the households do not have this facility.



Figure 3-35 Zone Wise Slum Households with or without Toilet



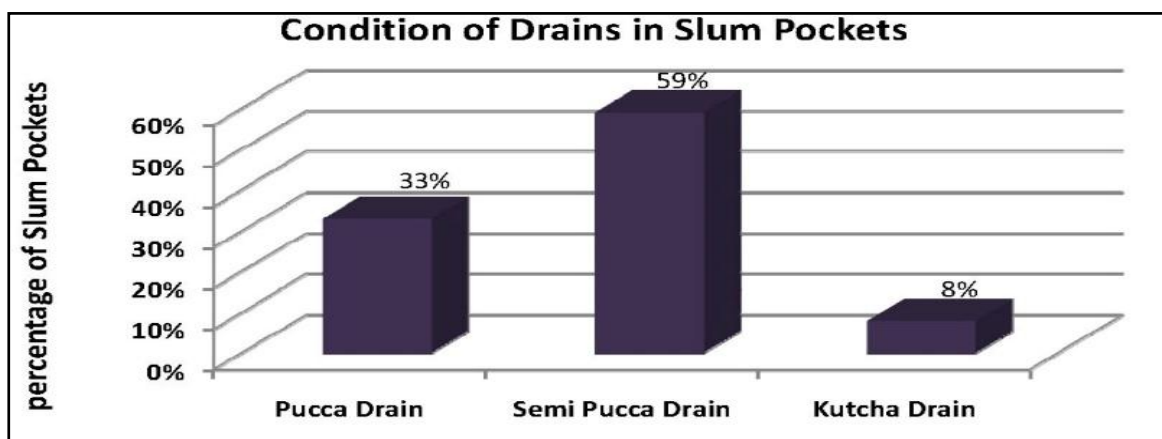
Source: Socio-economic Survey of Slums

Further about 79 percent of these households are connected to Municipal Sewers and about 16 percent have flush septic tank toilet facility. 2 percent of the households are having toilets connected to open drains.

Drainage

Pucca drains outside slum households are conspicuously missing in the slums and even where these drains exist, these are not cleaned regularly. Consequently, the streets and houses often get flooded in rainy season. Only about 33% of the slum pockets have complete pucca drains. A high percentage (59%) of the households has semi pucca drains.

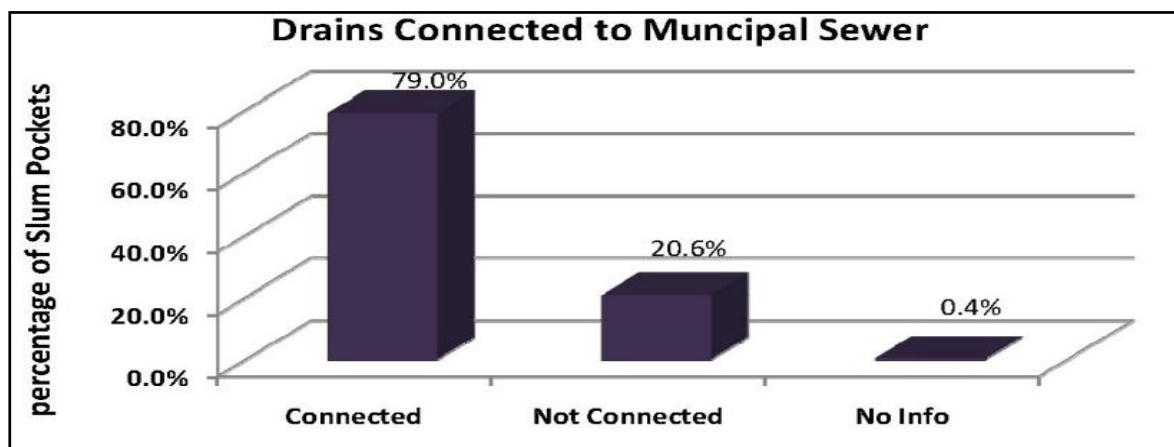
Figure 3-36 Condition of Drains in Slum Pockets



Source: Socio-economic Survey of Slums

About 79% of the drains are connected to Municipal Sewerage system.

Figure 3-37 Connectivity of Slum Pockets to Municipal Sewers

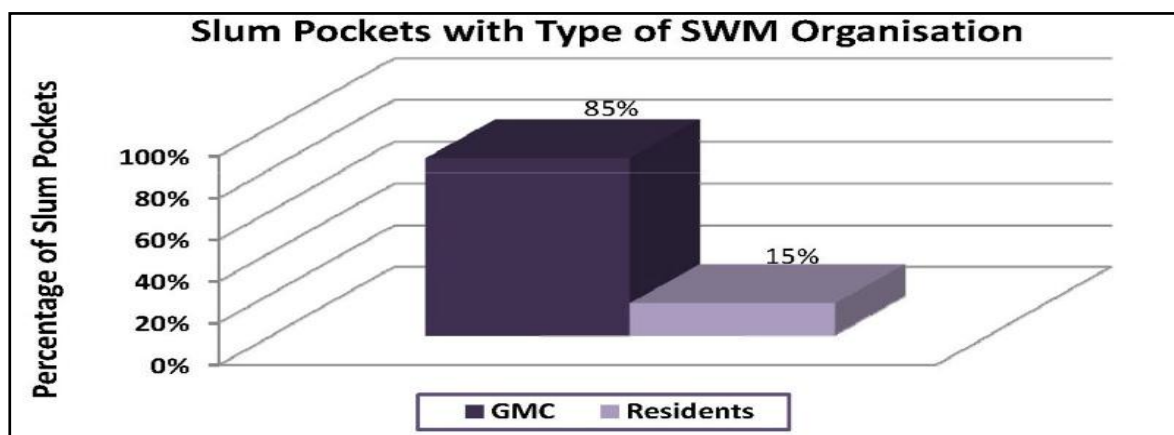


Source: Socio-economic Survey of Slums

Solid Waste Management

85% of the slum pockets are served by Gwalior Municipal Corporation for solid waste and the rest 15% is managed by residents themselves.

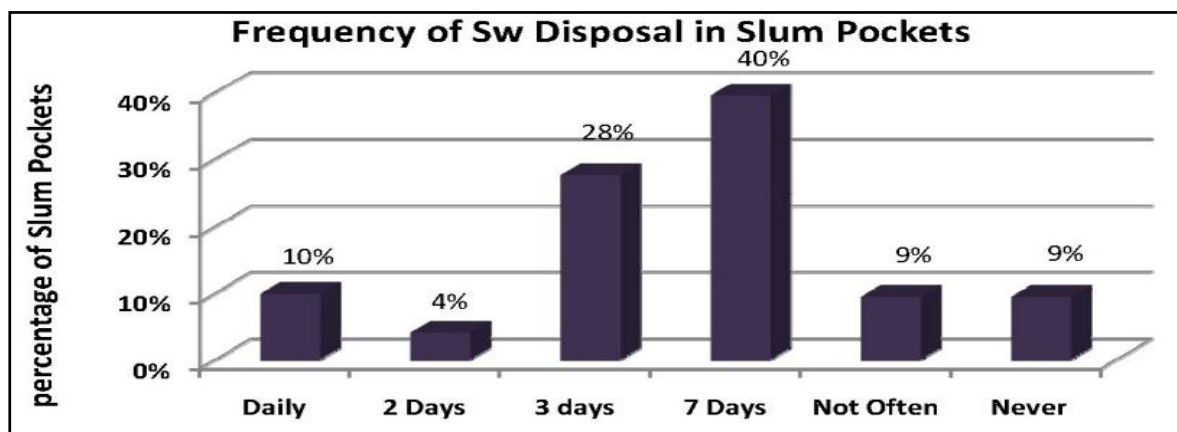
Figure 3-38 Type of Solid Waste Management in Slum Pockets



Source: Socio-economic Survey of Slums

In most of the slum pockets (68 percent) the solid waste is disposed in frequency of 3 or 7 days. In about 18% of the slum pockets the disposal frequency is not often or never.

Figure 3-39 Frequency of Solid Waste Collection in Slum Pockets



Source: Socio-economic Survey of Slums

Zone wise Incidence of various diseases in 2010

The incidence of diseases like malaria, jaundice, diarrhea, TB and others is unexpectedly low in the slums in 21 zones. Thus, about 3 percent of the inhabitants suffered from one or the other of these diseases in the year 2010. Again, disease wise, among inhabitants who suffered from some kind of disease inhabitants suffering from water borne disease like jaundice and diarrhoea (31.8 percent) is higher than inhabitants suffered from Malaria at (28.5 percent). The incidence of TB is significantly low Zone wise at 3.2%; the incidence of malaria was comparatively higher in zones – 3, 5, 13 & 14. In zones 4, 5 & 17 more than 4 percent of the inhabitants suffered from some kind of disease.

Zone wise Number of Deaths by age group in 2010

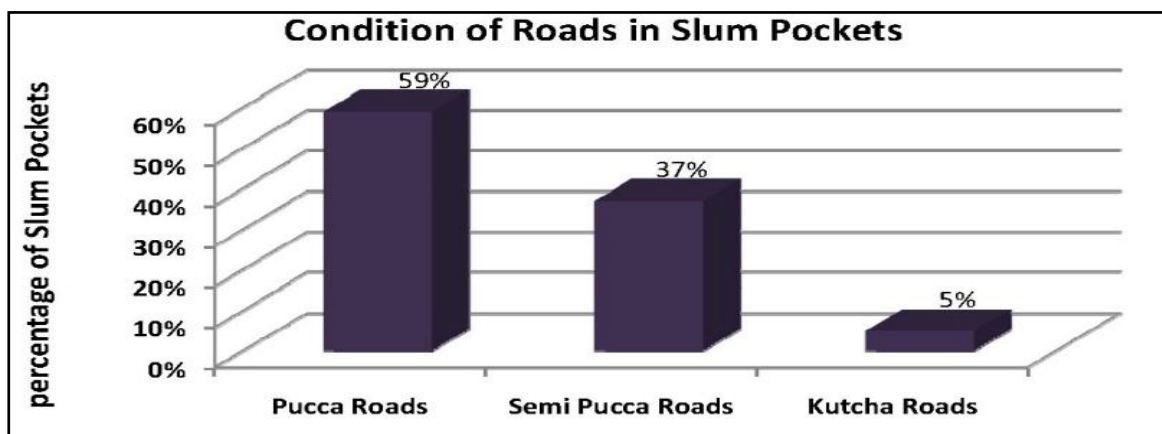
Consistent with the low incidence of diseases in slums, the death rate during 2010 among girls and boys under the age of 5 years was found to be low. The crude death rate works out to 0.17 on an average in the surveyed slums. The crude death rate was highest (6.31) in zones – 6.

Roads and Streets

Only 5 percent of the slum pockets are having kutchha roads. A significant 59% of the slum pockets have pucca roads while about 37% of the slum pockets have semi pucca roads.



Figure 3-40 Roads and Streets Facility in Slum Pockets



Source: Socio-economic Survey of Slums

Street Lighting

Only about 6 percent of the streets in the slum pockets are connected with street lighting facilities, rest 94 percent of the streets are with partial lighting.

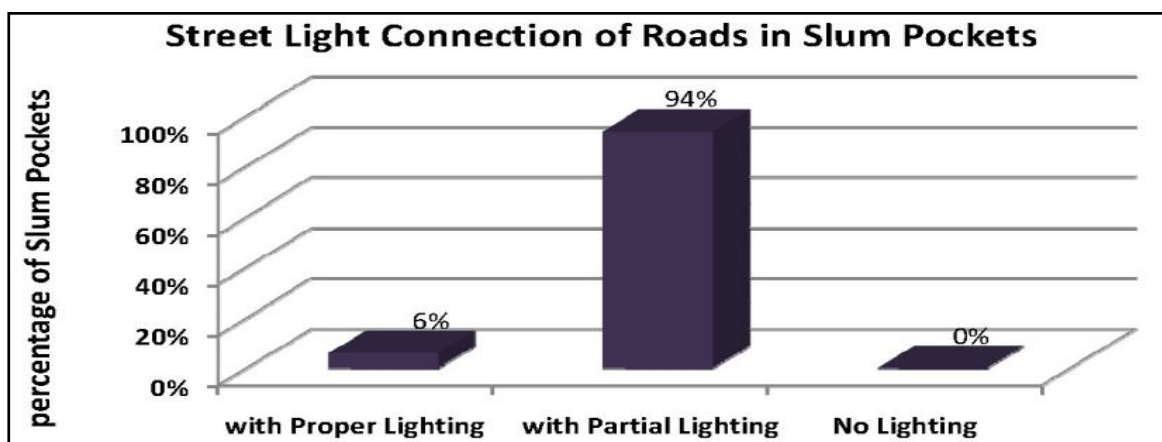
Type of Power Connection

It is found that about 88 percent of the households in the surveyed slums were having power connection. About 12 percent of the slum households do not have any power connection and they depend on kerosene/firewood for source of lighting.

Willing Ness to pay for service Delivery

Barring water supply service, slum households are not willing to spend much on other services like sanitation and solid waste disposal.

Figure 3-41 Street Lighting Facility in Slum Pockets



Source: Socio-economic Survey of Slums





Categorization of Slums – Chapter

4





Categorization of Slums - Chapter 4

Categorization of Slums is most significant step in Slum Free City Planning. Slums were categorized based on various parameters such as Tenability, Tenure Status, Land Ownership of Slum Pockets, Residential Density, Land Value and Three Dimensional Matrix Analysis on Housing, Infrastructure and Socio-economic Conditions of Slums. The GIS Enabled MIS was used to carry out the various analysis of slums in Gwalior and ultimately categorization of Slums was carried out.

3.4 Tenability Analysis

Tenability Analysis was conducted for every slum with the help of Geographical Information System. The Criteria's considered for Tenability Analysis were

- **Hazards/Risk Zones – (Flood, Seismicity and other Environmental Hazards) – based on Studies and Remote sensing spatial information.**
- **Land use Constraints – Consistency, Compatibility and Conformity – based on Land Use Map of Gwalior Development Plan – 2005.**
- **Land Ownership – Based on Geo-referenced Cadastral Maps and Slum survey on Ownership**

3.4.1 Un-Tenable Slums

Hazards/Risk Zones

Gwalior is located in Low Risk seismic zone (ZONE II) and has pre-dominantly flat land with less than 6% slope apart from fort area. Thus the Hazards/Risk Zones considered were only based on areas prone to local flooding and buffer area of Natural Streams. Such slums were categorized as UT_I in the Tenability Analysis.

Land Use Constraints

To Determine Land Use Constraints related to every slum pockets, Proposed Land Use Plan of 2005 of Gwalior Development Plan 2005 was used. Based on the slum pockets geographic location on the Land Use Plan the slums falling on Recreational Use Zones (Green and City Forest) and slums which are an Obstruction to Extension of Urban Infrastructure (Roads, Railways, Airport, Bus Terminal etc.) were considered to be untenable. Slums which were obstruction to extension of Urban Infrastructure were categorized as UT_II and slums located on Recreational Use Zones were categorized as UT_III in the Tenability Analysis.

None of the Slums in Gwalior fall on Airport Authority of India Land. While there were few slums which were partially located on railway Land who were considered partially Tenable or semi-tenable and the area falling under the railway Land was considered as untenable.





3.4.2 Semi-Tenable Slums

Land Use Constraints

Semi Tenable Category of Slums largely depends on the Land Use Constraints as per Proposed Land Use Plan 2005. Slums are considered to be Semi-Tenable when they are located on Existing or Proposed Non-Residential Use other than Transport and Recreational Use as per the Proposed Land Use Plan 2005. The Slums located on Existing or Proposed Public Semi Public Use were categorized as ST_I, Slums located on Existing or Proposed Industrial Use were categorized as ST_II, Slums located on Existing or Proposed Commercial Use were categorized as ST_III and Slums Located on proposed Agricultural Use and Market Garden Use Land were categorized as ST_IV.

The Semi-Tenable Category of Slums were studied and discussed on case by case basis with Municipal Authorities and considered as Tenable for Modeling Purpose, as all the Semi-tenable slums were located on Proposed Non-Residential use, with ample opportunity to swapping of Land Use within same zone. Further it was decided by Municipal Authorities to moot resolution in regards to Semi-tenable slums and send a request for change of Land Use to State Government.

3.4.3 Tenable Slums

Land Use Consistency, Conformity and Compatibility

Slum Pockets located on Existing and Proposed Residential Use Zones were categorized as Tenable Slums as per its Land Use Consistency, Conformity and Compatibility with the Proposed Land Use Plan 2005.

3.4.4 Partially Tenable or Semi-Tenable Slums

Almost 40% of the Slums in Gwalior are located on Multiple Use Zones. The Tenable or Semi-Tenable Area of any slum has been decided after deduction of Areas under Master Plan Roads (if crossing of Passing by), River, Water Body Green Buffer and Un-tenable Area. Such slums have been assessed and Net Tenable Area, Tenable Households, Un-Tenable Area and Un Tenable Area were computed. Such slums were separately categorized as Partly Tenable or Partly Semi-Tenable Slums

3.4.5 Results of Tenability Analysis

The Results of Tenability Analysis are presented in the **Table 4-16 & Figure 4-42** below and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 04** and **Volume – II – Annexure B**. Out of 243 Slums 109 Slums are Tenable, 93 Slums are Partially Tenable, 27 Slums are Semi-Tenable, 5 Slums are Partly Semi-Tenable and 9 Slums are Un-Tenable.

The Categorization based on Tenability Analysis was used in assigning strategies for Development in addition to other Analysis.



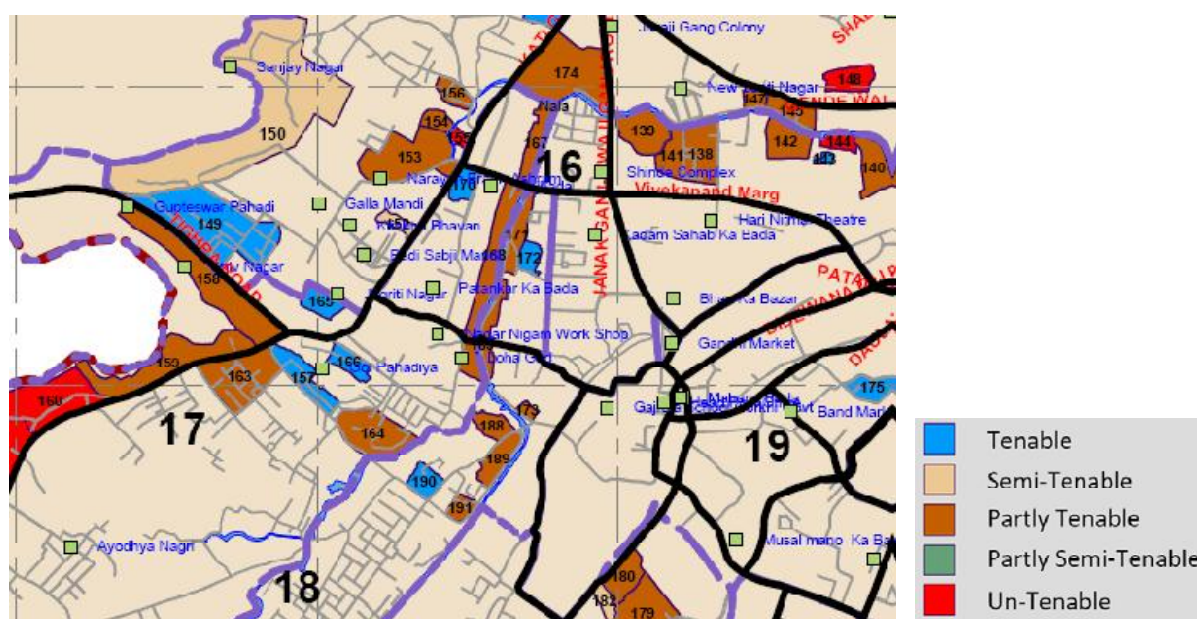


Table 4-16 Results of the Tenability Analysis of Slums

S N	Tenability	No of Slums
1	Tenable Slums	109
2	Semi-Tenable Slums	27
3	Partly Tenable Slums	93
4	Partly Semi-Tenable Slums	5
5	Un-Tenable Slums	9
	Total	243

Source: Analysis

Figure 4-42 Sample Tenability Analysis



Source: Analysis

3.5 Tenure Status of Slum Households

Land Tenure Status of all the Slum Households was studied. It was observed that various typology of Tenure is prevailing in every slum. The various Tenure Typologies observed were GoMP Patta, Possession Certificate or Occupancy Rights attributed to Free-hold Title, Encroachments on Public and Private Land attributed to no legal rights, Rented and Other Legal Rights such as un-registered agreements, notaries etc.

There is no noticeable uniformity in Household Tenure Status of Slums. So a Matrix analysis was conducted on Household Tenure Status in slums and the results were filtered in to





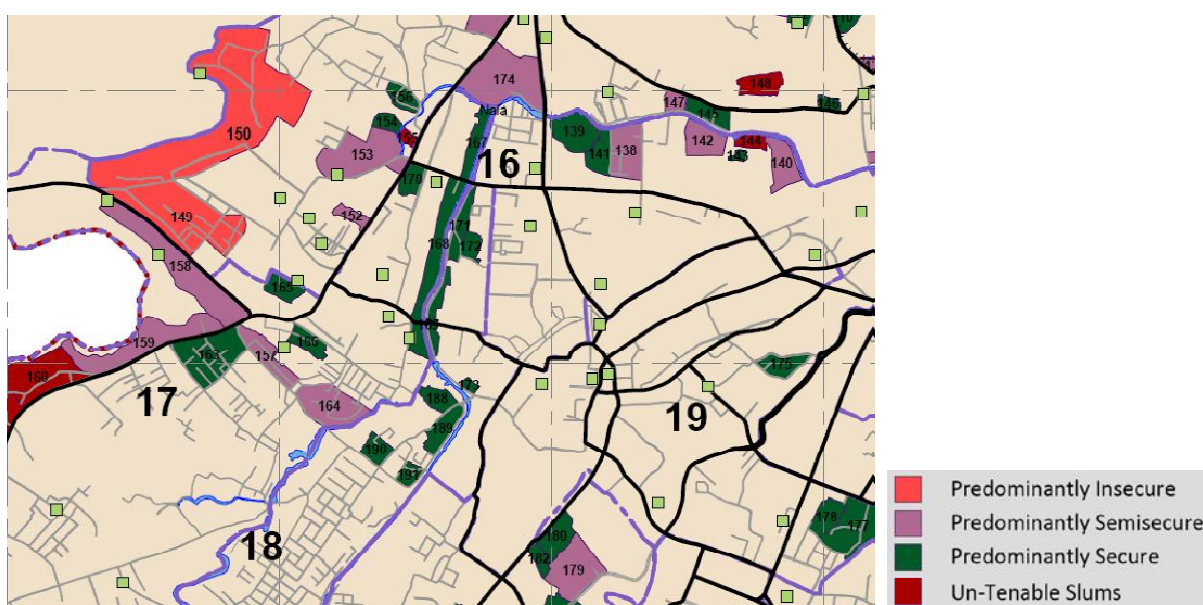
various categories of slums based on predominant Tenure Status. All the slums were categorized as Predominantly Secure Tenure, Predominantly Semi- Secure Tenure and Predominantly In-Secure Tenure.

The Results of Tenure Status of Slum Households are presented in the **Table 4-17** and **Figure 4-43** below and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 05** and **Volume – II – Annexure C**. Out of 234 Tenable and Partially Tenable Slums 164 Slums have predominantly Secure Tenure Households, 48 Slums have predominantly Semi-Secure Tenure Households and 22 Slums have predominantly In-Secure Tenure Households.

Table 4-17 Results of the Tenure Status of Slum Households Study		
S N	Tenure Status of Slum Households	No of Slums
1	Predominantly Secure Tenure	164
2	Predominantly Semi-Secure Tenure	48
3	Predominantly In-Secure Tenure	22
4	Remaining Un-Tenable Slums	9
	Total	243
<i>Source: Analysis</i>		

The Categorization based on Tenure Status of Slum Household was used in assigning priorities for implementation under various strategies for Development in addition to other Analysis. The reason for using Categorization based on

Figure 4-43 Sample Tenure Status of Slum Households Study



Source: Analysis



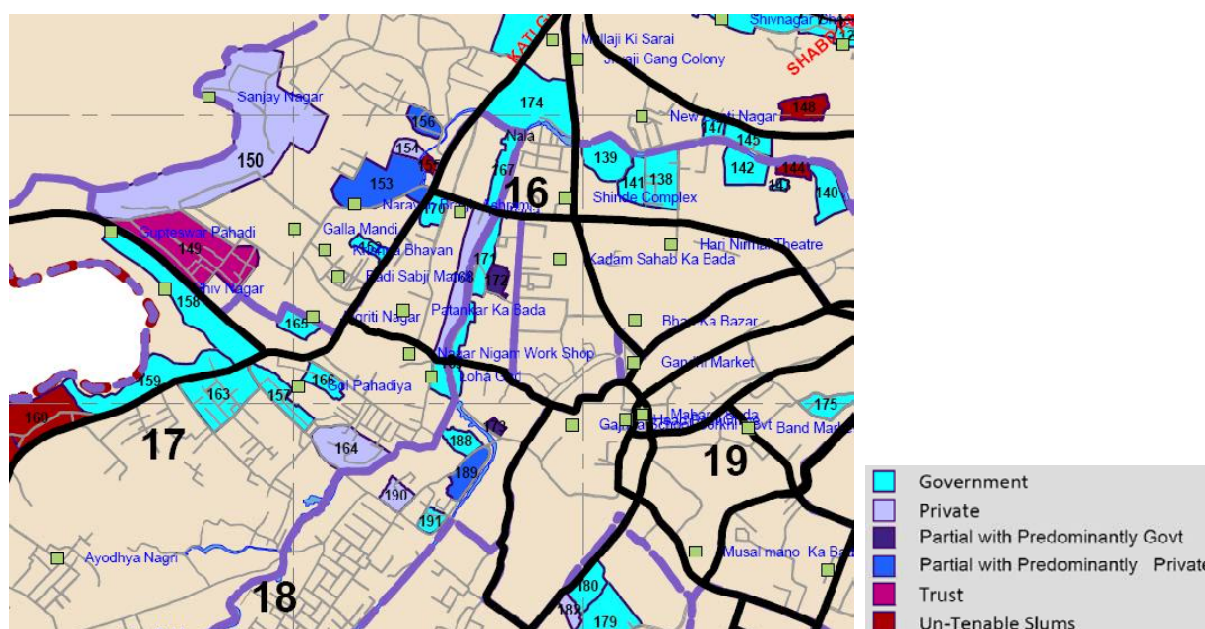


Tenure Status of Slum Household for Implementation Priority was the settlements/households without any tenure security are more vulnerable.

3.6 Land Ownership of Slums

Land Ownership of all the Slum Pockets was studied. It was observed that various Types of Land Ownership are prevailing across all the slums. The various Land Ownership observed were Government, Private and Trust etc. Thus the Land Ownership was categorized as Government, Private, Partial Ownership with Predominantly Government, Partial Ownership with Predominantly Private, and Trust Land for using it for development of strategies and implementation priority

Figure 4-44 Sample Land Ownership of Slums Study



Source: Analysis

The Results of Land Ownership of Slums are presented in the **Figure 4-44 above and Table 4-18 below** and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 06** and **Volume – II – Annexure C**. Out of 234 Tenable and Partially Tenable Slums 176 Slums are located on Government Land, 42 Slums are located on Private Land, 8 Slums are located on Partial Ownership with Predominantly Government Land, 6 Slums are located on Partial Ownership with Predominantly Private Land and 2 are located on Trust Land.

Table 4-18 Results of the Land Ownership Study of Slums		
S N	Land Ownership of Slums	No of Slums
1	Government	176
2	Private	42





Table 4-18 Results of the Land Ownership Study of Slums

S N	Land Ownership of Slums	No of Slums
3	Partial with Predominantly Government	8
4	Partial with Predominantly Private	6
5	Trust	2
6	Remaining Un-Tenable Slums	9
	Total	243
<i>Source: Analysis</i>		

The Categorization based on Land Ownership of Slums was used in assigning Strategies for Development and priorities for implementation under various strategies for Development in addition to other Analysis.

3.7 Residential Density of Slums

Residential Density of Slums (Net Residential Density in HHs/Ha) of all the Slum Pockets was studied. The Residential Density (Net Residential Density in HH's/Ha) of partially Tenable/Semi-Tenable Slums was calculated based on the Net Tenable/Semi-Tenable Area and referred to as Tenable Area Density. The various Densities observed were categorized as Low, Medium and High with respect to prevailing Density Characteristics of Gwalior City. The Density values considered for Low is below 150 HHs/Ha, Medium is 150-300 HHs/Ha and High is above 300 HHs/Ha.

The Results of Residential Density of Slums Study are presented in the **Table 4-19 and Figure 4-45 below** and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 07 & 08** and **Volume – II – Annexure D**. Out of 234 Tenable and Partially Tenable Slums 37 Slums are populated with High Density, 54 Slums are populated with Medium Density, and 143 Slums are populated with Low Density.

Table 4-19 Results of the Residential Density Study of Slums

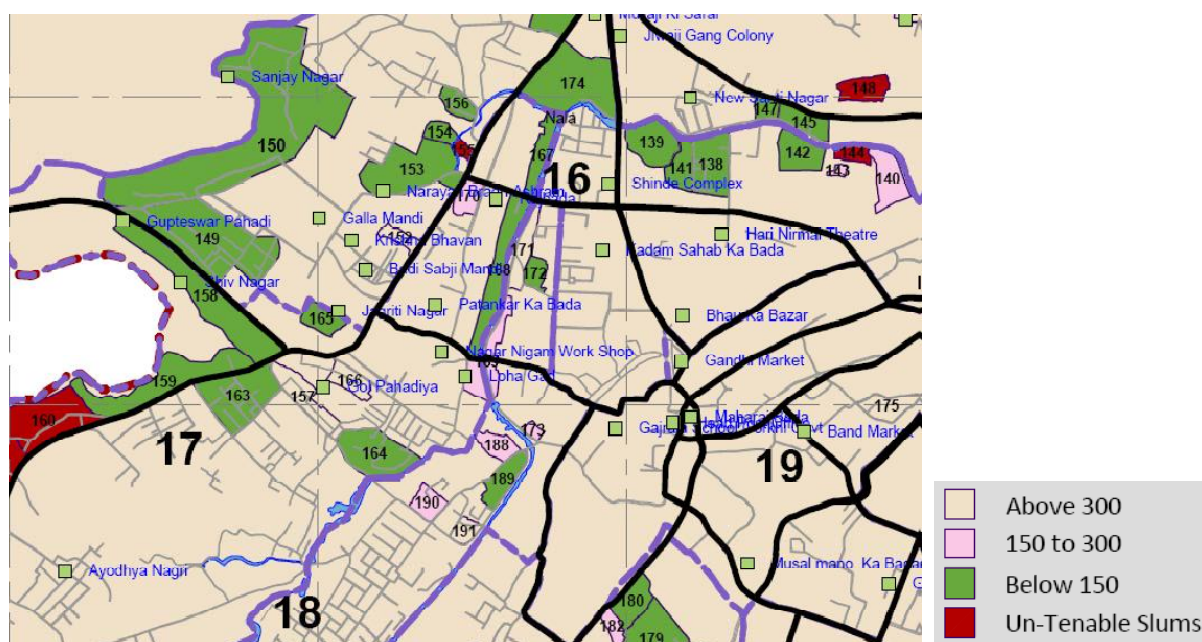
S N	Residential Density range in HHs/Ha	No of Slums
1	Above 300	37
2	150 to 300	54
3	Below 150	143
4	Remaining Un-Tenable Slums	9
	Total	243
<i>Source: Analysis</i>		





The Categorization based on Residential Density of Slums was used in assigning Strategies for Development in addition to other Analysis. The Strategies and Models pertaining to Public Private Partnership may be significantly influenced by the Slum Density. Further there is possibility of Densification of Low and Medium Density Redevelopment Sites through relocation of Un-tenable slums within the zone

Figure 4-45 Sample Residential Density of Slums Study



Source: Analysis

3.8 Land Value of Slum Pockets

Land Value of all the Slum Pockets was studied. The Land Value for every slum pocket was considered based on the Collectorate Guidelines 2010-11 for Assessment of Property Values for Developed Residential Land. The various Land Value Ranges observed were categorized as Low, Medium and High with respect to prevailing Land Value of Gwalior City. The Land Values considered for Low is below 8000 Rs/Sqm, Medium is 8000-14000 Rs/Sqm and High is above 14000 Rs/Sqm.

The Results of Land Value of Slum Pockets are presented in the **Table 4-20** and **Figure 4-46 below** and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 09** and **Volume – II – Annexure D**. Out of 234 Tenable and Partially Tenable Slums 16 Slum Pockets have High Land Value, 100 Slum Pockets have Medium Land Value and 118 Slum Pockets have Low Land Value.

The Categorization based on Land Value of Slum Pockets was used in assigning Strategies for Development in addition to other Analysis. The Strategies and Models pertaining to Public Private Partnership may be significantly influenced by the Land Value.



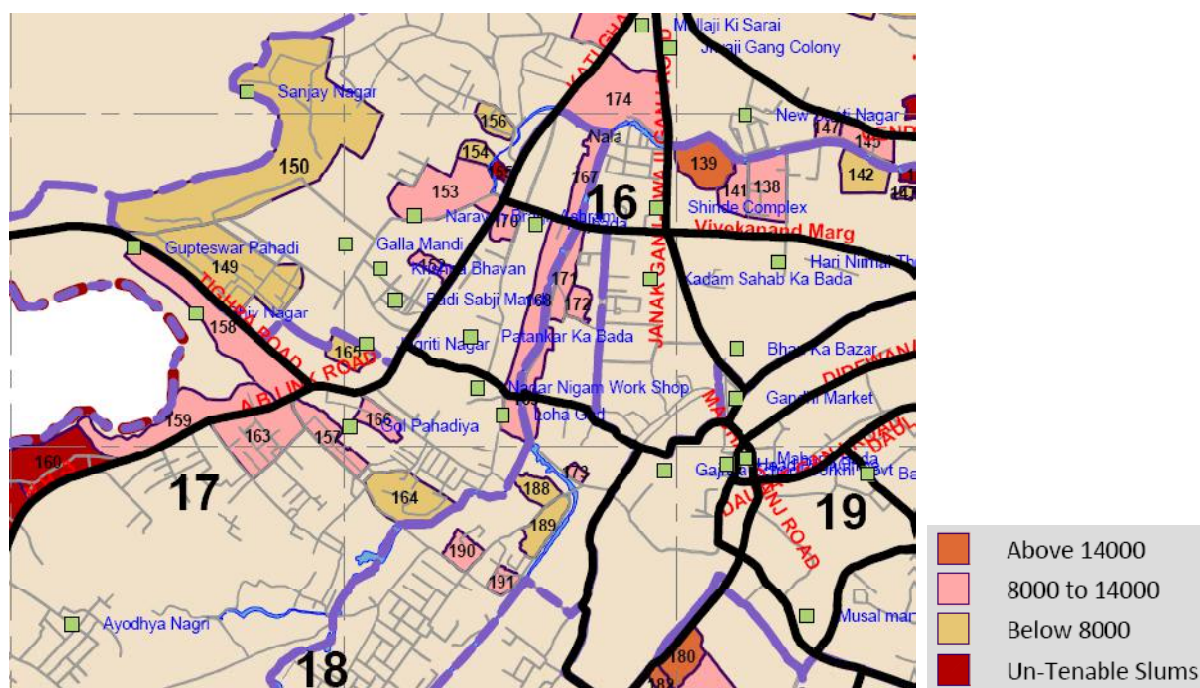


Table 4-20 Results of the Land Value Study of Slums

S N	Land Value range in INR/Sqm	No of Slums
1	Above 14000	16
2	8000 to 14000	100
3	Below 8000	118
4	Remaining Un-Tenable Slums	9
	Total	243

Source: Analysis

Figure 4-46 Sample Land Value of Slums Study



Source: Analysis

3.9 3X3X3 Matrix Analysis for Assessment of Slum Condition

After Analysis of the Tenability of Slums, Tenure status of Slum Households, Land Ownership of Slums, Density of Slums and Land Value of Slums there was a significant need to assess the existing condition of Slums in terms of Housing, Infrastructure and Socio-economic Status to arrive at interventions needed. A 3X3X3 Matrix analysis was conducted for assessment of Housing, Infrastructure and Socio-economic Condition of all Slum Pockets.





3.9.1 Basis for 3X3X3 Matrix Analysis

The findings from the Socio-economic Survey of Slums and FGD's conducted in various Slum Pockets were categorized in 3 broad categories which were:

- Socio-Economic Condition Indicators Category
- Infrastructure/Service Level Indicators Category
- Housing Condition Indicators Category

3.9.2 Key Indicators

The next exercise after categorization of all the indicators within above mentioned 3 categories was to identify key indicators within each category which could be closely associated for poor status of socio-economic condition, level of infrastructure services or housing condition in any slum pocket. The selection of such key indicators is discussed in detail in this section.

Housing Condition Indicators

The Surveyed Indicators considered for Assessment of Housing Condition of Slums are

Table 4-21 Surveyed Indicators for Housing Condition		
S N	Surveyed Indicators	Inference
1	House Condition	<p>The Housing Condition was best assessed on the basis of type of the Housing Structure, Security of Tenure, Availability of In-house Water Supply Connection and availability of In-House Toilets. The information which was surveyed was House Condition in terms of Pucca and Kutcha House. Also the Survey Findings Include Tenure Status, Availability of Water Supply House Connection and In House Toilet.</p> <p><i>The key indicator in this included High % of kutcha house, High % of HHs with Insecure Tenure, Low % of HHs Connected to Water Supply House Connection and Low % of HHs having In-House Toilets in a given slum pocket.</i></p>
2	Tenure Status	
3	Availability of Water Supply House Connection	
4	Availability of In-House Toilet	

Infrastructure/Service Level Indicators

The Surveyed Indicators considered for Assessment of Infrastructure/Service Level of Slums are

Table 4-22 Surveyed Indicators for Infrastructure/Service Level		
S N	Surveyed Indicators	Inference
1	Primary Source of Drinking Water in	The Survey Data contains number of HHs which has HH water connection, HHs taking water from public stand





Table 4-22 Surveyed Indicators for Infrastructure/Service Level

S N	Surveyed Indicators	Inference
	Wet Season	<p>post, neighbor, municipal tanker, public tube well/hand pump, private tube well/hand pump, private vendor, well/pond or others during wet season.</p> <p><i>Lower % of HHs with house water connection represents poor level of infrastructure services in a slum pocket. Therefore low % of HHs with house water connection was selected as one of the key indicator.</i></p>
2	Type on In-house Toilet and Disposal Mode in case of no In-House Toilet	<p>The Survey Data contains the number of HHs which has in-house toilet facility and the Counts for various types of Toilets based on the Disposal like Toilets Connected to Municipal Sewers and Septic Tank, Pour Flush Pit Toilet, dry bucket Toilet, Toilets Connected to open drains and others types. Further the Survey Data also contains the Type of Defecation opted by HH with no In-house Toilet.</p> <p><i>Out of total HHs with in-house toilet facility such HHs were selected which follow unhygienic mode of Disposal like dry bucket Toilets, Pour Flush Pit Toilets or Toilets Connected to open drain and other unhygienic modes.</i></p> <p><i>Out of total HHs with no in-house toilet facility such HHs were selected which follow unhygienic mode of Defecation Practice such as Private and Public dry bucket Toilets, Open Defecation and other unhygienic modes.</i></p> <p><i>These numbers of HHs represents poor level of infrastructure services in a slum pocket. Therefore higher % of HHs following unhygienic sewage disposal and Defecation practice was selected as one of the key indicator</i></p>
3	Road/Street Condition	<p>The Survey Data contains the information at community level for kuchha and pucca road length.</p> <p><i>Out of total road length, % deficiency of pucca roads was calculated and high % deficiency of pucca roads in slum pockets was selected as one of the key indicator.</i></p>
4	Availability of Pucca Storm Water Drains	<p>The Survey Data contains the information at community level for pucca drain length.</p> <p><i>Out of total road length, % deficiency of pucca drains was calculated and high % deficiency of pucca drains in slum pockets was selected as one of the key indicator.</i></p>
5	Frequency of Solid Waste Collection	<p>The Survey Data contains the information at community level for frequency of Waste Collection.</p> <p><i>The various level of Frequency of Waste Collection was selected as one of the key indicator.</i></p>





Table 4-22 Surveyed Indicators for Infrastructure/Service Level

S N	Surveyed Indicators	Inference
6	Street Lighting	The Survey Data contains the information at community level for number of streetlights. The same was then compared with required number of streetlights as per norms and % deficiency of streetlights was calculated. <i>High % deficiency of streetlights in slum pockets was selected as one of the key indicator.</i>
7	Distance from Health Facilities	The Survey Data contains the information at community level for Availability of Health Facilities near Slum Pockets with their distance. <i>The various lengths of Distances from Health Facilities were selected as one of the key indicator.</i>
8	Availability of Primary Education Facility	The Survey Data contains the information at community level for Availability of Primary Education Facility in the Slum Pockets. <i>The Availability or Non-availability of Primary Education Facility at Slum Pockets was selected as one of the key indicator.</i>

Socio-economic Condition Indicators

The Surveyed Indicators considered for Assessment of Socio-economic Condition of Slums are

Table 4-23 Surveyed Indicators for Socio-economic Condition

S N	Surveyed Indicators	Inference
1	Occupation/Source of Income	The Survey Data contains distribution of Population among various Occupation/Source of Income such as Salaried Employee, Business, Un-organized Sector, Rent Pension and Non-Workers <i>Higher % of Non-workers represents unhealthy economic status of a community. Therefore this was selected as one of the key indicator</i>
2	Monthly HH Income	The Survey Data contains distribution of HHs among various Monthly HH Income Categories. <i>Higher % of HHs with Monthly HHs Income less than 3000 INR represents unhealthy economic status of a community. Therefore this was selected as one of the key indicator</i>
3	Highest Education	The Survey Data contains distribution of Population among various Highest Education Pursued





Table 4-23 Surveyed Indicators for Socio-economic Condition

S N	Surveyed Indicators	Inference
	Pursued	<i>Higher % of Illiterates represents unhealthy economic status of a community. Therefore this was selected as one of the key indicator</i>
4	Caste	The Survey Data contains distribution of HHs among various Caste Categories. <i>Higher % of ST/SC population in any slum pocket represents its unhealthy socio-economic status. Therefore this was selected as one of the key indicator</i>
5	Type of Consumer Card	The Survey Data contains distribution of HHs among various Types of Consumer Card they hold such as BPL, APL and None. <i>Lower % of APL Card Holders in any slum pocket represents its unhealthy socio-economic status. Therefore this was selected as one of the key indicator</i>
6	HH Assets Owned	The Survey Data contains distribution of HHs among various types of Vehicles Owned. <i>Lower % of HH with Motorized Vehicles Ownership in any slum pocket represents its unhealthy socio-economic status. Therefore this was selected as one of the key indicator</i>
7	HH Assets Owned	The Survey Data contains distribution of HHs among various types of Consumer Electronics/Electricals Owned. <i>Lower % of HH with Consumer Electronics and Electricals Ownership in any slum pocket represents its unhealthy socio-economic status. Therefore this was selected as one of the key indicator</i>
8	Source of Lighting	The Survey Data contains distribution of HHs among various source of HH Lighting. <i>Higher % of HH with Kerosene/Firewood, source of Lighting in any slum pocket represents its unhealthy socio-economic status. Therefore this was selected as one of the key indicator</i>

3.9.3 Range Code and Weightage for Key Indicators

The Identified Key Indicators were provided with Range code as per range values and weightage as per the impact on each condition category. The Range Code and Weightage for Housing, Infrastructure and Socio-economic Condition were presented in Tables below





Table 4-24 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Housing Condition

S N	Major Indicator	Sub Indicator			
1	High % of Kutcha Houses	% of Kutcha Houses	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% of katcha houses in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned the highest weightage of 6, since this indicator is directly reflects the housing condition
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, 11.52% of the slum pockets have more than 80% kutcha houses, 3.29% of the slum pockets have 61-80% kutcha houses, 6.17% of the slum pockets have 41-60% kutcha houses, 22.22% of the slum pockets have 21-40% kutcha houses and majority 56.79% of the slum pockets have <20% kutcha houses.

Substantially Low % of slum pockets have high % of kutcha houses which shows that the overall housing condition is not very poor. The slums which have range code as 4 or 5 are the ones which have very high % of kutcha houses and therefore require immediate attention.

% of Slum Pockets v/s % of Kutcha Houses

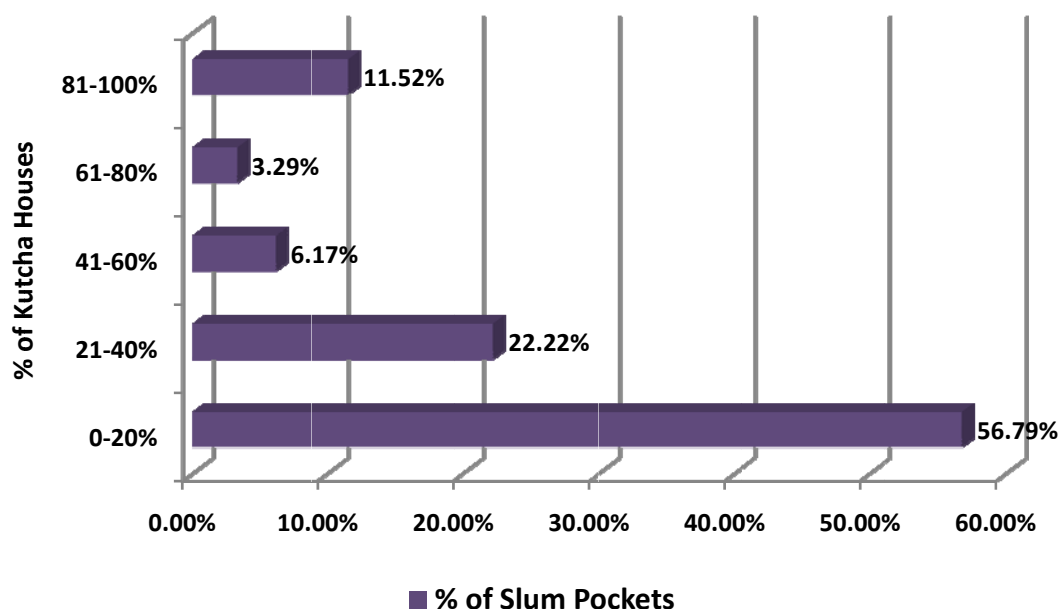




Table 4-24 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Housing Condition

S N	Major Indicator	Sub Indicator			
		% of HHs with Insecure Tenure	Range Code	Derivation of Range	Assigned Weightage
2	High % of HHs with Insecure Tenure	0-20	1	% of HHs with Insecure Tenure in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned the 2 nd highest weightage of 1.5, since lack of Tenure Security reflects the poor housing condition.
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, 14.81% of the slum pockets have more than 80% HHs with Insecure Tenure, 18.52% of the slum pockets have 61-80% HHs with Insecure Tenure, majority of 26.34% of the slum pockets have 41-60% HHs with Insecure Tenure, 20.58% of the slum pockets have 21-40% HHs with Insecure Tenure and 19.75% of the slum pockets have <20% HHs with Insecure Tenure.

Only around 40% of the Slum Pockets have less than 40% of HHs with Insecure Tenure shows that the Land Tenure status of Slum Households is not very sound. The slums which have range code as 4 or 5 are the ones which have very high % of HHs with Insecure Tenure and therefore require more attention.

% of slum pockets v/s % of HHs with Insecure Tenure

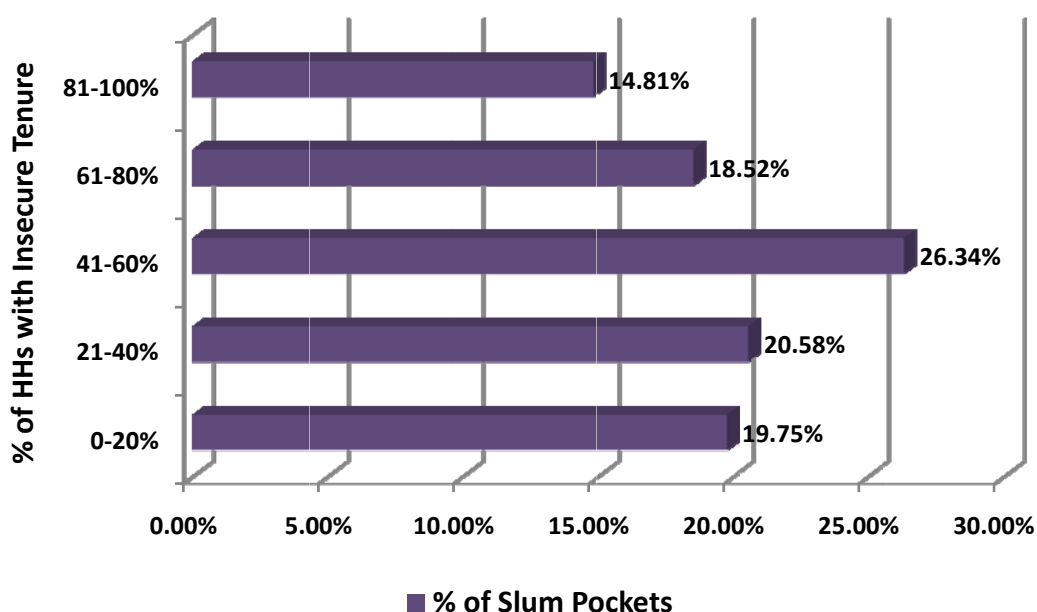




Table 4-24 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Housing Condition

S N	Major Indicator	Sub Indicator			
3	Low % of HHs Connected to Water Supply House Connection	% of HH Connected to WSHC	Range Code	Derivation of Range	Assigned Weightage
		81-100	1	% of HHs connected to Water Supply House Connection in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned the lowest weightage 1, since absence of this indicator even though reflects poor Housing but doesn't have high bearing on overall housing condition.
		61-80	2		
		41-60	3		
		21-40	4		
		0-20	5		

Out of total 243 slum pockets, majority 41.56% of the slum pockets have more than 80% HHs connected to Water Supply House Connection, 18.52% of the slum pockets have 61-80% HHs connected to Water Supply House Connection, 13.17% of the slum pockets have 41-60% HHs connected to Water Supply House Connection, least 8.64% of the slum pockets have 21-40% HHs connected to Water Supply House Connection and 18.11% of the slum pockets have <20% HHs connected to Water Supply House Connection.

About 60% of the Slum Pockets have more than 60% of HHs connected to Water Supply House Connection shows that the majority of Slum Households have access to piped water supply network. The slums which have range code as 4 or 5 are the ones which have very low % of HHs connected to Water Supply House Connection and therefore require more attention in infrastructure and service delivery.

% of slum pockets v/s % of HHs connected to Water Supply House Connection

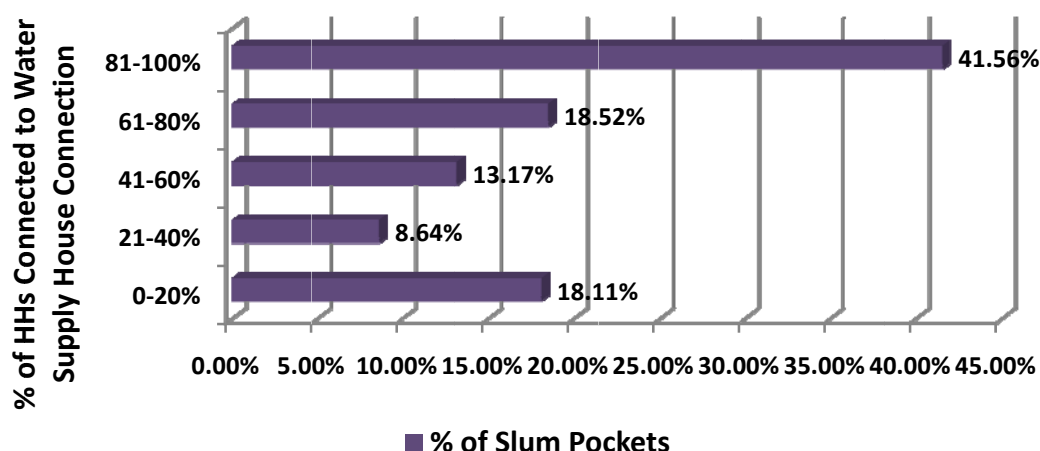




Table 4-24 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Housing Condition

S N	Major Indicator	Sub Indicator			
4	Low % of HHs having In-house Toilet	% of HHs having In- house Toilet	Range Code	Derivation of Range	Assigned Weightage
		81-100	1	% of HHs having In-house Toilet in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned the 2 nd highest weightage of 1.5, since In-house toilet is an integral part of House and its absence reflects the poor housing condition.
		61-80	2		
		41-60	3		
		21-40	4		
		0-20	5		

Out of total 243 slum pockets, majority 68.31% of the slum pockets have more than 80% HHs having In-House Toilet, 14.81% of the slum pockets have 61-80% HHs having In-House Toilet, least 4.53% of the slum pockets have 41-60% HHs having In-House Toilet, 4.94% of the slum pockets have 21-40% HHs having In-House Toilet and 7.41% of the slum pockets have <20% HHs having In-House Toilet.

About 73% of the Slum Pockets have more than 60% of HHs having In-House Toilet shows that the majority of Slum Households have access Toilet Facility with Septic Tank or connected to municipal sewers. The slums which have range code as 4 or 5 are the ones which have very low % of HHs having In-House Toilet and therefore require more attention in infrastructure and service delivery.

% of slum pockets v/s % of HHs having In-House Toilet

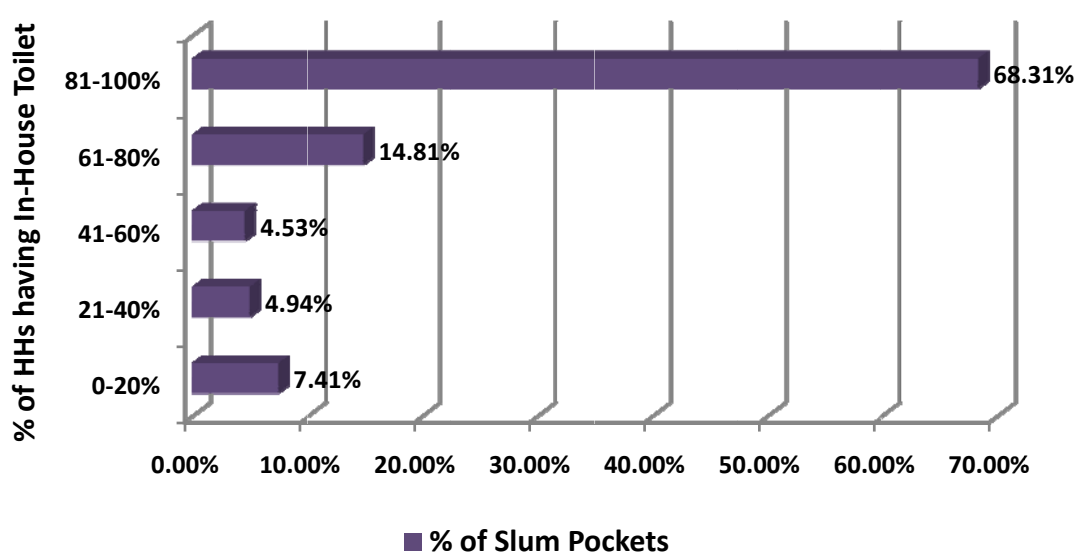




Table 4-25 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Infrastructure/Service Level

S N	Major Indicator	Sub Indicator			
1	Low % of HHs Connected to Water Supply House Connection	% of HH Connected to WSHC	Range Code	Derivation of Range	Assigned Weightage
		81-100	1	% of HHs connected to Water Supply House Connection in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned the highest weightage 2, since availability of drinking water is the most important indicator of Infrastructure/Service Level
		61-80	2		
		41-60	3		
		21-40	4		
		0-20	5		

Out of total 243 slum pockets, majority 41.56% of the slum pockets have more than 80% HHs connected to Water Supply House Connection, 18.52% of the slum pockets have 61-80% HHs connected to Water Supply House Connection, 13.17% of the slum pockets have 41-60% HHs connected to Water Supply House Connection, least 8.64% of the slum pockets have 21-40% HHs connected to Water Supply House Connection and 18.11% of the slum pockets have <20% HHs connected to Water Supply House Connection.

About 60% of the Slum Pockets have more than 60% of HHs connected to Water Supply House Connection shows that the majority of Slum Households have access to piped water supply network. The slums which have range code as 4 or 5 are the ones which have very low % of HHs connected to Water Supply House Connection and therefore require more attention in infrastructure and service delivery.

% of slum pockets v/s % of HHs connected to Water Supply House Connection

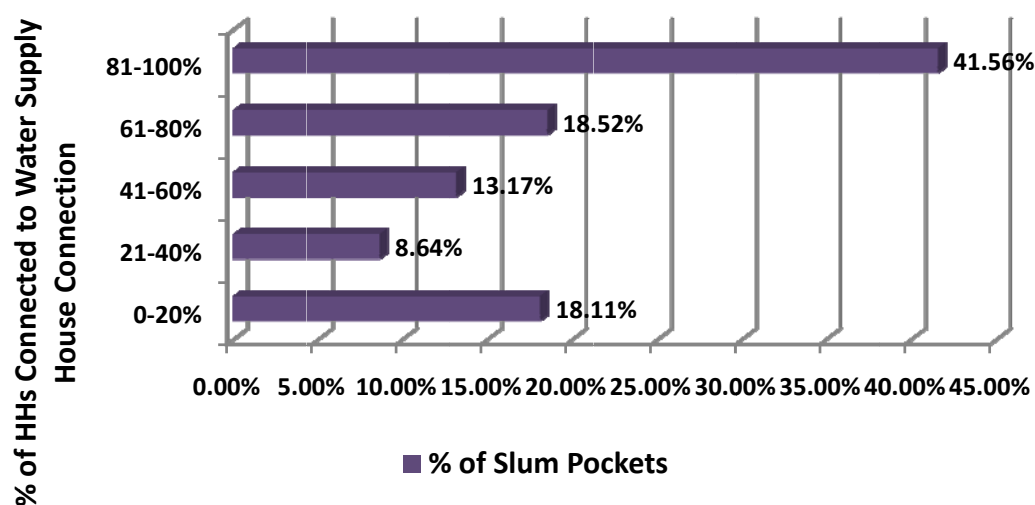




Table 4-25 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Infrastructure/Service Level

S N	Major Indicator	Sub Indicator			
2	High % of HH with Unhygienic mode of Sewage Disposal or Defecation	% of Such HHs	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% of HHs following unhygienic sewage disposal and Defecation practice in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned the highest weightage of 2, since sewerage and sanitation service level is directly related to healthy living condition in any area and an indication of the Infrastructure/Service Level.
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, only 6.58% of the slum pockets are such where more than 80% HHs follow unhygienic sewage disposal and defecation Practices, 4.94% of the slum pockets are such where 41-60% HHs follow unhygienic sewage disposal and defecation Practices, 4.53% of the slum pockets are such where 21-40% HHs follow unhygienic sewage disposal and defecation Practices, and maximum 72.02% of the slum pockets are such where <20% HHs follow unhygienic sewage disposal and defecation Practices.

Even though there are only few % HHs follow unhygienic sewage disposal and defecation Practices but still it has been given high weightage since it is the an indication of unhealthiest and unhygienic sanitation situation and needs to be addressed at priority

**% of slum pockets v/s % of HHs following unhygienic
Sewage Disposal and Defecation Practice**

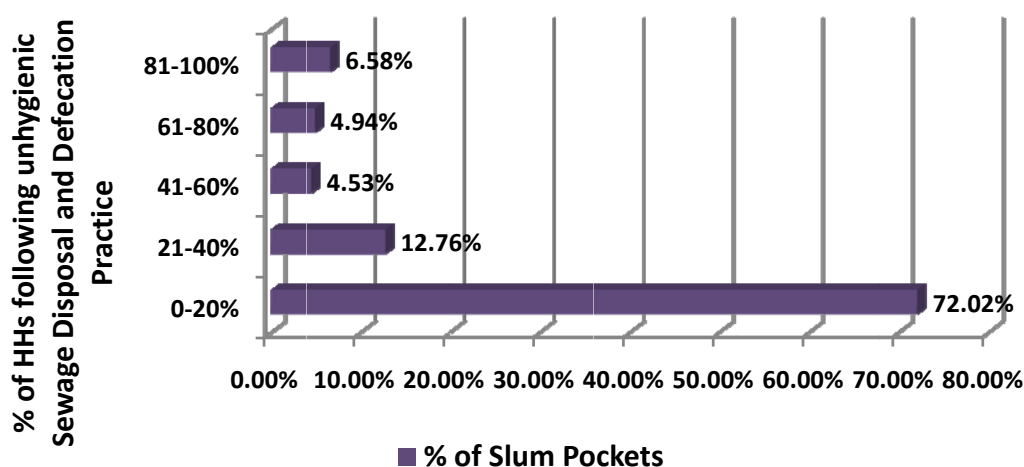




Table 4-25 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Infrastructure/Service Level

S N	Major Indicator	Sub Indicator			
3	High % Deficiency of Pucca Roads	% Deficiency of Pucca Roads	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% deficiency of pucca roads in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, % deficiency of pucca roads has been assigned the weightage of 1, since deficiency in this infrastructure service have lesser impact on Infrastructure/Service Levels than Water Supply, sewage disposal and Sanitation
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, only 5.35% of the slum pockets have more than 80% deficiency in pucca roads, 2.88% of the slum pockets have 61-80% deficiency in pucca roads, 4.94% of the slum pockets have 41-60% deficiency of pucca roads, 13.99% of the slum pockets have 21-40% deficiency in pucca roads and majority 72.84% of the slum pockets have <20% deficiency of pucca roads.

Less than 10% of the Slum Pockets have more than 60% Deficiency in Pucca Roads thus Roads and Street Condition of the Slums in Gwalior are in sound condition.

% of slum pockets v/s % Deficiency of Pucca Roads/Streets

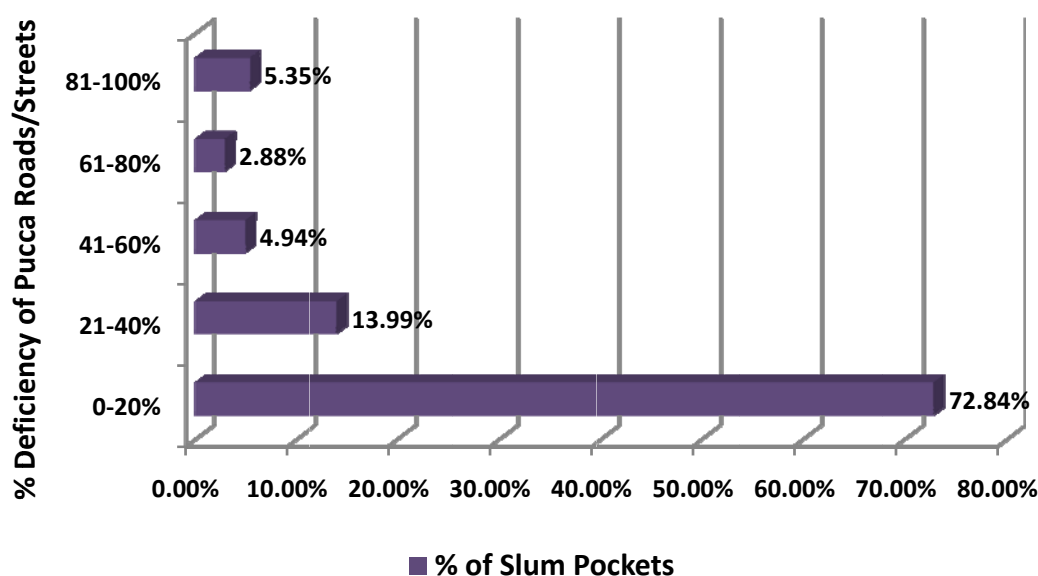




Table 4-25 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Infrastructure/Service Level

S N	Major Indicator	Sub Indicator			
4	High % Deficiency of Pucca Drains	% Deficiency of Pucca Drains	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% deficiency of pucca drains in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, % deficiency of pucca drains has been assigned the second highest weightage of 1.5, since it occupies high priority after water supply and sewage disposal due to impact on overall Infrastructure Service Level
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, 11.52% of the slum pockets have more than 80% deficiency in pucca drains, 5.35% of the slum pockets have 61-80% deficiency in pucca drains, 9.47% of the slum pockets have 41-60% deficiency of pucca drains, 20.58% of the slum pockets have 21-40% deficiency in pucca drains and majority 53.09% of the slum pockets are such where there is <20% deficiency of pucca drains.

More than 25% of the Slum Pockets have more than 40% Deficiency in Pucca Drains unlike Road and Streets where the same figure is less than 15%. Irrespective of the Road and Street Condition of the Slums in Gwalior poor storm water drainage conditions deteriorates livability of the Slum Pockets.

% of slum pockets v/s % Deficiency of Pucca Drains

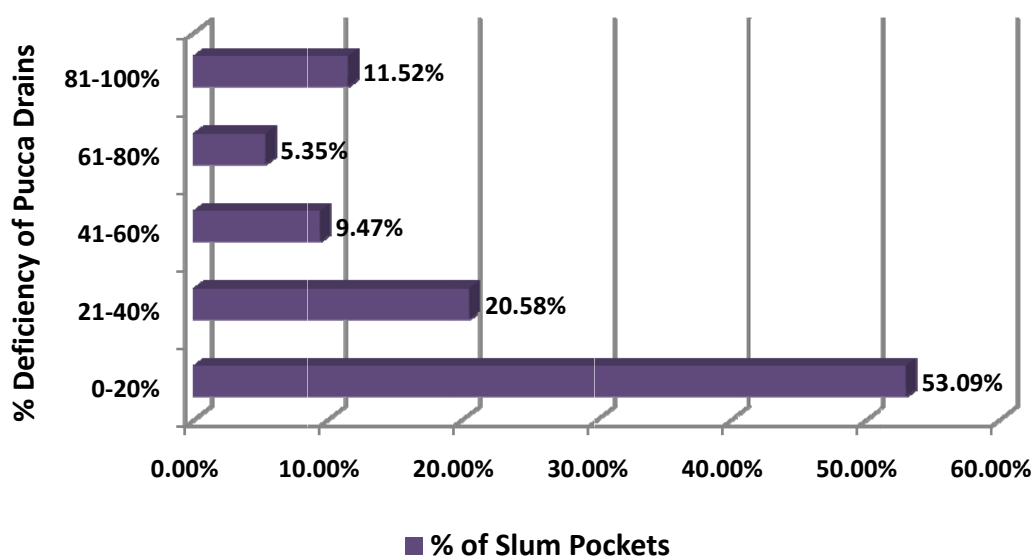




Table 4-25 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Infrastructure/Service Level

S N	Major Indicator	Sub Indicator			
5	Frequency of Waste Collection	Freq. of Waste Collection	Range Code	Derivation of Range	Assigned Weightage
		Daily	1	Frequency of Waste Collection in all the slums was divided in five categories such as Daily, 2-3 Days, 7 Days, Not Often and Never and distributing the same in 5 ranges	On the scale of 10, Frequency of Waste Collection has been assigned the second highest weightage of 1.5, since it occupies high priority after water supply and sewage disposal due to impact on overall Infrastructure Service Level
		2-3 Days	2		
		7 Days	3		
		Not Often	4		
		Never	5		

Out of total 243 slum pockets, 9.47% of the slum pockets observed no waste collection, another 9.47% of the slum pockets observed not often the waste is collected, majority 39.51% of the slum pockets have observed waste is collected once in a week, 31.69% of the slum pockets have observed waste collection once in 2-3 days while only 9.88% of the slum pockets have observed Daily Collection of Waste.

More than 90% of the Slum Pockets have observed no waste collection on daily basis hence the Solid Waste Management Service Level in the Slums of Gwalior Need to be substantially Improved.

% of slum pockets v/s % Frequency of Waste Collection

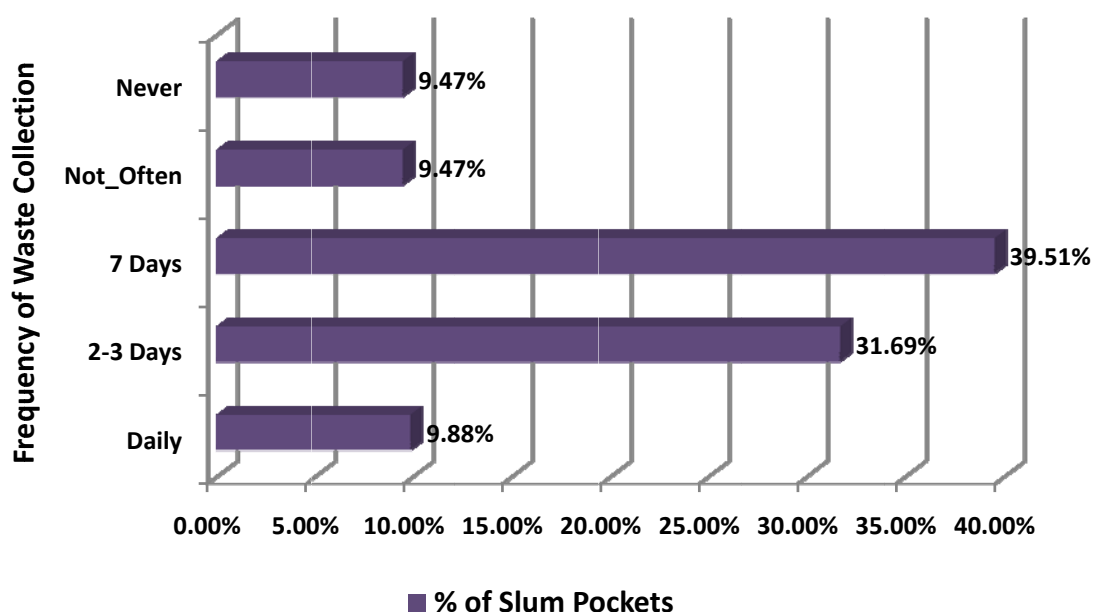




Table 4-25 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Infrastructure/Service Level

S N	Major Indicator	Sub Indicator			
6	High % deficiency of Street Lights	% deficiency of Street Lights	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% deficiency of Street Lights in all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, % deficiency of Street Lights has been assigned the weightage of 1, since deficiency in this infrastructure service have lesser impact on Infrastructure/Service Levels than Water Supply, sewage disposal and Sanitation
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, 17.28% of the slum pockets have more than 80% deficiency of Street Lights, Majority 61.73% of the slum pockets have 61-80% deficiency of Street Lights, 14.40% of the slum pockets have 41-60% deficiency of Street Lights, 7.41% of the slum pockets have 21-40% deficiency of Street Lights and Only 0.41% of the slum pockets are such where there is <20% deficiency of Street Lights.

Almost 70% of the Slum Pockets have more than 60% Deficiency of Street Lights Irrespective of the Road and Street Condition of the Slums in Gwalior poor Street Lighting conditions show safety and Security threats in Slum Pockets.

% of slum pockets v/s % Deficiency of Street Lights

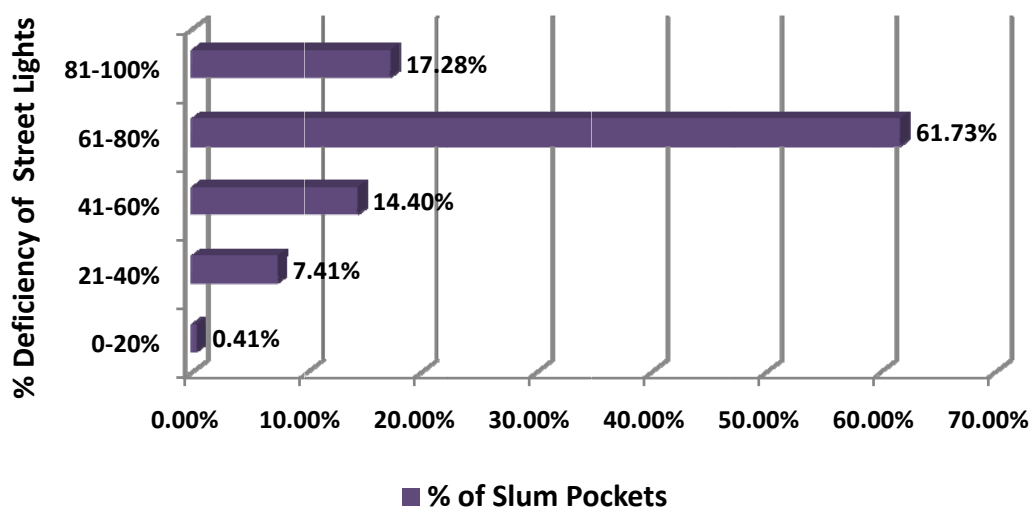




Table 4-25 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Infrastructure/Service Level

S N	Major Indicator	Sub Indicator			
7	Distance from Health Facilities	Distance from Health Facilities	Range Code	Derivation of Range	Assigned Weightage
		0-1.0 Kms	1	Distance of Health Facilities from each of the slums was divided in five categories such as 0-1.0 Kms, 1.1-2.0 Kms, 2.1-3.0 Kms, 3.1-4.0 Kms and 4.1-5.5 Kms and distributing the same in 5 ranges	On the scale of 10, Distance of Health Facilities from each of the Slum Pockets has been assigned the weightage of 0.5.
		1.1-2.0 Kms	2		
		2.1-3.0 Kms	3		
		3.1-4.0 Kms	4		
		4.1-5.5 Kms	5		

Out of total 243 slum pockets, 4.12% of the slum pockets are located 4.1-5.5 Kms from nearest Health Facilities, 4.53% of the slum pockets are located 3.1-4.0 Kms from nearest Health Facilities, 16.05% of the slum pockets are located 2.1-3.0 Kms from nearest Health Facilities, Majority 69.14% of the slum pockets are located 1.1-2.0 Kms from nearest Health Facilities and 6.17% of the slum pockets are located less than 1.0 Kms from nearest Health Facilities.

More 75% of the Slum Pockets are located less than 2.0 Kms from nearest health Facilities. thus majority of Slum Pockets in Gwalior doesn't need interventions in Health Facilities.

% of slum pockets v/s Distance from Health Facility in Kms

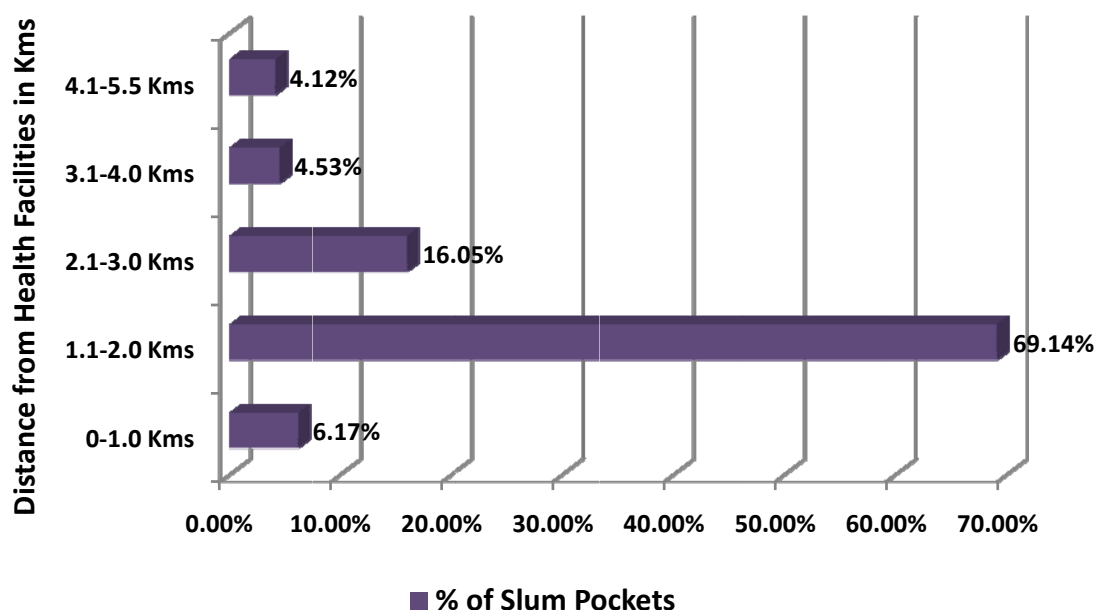




Table 4-25 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Infrastructure/Service Level

S N	Major Indicator	Sub Indicator			
8	Availability of Primary Education	Avail. of Primary Edu.	Range Code	Derivation of Range	Assigned Weightage
		Both Available	1	Availability of Primary Education Facilities in all the slums was divided in three categories such as both primary and Pre-primary school available, one of the primary and pre-primary school available, and none of the primary education facility available and distributing the same in 3 ranges	On the scale of 10, Availability of Primary Education Facility has been assigned the weightage of 0.5
		One of Primary or Pre-primary Available	3		
		None Available	5		

Out of total 243 slum pockets, 65.43% of the slum pockets have none of the Primary Education Facility, 22.22% of the slum pockets have either primary and Pre-primary school, and least 12.35% of the slum pockets have both Primary and Pre-primary School.

65% of the Slum Pockets doesn't have Primary Education Facility is further clear from the fact that more than 80% of the children in the Gwalior Slum Pockets don't attend School.

% of slum pockets v/s Availability Primary Education Facility

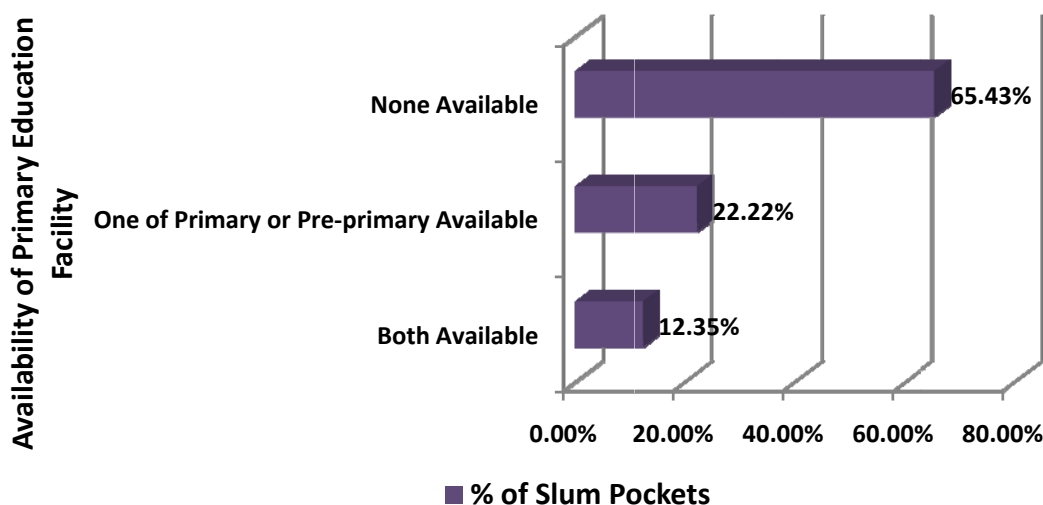




Table 4-26 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Socio-economic Condition

S N	Major Indicator	Sub Indicator			
1	High % of Non- workers Population	% of Non- workers	Range Code	Derivation of Range	Assigned Weightage
		0-15	1	Non-Workers rate of all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned a weightage of 1, since lower WFPR increases the Socio-economic vulnerability of a HHs
		16-30	2		
		31-45	3		
		46-60	4		
		61-100	5		

Out of total 243 slum pockets, Majority 82.30% of the slum pockets have more than 60% of Non-Workers Population, 18.93% of the slum pockets have 46-60% of Non-Workers Population, 1.65% of the slum pockets have 31-45% of Non-Workers Population, Only 0.41% of the slum pockets have 16-30% of Non-Workers Population and 1.65% of the slum pockets have <15% of Non-Workers Population. This clearly shows that about 82% of the slum pockets have more than 61% of Non-Workers Population which represents the below par work force participation resulting in poor socio-economic status of such slum pockets and which needs immediate attention.

% of slum pockets v/s % of Non-Workers Population

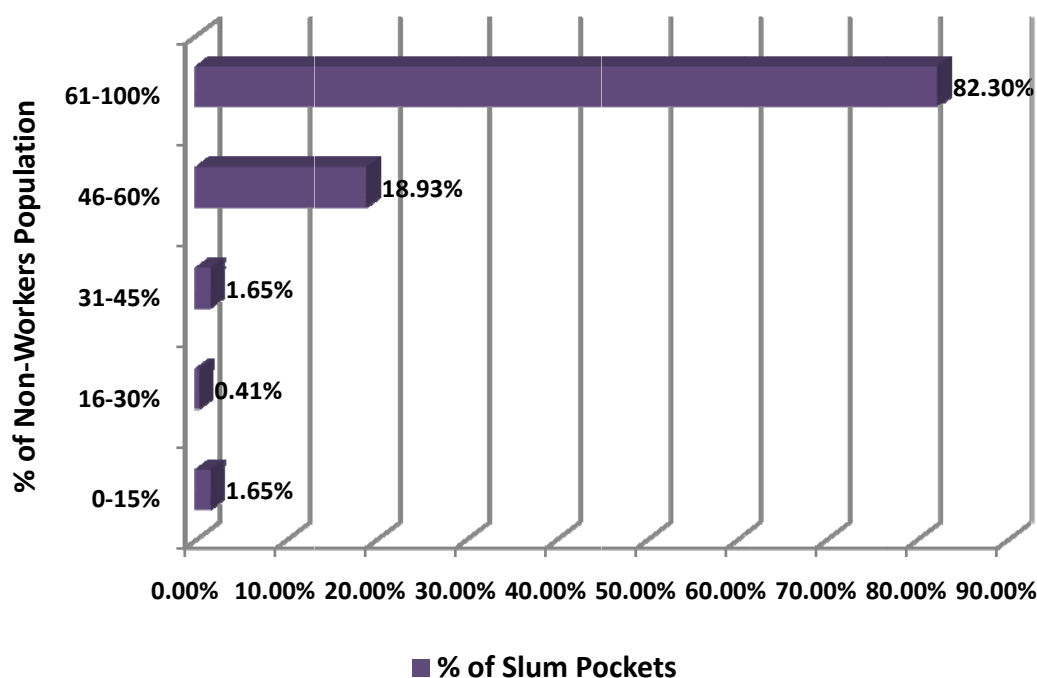




Table 4-26 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Socio-economic Condition

S N	Major Indicator	Sub Indicator			
2	High % of HHs with Monthly Income less than 3000 INR	% of HHs with mon. Income less than 3000	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% of HHs with Monthly Income less than 3000 INR of all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned the highest weightage of 2.5, since it directly reflects the poor financial status of the HH
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, Majority 58.44% of the slum pockets have more than 81% of the HHs with Income <Rs 3000/Month, 21.40% of the slum pockets have 61-80% of the HHs with Income <Rs 3000/Month, 18.11% of the slum pockets 41-60% of the HHs with Income <Rs 3000/Month, 1.23% of the slum pockets have 21-40% of the HHs with Income <Rs 3000/Month, and only 0.82% of the slum pockets have < 20% of the HHs with Income <Rs 3000/Month.

About 80% of the slum pockets have more than 61% of the HHs with Income <Rs 3000/Month which depicts the poor economic status of these slum pockets.

% of slum pockets v/s % of HHs with Monthly Income less than 3000 INR

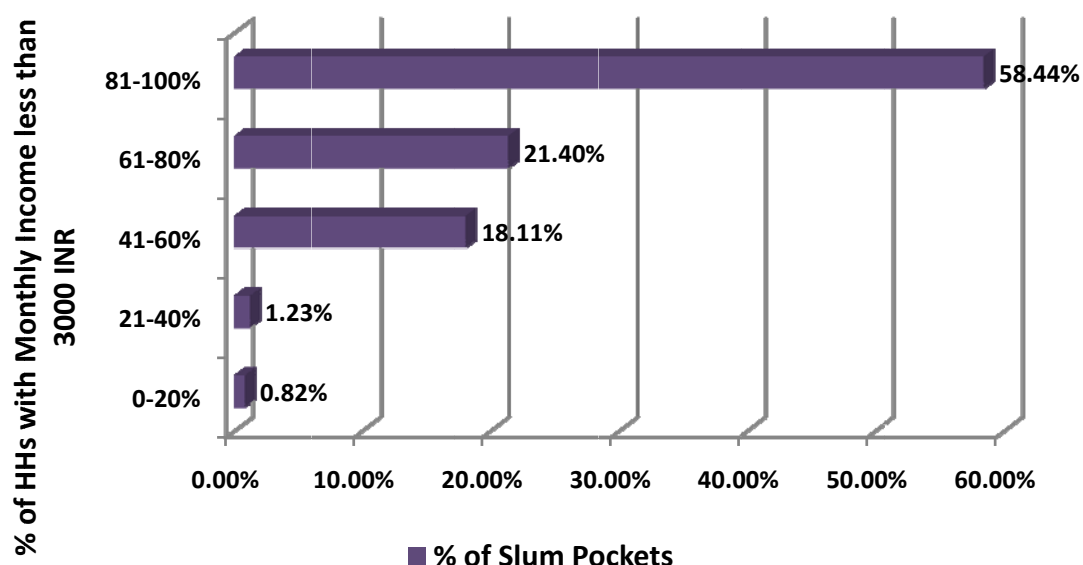




Table 4-26 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Socio-economic Condition

S N	Major Indicator	Sub Indicator			
3	High % of Illiterate Population	% of Illiterates	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% of Illiterates of all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned a weightage of 1.5, since poverty along with illiteracy increases the vulnerability of a HH
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, only 4.94% of the slum pockets have more than 81% of illiterate population, 18.11% of the slum pocket have 61-80% of illiterate population, 34.16% of the slum pockets have 41-60% of illiterate population, majority 35.80% of the slum pockets have 21-40% of illiterate population and 7.41% of the slum pockets have <20% of illiterate population.

Comparatively there are only few % of slum pockets where the population of illiterates is very high which a good sign but the figure of more than 75% of the Slum Pockets have at least 60% Illiterates as compared to overall Gwalior City where only 31% of the Population is Illiterate.

% of slum pockets v/s % of Illiterate Population

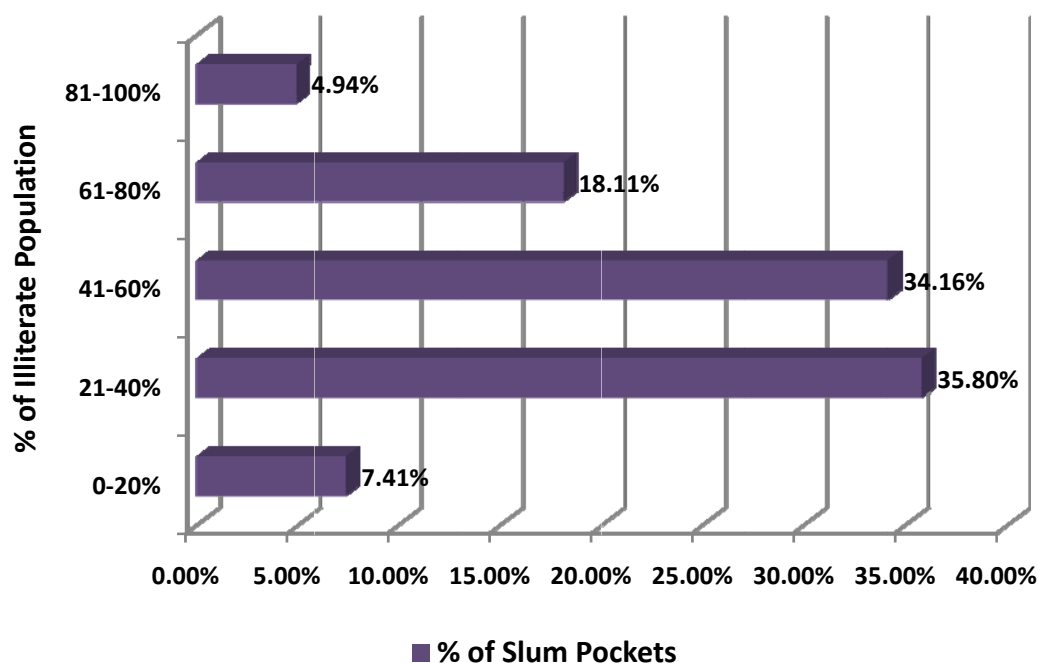




Table 4-26 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Socio-economic Condition

S N	Major Indicator	Sub Indicator			
4	High % of SC/ST HHs	% of SC/ST HHs	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% of SC/ST HHs of all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned a low weightage of 1. Though it is a direct indicator of the social status of the slum but it does not necessarily reflect the economic standing of the people residing.
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, only 8.23% of the slum pockets have more than 81% of SC/ST Households, 10.29% of the slum pockets have more than 61-80% of SC/ST Households, 15.23% of the slum pockets have more than 41-60% of SC/ST Households, majority 34.16% of the slum pockets have more than 21-40% of SC/ST Households, and 32.51% of the slum pockets have <20% of SC/ST Households.

More than 65% of the Slum Pockets have less than 40% of SC/ST Households the figures are higher as compared to overall Gwalior city which has 18.26% of SC/ST Population. The higher % of ST/SC population in a particular community represents its unhealthy socio-economic status since ST/SC belongs to backward class.

% of slum pockets v/s % of SC/ST Households

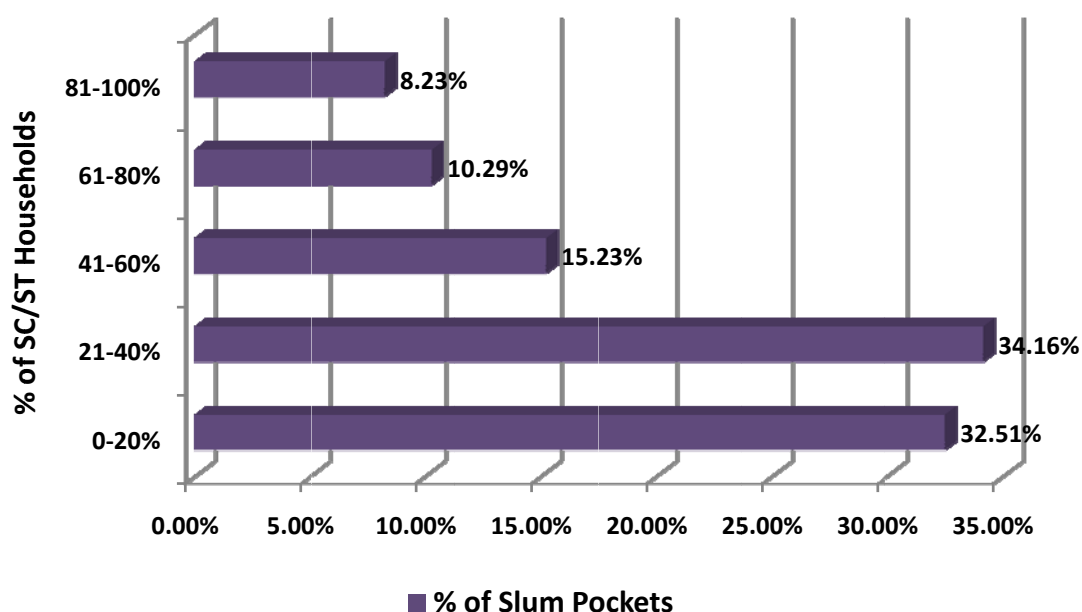




Table 4-26 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Socio-economic Condition

S N	Major Indicator	Sub Indicator			
5	Low % of APL Card Holders	% of APL Card Holders	Range Code	Derivation of Range	Assigned Weightage
		81-100	1	% of APL Card Holders of all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges.	On the scale of 10, this indicator has been assigned the second highest weightage of 1.5, since Lower number of APL card holders reflects higher number of BPL or unregistered Citizens representing poor economic status of a community
		61-80	2		
		41-60	3		
		21-40	4		
		0-20	5		

Out of total 243 slum pockets, only 2.88% of the slum pockets have more than 80% of the HHs have APL Cards, 4.94% of the slum pockets have 61-80% of the HHs have APL Cards, 9.47% of the slum pockets have 41-60% of the HHs have APL Cards, 13.17% of the slum pockets have 21-40% of the HHs have APL Cards and a majority of 69.55% of the slum pockets have less than <20% of the HHs have APL Cards. This clearly shows nearly 70% of the total slum pockets have less than 20% of the HHs with APL Card which attributes to more than 80% of the Households in BPL or unregistered category which further indicates the poverty profile of slums in Gwalior.

% of slum pockets v/s % of APL Card Holders

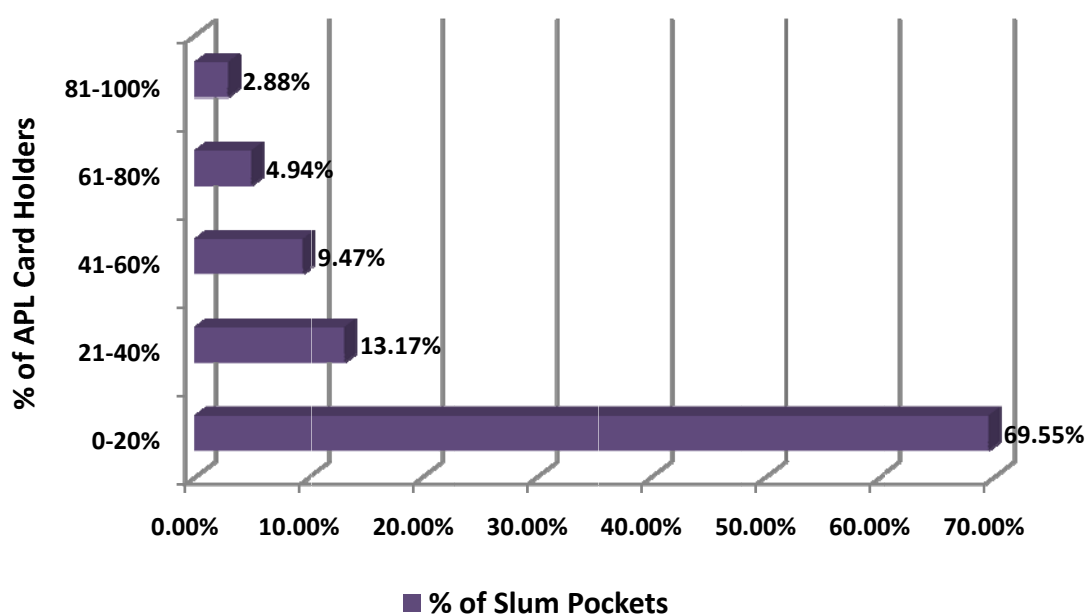




Table 4-26 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Socio-economic Condition

S N	Major Indicator	Sub Indicator			
6	Low % of HHs with Mot. Vehicle Ownership	% of HHs with Mot. Veh. Own.	Range Code	Derivation of Range	Assigned Weightage
		81-100	1	% of HHs with Motorized Vehicle Ownership of all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges.	On the scale of 10, this indicator has been assigned the weightage of 1.5, since lower number of HHs with Motorized Vehicle Ownership attributes to higher number of HHs who don't afford to have Motorized Vehicle representing poor economic status of a community
		61-80	2		
		41-60	3		
		21-40	4		
		0-20	5		

Out of total 243 slum pockets, only 1.23% of the slum pockets have more than 80% of the HHs with Motorized Vehicle Ownership, 0.41% of the slum pockets have 61-80% of the HHs with Motorized Vehicle Ownership, 0.41% of the slum pockets have 41-60% of the HHs with Motorized Vehicle Ownership, 4.12% of the slum pockets have 21-40% of the HHs with Motorized Vehicle Ownership and a majority of 93.83% of the slum pockets have less than <20% of the HHs with Motorized Vehicle Ownership. This clearly shows nearly about 94% of the total slum pockets have less than 20% of the HHs with Motorized Vehicle Ownership which attributes to more than 80% of the Households can't afford to own a motorized Vehicle which further indicates the poverty profile of slums in Gwalior.

% of slum pockets v/s % of HHs with Motorised Vehicle Ownership

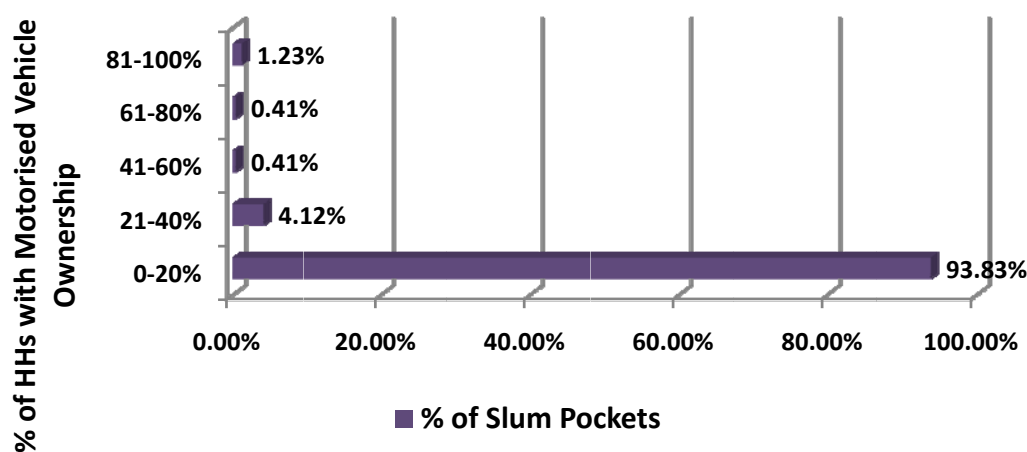




Table 4-26 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Socio-economic Condition

S N	Major Indicator	Sub Indicator			
7	Low % of HHs with Consumer Electri/ Electro Ownership	% of HHs with Cons electri/ electro Own.	Range Code	Derivation of Range	Assigned Weightage
		81-100	1	% of HHs with Consumer Electricals/Electronics Ownership of all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges.	On the scale of 10, this indicator has been assigned the weightage of 0.5, since lower number of HHs with Consumer Electricals /Electronics Ownership attributes to higher number of HHs who don't afford to have the same representing poor economic status of a community
		61-80	2		
		41-60	3		
		21-40	4		
		0-20	5		

Out of total 243 slum pockets, 27.57% of the slum pockets have more than 80% of the HHs with Consumer Electricals/Electronics Ownership, Majority 29.22% of the slum pockets have 61-80% of the HHs with Consumer Electricals/Electronics Ownership, 25.10% of the slum pockets have 41-60% of the HHs with Consumer Electricals/Electronics Ownership, 13.17% of the slum pockets have 21-40% of the HHs with Consumer Electricals/Electronics Ownership and only 6.17% of the slum pockets have less than <20% of the HHs with Consumer Electricals/Electronics Ownership. This shows nearly about 80% of the slum pockets have more than 40% of the HHs with Consumer Electricals and Electronics Ownership which attributes to only 40% of the Households can't afford to own a Consumer Electricals and Electronics which is due to urbanization and urban lifestyle of slum pockets in Gwalior.

**% of slum pockets v/s % of HHs with Consumer
Electricals/Electronics Ownership**

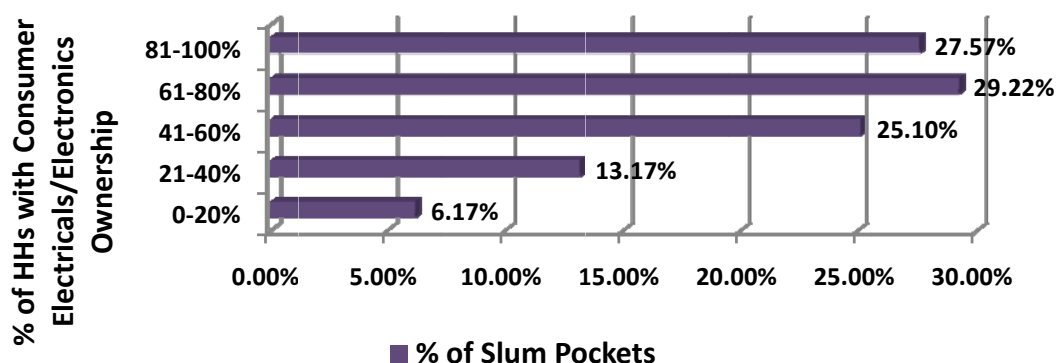




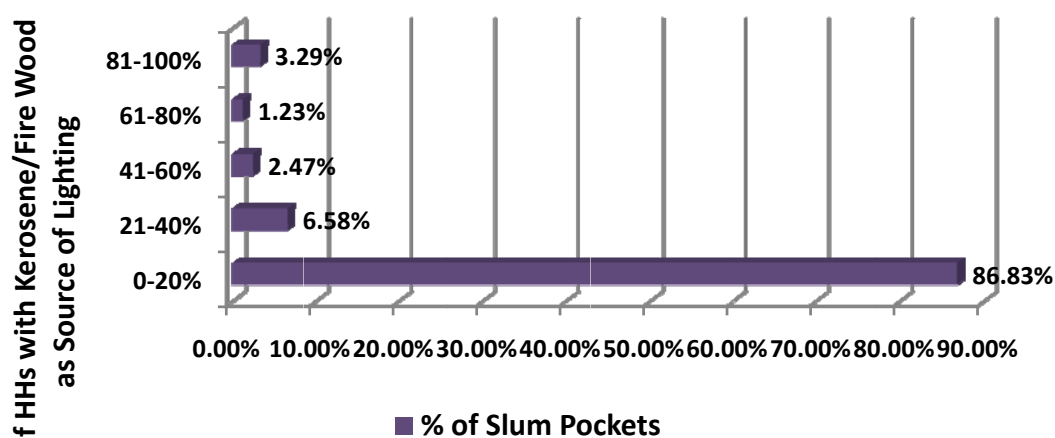
Table 4-26 Range Code for various Figures of Key Indicators and Weightage for Various Key Indicators in Assessment of Socio-economic Condition

S N	Major Indicator	Sub Indicator			
8	High % of HHs with Kerosene and firewood source of lighting	% of HHs with Ker. and FW source of lighting	Range Code	Derivation of Range	Assigned Weightage
		0-20	1	% of HHs with Kerosene and Fire Wood as Source of Lighting of all the slums was divided in five categories taking the difference of minimum and maximum % value and distributing the same in 5 ranges	On the scale of 10, this indicator has been assigned a low weightage of 0.5. Though it is a direct indicator of the economic status of the slum but it does not necessarily reflect the economic standing of the people residing.
		21-40	2		
		41-60	3		
		61-80	4		
		81-100	5		

Out of total 243 slum pockets, 3.29% of the slum pockets have more than 80% of the HHs with Kerosene/Fire Wood as Source of Lighting, 1.23% of the slum pockets have 61-80% of the HHs with Kerosene/Fire Wood as Source of Lighting, 2.47% of the slum pockets have 41-60% of the HHs with Kerosene/Fire Wood as Source of Lighting, 6.58% of the slum pockets have 21-40% of the HHs with Kerosene/Fire Wood as Source of Lighting and Majority 86.83% of the slum pockets have less than <20% of the HHs with Kerosene/Fire Wood as Source of Lighting.

More than 85% of the Slum Pockets have less than 20% of the HHs with Kerosene/Fire Wood as Source of Lighting, which shows more than 80% of the Households in the slums in Gwalior have access to Electricity

% of slum pockets v/s % of HHs with Kerosne/Fire Wood as Source of Lighting



3.9.4 Assigning Final Range Code as per Weightage

The selected key indicators from each category i.e., 4 key indicators from housing category, 8 key indicators from infrastructure category and 8 key indicators from socio-economic category were given scores according to the range in which they lie and their corresponding weightage. The individual score of all the key indicators within each category was added to derive the final score of 243 slum pockets.

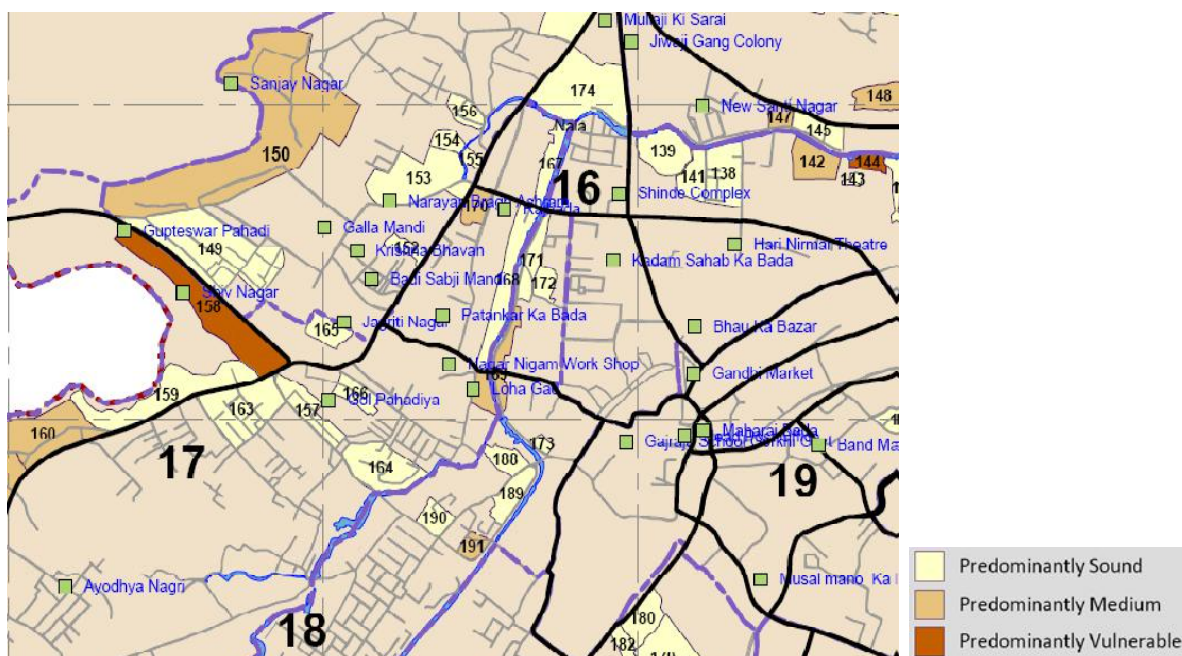
All the 243 slum pockets had a final score out of 50 for housing, infrastructure and socio-economic category. The final score of each category was again divided into 3 ranges which were coded as following:

- Final Range Code 1: Sound or Capable
- Final Range Code 2: Medium
- Final Range Code 3: Vulnerable

Housing Condition

The Results of Housing Condition Assessment are presented in the **Figure 4-47** and Figure 4-46 **Table 4-27** below and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 11** and **Volume – II – Annexure E**. Out of 243 Slum Pockets, 171 Slum Pockets have Predominantly Sound Housing Condition, 42 Slum Pockets have Medium Housing Condition and 30 Slum Pockets have Vulnerable Housing Condition.

Figure 4-47 Sample Housing Condition Assessment in 3X3X3 Matrix Analysis



Source: Analysis



Table 4-27 Results of the Housing Condition Assessment in 3X3X3 Matrix Analysis

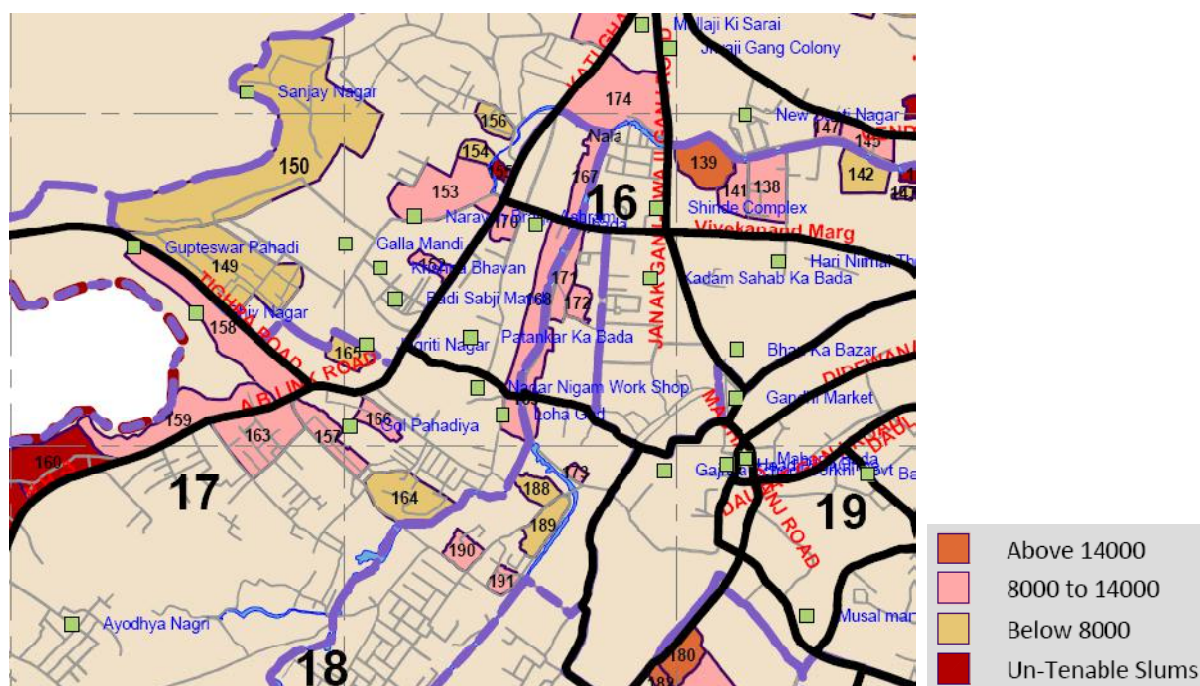
S N	Housing Condition	No of Slums
1	Predominantly Sound	171
2	Predominantly Medium	42
3	Predominantly Vulnerable	30
	Total	243

Source: Analysis

Infrastructure Service Level

The Results of Infrastructure Service Level Assessment of Slum Pockets are presented in the **Figure 4-48 and Table 4-28 below** and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 12 and Volume – II – Annexure E**. Out of 243 Slum Pockets, 130 Slum Pockets have Predominantly Sound Infrastructure Service Level, 88 Slum Pockets have Medium Infrastructure Service Level and 25 Slum Pockets have Vulnerable Infrastructure Service Level.

Figure 4-48 Sample Infrastructure Service Level Assessment in 3X3X3 Matrix Analysis



Source: Analysis





Table 4-28 Results of the Infrastructure Service Level Assessment in 3X3X3 Matrix Analysis

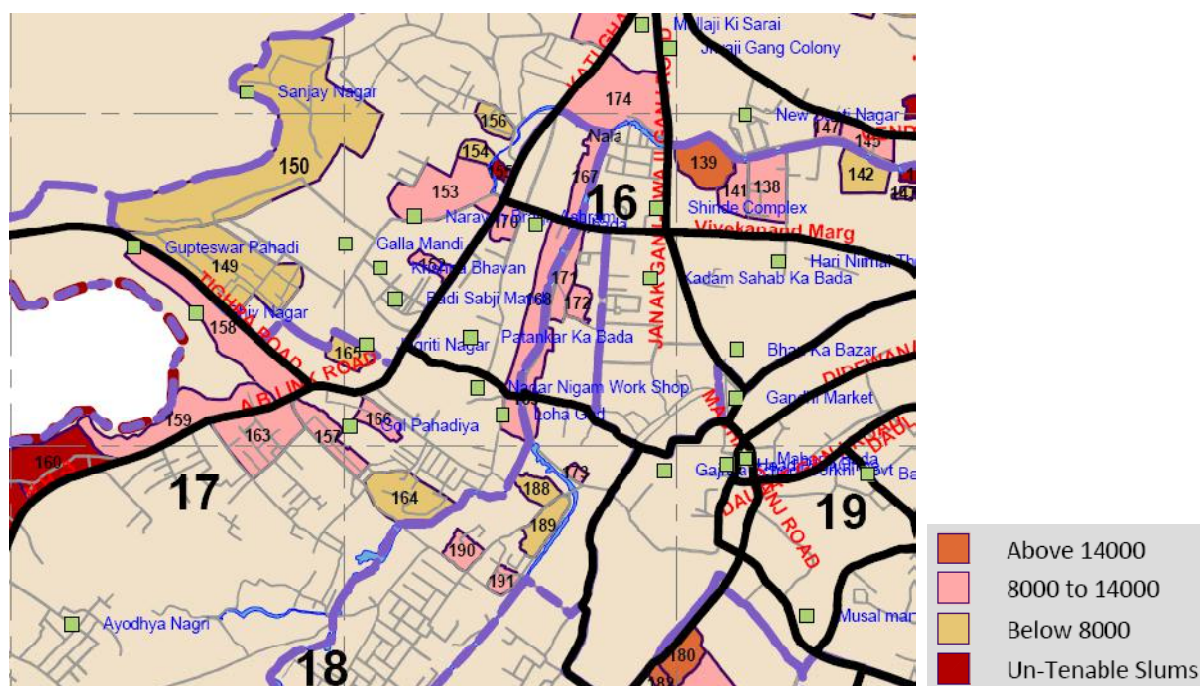
S N	Infrastructure Service Level	No of Slums
1	Predominantly Sound	130
2	Predominantly Medium	88
3	Predominantly Vulnerable	25
	Total	243

Source: Analysis

Socio-economic Condition

The Results of Socio-economic Condition Assessment of Slum Pockets are presented in the **Figure 4-49** and **Table 4-29** below and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 13** and **Volume – II – Annexure E**. Out of 243 Slum Pockets, 3 Slum Pockets have Predominantly Sound Socio-economic Condition, 103 Slum Pockets have Medium Socio-economic Condition, and 137 Slum Pockets have Vulnerable Socio-economic Condition.

Figure 4-49 Sample Socio-economic Condition Assessment in 3X3X3 Matrix Analysis



Source: Analysis





Table 4-29 Results of the Socio-economic Condition Assessment in 3X3X3 Matrix Analysis

S N	Socio-economic Condition	No of Slums
1	Predominantly Capable	3
2	Predominantly Medium	103
3	Predominantly Vulnerable	137
	Total	243
<i>Source: Analysis</i>		

3.9.5 Results of 3 X 3 X 3 Matrix

The next step after assigning final range code to all 243 slum pockets for the 3 categories, was to locate them on 3 x 3 x 3 matrix in terms of poor housing condition, infrastructure deficiency and poor socio-economic condition. There were total 27 categories in the matrix which had different inferences which are shown in the **Table 4-30**, for eg if a slum pocket has final range code as 1 for all the 3 categories namely housing, infrastructure and socio-economic category then it falls in the 1st category out of 27 in the matrix and the inference for that slum pocket is that it is least deficient in all the 3 categories and is therefore lowest prioritized or in other words it is most equipped in all the 3 categories.

Following the above procedure all 243 slum pockets were assigned a matrix category. While preparing this matrix it was assumed that there is no direct co-relation between the poor socio-economic status, deficiency in infrastructure services and deficiency in housing condition. Thus as per the matrix the slum pockets which have final range code as 1 for all 3 categories are in best condition and are therefore at lowest priority and the slum pockets which have final range code as 3 for all 3 categories are in worst condition and are therefore at highest priority. Rest all slums fall in between these 2 matrix categories.

The Results of 3X3X3 Matrix analysis and resulting interventions needed are presented in the **Table 4-30, Figure 4-50, Figure 4-51 and Figure 4-52 below** and a detailed slum wise analysis is presented in **Appendix – C – Dwg No – 14 and 15 and Volume – II – Annexure E**. The Number of Slums falling in the various categories are presented in **Table 4-30 below**. Further as per the results of 3X3X3 Matrix Categories and based on the combined analysis of Tenability of Slums, Tenure status of Slum Households, Land Ownership of Slums, Density of Slums and Land Value of Slums the slums may be categorized for various requisite interventions





Table 4-30 Results of 3X3X3 Matrix Analysis for Assessment of Housing, Infrastructure and Socio-economic Condition of Slums

Final Range Code			Matrix Category	No of Slums	Inference
Socio-Economic	Infrastructure	Housing			
1	1	1	1	3	Capable/Sound in All
2	1	1	2	52	Medium in Poverty and Sound in others
1	1	2	3	0	Medium in Housing and Sound/Capable in others
1	2	1	4	0	Medium in Infrastructure and Sound/Capable in others
2	1	2	5	7	Sound in Infrastructure and Medium in others
2	2	1	6	29	Sound in Housing and Medium in others
1	2	2	7	0	Capable in Poverty and Medium in others
3	1	1	8	57	Vulnerable in Poverty and Sound in others
1	1	3	9	0	Vulnerable in Housing and Sound/Capable in others
1	3	1	10	0	Vulnerable in Infrastructure and Sound/Capable in others
3	1	2	11	10	Sound in Infrastructure, Medium in Housing and Vulnerable in Poverty
3	2	1	12	23	Sound in Housing, Medium in Infrastructure and Vulnerable in Poverty
2	1	3	13	0	Sound in Infrastructure, Medium in Poverty and Vulnerable in Housing
2	2	2	14	4	Medium in all
1	2	3	15	0	Vulnerable in Housing, Medium in Infrastructure and Capable in Poverty
2	3	1	16	2	Vulnerable in Infrastructure, Medium in Poverty and Sound in Housing
1	3	2	17	0	Vulnerable in Infrastructure, Medium in Housing and Capable in Poverty
3	2	2	18	14	Vulnerable in Poverty and Medium in others
2	2	3	19	5	Vulnerable in Housing and Medium in others
2	3	2	20	2	Vulnerable in Infrastructure and Medium in others
3	1	3	21	1	Sound in Infrastructure and Vulnerable in others
3	3	1	22	5	Sound in Housing and Vulnerable in others



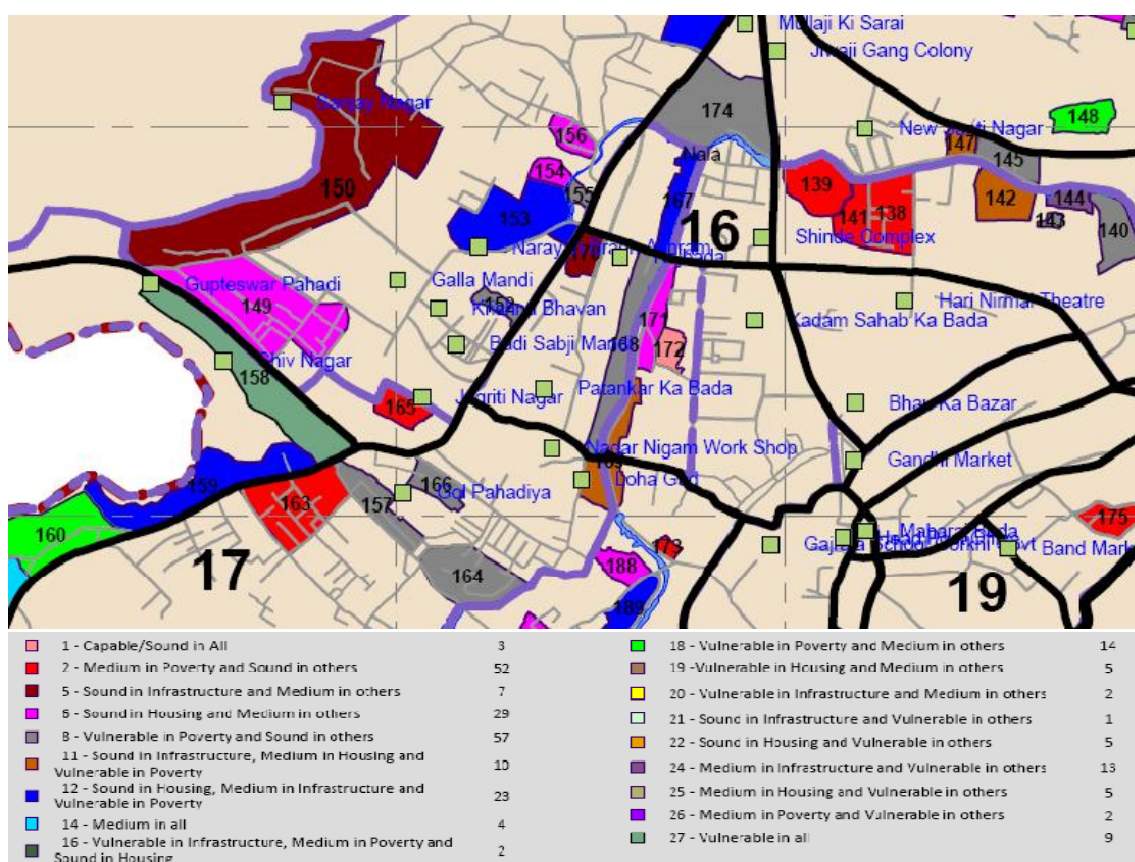


Table 4-30 Results of 3X3X3 Matrix Analysis for Assessment of Housing, Infrastructure and Socio-economic Condition of Slums

Final Range Code			Matrix Category	No of Slums	Inference
Socio-Economic	Infrastructure	Housing			
1	3	3	23	0	Capable in Poverty and Vulnerable in Other
3	2	3	24	13	Medium in Infrastructure and Vulnerable in others
3	3	2	25	5	Medium in Housing and Vulnerable in others
2	3	3	26	2	Medium in Poverty and Vulnerable in others
3	3	3	27	9	Vulnerable in all

Source: Analysis

Figure 4-50 Sample Results of 3X3X3 Matrix Analysis



Source: Analysis



3.9.6 3 X 3 X 3 Matrix Resulting Interventions

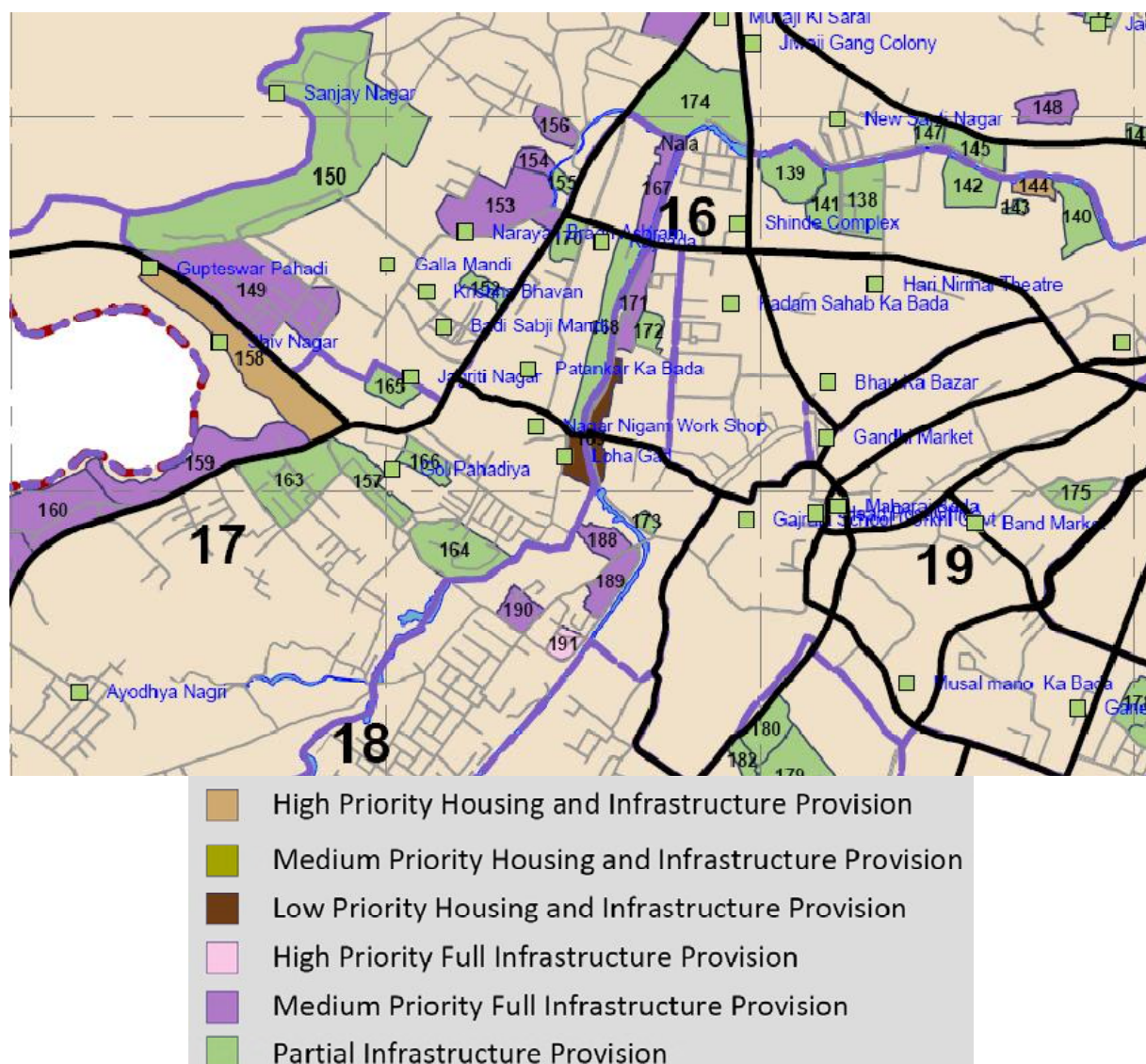
The Categorization based on 3X3X3 Matrix analysis of Slum Pockets was used in identification of required interventions and their priority, which has helped in Development Strategies and Implementation Priority in addition to other Analysis.

Figure 4-51 Results of 3X3X3 Matrix Analysis for Assessment of Housing, Infrastructure and Socio-economic Condition of Slums

Source: Analysis



Figure 4-52 Sample 3X3X3 Matrix Resulting Interventions Needed for Existing Slums



Source: Analysis





Development of Strategies and Prioritization – Chapter

5





Development of Strategies and Prioritization - Chapter

5

5.1 Development of Strategies

The strategy has been developed based on the analysis of Tenability of Slums and 3X3X3 Matrix analysis conducted for assessment of Housing, Infrastructure and Socio-economic Condition. A Prevention Strategy was also identified as per the study of City Profile, Housing Scenario and Urban Development and Governance Framework and Regulations. The strategy aims at bringing about an overall development in improving the quality of life of entire Slum population in Gwalior.

5.1.1 Goal

The strategy aims at providing a permanent and secure place for the slum and squatter Households to reside and have a destination. The strategy provides a common forum to address all the socio-economic problems of the slums and squatter settlements with the involvement of the community for a sustainable future. A city with minimum slums and squatters will not only lead to vital transformation in all social and economic indicators of development, but will also help to make Gwalior a healthier and a cleaner city for the generations to come. Increasing control of people over the processes of decision making through systems of community building and interface are the only true sustainable solutions

5.1.2 Objectives

The Strategies seeks to achieve the following objectives

Access to secure land tenure

Slums and Squatters develop because access to affordable land is denied to the under privileged section of Society. They do not have an access to the formal housing, which is why they seek informal housing. Once the land and housing become affordable and easily accessible, the phenomenon of squatting will automatically get curbed.

Reduction of Housing Poverty

Housing is an asset. It is a fundamental right. Housing poverty refers to the people who are denied housing because its supply does not match the demand and the right kind of affordable housing is not available in the market. Housing poverty is a human problem arising out of economic distress. The migration stream will continue for the next two decades especially from economically backward areas. The inflows therefore must be regulated through planned expansion of the city, away from the core.





Shelter Improvement

The strategies not only aims at reduction of housing poverty but also towards improvement of the existing shelters by giving grant and loans through various programmes and schemes.

Access to Basic Services

Basic urban services that are considered bare minimum for a healthy living like water supply, sanitation, roads, solid waste disposal, etc. should be made accessible. Basic services are crucial for human capital development and poverty reduction. Improved access to social services would help in building up capacity of the poor and empowering the Slum Households to improve their own living condition and quality of life.

Integration with planning system

The objective of the strategies is to integrate the slums and squatter settlements with the formal planning system and not alienate them.

5.1.3 Strategies Identified

The Proposed Strategies are clubbed in to four categories and were assigned to every slum based on the categorization done earlier on. The various strategies are

- Relocation Strategy
- In Situ Upgradation and Improvement Strategy
- In-Situ Redevelopment Strategy
- Prevention Strategy

The Proposed strategies of In Situ Upgradation and Improvement Strategy and In-Situ Redevelopment Strategy also have some slums where they need to be partially relocated due to Part Tenability in the case of In Situ Upgradation and Improvement Strategy and due to High density above permissible densities of existing Households in the case of In-Situ Redevelopment Strategy.

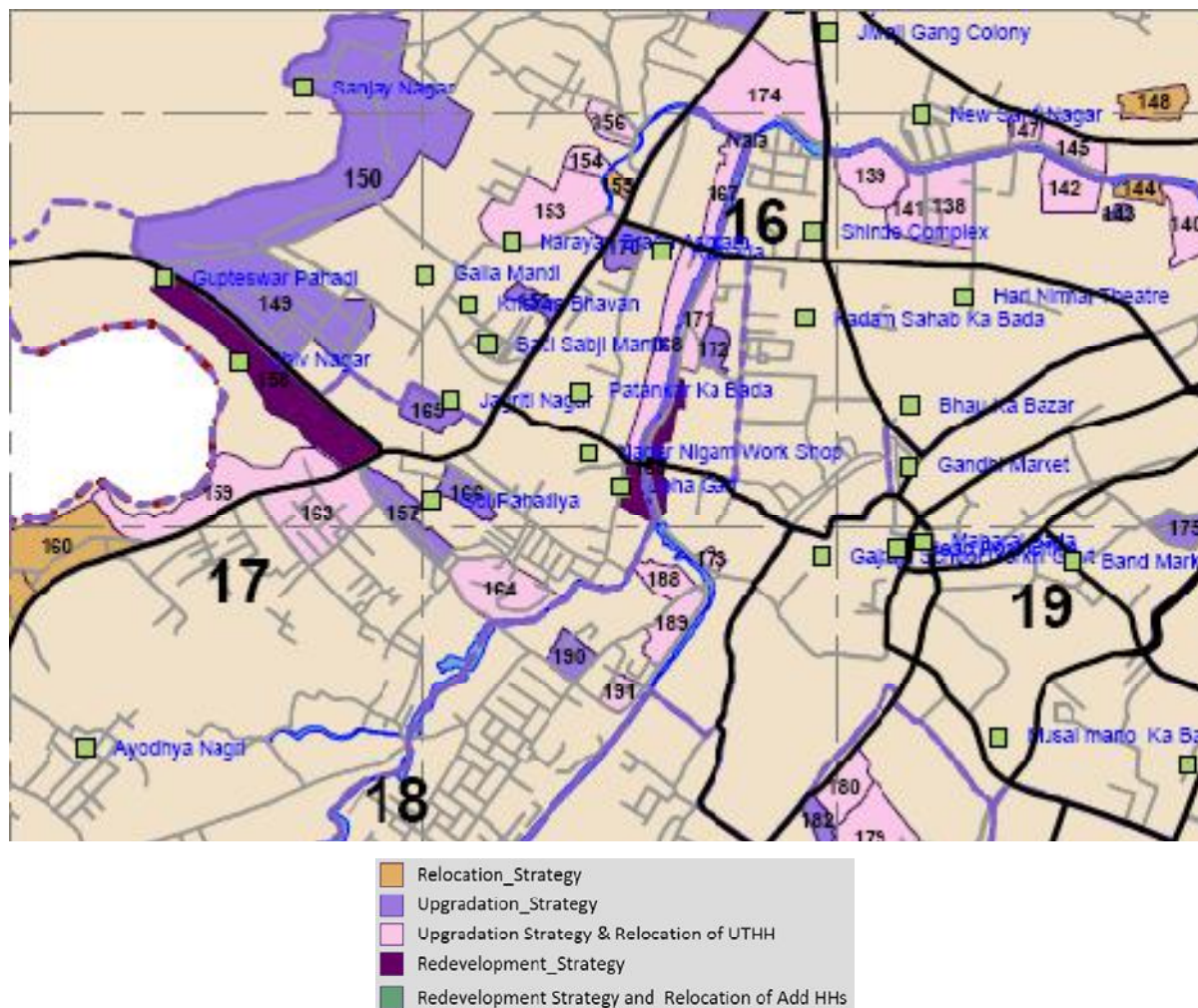
5.2 Proposed Strategies

The Assignment of strategies for every slum in Gwalior are presented in the **Figure 5-53 and Table 5-31 below** and a detailed slum wise Strategies Assigned are presented in **Appendix – C – Dwg No – 16 and Volume – II – Annexure G**. Out of 243 Existing Slum Pockets in Gwalior 9 Slum Pockets have been assigned Relocation Strategy 119 Slum Pockets have been assigned In Situ Upgradation and Improvement Strategy out of which 80 also involve Relocation of un-Tenable Households, and 35 Slum Pockets have been assigned with In-Situ Redevelopment Strategy out of which two slums are High Density Slums where additional Households above the permissible Density are to be relocated.





Figure 5-53 Sample Assignment of Strategies to slums in Gwalior



Source: Analysis

Table 5-31 Assignment of Strategies for slums in Gwalior

S N	Proposed Strategies	No of Households	No of Slums
1	Relocation Strategy	2309	9
2	In Situ Upgradation and Improvement Strategy	53457	119+80
3	In-Situ Redevelopment Strategy	8306	33+2
	Total	64072	243

Source: Analysis





5.2.1 Relocation Strategy

Relocation Strategy has been chosen for Un-Tenable Slums and Un-Tenable Households of Partially Tenable Slums. There are 9 Slums which need to be wholly relocated and there are 82 Slums of which some of the Households need to be relocated due to them located on un-tenable area or the slums have high density and some of the Households need to be relocated as they can't be accommodated at the same site in Redevelopment.

Thus the Total No of Households under Relocation strategy are; Complete Slum Relocation of 2309 Households from 9 un-tenable Slums and Partial Slum Relocation of 82 partially tenable Slums with 5446 Households falling on un-Tenable Area.

5.2.2 In Situ Up gradation and Improvement Strategy

In Situ Up gradation and Improvement Strategy has been chosen for Tenable Slums and Tenable Households from Partially Tenable Slums with predominant Pucca Structures and Poor/average Infrastructure. There are 199 such Slums which need to be upgraded with the Total Households of 53457. Out of the Total 53457 Households in which 7374 Households spread across 133 slums, have kutcha Houses thus they need Housing along with Infrastructure and proposed to be provided with Gap Filling Housing.

5.2.3 In-Situ Redevelopment Strategy

In Situ Redevelopment Strategy has been chosen for Tenable Slums and Partially Tenable slums with predominant Kutcha Structures and Poor Infrastructure. There are 35 such Slums which need to be redeveloped with the Total Households of 8306. Out of the Total 8306 Households, 970 Households spread across 9 slums of the total 35 slums, have pucca Houses thus they need Infrastructure only. While there are around 826 Households in partially tenable slum location or high density slums which need to be relocated in nearby redevelopment or relocation site which has been included in Relocation Strategy. Rest 6510 Households need both Infrastructure and Housing.

5.2.4 Prevention Strategy

Preventions Strategy involves actions by State Government and Urban Local Bodies (i.e. GMC, GDA & MPHB) so that slums are not created in future. Under the Prevention strategy apart from statutory and regulatory reforms required through state level policy interventions, options have been developed to be implemented by GDA, GMC or MPHB through their schemes. The Proposed Option is Creation of affordable housing and disposal of the same to target groups. The need for affordable housing has been derived from existing Housing scenario of Gwalior and its Housing Demand Assessment.

The Prevention Strategy is proposed to be implemented by Municipal Corporation and other Parastatal Agencies like Development Authority, Housing Board etc. in an Integrated





manner. The Creation and Disposal of Affordable Housing Units for EWS and LIG are worked out on the basis of Demand Calculations in Chapter 4

Preventive strategy aims to

- Restrict\ prevent the formation of slums in future,
- Correcting the supply and demand constraints in the housing market for Urban Poor.

The aims of Prevention strategy may be achieved through Direct Interventions for increasing Affordable Housing Stock as well as regulatory interventions to ensure supply of Affordable housing to EWS and LIG. As per the Housing Demand Assessment Gwalior requires about 8000 to 9000 Housing Units per Year during 2014-18, of which 2500 to 3000 per Year is for EWS and LIG.

The Prevention Strategy is proposed to be implemented through

- Ensuring Affordable Housing stock by way of Reservations under Madhya Pradesh Nagar Palika (Registration of Colonizer, Terms and Condition) Rules, 1998
 - Colonizer has to Reserve 15% of the Dwelling units for EWS and LIG, further the Proportion of EWS and LIG Dwelling Units are required to be provided in the ratio of 3:2. So out of total housing Demand,
 - Thus 15% of the 9000 Housing Units i.e. 1350 Housing Units will be catered by Private Developer, Gwalior Development Authority and Madhya Pradesh Housing Board in their Schemes.
 - This accounts for 45% of Affordable Housing Units Demand for EWS and LIG

The Remaining 1650 odd Affordable Housing Units (55% of Affordable Housing Units Demand for EWS and LIG) are proposed to be created through special Projects for Urban Poor as Rental Housing and Affordable Housing Projects under RAY.

- **Rental Housing**
 - 20% of Affordable Housing Units Demand for EWS and LIG as Rental Housing to be implemented by Gwalior Municipal Corporation
- **Special Affordable Housing Projects**
 - Remaining 40% of Affordable Housing Units Demand for EWS and LIG as Special Affordable Housing Projects/ Schemes to be implemented by Gwalior Development Authority and Madhya Pradesh Housing Board

5.3 Development of Options

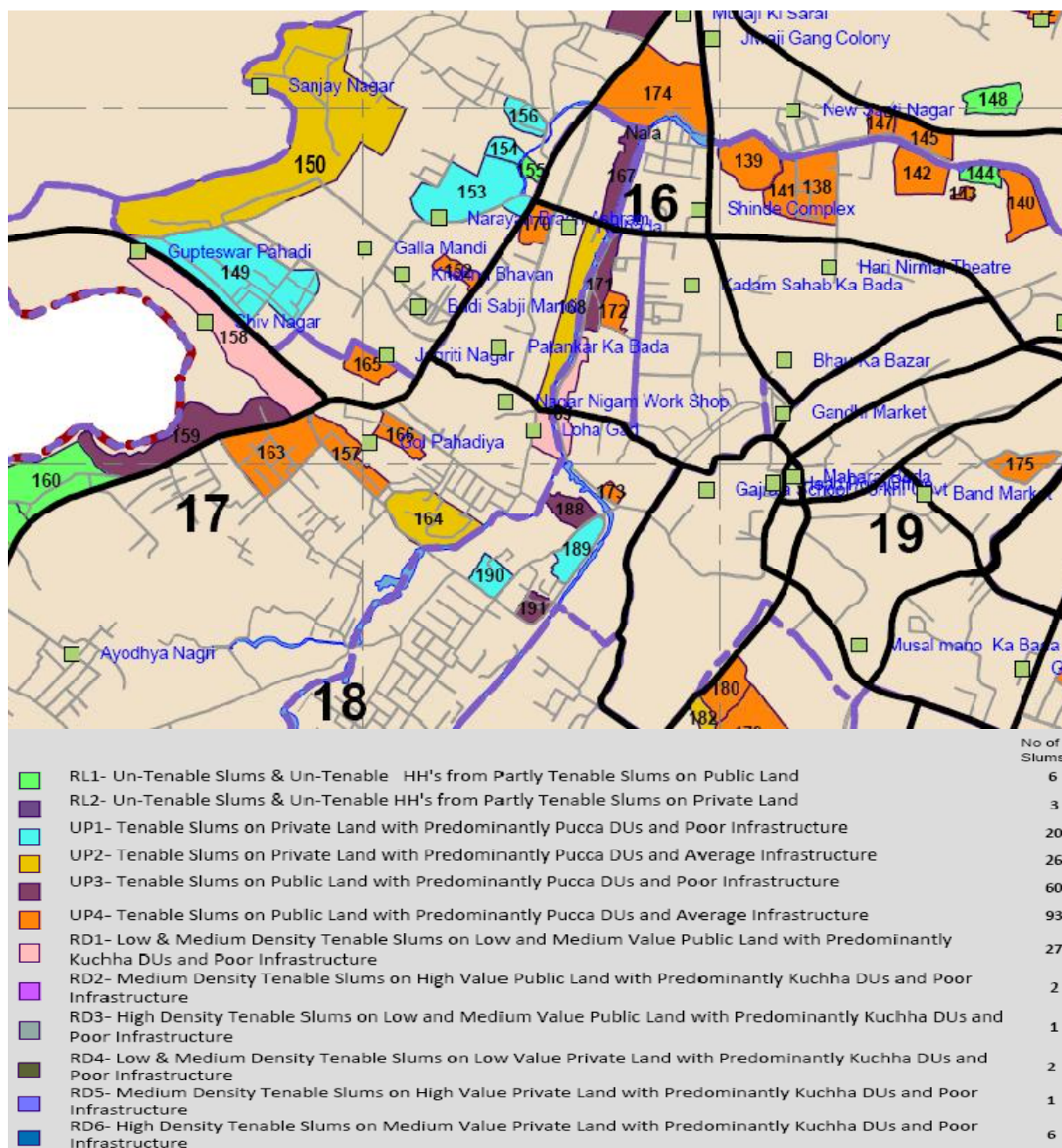
Various Options were identified for every slum under abovementioned different strategies based on the Categorization as per Strategies Assigned, Land Ownership of Slum Pockets, Residential/Tenable Area Density of the Slum Pockets and Land Value of the Slum Pockets. While under Prevention Strategy Options were identified to create Housing Stock for Economically Weaker Section.

Figure 5-54 Sample Identification of Options under Various Strategies for slums in Gwalior





Figure 5-54 Sample Identification of Options under Various Strategies for slums in Gwalior



The Identification of Options for every slum in Gwalior under Various Strategies are presented in the **Figure 5-54** above and a detailed slum wise Options under various Strategies are presented in **Appendix – C – Dwg No – 17** and **Volume – II – Annexure G**. Out of 243 Existing Slum Pockets in Gwalior 6 Slum Pockets have been Identified for RL-1 Option under Relocation Strategy, 3 Slum Pockets have been Identified for RL-2 Option under Relocation Strategy, 20 Slum Pockets have been Identified for UP-1 Option under In Situ Upgradation and Improvement Strategy, 26 Slum Pockets have been Identified for UP-2





Option under In Situ Upgradation and Improvement Strategy, 60 Slum Pockets have been Identified for UP-3 Option under In Situ Upgradation and Improvement Strategy, 93 Slum Pockets have been Identified for UP-4 Option under In Situ Upgradation and Improvement Strategy, 27 Slum Pockets have been Identified for RD-1 Option under In-Situ Redevelopment Strategy, 2 Slum Pockets have been Identified for RD-2 Option under In-Situ Redevelopment Strategy, 1 Slum Pocket has been Identified for RD-3 Option under In-Situ Redevelopment Strategy, 2 Slum Pockets have been Identified for RD-4 Option under In-Situ Redevelopment Strategy and 1 each Slum Pockets have been Identified for RD-5 & RD-6 Options respectively under In-Situ Redevelopment Strategy.

5.3.1 Options identified under Relocation Strategy

Based on Ownership of Land the Options Developed under the Relocation Strategy are

- **RL1 - Un-tenable slums and Untenable Households from partially Tenable Slums on Public Land**
- **RL2 - Un-tenable slums and Untenable Households from partially Tenable Slums on Private Land**

The Details of the Development Options under the Relocation Strategy are presented in **Table 5-32**.

Table 5-32 Proposed Options under Relocation Strategy		
Option/Particulars	RL-1	RL-2
No of Slums	6+61	3+19
No of HHs	1379	930
No of Relocation HHs	3827	793
Tenability	Un-tenable Slums & Un-tenable HHs from Partially Tenable Slums	Un-tenable Slums & Un-tenable HHs from Partially Tenable Slums
Land Ownership	Public	Private
Slum Type	Slums which are Un-tenable and Untenable Households from Partly Tenable Slums Identified for INFRA Upgradation Only	Slums which are Un-tenable and Untenable Households from Partly Tenable Slums Identified for INFRA Upgradation Only
Action	Provision of Housing and Basic Services to all Households up to Permissible Density in the Proposed Redevelopment Sites and BSUP JNNURM Housing and Rest in Resettlement Sites within Zone (Model-RL-2)	Provision of Housing and Basic Services to all Households in Resettlement Sites Within the Zone
Agency	Public	Public





Table 5-32 Proposed Options under Relocation Strategy

Option/Particulars	RL-1	RL-2
Central Government support	Share in Housing and Infrastructure Cost	Share in Housing and Infrastructure Cost
State/ULB Support	Share in Housing and Infrastructure Cost	Share in Housing and Infrastructure Cost
Beneficiary Contribution	Marginal Contribution in Housing and Infrastructure cost	Marginal Contribution in Housing and Infrastructure cost

5.3.2 Options identified under In Situ Upgradation and Improvement Strategy

Based on Ownership of Land and the Infrastructure Condition, the Options Developed under the In Situ Upgradation and Improvement Strategy are

- **UP1 - Tenable/Partially Tenable Slums on Private Land with Predominantly Pucca Dwelling Units and Poor Infrastructure**
- **UP2 - Tenable/Partially Tenable Slums on Private Land with Predominantly Pucca Dwelling Units and Average Infrastructure**
- **UP3 - Tenable/Partially Tenable Slums on Public Land with Predominantly Pucca Dwelling Units and Poor Infrastructure**
- **UP4 - Tenable/Partially Tenable Slums on Public Land with Predominantly Pucca Dwelling Units and Average Infrastructure**

The Details of the Development Options under the In Situ Upgradation and Improvement Strategy are presented in **Table 5-33 and Table 5-34.**

Table 5-33 Proposed Options under In Situ Upgradation and Improvement Strategy

Option/Particulars	UP-1	UP-2
No of Slums	20	26
No of HHs	4552	7438
No of Relocation HHs	188	605
No of Gap Filling Housing Needed	752	1264
Tenability	Tenable Slums and Tenable HHs from Partly Tenable Slums	Tenable Slums and Tenable HHs from Partly Tenable Slums
Land Ownership	Private	Private
Slum Type	Slums with predominantly pucca DU's and Poor Infrastructure and Basic Service Delivery	Slums with predominantly pucca DU's and Average Infrastructure and Basic Service Delivery





Table 5-33 Proposed Options under In Situ Upgradation and Improvement Strategy

Option/Particulars	UP-1	UP-2
Action	Provision of Basic Services to all Tenable Households, Gap Filling Housing for Kutcha Tenable Dwelling Units and Relocation for un-tenable Households as per (Model-RL-2)	Provision of Partial Basic Services to all Tenable Households, Gap Filling Housing for Kutcha Tenable Dwelling Units and Relocation for untenable Households as per (Model-RL-2)
Agency	Public	Public
Central Government support	Share in Infrastructure Cost and 5% interest subsidy on housing loan for upgradation of remaining kutcha/Kutcha/Semipucca DU's	Share in Infrastructure Cost and 5% interest subsidy on housing loan for upgradation of remaining kutcha/Kutcha/Semipucca DU's
State/ULB Support	Share in Infrastructure Cost	Share in Infrastructure Cost
Beneficiary Contribution	Marginal Contribution in Infrastructure cost and Subsidised loan for incremental housing for remaining Kutcha/Semipucca DU's	Marginal Contribution in Infrastructure cost and Subsidised loan for incremental housing for remaining Kutcha/Semipucca DU's

Table 5-34 Proposed Options under In Situ Upgradation and Improvement Strategy

Option/Particulars	UP-3	UP-4
No of Slums	60	93
No of HHs	13895	22952
No of Relocation HHs	1853	1974
No of Gap Filling Housing Needed	2155	3203
Tenability	Tenable Slums and Tenable HHs from Partly Tenable Slums	Tenable Slums and Tenable HHs from Partly Tenable Slums
Land Ownership	Public	Public
Slum Type	Slums with predominantly pucca DU's and Poor Infrastructure and Basic Service Delivery	Slums with predominantly pucca DU's and Average Infrastructure and Basic Service Delivery
Action	Provision of Basic Services to all Tenable Households, Gap Filling Housing for Kutcha Tenable Dwelling Units and Relocation for un-tenable Households as per (Model-RL-	Provision of Partial Basic Services to all Tenable Households, Gap Filling Housing for Kutcha Tenable Dwelling Units and Relocation for untenable Households as





Table 5-34 Proposed Options under In Situ Upgradation and Improvement Strategy

Option/Particulars	UP-3	UP-4
	2)	per (Model-RL-2)
Agency	Public	Public
Central Government support	Share in Infrastructure Cost and 5% interest subsidy on housing loan for upgradation of remaining kutcha/Kutcha/Semipucca DU's	Share in Infrastructure Cost and 5% interest subsidy on housing loan for upgradation of remaining kutcha/Kutcha/Semipucca DU's
State/ULB Support	Share in Infrastructure Cost	Share in Infrastructure Cost
Beneficiary Contribution	Marginal Contribution in Infrastructure cost and Subsidized loan for incremental housing for remaining Kutcha/Semipucca DU's	Marginal Contribution in Infrastructure cost and Subsidized loan for incremental housing for remaining Kutcha/Semipucca DU's

5.3.3 Options identified under In Situ Redevelopment Strategy

Based on Residential Density/Tenable Area Density of Slums, Ownership of Land of Slum and the Land Value of the Land of Slum, the Options Developed under the In Situ Upgradation and Improvement Strategy are

- **RD1 - Low and Medium Density Tenable Slums on Low and Medium Value Public Land with Predominantly Kaccha Dwelling Units and Poor Infrastructure**
- **RD2 - Medium Density Tenable Slums on High Value Public Land with Predominantly Kaccha Dwelling Units and Poor Infrastructure**
- **RD3 - High Density Tenable Slums on Medium and Low Value Public Land with Predominantly Kaccha Dwelling Units and Poor Infrastructure**
- **RD4 – Low and Medium Density Tenable Slums on Low Value Private Land with Predominantly Kaccha Dwelling Units and Poor Infrastructure**
- **RD5 - Medium Density Tenable Slums on High Value Private Land with Predominantly Kaccha Dwelling Units and Poor Infrastructure**
- **RD6 - High Density Tenable Slums on Medium Value Private Land with Predominantly Kaccha Dwelling Units and Poor Infrastructure**

The Details of the Development Options under the In Situ Redevelopment Strategy are presented in **Table 5-35** and **Table 5-36**.

Table 5-35 Proposed Options under In Situ Redevelopment Strategy

Option/Particulars	RD-1	RD-2	RD-3
No of Slums	27	3	1





Table 5-35 Proposed Options under In Situ Redevelopment Strategy

Option/Particulars	RD-1	RD-2	RD-3
No of HHs	5646	343	150
No of Relocation HHs	NA	NA	35
Less Pucca HHs which need INFRA Only	534	64	0
Tenability	Tenable and Partly Tenable Slums	Tenable and Partly Tenable Slums	Tenable and Partly Tenable Slums
Density	Low and Medium	Medium	High
Land Value	Low and Medium	High	Medium and Low
Land Ownership	Public	Public	Public
Slum Type	Slum with Predominantly Kutcha DU's and Poor Infrastructure	Slum with Predominantly Kutcha DU's and Poor Infrastructure	Slum with Predominantly Kutcha DU's and Poor Infrastructure
Action	Provision of Housing and Basic Services to all Households up to Permissible Density where additional houses if needed may be relocated from (Model-RL-1). Where more than 25% of Households or 50 Households (which ever is low) are living in Pucca Households for which Pucca Tenable DU's will be provided with Basic Services Only	Provision of Housing and Basic Services to all Households. Where more than 25% of Households or 50 Households (which ever is low) are living in Pucca Households for which Pucca Tenable DU's will be provided with Basic Services Only. The Rest of the FAR Up to permissible Density may be provided to Private Partner for Sale in Open Market in the form of Built-up or TDR	Provision of Housing and Basic Services to all Households up to Permissible Density where additional houses if needed may be relocated in other RD Sites within Zones under (Model RD-1). Where more than 25% of Households or 50 Households (which ever is low) are living in Pucca Households for which Pucca Tenable DU's will be provided with Basic Services Only
Agency	Public	PPP	Public
Central Government support	Share in Housing and Infrastructure Cost	Viability Gap Funding	Share in Housing and Infrastructure Cost
State/ULB Support	Share in Housing and Infrastructure Cost	Land Availability; Zoning/FSI Incentives including TDR	Share in Housing and Infrastructure Cost
Role of Private Developer	NA	Bid based on No. of Free Houses (Ownership/ Rental) offered	NA
Beneficiary Contribution	Marginal Contribution in Housing and	Marginal Contribution in Housing and	Marginal Contribution in





Table 5-35 Proposed Options under In Situ Redevelopment Strategy

Option/Particulars	RD-1	RD-2	RD-3
	Infrastructure cost	Infrastructure cost	Housing and Infrastructure cost

Table 5-36 Proposed Options under In Situ Redevelopment Strategy

Option/Particulars	RD-4	RD-5	RD-6
No of Slums	2	1	1
No of HHs	191	405	1571
No of Relocation HHs	NA	NA	791
Less Pucca HHs which need INFRA Only	0	89	283
Tenability	Tenable and Partly Tenable Slums	Tenable and Partly Tenable Slums	Tenable and Partly Tenable Slums
Density	Low and Medium	Medium	High
Land Value	Low	High	Medium
Land Ownership	Private	Private	Private
Slum Type	Slum with Predominantly Kutcha DU's and Poor Infrastructure	Slum with Predominantly Kutcha DU's and Poor Infrastructure	Slum with Predominantly Kutcha DU's and Poor Infrastructure
Action	Provision of Housing and Basic Services to all Households. Where more than 25% of Households or 50 Households (which ever is low) are living in Pucca Households for which Pucca Tenable DU's will be provided with Basic Services Only. The Rest of the FAR Up to permissible Density may be provided to Private Partner for Sale in Open Market in the form of Built-up or TDR	Provision of Housing and Basic Services to all Households. Where more than 25% of Households or 50 Households (which ever is low) are living in Pucca Households for which Pucca Tenable DU's will be provided with Basic Services Only. The Rest of the FAR Up to permissible Density may be provided to Private Partner for Sale in Open Market in the form of Built-up or TDR	Provision of Housing and Basic Services to all Households up to Permissible Density rest households if needed may be relocated in other RD Sites within Zones under (Model RD-1). Where more than 25% of Households or 50 Households (which ever is low) are living in Pucca Households for which Pucca Tenable DU's will be provided with Basic Services Only. Private Partner may be provided with Viability Gap Funding and additional FAR in form of TDR for Sale





Table 5-36 Proposed Options under In Situ Redevelopment Strategy

Option/Particulars	RD-4	RD-5	RD-6
			in Open Market.
Agency	PPP	PPP	PPP
Central Government support	Viability gap Funding	NA	Viability gap Funding
State/ULB Support	Land Availability; Zoning/FSI Incentives including TDR	Land Availability; Zoning/FSI Incentives including TDR	Land Availability; Zoning/FSI Incentives including TDR
Role of Private Developer	Bid based on No. of Free Houses (Ownership/ Rental) offered and Benefit to Private Owner	Bid based on No. of Free Houses (Ownership/ Rental) offered and Benefit to Private Owner	Bid based on No. of Free Houses (Ownership/ Rental) offered and Benefit to Private Owner
Beneficiary Contribution	Marginal Contribution in Housing and Infrastructure cost	Marginal Contribution in Housing and Infrastructure cost	Marginal Contribution in Housing and Infrastructure cost

5.3.4 Options identified under Prevention Strategy

Options Developed under the Prevention Strategy apart from the statutory and regulatory interventions required through state level policy interventions are

- **PR1 – Creation of Affordable Housing Stock to keep pace with the growing Housing Need of EWS on Public Housing Schemes**
- **PR2 - Creation of Affordable Housing Stock to keep pace with the growing Housing Need of EWS in Public Private Partnership**

The Details of the Development Options under the Prevention Strategy are presented in **Table 5-37**.

Table 5-37 Proposed Options under Prevention Strategy

Option/Particulars	PR-1	PR-2
No of HHs	6000	6000
Land Ownership	Public	Private
Agency	Public	Private
Central Government support	Viability Gap Funding and Share in Housing and Infrastructure Costs per unit of Affordable House, 5% Interest Subsidy on Housing Loan	Share in Housing and Infrastructure Costs per unit of Affordable House, 5% Interest Subsidy on Housing Loan
State/ULB Support	Land Share in Housing and	Land Availability, Zoning/FSI





Table 5-37 Proposed Options under Prevention Strategy

Option/Particulars	PR-1	PR-2
	Infrastructure Costs per unit of Affordable House	Incentives including TDR, external development where required
Private Developers Role	NA	Bid based on No. of Free Houses (Ownership/ Rental) offered
Beneficiary Contribution	Subsidised Housing and Infrastructure cost	Subsidised Housing and Infrastructure cost

5.4 Prioritization of Slums

Slums were prioritised for Implementation and phased in five years based on the criteria's Identified for Priority and The Capital Investment incurred for the Proposed Interventions so that the entire capital Investment shall be distributed evenly among five years.

5.4.1 Criteria's for Prioritization of Slums

Criteria for Prioritisation under Relocation Strategy

- Ownership of Slums – Public Owned Land slums will have more priority than Other Ownership
- Tenure Status of Households in Slum - In-secure Tenure Households are more vulnerable hence will be implemented in priority than semi secure tenure and secure tenure households
- Willingness of Slum Community gathered through FGD's

Criteria for Prioritisation under In Situ Up gradation and Improvement Strategy

- Tenure Status of Households in Slum - In-secure Tenure Households are more vulnerable hence will be implemented in priority than semi secure tenure and secure tenure households
- Ownership of Slums – Public Owned Land slums will have more priority than Other Ownership
- 3X3X3 Matrix Conditions Status – Priority on the basis of Vulnerability
- Existing Trunk Infrastructure Availability – Priority to slums having connectivity to City Level Trunk Infrastructure of Water Supply, Sanitation and Road Connectivity.
- Willingness of Slum Community gathered through FGD's

Criteria for Prioritisation under In Situ Redevelopment Strategy





- Tenure Status of Households in Slum - In-secure Tenure Households are more vulnerable hence will be implemented in priority than semi secure tenure and secure tenure households
- Ownership of Slums – Public Owned Land slums will have more priority than Other Ownership
- 3X3X3 Matrix Conditions Status – Priority on the basis of Vulnerability
- Existing Trunk Infrastructure Availability – Priority to slums having connectivity to City Level Trunk Infrastructure of Water Supply, Sanitation and Road Connectivity.
- Willingness of Slum Community gathered through FGD's

The Phasing of Investment as per the Prioritisation under abovementioned Criteria's is presented in Chapter - 6 and in **Appendix – C – Dwg No – 18, 19, 20, 21 and Volume – II – Annexure H and J.**

VACANT LAND INVENTORY

Public Vacant Land has been identified in the vicinity of few slums. The Khasra/ Patwari maps were obtained for the selected slum and its 1 kms (approx.) surrounding area. Each Khasra belonging to this selected area were checked for the ownership with the Nazul records and its land utilization was identified either physically or on satellite imagery.

S.No.	Slum Name	Ward Number	Patwari Gram	Area of Slum (Ha)	Area of Available Vacant Land (Ha)
1	Harkheda	60	Mehra	9.004	152.477
2	Sharma farm No. 3	7	Sewage Farm, Jagnapura	1.967	56.926
3	Loharpur	18	Loharpur (Murar)	4.232	147.129
4	Vickey factory	59	Mehelgaon	5.893	181.282
5	Kote Ki Sarai	60	Bhatkhedi	1.369	85.165
6	KisanBagh	5	Akbarpur	4.399	11.833
7	Gram bara	15	Bara	1.808	146.501
7	Jati ki Lane	37	Goshpura	6.533	196.86
8	Nimbaji Ki Kho	4	KotaLashkar	0.996	60.637
9	Mewati Mohalla	60	Bahodapur	13.273	47.316
10	Scindhia Nagar	1	Mehelgaon	12.652	181.282
11	Krishna nagar	5	Malanpur (Rairu)	7.472	27.806
12	Kothi Gram	59	Kedarpur	4.324	112.456

It shall be noted that no government vacant land is available in immediate vicinity of any of the above slum.





Similarly, all vacant land will be identified as per the priority of slum in Slum Free City Plan of Action.

5.5 Reforms

As per the RAY Guidelines the Cities are required to implement following three Pro poor Reforms under JNNURM:

- **Internal earmarking within local body budgets for basic services to the urban poor.**
 - The Municipal Corporation has already started to earmark 25% of the Budget for Urban Poor
- **Conferment of Property Rights to Slum Dwellers including security of tenure at affordable prices, improved housing, water supply, sanitation and ensuring delivery of other already existing universal services of the government for education, health and social security**

5.6 MP has Patta Act since 1984 and on the same line the beneficiaries under RAY will be provided with Property Rights

- **Reservation of 20-25% of developed land in all housing projects (both public and private agencies) for EWS/LIG category with a system of cross-subsidization.**
 - MP has amended its Land Reservation Rules for EWS and LIG recently to make it 15% of the Dwelling units shall be reserved for EWS and LIG enforced on 19th April 2012

Apart from the JnNURM Pro-Poor Reforms Madhya Pradesh Government is also taking Initiatives in following Reforms

- Amendment to Rent Control Regulation to enable new rental housing stock
- Amendment to enactments governing Town Planning, Urban Development and Local Bodies and Land Assembly to ensure assembly at desired rate to improve housing supply for all sections of society and arrest the Housing Shortage.
- Simplification of the processes and procedures of sanctioning buildings and building byelaws concerning development and housing projects





Proposed Investment Plan and Phasing – Chapter

6





Proposed Investment Plan and Phasing - Chapter

6

6.1 Proposed Investment Plan for Existing Slums

The Detailed Proposed Investment Plan on Existing Slums in Gwalior has been in **Volume – II – Annexure H, I and J.**

6.1.1 Relocation of Slums

The Total Cost of Complete Slum Relocation of 2309 Households in 9 slums is **INR 159.93 Crores.**

6.1.2 In Situ up gradation and Improvement of Slums

The Total Cost of In-situ up gradation and Improvement of 53457 Households in 199 slums Including Relocation of 4620 Households from 80 Slums and Gap Filling Housing for 7374 Households who have kutchra Houses is **INR 1360.83 Crores.**

6.1.3 In-Situ Redevelopment of Slums

The Total Cost of In-situ Redevelopment of 6510 Households with Housing and Infrastructure and 970 Households with Infrastructure only and 826 Households need to be relocated due to high Density in 35 slums is **INR 527.69 Crores.**

Thus the Capital Investment needed for Existing Slums in Gwalior is to the Tune of **INR 2048.45 Crores.**

6.2 Investment on Preventive Strategy

6.2.1 Creation of Affordable Housing for LIG and EWS category

The cumulative need of Affordable Housing for LIG and EWS Category Units during next five years at the rate of 1150 units per year is 5750 Units, which will cost around **INR 502.24 Crores**

6.2.2 Creation of Rental Housing EWS category

The cumulative need of Rental Housing for EWS Category Units during next five years at the rate of 500 units per year is 2500 Units, which will cost around **INR 173.91 Crores**

Thus, The cumulative need Creating Housing Stock as Preventive Strategy during next five years at the rate of 1650 units per year is 8250 Units, which will cost around **INR 676.14 Crores**

6.3 Phasing of Investment as per the Priority

The Total Capital Investment required to make Gwalior City Slum Free is **INR 2724.59 Crores.** The Total Investment has been phased in five years as per the Prioritisation Criteria's





mentioned in the Chapter – 5. The phasing of Entire Capital Investment of Slum Free City Plan of Gwalior is presented in **Table 6-38**.

The Entire phasing slums as per prioritisation and Investment is presented in **Appendix – C – Dwg No – 18, 19, 20, 21 and Volume – II – Annexure H and J**.

Table 6-38 Phasing of Capital Investment under the Slum Free City Plan for Gwalior		
S N	Year	Investment in INR Lakhs
1	First	53931.74
2	Second	54164.55
3	Third	54242.25
4	Fourth	55409.69
5	Fifth	54710.96
	Total	272459.19

6.3.1 Phasing of Investment on Existing Slums

The phasing of Capital Investment on Existing Slums of Gwalior is presented in **Table 6-39**.

Table 6-39 Phasing of Capital Investment on Existing Slums of Gwalior				
S N	Year	No of Slums	No of Households	Investment in INR Lakhs
1	First	42	10283	40408.83
2	Second	37	11353	40641.65
3	Third	61	11805	40719.34
4	Fourth	67	17599	41886.78
5	Fifth	36	13032	41188.06
	Total	243	64072	204844.66

6.3.2 Phasing of Investment on Relocation of Slums

The phasing of Capital Investment on Relocation of Slums of Gwalior is presented in **Table 6-40**.

Table 6-40 Phasing of Capital Investment on Relocation of Slums of Gwalior				
S N	Year	No of Slums	No of Households	Investment in INR Lakhs
1	First	4	507	3547.76
2	Second	1	493	3408.64





Table 6-40 Phasing of Capital Investment on Relocation of Slums of Gwalior

S N	Year	No of Slums	No of Households	Investment in INR Lakhs
3	Third	3	616	4236.67
4	Fourth	1	693	4799.92
5	Fifth	0	0	0.00
	Total	9	2309	15992.99

6.3.3 Phasing of Investment on in situ up gradation and improvement of slums

The phasing of Capital Investment on in situ upgradation and improvement of Slums of Gwalior is presented in **Table 6-41**.

Table 6-41 Phasing of Capital Investment on in situ Up gradation and Improvement of Slums of Gwalior

S N	Year	No of Slums	No of Households	Investment in INR Lakhs
1	First	28	8065	26733.89
2	Second	27	9322	27201.21
3	Third	52	9890	27378.76
4	Fourth	60	15434	27585.77
5	Fifth	32	10746	27183.26
	Total	199	53457	136082.89

6.3.4 Phasing of Investment on in situ Redevelopment of slums

The phasing of Capital Investment on in situ Redevelopment of Slums of Gwalior is presented in **Table 6-42**.

Table 6-42 Phasing of Capital Investment on in situ Redevelopment of Slums of Gwalior

S N	Year	No of Slums	No of Households	Investment in INR Lakhs
1	First	10	1711	10127.17
2	Second	9	1538	10031.80
3	Third	6	1299	9103.91
4	Fourth	6	1472	9501.10





Table 6-42 Phasing of Capital Investment on in situ Redevelopment of Slums of Gwalior

S N	Year	No of Slums	No of Households	Investment in INR Lakhs
5	Fifth	4	2286	14004.80
	Total	35	8306	52768.78

6.3.5 Phasing of Investment on Preventive Strategy in Gwalior

The phasing of Capital Investment on Preventive Strategy in Gwalior is presented in **Table 6-43**.

Table 6-43 Phasing of Capital Investment on Preventive Strategy under the Slum Free City Plan for Gwalior

S N	Year (Units)	Investment in INR Lakhs
1	First (1650 Units)	13522.91
2	Second (1650 Units)	13522.91
3	Third (1650 Units)	13522.91
4	Fourth (1650 Units)	13522.91
5	Fifth (1650 Units)	13522.91
	Total	67614.53

The phasing of Capital Investment on Preventive Strategy in Gwalior is presented in **Table 6-44**.

Table 6-44 Phasing of Capital Investment on Creation of Affordable Housing for LIG and EWS Category under the Slum Free City Plan for Gwalior

S N	Year (Units)	Investment in INR Lakhs
1	First (1150 Units)	10044.71
2	Second (1150 Units)	10044.71
3	Third (1150 Units)	10044.71
4	Fourth (1150 Units)	10044.71
5	Fifth (1150 Units)	10044.71
	Total	50223.53





The phasing of Capital Investment on Preventive Strategy in Gwalior is presented in **Table 6-45**

Table 6-45 Phasing of Capital Investment on Creation of Rental Housing for EWS Category under the Slum Free City Plan for Gwalior

S N	Year (Units)	Investment in INR Lakhs
1	First (500 Units)	3478.20
2	Second (500 Units)	3478.20
3	Third (500 Units)	3478.20
4	Fourth (500 Units)	3478.20
5	Fifth (500 Units)	3478.20
	Total	17391.00





Financing Strategies for Slum Free City Plan

- Chapter

7

7.1 Summary of Investment

The Total Investment requirement under the Slum Free City Plan of Gwalior Metropolitan Area is INR 2724.59 Crores. The investment has been classified as per various Strategies. Summary of Investment under Various strategies is shown in Table below.

Table 7-46 : Strategy wise Summary of Investments						
SN	Strategy	No of Slums	No of HHs/DUs	Implementation Strategy	Total (In Rs. Lakhs)	% Share
A	Curative Strategy					
1	In-Situ Upgradation and Improvement Strategy	199	53457	GMC	136082.89	49.95%
2	In-Situ Redevelopment Strategy	35	8306	GMC	52768.78	19.37%
3	In-Situ Relocation Strategy	9	2309	GMC	15992.99	5.87%
4	Total for Curative Strategy	243	64072		204844.66	75.18%
B	Prevention Strategy					
5	Rental Housing		7500	GMC	17391.00	6.38%
6	Affordable Housing		17800	GDA/MPHB	50223.53	18.43%
7	Total for Preventive Strategy		25300		67614.53	24.82%
8	Total Investment for Slum Free Gwalior				272459.19	100.00%

Out of the Total Investment requirement 75.18% of the Investment is proposed under Curative Strategy and rest 24.82% of the Investment is proposed under Preventive Strategy.

Out of the Total Investment requirement 81.57% of the Investment is to be implemented by Gwalior Municipal Corporation and rest 18.3 % of the Investment is proposed to be implemented by Parastatal Agencies like GDA/MPHB.

Out of the Total Investment requirement under Curative Strategy 47.54% is on Housing and 41.59% on Infrastructure. While out of Total Investment requirement under Preventive Strategy 16.64% is on Rental Housing, 11.31% is on Affordable Housing for EWS and 40.43%





on Affordable Housing for LIG. About 20.74% of the Total Investment Requirement under Preventive Strategy is on Infrastructure.

The Table Below shows Component wise Investment Requirement

Table 7-47 : Component wise Summary of Investments			
SN	Component	Total (In Rs. Lakhs)	% Share
A	Curative Strategy		
1	Housing – Slum Rehabilitation	97375.50	47.54%
2	Infrastructure – Physical and Social	85195.50	41.59%
3	Operation and Maintenance	3651.42	1.78%
4	DPR/PMC/Supervision and Quality Control Cost	9311.12	4.55%
5	Capacity Building Community Mobilization, Social Audit and TPIMA Cost	9311.12	4.55%
	Total for Curative Strategy	204844.66	100.00%
B	Prevention Strategy		
1	Housing – Rental	11250.00	16.64%
2	Housing – Affordable EWS	7650.00	11.31%
3	Housing – Affordable LIG	27337.50	40.43%
4	Infrastructure – Physical and Social	14025.00	20.74%
5	Operation and Maintenance	1205.25	1.78%
6	DPR/PMC/Supervision and Quality Control Cost	3073.39	4.55%
7	Capacity Building Community Mobilization, Social Audit and TPIMA Cost	3073.39	4.55%
	Total for Preventive Strategy	67614.53	100.00%
	Total Investment for Slum Free Gwalior	272459.19	

7.2 Phasing of Investment

The Total Investment has been phased in five years as per the Prioritisation Criteria's mentioned in the Chapter – 5. The Phasing of Investment yearly has been presented in table below





Table 7-48 : Phasing of Investment

S N	Strategy	Year wise Investment (In Rs. Lakhs)					Total (In Rs. Lakhs)
		1st Year	2nd Year	3rd Year	4th Year	5th Year	
A	Curative Strategy						
1	In-Situ Upgradation and Improvement Strategy	26733.89	27201.21	27378.76	27585.77	27183.26	136082.89
2	In-Situ Redevelopment Strategy	10127.17	10031.80	9103.91	9501.10	14004.80	52768.78
3	In-Situ Relocation Strategy	3547.76	3408.64	4236.67	4799.92	0.00	15992.99
	Total for Curative Strategy	40408.83	40641.65	40719.34	41886.78	41188.06	204844.66
B	Prevention Strategy						
5	Rental Housing	3478.20	3478.20	3478.20	3478.20	3478.20	17391.00
6	Affordable Housing	10044.71	10044.71	10044.71	10044.71	10044.71	50223.53
	Total for Preventive Strategy	13522.91	13522.91	13522.91	13522.91	13522.91	67614.53
	Total Investment for Slum Free Gwalior	53931.74	54164.55	54242.25	55409.69	54710.96	272459.19

7.3 Financing Strategies

Government of Madhya Pradesh has finalised financing Strategy for Implementation of the Slum Free City Plans. It has been decided that the Infrastructure Cost is States Responsibility which will have to borne by GoI, GoMP and ULB in ratio of 50:20:30 respectively while the 30% Local share of the Housing Cost will be borne by Beneficiaries.





7.3.1 Funding Sources

The Financial Arrangements for Implementation is proposed based on the RAY Guidelines and Provisions of Grants in it. The State Government has decided that the 30% share of Beneficiaries Housing will be borne by Beneficiaries. The 30% of the Infrastructure Cost will be borne by GMC with no cost to beneficiaries. The Beneficiaries Contribution has been proposed based on the RAY guidelines ensuring that if a Slum dweller avails loan for the same will not have to pay more than 25% of his Monthly Income as EMI. The Financial Arrangement will be as per following Principal:

- **Government of India** RAY Scheme guidelines stipulates that 50% of the cost of provision of Basic civic and social infrastructure and amenities and of Housing (including Rental housing and Affordable housing) for In-Situ redevelopment in slums would be borne by the center.
 - 50% of Housing, Physical Infrastructure , Social Infrastructure
 - 50% of O&M Cost
 - 100% of Cost of DPR Preparation, Project Management, Supervision and Quality Control and
 - 100% of Cost of Capacity Building, Community Mobilization, Social Audit and TPIM.

Table 7-49 : Sources of Funds for Various Components

S N	Components	GOI	GOMP	Beneficiaries Contribution	GMC Contribution	GDA & MPHB Contribution
1	Slum Rehabilitation Housing	50%	20%	30%	0%	0%
2	Rental Housing	50%	20%	0%	30%	0%
3	Affordable Housing	50%	20%	30%	0%	0%
4	Infrastructure : Physical and Social	50%	20%	0%	30%	0%
5	Infrastructure : Physical and Social (Affordable Housing)	50%	20%	0%	0%	30%
6	Operation and Maintenance	50%	20%	0%	30%	0%
7	DPR/PMC/Supervision and Quality Control Cost	100%	0%	0%	0%	0%
8	Capacity Building Community Mobilization, Social Audit and TPIMA	100%	0%	0%	0%	0%

- **Government of Madhya Pradesh** The state has decided to keep the minimum share of 20% for the total cost of Housing (including Rental housing and Affordable housing),





Infrastructure and Civic amenities. The Financial Arrangement from GoMP will be as per following Principal:

- 20% of Housing, Physical Infrastructure, Social Infrastructure
- 20% O&M Cost
- **Beneficiaries Contribution:** In order to ensure beneficiaries interest, financial contribution by the beneficiary is critical, the share of beneficiary contribution in housing is proposed to 30% of the total cost of Slum Housing and Affordable housing. As per RAY guidelines, no contribution from the beneficiaries is expected in Infrastructure improvements. The 30% of share of Affordable Housing Cost shall be considered as Subsidised Sale Price for the Affordable Housing Units.
- **GMC Contribution:** 30% of Rental Housing, Physical Infrastructure, Social Infrastructure and 30% of Total O&M Cost would be borne by GMC. To ensure Sustainability of the Investment by GMC, GMC would need to continue fiscal reforms that have already been initiated under JnNURM and other schemes.
- **GDA & MPHB Contribution:** The 30% of Infrastructure cost for Affordable housing will be borne by the respective agency (GDA or MPHB).

7.3.2 Fund Mobilization

It needs to mention that of the total identified investment of INR 2724.59 Crores, Is to be shared by various agencies like Government of India, State Government of MP, Gwalior Municipal Corporation, Gwalior Development Authority, MP Housing Board and Beneficiaries

- Central Government of India: Rs 148614.10 Lakhs (54.55%)
- State Government of Madhya Pradesh: Rs 49538.03 Lakhs (18.18%)
- Gwalior Municipal Corporation: Rs 31397.08 Lakhs (11.52%)
- Beneficiaries Contribution: Rs 39708.90 Lakhs (14.57%)
- Gwalior Development Authority and MP Housing Board: Rs 3201.08 Lakhs (1.17%)

The Table Below shows the Strategy wise Funding Source for the Total Capital Investment.

Table 7-50 : Summary of Strategy wise Funding Source

SN	Strategy	Share of Total Cost (in Rs. Lakhs)				
		Center	State	GMC	Beneficiaries	GDA/MPHB
A	Curative Strategy					
1	Total In-Situ Upgradation and Improvement Strategy	74227.03	24742.34	20921.62	16191.90	0.00
2	Total In-Situ Redevelopment Strategy	28782.97	9594.32	4487.89	9903.60	0.00
3	Total In-Situ Relocation Strategy	8723.45	2907.82	1244.57	3117.15	0.00
	Total for Curative	111733.45	37244.48	26654.08	29212.65	0.00





	Strategy					
B	Prevention Strategy					
4	Total Rental Housing	9486.00	3162.00	4743.00	0.00	0.00
5	Total Affordable Housing	27394.65	9131.55	0.00	10496.25	3201.08
	Total for Preventive Strategy	36880.65	12293.55	4743.00	10496.25	3201.08
	Grand Total	148614.10	49538.03	31397.08	39708.90	3201.08

7.3.3 Credit Plan

Credit Plan for GMC Contribution

The Credit Requirement for Gwalior Municipal Corporation for Implementation of the SFCPoA will be derived from the Financial Operation Plan of the Revised Gwalior CDP, where in the Capital Investment under SFCPoA will also be considered in the Capital Investment Plan of the Revised City Development Plan. Based on the FOP sustainability of the Revised Gwalior CDP the actual Credit Requirement for Gwalior Municipal Corporation under SFCPoA RAY will be worked out. Since Gwalior Municipal Corporation earmarks 25% of its Budget for Urban Poor its very unlikely that Gwalior Municipal Corporation will require Credit for Implementation of SFCPoA.

Credit Plan for Beneficiaries share

The Total Beneficiaries share under SFCPoA Investment Plan is about Rs 397.08 Crs of which Rs 292.13 Crs is under Curative Strategy and Rs 104.96 Crs is for Preventive Strategy. Considering 85% of Credit will be required is Rs 337.53 Crs. The size of Credit Requirement per Household for Slum Housing and Affordable EWS Units is Rs 1.15 Lakhs with 23339 Beneficiaries. While the Credit requirement per Household Affordable LIG Units is Rs 1.72 Lakhs with 4050 Beneficiaries.

Credit Risk Guarantee fund may be created at State Level to safeguard Financial Institution which may make credit available to the Beneficiaries. Since the Credit Requirement is to the tune of 1-1.7 Lakhs this can be considered under CRGF Scheme of GoI where in CRGF Trust will Guarantee the housing loans given by the lending institutions to new or existing individual EWS/LIG borrowers and eligible borrowers forming a group or housing society for purposes of home improvement, construction, acquisition, and purchase of new or second hand dwelling units of size up to 430 sq.ft. (40 sq.mtrs.) carpet area. The Credit Limit for the Scheme is below Rs.5 lakh per loan without any collateral security and / or third party guarantees.

Dovetailing with Interest Subsidy Scheme for Housing the Urban Poor

The Credit of Rs 1.15 Lakhs will require an EMI of about 1150 per month to be paid by EWS Household and Credit of Rs 1.72 Lakhs will require an EMI of about 1720 per month to be paid by LIG Household if they avail the loan at market rate. Since this will benefit an EWS





Household earning more than 5500 per Month and LIG Household earning more than 8500 per Month very few such beneficiaries will be able to avail Loan.

So Dovetailing ISHUP Scheme with RAY will take the EMI down to Rs 650 per month for EWS and Rs 1220 per Month for LIG Household and ensure larger beneficiaries availing Loan.

7.4 Implementation Framework

7.4.1 Role of GMC and Parastatal Agencies

Table 7-51 : Roles of various Implementing Agencies

SN	Stakeholder	Preparatory Phase (Initiation of SFCPoA)	Community Participation	Planning	Implementation	Reforms	Post implementation
1	GMC	√	√	√	√	√	√
2	GDA			√	√	√	
3	MPHB			√	√	√	
4	NGO	√	√	√	√		
5	CBO's	√	√	√	√		√
6	Private Sectors				√	√	

7.5 Linkage with City Development Plan

The Proposals under Gwalior SFCPoA will be incorporated in the Revised CDP and the Financial Operation Plan will be developed based on the same.





Appendices

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SFCPoA Format – Appendix

A

Tab 1: City Profile

SN	Indicator	2001*	2011*
1	Area (in Sqm)		
1.1	Planning Area (Sq.Km)	5.2652	
1.2	Municipal Area (Sq.Km.)	2.8985	
1.3	Area of Slums (Sq.km.)	6.89	
2	Population of Municipal Wards		
3	Population and Households		
3.1	Total Population (in millions)	0.827	1.054
3.2	Number of Households	0.145	0.19
3.3	Density of Population (Persons per square Km)	28.53	
3.4	Slum population as % of total population in city		23.42%
3.5	Slum households as % terms of total household in city		44.27%
*In case data on 2011 is not available the cell may be left blank.			

Tab 2: Growth of Slums

Slum Population							
2001 Census				2011 Census*			
No of HH	Total Population	Male	Female	No of HH	Total Population	Male	Female
64072	229644	128156	101488	DNA	DNA	DNA	DNA
DNA means Data not Available							

Tab 3: Ward wise Slum Population

Ward wise Slum Population as per Census2001								
Ward No.	No. of Slums	No. of Households	Total Population	Male	Female	SC/ST	OBC	General
1	7	2348	8139	4178	3961	684	1194	470
2	8	1791	6090	3477	2613	525	745	521
3	4	491	2008	1083	925	137	166	188





Tab 3: Ward wise Slum Population

Ward wise Slum Population as per Census2001

Ward No.	No. of Slums	No. of Households	Total Population	Male	Female	SC/ST	OBC	General
4	7	3604	14685	8036	6649	1138	1634	832
5	5	1126	3298	1844	1454	515	517	94
6	8	1692	4786	2762	2024	373	823	496
7	6	1860	7493	4242	3251	880	282	698
8	3	1466	4618	2559	2059	281	668	517
9	8	1912	6546	4113	2433	893	666	353
10	9	1319	4115	2283	1832	689	329	301
11	2	1297	3439	2124	1315	398	664	235
12	1	255	1072	615	457	132	97	26
13	4	496	1470	812	658	136	157	203
14	5	2106	7784	4358	3426	388	1173	545
15	4	2993	11498	6385	5113	733	1510	750
16	4	867	3057	1641	1416	314	332	221
17	4	716	2257	1270	987	332	146	238
18	2	258	1052	613	439	156	50	52
19	2	909	3660	2143	1517	198	322	389
20	0	0	0	0	0	0	0	0
21	5	692	1871	1020	851	354	301	37
22	5	971	2470	687	1783	223	435	313
23	5	1404	5070	2846	2224	1032	241	131
24	0	0	0	0	0	0	0	0
25	2	238	695	375	320	108	92	38
26	9	1487	4894	2604	2290	612	649	226
27	1	176	750	518	232	90	53	33
28	4	1315	4069	2323	1746	857	401	57
29	1	650	2310	1284	1026	305	67	278
30	0	0	0	0	0	0	0	0
31	2	154	485	274	211	49	97	8
32	2	612	2528	1386	1142	420	162	30





Tab 3: Ward wise Slum Population

Ward wise Slum Population as per Census2001

Ward No.	No. of Slums	No. of Households	Total Population	Male	Female	SC/ST	OBC	General
33	6	2095	7985	4448	3537	444	1223	428
34	1	61	238	132	106	55	5	1
35	7	1028	3739	2023	1716	420	481	127
36	4	937	3405	1894	1511	369	471	97
37	8	2299	10505	5764	4741	658	1250	391
38	9	3145	12564	6977	5587	759	2022	364
39	5	909	3104	1759	1345	354	415	140
40	3	848	1682	1061	621	157	384	307
41	1	411	1641	919	722	146	138	127
42	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0
44	1	472	1497	900	597	54	197	221
45	1	124	566	305	261	87	27	10
46	2	621	2397	1338	1059	85	272	264
47	4	542	1653	1003	650	240	139	163
48	5	1093	3799	2086	1713	210	481	402
49	4	796	2974	1697	1277	61	535	200
50	0	0	0	0	0	0	0	0
51	4	1096	3640	2041	1599	242	767	87
52	5	1413	4133	2233	1900	223	855	335
53	10	1057	4004	2225	1779	253	492	312
54	3	326	1442	780	662	265	30	31
55	2	2400	9400	5238	4162	120	1519	761
56	6	2394	8824	4870	3954	819	1020	555
57	2	782	3061	1785	1276	170	538	74
58	2	191	424	258	166	61	127	3
59	8	1269	5089	2901	2188	276	577	416
60	11	2558	9669	5664	4005	1260	773	525
Total	243	64072	229644	128156	101488	20740	28711	14621





Tab 4: Slum Profile

S N	Legal Status of Slumsn	Core area				Fringes Area				Slum population in % terms of total population of Slums	Slum area in % terms of total area of slums in City
		No of Slums	No. of HH's	No. of persons	Area of slum in sqkm	No. of Slums	No. of HH's	No. of person s	Area of slum in sqk m		
1	Notified Slums	114	27586	97053	2.59	129	36486	13259 1	4.30	100. 00%	11.7 9%
2	Non Notified Slums	0	0	0	0	0	0	0	0	-	-
3	Total	114	27586	97053	2.59	129	36486	13259 1	4.30	100. 00%	11.7 9%

Tab 5: Economic Profile of Slum

S N	Status of Slums	Core area		Fringes Area	
		No of Slums	BPL Households	No of Slums	BPL Households
			Number of HH's		Number of HH's
1	Notified Slums	114	3765	129	4301
2	Non Notified Slums	0	0	0	0
3	Total	114	3765	129	4301

Tab 6: Distribution of slum based on Land Tenure Status

S N	Land Tenure Status Status of Slums	With Patta	Possession Certificate/ Occupancy Right	Encroached-Private Land Encroached-Public Land	On Rent	Other
1	Notified Slums	12518	20962	13589	15684	1319
2	Non Notified Slums	0	0	0	0	0
3	Total	12518	20962	13589	15684	1319





Tab 7: Ward-Wise Distribution of Slums

Ward No.	Notified Slums		Non-Notified Slums		Total Slums	
	Number of Notified slums	Pop_Density = Total population of all notified slums in ward/total area (sqm) of all notified slums in ward.	Number of Non Notified slums	Pop_Density = Total population of all non-notified slums in ward/total area (sqm) of all non-notified slums in ward.	Total Number of Slums	Pop_Density = Total population of all slums in ward/total area (sqm) of all slums in ward.
1	7	0.022	0	0	7	0.022
2	8	0.052	0	0	8	0.052
3	4	0.030	0	0	4	0.030
4	7	0.086	0	0	7	0.086
5	5	0.009	0	0	5	0.009
6	8	0.024	0	0	8	0.024
7	6	0.050	0	0	6	0.050
8	3	0.043	0	0	3	0.043
9	8	0.023	0	0	8	0.023
10	9	0.034	0	0	9	0.034
11	2	0.185	0	0	2	0.185
12	1	0.165	0	0	1	0.165
13	4	0.081	0	0	4	0.081
14	5	0.070	0	0	5	0.070
15	4	0.048	0	0	4	0.048
16	4	0.036	0	0	4	0.036
17	4	0.047	0	0	4	0.047
18	2	0.033	0	0	2	0.033
19	2	0.046	0	0	2	0.046
21	5	0.015	0	0	5	0.015
22	5	0.057	0	0	5	0.057
23	5	0.041	0	0	5	0.041
25	2	0.014	0	0	2	0.014
26	9	0.060	0	0	9	0.060
27	1	0.053	0	0	1	0.053





Tab 7: Ward-Wise Distribution of Slums

Ward No.	Notified Slums		Non-Notified Slums		Total Slums	
	Number of Notified slums	Pop_Density = Total population of all notified slums in ward/total area (sqm) of all notified slums in ward.	Number of Non Notified slums	Pop_Density = Total population of all non-notified slums in ward/total area (sqm) of all non-notified slums in ward.	Total Number of Slums	Pop_Density = Total population of all slums in ward/total area (sqm) of all slums in ward.
28	4	0.034	0	0	4	0.034
29	1	0.011	0	0	1	0.011
31	2	0.017	0	0	2	0.017
32	2	0.061	0	0	2	0.061
33	6	0.108	0	0	6	0.108
34	1	0.016	0	0	1	0.016
35	7	0.041	0	0	7	0.041
36	4	0.106	0	0	4	0.106
37	8	0.017	0	0	8	0.017
38	9	0.030	0	0	9	0.030
39	5	0.038	0	0	5	0.038
40	3	0.082	0	0	3	0.082
41	1	0.031	0	0	1	0.031
44	1	0.133	0	0	1	0.133
45	1	0.062	0	0	1	0.062
46	2	0.052	0	0	2	0.052
47	4	0.027	0	0	4	0.027
48	5	0.109	0	0	5	0.109
49	4	0.085	0	0	4	0.085
51	4	0.042	0	0	4	0.042
52	5	0.009	0	0	5	0.009
53	10	0.045	0	0	10	0.045
54	3	0.128	0	0	3	0.128
55	2	0.176	0	0	2	0.176
56	6	0.053	0	0	6	0.053





Tab 7: Ward-Wise Distribution of Slums

Ward No.	Notified Slums		Non-Notified Slums		Total Slums	
	Number of Notified slums	Pop_Density = Total population of all notified slums in ward/total area (sqm) of all notified slums in ward.	Number of Non Notified slums	Pop_Density = Total population of all non-notified slums in ward/total area (sqm) of all non-notified slums in ward.	Total Number of Slums	Pop_Density = Total population of all slums in ward/total area (sqm) of all slums in ward.
57	2	0.088	0	0	2	0.088
58	2	0.006	0	0	2	0.006
59	8	0.022	0	0	8	0.022
60	11	0.015	0	0	11	0.015
Total	243	2.969	0	0	243	2.969

Tab 8 : Average Monthly Income of Slum Households

City Level Average Monthly Income of Slum Households

City	No. of Households	Total Population	Average Monthly Income of Household (in Rs.)		
			Less than Rs. 1000	Rs.1000 to Rs.3000	> Rs.3000
Gwalior	64072	229644	6819	44266	12987

Tab 9: Distribution of Slums with reference to Core or Fringe Area

Status of Slums	No of Notified Slums			No of Non-Notified Slums			Total Number of Slums			Area category of slums in % terms of total number of slums
Location of Slum Category of Slum as per Area	In Core City	In Fringe Area	Total	In Core City	In Fringe Area	Total	In Core City	In Fringe Area	Total	
0 <=1000 sqm	0	0	0	0	0	0	0	0	0	0.0%
1000 <=3000 sqm	5	4	9	0	0	0	5	4	9	3.7%
3000 <=6000 sqm	21	9	30	0	0	0	21	9	30	12.3%
6000 <=9000	16	18	34	0	0	0	16	18	34	14.0%





Tab 9: Distribution of Slums with reference to Core or Fringe Area

Status of Slums	No of Notified Slums			No of Non-Notified Slums			Total Number of Slums			Area category of slums in % terms of total number of slums
Location of Slum Category of Slum as per Area	In Core City	In Fringe Area	Total	In Core City	In Fringe Area	Total	In Core City	In Fringe Area	Total	
sqm										
9000 <=12000 sqm	20	7	27	0	0	0	20	7	27	11.10%
>=12000 sqm	52	91	143	0	0	0	52	91	143	58.80%
Total Number of Slums	114	129	243	0	0	0	114	129	243	100.00%
Location wise Slums in % terms of total No of Slums	46.9 1%	53.0 9%	100.0 0%	0.0 0%	0.0 0%	0.0 0%	46.9 1%	53.0 9%	100.0 0%	

Tab 10: Distribution of Slums with reference to Physical Location of Slums

Status of Slums Physical Location of Slum	No of Notified Slums		No of Non-Notified Slums		Total Number of Slums		Physical Location wise slum in % terms of Total Number of Slums	Physical Location wise slum HHs in % terms of Total Number of Slums HHs
	No. of Slums	No. of Households	No. of Slums	No. of Households	No. of Slums	No. of Households		
Along the Water Body	45	13122	0	0	45	13122	18.52%	20.48%
Along the Rail lines or Roads	70	17604	0	0	70	17604	28.81%	27.48%





Tab 11: Distribution of Slums with reference to Land Use of Surrounding Area

Status of Slum Land Use of Surrounding Area	Notified Slums	Non-Notified Slums	Total Slums	Slums in category as % of Total No. of slums	Number of HHs in each Category (Land use)	HHs in category in % terms of Total Number of slum Households
Residential	107	0	107	44.03%	27841	43.45%
Industrial	4	0	4	1.65%	859	1.34%
Commercial	4	0	4	1.65%	791	1.23%
PSP	4	0	4	1.65%	1639	2.56%
Recreational	7	0	7	2.88%	1979	3.09%
Partial Residential	94	0	94	38.68%	23863	37.24%
Partial Industrial	0	0	0	0.00%	0	0.00%
Partial Commercial	3	0	3	1.23%	401	0.63%
Partial PSP	2	0	2	0.82%	134	0.21%
Partial Green	6	0	6	2.47%	4528	7.07%
Others	12	0	12	4.94%	2037	3.18%
Total	243	0	243	100.00%	64072	100.00%

Tab 12: Distribution of Slums based on Ownership of lands and Status of Slums

Land Ownership Status of Slum	Public					Gol other than Railways, Defense or Airport	Private	Others	Not Known	Part_Govt_Pvt
	Government	Private	Trust	Part Ownership with Majority Govt.	Part Ownership with Majority Private					
Notified slums	0	182	0	0	0	0	43	4	0	14
Non-notified slums	0	0	0	0	0	0	0	0	0	0
Total number of slums	0	182	0	0	0	0	43	4	0	14





Tab 12: Distribution of Slums based on Ownership of lands and Status of Slums

Land Ownership Status of Slum	Public					Gol other than Railways, Defense or Airport	Private	Others	Not Known	Part_Govt_Pvt
	Government	Private	Trust	Part Ownership with Majority Govt.	Part Ownership with Majority Private					
Slums in category in % terms of the total number of slums	0.00%	74.90%	0.00%	0.00%	0.00%	0.00%	17.70%	1.65%	0.00%	5.76%

Tab 13: Distribution of Slums based on Land Ownership, Population and Area

Numb er of Slums on	Area Population	0</= 1000 Sqm	1000</= 3000 Sqm	3000</= 6000 Sqm	6000</= 9000 Sqm	9000</= 12000 Sqm	>12000 Sqm	Total
Government	0 </= 100 Persons	0	0	0	0	0	2	2
	100 </= 250 Persons	0	3	5	3	3	16	30
	250 </= 500 Persons	0	1	7	10	8	22	48
	500 </= 1000 Persons	0	1	6	6	8	23	44
	> 1000 Persons	0	0	3	4	6	45	58
	Total No of Slums	0	5	21	23	25	108	182
Part_Pvt_Govt	0 </= 100 Persons	0	0	1	0	0	0	1
	100 </= 250 Persons	0	0	0	2	0	0	2
	250 </= 500 Persons	0	0	1	0	0	1	2
	500 </= 1000 Persons	0	0	0	0	0	0	0





Tab 13: Distribution of Slums based on Land Ownership, Population and Area

Number of Slums on	Area Population	0</= 1000 Sqm	1000</= 3000 Sqm	3000</= 6000 Sqm	6000</= 9000 Sqm	9000</= 12000 Sqm	>12000 Sqm	Total
	> 1000 Persons	0	0	0	0	0	1	1
	Total No of Slums	0	0	2	2	0	2	6
Part_Govt_Pvt	0 </= 100 Persons	0	0	0	0	0	0	0
	100 </= 250 Persons	0	1	1	1	0	1	4
	250 </= 500 Persons	0	0	0	1	0	1	2
	500 </= 1000 Persons	0	0	0	0	0	1	1
	> 1000 Persons	0	0	0	0	0	1	1
	Total No of Slums	0	1	1	2	0	4	8
Private	0 </= 100 Persons	0	0	0	0	0	0	0
	100 </= 250 Persons	0	1	1	1	1	3	7
	250 </= 500 Persons	0	2	4	0	0	7	13
	500 </= 1000 Persons	0	0	1	3	0	3	7
	> 1000 Persons	0	0	0	2	1	13	16
	Total No of Slums	0	3	6	6	2	26	43
Trust	0 </= 100 Persons	0	0	0	0	0	0	0
	100 </= 250 Persons	0	0	0	1	0	0	1
	250 </= 500 Persons	0	0	0	0	0	1	1
	500 </= 1000 Persons	0	0	0	0	0	0	0





Tab 13: Distribution of Slums based on Land Ownership, Population and Area

Number of Slums on	Area Population	0<=/ 1000 Sqm	1000</= 3000 Sqm	3000</= 6000 Sqm	6000</= 9000 Sqm	9000</= 12000 Sqm	>12000 Sqm	Total
	> 1000 Persons	0	0	0	0	0	2	2
	Total No of Slums	0	0	0	1	0	3	4
Total Number of Slums								243

Tab 14: Number of Slums with Reference to Physical Location, Land Tenure Status and Housing Requirements

Housing Condition Land Tenure Status	Kutcha Houses = 0	Kutcha Houses ≥60%	Kutcha Houses < 60%	Total
Predominantly Secure	52	26	88	166
Predominantly In-Secure	1	9	15	25
Predominantly Semi-Secure	14	1	37	52
Total	67	36	140	243

Tab 15: Distribution of Slums based on Status, Population & Area of Slums

Legal Status of Slums	Area Population	0<=/ 1000 Sqm	1000</= 3000 Sqm	3000</= 6000 Sqm	6000</= 9000 Sqm	9000</= 12000 Sqm	>12000 Sqm	Total
Number of Notified Slums	0 <= 100 Persons	0	0	1	0	0	2	3
	100 <= 250 Persons	0	5	7	8	4	20	44
	250 <= 500 Persons	0	3	12	11	8	32	66
	500 <= 1000 Persons	0	1	7	9	8	27	52
	> 1000 Persons	0	0	3	6	7	62	78
	Total	0	9	30	34	27	143	243
Non-Notified	0 <= 100 Persons	0	0	0	0	0	0	0





Tab 15: Distribution of Slums based on Status, Population & Area of Slums

Legal Status of Slums	Area Population	0</= 1000 Sqm	1000</= 3000 Sqm	3000</= 6000 Sqm	6000</= 9000 Sqm	9000</= 12000 Sqm	>12000 Sqm	Total
	100 </= 250 Persons	0	0	0	0	0	0	0
	250 </= 500 Persons	0	0	0	0	0	0	0
	500 </= 1000 Persons	0	0	0	0	0	0	0
	> 1000 Persons	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0
Total Number of Slums	0 </= 100 Persons	0	0	1	0	0	2	3
	100 </= 250 Persons	0	5	7	8	4	20	44
	250 </= 500 Persons	0	3	12	11	8	32	66
	500 </= 1000 Persons	0	1	7	9	8	27	52
	> 1000 Persons	0	0	3	6	7	62	78
	Total	0	9	30	34	27	143	243

Tab 16: Access to Services in Slums

Status of Slums	Notified Slums		Non-Notified Slums		Total		
	Number of Slums	Number of HHs	Number of Slums	Number of HHs	Number of Slums	Number of HHs	% HH of Total No of HHs
Connectivity to Water Supply							
Connected	225	61677	0	0	225	61677	96.3%
Not Connected	18	2395	0	0	18	2395	3.7%
Total	243	64072	0	0	243	64072	100.0%
Source of Drinking Water							
House Connection	225	40965	0	0	225	40965	63.9%
Pub Stand post	128	4458	0	0	128	4458	7.0%





Tab 16: Access to Services in Slums

Status of Slums	Notified Slums		Non-Notified Slums		Total		
	Number of Slums	Number of HHs	Number of Slums	Number of HHs	Number of Slums	Number of HHs	% HH of Total No of HHs
Neighbor	146	3278	0	0	146	3278	5.1%
Municipal Tanker	49	3209	0	0	49	3209	5.0%
Pub_TW_HP	141	9408	0	0	141	9408	14.7%
Pvt_TW_HP	62	1953	0	0	62	1953	3.0%
Pvt_Vendor	14	424	0	0	14	424	0.7%
Well_Pond	12	60	0	0	12	60	0.1%
Other	17	317	0	0	17	317	0.5%
Total		64072					100.0%
Connectivity to wide Sewerage System							
Connected	192	55642	0	0	192	55642	86.8%
Not Connected	51	8430	0	0	51	8430	13.2%
Total	243	64072	0	0	243	64072	100.0%
Arrangement of garbage Disposal							
GMC	206	56754	0	0	206	56754	88.6%
Residents	37	7318	0	0	37	7318	11.4%
Total	243	64072	0	0	243	64072	100.0%
Frequency of Garbage Disposal							
Daily	24	4446	0	0	24	4446	6.9%
2 Days	10	3287	0	0	10	3287	5.1%
3 Days	67	12727	0	0	67	12727	19.9%
7 days	96	33088	0	0	96	33088	51.6%
Never	23	4754	0	0	23	4754	7.4%
Not often	23	5770	0	0	23	5770	9.0%
Total	243	64072	0	0	243	64072	100.0%
Availability of Street light/Pole							
Yes	231	62371	0	0	231	62371	97%
No	12	1701	0	0	12	1701	3%
Total	243	64072	0	0	243	64072	100%





Tab 17: Health Indicators and Physical Location of Slums

Health Indicators Location of Slums	HHs with Physically Challenged Persons	Persons with Tuberculosis	Malaria	Jaundice	Diarrhea	Other	Total
Along Railway Line and Road	39	14	282	146	303	444	1189
Along River / Water Body	41	23	204	135	112	381	855
Total	80	37	486	281	415	825	2044

Tab 18: Access to Health Facilities in Slums

Name of Health Facilities (HF) Distance of Health Facility from the Slum	Urban Health Post	Primary Health Centre	Government Hospital	Private Health Clinic	Ayurvedic Doctor / Vaidya	Maternity Centre	RMP
No. of Health Facilities within the Slum Area	DNA	Nil	Nil	Nil	DNA	DNA	DNA
No. of Health Facilities Outside Slum Area & within a distance 0.5-1 km	DNA	15	15	189	DNA	DNA	DNA
No. of Health Facilities Outside Slum Area & within a distance 1-2 km	DNA	168	168	41	DNA	DNA	DNA
No. of Health Facilities Outside Slum Area & within a distance 2-5 km	DNA	59	59	13	DNA	DNA	DNA
No. of Health Facilities Outside Slum Area & within a distance 5 km and above	DNA	1	1	0	DNA	DNA	DNA
Total	DNA	243	243	243	DNA	DNA	DNA
<i>Note: RMP- Registered Medical Practitioner, DNA-Data Not Available</i>							





Tab 19: Availability of Other Facilities within Slums

Type of Community Group Status of Slums	No. of Community Hall	No. of livelihood / Production Centers	No. of Vocational Training Centre	No. of Street Children Rehabilitation Centre	No. of Night Shelters	No. of Old Age Homes
Notified Slums	0	0	0	0	0	0
Non Notified Slums	0	0	0	0	0	0
Total	0	0	0	0	0	0

Tab 20: Distribution of Number of Beneficiaries Under Social Development/Welfare schemes

	SJSRY	SSP	FWS	Health Insurance	Other	Total
Notified Slums						
Number of Households	DNA	DNA	DNA	DNA	DNA	
Number of Beneficiaries in Slums	4	3	6	12	15	40
Non - Notified Slums						
Number of Households	0	0	0	0	0	0
Number of Beneficiaries in Slums	0	0	0	0	0	0
Total	4	3	6	12	15	40
Number of Households	DNA	DNA	DNA	DNA	DNA	
Number of Beneficiaries in Slums	8	6	12	24	30	80
<i>Note: SJSRY- Shwam Jyanti Shahari Rojagar Yojana, SSP- , FWS -DNA - Data Not Available</i>						

Tab 21: Migration Details of Slum Households according to years of Stay

No. of Slum Households	Total Slum Population	Number of Years of Stay in this Town/City (HHs)			
		0-01	01-03	03-05	> 5 Years
64072	229644	3680	1703	1831	56858





Tab 22: Migration Stream of Slum Households according to years of Stay

No. of Slum Households	Total Slum Population	Migrated From	
		Rural Area to Urban Area	Urban Area to Urban Area
64072	229644	30263	33809





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
1	1	1	1	SHIV NANDI NAGAR	117	486	0	0.00%	0	17	0	0	74	26	0	0	0	117	0
2	1	1	2	ISLAMPURA	584	2232	129	22.09%	310	7	64	0	194	9	0	0	0	584	1300
3	1	1	3	JANAK TAAL KUSHWAHA MOHALLA	38	132	0	0.00%	27	3	0	0	8	0	0	0	0	38	100
4	1	1	4	RAMJI KA PURA	1045	3554	214	20.48%	874	103	68	0	0	0	0	0	0	1045	1600
5	1	1	5	GRAM BARA	313	911	55	17.57%	153	1	0	44	115	0	0	0	0	313	900
6	1	1	6	JATAVPURA	165	528	7	4.24%	109	3	8	0	31	5	0	9	0	165	400
7	1	1	7	BEEES SUTRIYA NAGAR	86	296	84	97.67%	49	0	0	0	37	0	0	0	0	86	800
8	7	2	8	KACCHI SARAI, GHOSIPURA	63	216	0	0.00%	58	4	1	0	0	0	0	0	0	63	200
9	7	2	9	SHIV NAGAR, GHOSIPURA	183	859	23	12.57%	168	8	7	0	0	0	0	0	0	183	700
10	7	2	10	SUNAR KI BAGIYA	244	269	0	0.00%	190	33	21	0	0	0	0	0	0	244	2000
11	7	2	11	PANCHSHEEL NAGAR W NO 2	154	498	0	0.00%	134	10	10	0	0	0	0	0	0	154	900
12	7	2	12	JHADUWALA MOHALLA	267	944	15	5.62%	144	3	59	0	8	50	3	0	0	267	250
13	7	2	13	PURANA SCINDHIYA NAGAR	448	1710	0	0.00%	358	55	35	0	0	0	0	0	0	448	700
14	7	2	14	RAMPURI MOHALLA	334	1317	25	7.49%	271	40	23	0	0	0	0	0	0	334	700
15	7	2	15	AMBEDKAR NAGAR W NO 2	98	277	0	0.00%	91	6	1	0	0	0	0	0	0	98	400





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
16	7	3	16	GHOSIPURA W NO 3	119	484	11	9.24%	78	0	7	0	29	5	0	0	0	119	450
17	7	3	17	FARRASH KHANA	76	347	0	0.00%	65	0	2	0	5	4	0	0	0	76	800
18	7	3	18	SHIV NAGAR	110	329	6	5.45%	0	110	0	0	0	0	0	0	0	110	450
19	7	3	19	RAMGAD	186	848	38	20.43%	23	0	6	0	74	82	0	1	0	186	200
20	1	4	21	INDRA COLONY	648	1973	131	20.22%	543	63	42	0	0	0	0	0	0	648	2100
21	1	4	22	MEVATI MOHALLA W NO 4	443	827	57	12.87%	295	43	29	0	45	28	1	1	1	443	1500
22	1	4	23	BANDA GHURA	151	782	14	9.27%	51	9	14	23	45	8	0	0	1	151	450
23	1	4	24	GHATAMPUR	116	502	101	87.07%	46	12	6	1	48	3	0	0	0	116	800
24	1	4	25	MIRJAPUR	137	646	3	2.19%	30	13	31	0	34	28	0	1	0	137	1800
25	1	4	26	BULBULPURA	112	516	7	6.25%	38	32	10	1	28	1	0	2	0	112	500
26	1	4	27	CHANDRA NAGAR	1997	9439	379	18.98%	222	17	78	9	954	706	0	11	0	1997	1500
27	1	5	28	BADNAPURA	225	619	22	9.78%	225	0	0	0	0	0	0	0	0	225	750
28	1	5	29	RESHAMPURA	122	343	15	12.30%	27	7	58	0	6	24	0	0	0	122	250
29	1	5	30	DAMODARBAG COLONY	50	242	8	16.00%	0	0	0	0	4	46	0	0	0	50	0
30	1	5	31	KRISHNA NAGAR	270	964	30	11.11%	93	1	5	0	123	48	0	0	0	270	600
31	1	5	32	KISHANBAG, AB ROAD	459	1130	2	0.44%	167	35	47	28	94	42	41	2	3	459	700
32	2	6	33	MANGLESHWAR ROAD	218	391	17	7.80%	171	28	19	0	0	0	0	0	0	218	900
33	2	6	34	JOSIYANA MOHALLA	30	132	0	0.00%	13	9	8	0	0	0	0	0	0	30	100
34	2	6	35	LADHEDI	602	1710	51	8.47%	482	73	47	0	0	0	0	0	0	602	2700





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
35	2	6	36	MEVATI MOHALLA W NO 6	180	547	14	7.78%	147	20	13	0	0	0	0	0	0	180	900
36	2	6	37	HAVELI KA PICHWADA	285	690	26	9.12%	246	23	16	0	0	0	0	0	0	285	1600
37	2	6	38	JHANSIGANJ	96	484	10	10.42%	91	2	3	0	0	0	0	0	0	96	450
38	2	6	39	JHANGIR KATRA	192	584	50	26.04%	102	78	12	0	0	0	0	0	0	192	500
39	2	6	40	MACHHI ADDI	89	248	7	7.87%	63	16	10	0	0	0	0	0	0	89	1600
40	3	7	41	JAGNAPURA	53	212	0	0.00%	53	0	0	0	0	0	0	0	0	53	1850
41	3	7	42	INDRA NAGAR	1091	4569	279	25.57%	949	1	129	0	12	0	0	0	0	1091	2100
42	3	7	43	MADANPURA, MADAN KUI	104	399	7	6.73%	85	0	2	0	17	0	0	0	0	104	1100
43	3	7	44	LOOTPURA	494	1906	101	20.45%	447	0	15	0	12	0	0	1	19	494	600
44	3	7	45	SHARMA FARM NO 2	62	223	7	11.29%	8	0	0	0	37	17	0	0	0	62	0
45	3	7	46	SHARMA FARM NO 3	56	184	34	60.71%	26	2	0	0	28	0	0	0	0	56	0
46	3	8	47	CHODE KE HANUMAN	930	2964	50	5.38%	727	31	39	0	131	2	0	0	0	930	1400
47	3	8	48	NARSINGH NAGAR	478	1478	42	8.79%	477	0	0	0	1	0	0	0	0	478	1200
48	3	8	49	SHARMA FARM NO 1	58	176	0	0.00%	30	0	0	0	28	0	0	0	0	58	150
49	2	9	50	RANIPURA	324	1223	47	14.51%	288	11	22	0	1	2	0	0	0	324	1200
50	2	9	51	RANGIYANA MOHALLA	304	1272	54	17.76%	252	40	12	0	0	0	0	0	0	304	1200
51	2	9	52	POSTHIKHANA	161	518	0	0.00%	14	0	0	0	147	0	0	0	0	161	600
52	2	9	53	GOLPADE	347	1014	169	48.70%	326	21	0	0	0	0	0	0	0	347	450
53	2	9	54	RAJA KI MANDI	304	902	178	58.55%	174	77	53	0	0	0	0	0	0	304	2800





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
54	2	9	55	SODA KA KUA	142	464	6	4.23%	17	7	0	0	118	0	0	0	0	142	350
55	2	9	56	MADDI KA BAZAAR	181	645	0	0.00%	71	69	18	0	18	5	0	0	0	181	900
56	2	9	57	MAIDAI KA MOHALLA	149	508	2	1.34%	123	0	0	0	0	26	0	0	0	149	450
57	2	10	58	GOLANDAJ	252	707	6	2.38%	54	82	0	115	1	0	0	0	0	252	550
58	2	10	59	KESHOBAG	102	325	3	2.94%	100	1	0	1	0	0	0	0	0	102	450
59	2	10	60	AAUKHANA	226	670	8	3.54%	0	6	68	0	152	0	0	0	0	226	800
60	2	10	61	JAMA MASJID, CHOWK BAZAAR	112	305	106	94.64%	0	0	0	0	112	0	0	0	0	112	0
61	2	10	62	KASHI NARESH KI GALI	66	260	0	0.00%	61	0	0	0	5	0	0	0	0	66	250
62	2	10	63	SUNAAR MOHALLA	160	622	143	89.38%	3	0	0	54	103	0	0	0	0	160	0
63	2	10	64	KANOON GOYAN	150	453	40	26.67%	8	142	0	0	0	0	0	0	0	150	250
64	2	10	65	TAMESHWAR MOHALLA	150	500	89	59.33%	52	0	0	0	93	5	0	0	0	150	400
65	2	10	66	HATHIKHANA	101	273	0	0.00%	8	0	0	93	0	0	0	0	0	101	550
66	4	11	67	GHOSHUPURA NO 1	633	1309	28	4.42%	606	0	0	0	13	14	0	0	0	633	2700
67	4	11	68	GHOSHUPURA NO 2	664	2130	191	28.77%	533	0	4	0	127	0	0	0	0	664	2800
68	5	12	69	RASULABAD	255	1072	9	3.53%	153	1	52	0	49	0	0	0	0	255	1200
69	4	13	70	KOTAWALA MOHALLA	159	444	13	8.18%	130	0	14	1	14	0	0	0	0	159	560
70	4	13	71	PACHEE PADA	137	297	3	2.19%	0	0	0	0	137	0	0	0	0	137	0
71	4	13	72	KHIDKI MOHALLA	111	407	2	1.80%	54	45	12	0	0	0	0	0	0	111	250





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
72	4	13	73	HORIPURA	89	322	0	0.00%	2	85	2	0	0	0	0	0	0	89	250
73	4	14	74	GUDARI	541	1960	27	4.99%	282	113	3	0	118	12	13	0	0	541	1500
74	4	14	75	NOORGANJ	773	3129	232	30.01%	579	15	36	0	139	4	0	0	0	773	1600
75	4	14	76	KHWAJA NAGAR	254	1047	4	1.57%	210	7	17	0	20	0	0	0	0	254	1200
76	4	14	77	RAMTAPURA NO 2	474	1423	235	49.58%	290	8	161	0	15	0	0	0	0	474	1600
77	4	14	78	KHWAJA KANOON	64	225	13	20.31%	23	27	0	0	14	0	0	0	0	64	150
78	3	15	79	JATI KI LANE	311	1359	1	0.32%	200	0	0	0	111	0	0	0	0	311	800
79	3	15	80	HARIJAN BASTI, LANE NO 5	85	320	2	2.35%	82	1	0	0	2	0	0	0	0	85	500
80	3	15	81	NEW SANJAY NAGAR	405	1627	4	0.99%	202	28	24	1	150	0	0	0	0	405	1500
81	3	15	82	GADAIPURA	2192	8192	229	10.45%	1871	64	0	0	245	12	0	0	0	2192	2700
82	5	16	83	NEW COLONY NO 2	37	138	12	32.43%	23	3	0	0	3	8	0	0	0	37	300
83	5	16	84	NEW COLONY NO 1	354	1258	5	1.41%	347	1	6	0	0	0	0	0	0	354	1100
84	5	16	85	CHANDANPURA	128	495	13	10.16%	116	0	1	0	11	0	0	0	0	128	450
85	5	16	86	RESHAM MILL BASTI	348	1166	1	0.29%	256	12	17	0	63	0	0	0	0	348	1050
86	5	17	87	ANAND NAGAR, CHAMDA MILL	85	164	7	8.24%	33	51	0	0	1	0	0	0	0	85	300
87	5	17	88	ARA MILL, HARIJAN BASTI	462	1564	39	8.44%	437	25	0	0	0	0	0	0	0	462	2600
88	5	17	89	3B COLONY, LAL QUARTER	49	135	0	0.00%	49	0	0	0	0	0	0	0	0	49	450
89	5	17	90	NEW KANCH MILL	120	394	1	0.83%	120	0	0	0	0	0	0	0	0	120	600





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
90	8	18	91	ADARSH NAGAR	110	501	19	17.27%	16	36	16	0	41	1	0	0	0	110	350
91	8	18	92	RASULPUR	148	551	0	0.00%	0	0	0	0	96	52	0	0	0	148	0
92	8	19	93	JADERUA KALAH	818	3281	74	9.05%	526	194	98	0	0	0	0	0	0	818	2500
93	8	19	94	RACHANA NAGAR	91	379	8	8.79%	0	0	3	0	88	0	0	0	0	91	500
94	10	21	95	VIVEK NAGAR	29	100	0	0.00%	29	0	0	0	0	0	0	0	0	29	800
95	10	21	96	PANCHSHEEL NAGAR W NO 21	59	214	0	0.00%	56	0	1	1	1	0	0	0	0	59	450
96	10	21	97	MELA DULPUR	497	1217	19	3.82%	328	0	0	0	169	0	0	0	0	497	1450
97	10	21	98	SHANTI NAGAR W NO 21	52	183	0	0.00%	52	0	0	0	0	0	0	0	0	52	350
98	10	21	99	BAGIYA HANUMAN NAGAR	55	157	3	5.45%	26	1	0	0	28	0	0	0	0	55	150
99	10	22	100	BASTI GODAM	289	883	23	7.96%	226	40	23	0	0	0	0	0	0	289	500
100	10	22	101	SHIDHESHWAR NAGAR	511	1124	16	3.13%	436	45	30	0	0	0	0	0	0	511	2000
101	10	22	102	KHALEefa COLONY	38	142	2	5.26%	20	10	8	0	0	0	0	0	0	38	200
102	10	22	103	GOPALPURA	103	238	8	7.77%	75	18	10	0	0	0	0	0	0	103	500
103	10	22	104	SHIDHARTH NAGAR	30	83	5	16.67%	14	0	0	0	16	0	0	0	0	30	100
104	10	23	105	NADI PAR TAL	666	2275	158	23.72%	562	5	0	0	96	0	3	0	0	666	1350
105	10	23	106	GALLA KOTHER	338	1477	159	47.04%	83	44	1	0	210	0	0	0	0	338	650
106	10	23	107	AMBEDKAR NAGAR W NO 23	62	127	8	12.90%	25	16	0	0	21	0	0	0	0	62	150





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
107	10	23	108	SHRI NAGAR COLONY	303	1029	94	31.02%	267	0	12	0	24	0	0	0	0	303	1700
108	10	23	109	HARIJAN BASTI, SHAMSHAN GHAT	35	162	2	5.71%	33	0	0	0	2	0	0	0	0	35	700
109	8	25	110	LEATHER FACTORY	199	523	0	0.00%	199	0	0	0	0	0	0	0	0	199	650
110	8	25	111	SHITLA COLONY	39	172	0	0.00%	29	0	5	0	4	1	0	0	0	39	100
111	9	26	112	TIKONIYA	138	472	50	36.23%	78	50	10	0	0	0	0	0	0	138	700
112	9	26	113	HARIJAN BASTI, GURUDWARA	275	742	9	3.27%	275	0	0	0	0	0	0	0	0	275	750
113	9	26	114	KHATEEK MOHALLA W NO 26	118	550	0	0.00%	118	0	0	0	0	0	0	0	0	118	250
114	9	26	115	HANUMAN COLONY	100	356	0	0.00%	100	0	0	0	0	0	0	0	0	100	300
115	9	26	116	TYAGI NAGAR	451	1384	76	16.85%	396	44	0	0	0	11	0	0	0	451	750
116	9	26	117	PEETAL KARKHANA	149	485	1	0.67%	149	0	0	0	0	0	0	0	0	149	325
117	9	26	118	KACHERI PARUSRAM	51	159	0	0.00%	51	0	0	0	0	0	0	0	0	51	150
118	9	26	119	VINAY COLONY	123	460	0	0.00%	0	0	0	123	0	0	0	0	0	123	0
119	9	26	120	GHAS MANDI	82	286	81	98.78%	80	0	2	0	0	0	0	0	0	82	200
120	9	27	121	RAM NAGAR	176	750	3	1.70%	149	18	9	0	0	0	0	0	0	176	650
121	11	28	122	HARNAMPURA	401	1261	78	19.45%	350	0	0	0	51	0	0	0	0	401	1250
122	11	28	123	BHIM NAGAR	405	1336	144	35.56%	234	0	0	18	153	0	0	0	0	405	1400





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
									Supply Source									Pipelines (Rmts)	
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
123	11	28	124	PHULE NAGAR	124	311	27	21.77%	124	0	0	0	0	0	0	0	0	124	350
124	11	28	125	KUMHARPURA	385	1161	3	0.78%	337	0	0	0	48	0	0	0	0	385	900
125	14	29	126	MAHAL GAON, KAROULI MATA	650	2310	16	2.46%	344	24	3	0	59	9	192	2	17	650	1200
126	6	31	127	GUJARATI MOHALLA	92	248	0	0.00%	92	0	0	0	0	0	0	0	0	92	600
127	6	31	128	LAXMANPURA	62	237	1	1.61%	62	0	0	0	0	0	0	0	0	62	550
128	6	32	129	MARI MATA	117	235	12	10.26%	37	59	0	0	21	0	0	0	0	117	150
129	6	32	130	MAHAL GAON, MARI MATA	495	2293	13	2.63%	267	87	62	1	0	3	0	0	75	495	1750
130	7	33	131	RAVIDAS NAGAR	534	2148	14	2.62%	464	0	12	10	40	5	3	0	0	534	300
131	7	33	132	DONGARPUR W NO 33	299	1219	37	12.37%	237	0	34	0	28	0	0	0	0	299	400
132	7	33	133	LAXMAN TALIYA	359	1289	17	4.74%	292	56	4	0	7	0	0	0	0	359	1800
133	7	33	134	KHATEEK MOHALLA W NO 33	49	217	1	2.04%	43	0	4	0	2	0	0	0	0	49	300
134	7	33	135	KHALASIPURA	587	2028	37	6.30%	564	0	13	0	10	0	0	0	0	587	1100
135	7	33	136	PIYAU WALI GALI	267	1084	100	37.45%	245	0	22	0	0	0	0	0	0	267	200
136	15	34	137	PARDI MOHALLA W NO 34	61	238	3	4.92%	21	1	26	0	13	0	0	0	0	61	250
137	16	35	138	SHEIKH KI BAGIYA	282	1172	50	17.73%	237	0	25	3	16	1	0	0	0	282	650
138	16	35	139	SWARNALEKHA NALLAH, JIWAJIGANJ	50	182	43	86.00%	50	0	0	0	0	0	0	0	0	50	150





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
									Supply Source									Pipelines (Rmts)	
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
139	16	35	140	SUBEY KI GOTH	374	1236	18	4.81%	314	32	14	7	6	0	0	0	1	374	900
140	16	35	141	SHANTI NAGAR, NAI SADAK	112	400	15	13.39%	109	0	3	0	0	0	0	0	0	112	500
141	16	35	142	RASSI WALA MOHALLA	107	409	8	7.48%	107	0	0	0	0	0	0	0	0	107	450
142	16	35	143	DALIYA WALA MOHALLA	50	158	0	0.00%	50	0	0	0	0	0	0	0	0	50	225
143	16	35	144	GANJ WALA MOHALLA W NO 35	53	182	23	43.40%	48	0	1	1	3	0	0	0	0	53	250
144	7	36	145	DHOBI GHAT NO 2	135	400	6	4.44%	68	0	26	0	40	1	0	0	0	135	900
145	7	36	146	DHOBI GHAT NO 1	255	673	13	5.10%	255	0	0	0	0	0	0	0	0	255	1400
146	7	36	147	BAKRA MANDI	54	268	0	0.00%	40	0	11	0	3	0	0	0	0	54	150
147	7	36	148	SATYA NARAYAN KI TEKARI	493	2064	26	5.27%	57	0	139	0	288	9	0	0	0	493	0
148	16	37	149	MADHO NAGAR	451	2607	94	20.84%	372	0	14	2	57	6	0	0	0	451	800
149	16	37	150	SANJAY NAGAR	102	472	3	2.94%	45	4	11	9	11	0	22	0	0	102	1000
150	16	37	151	NIMBAJI KI KHO	653	2739	34	5.21%	614	0	19	0	20	0	0	0	0	653	2000
151	16	37	152	NAYAPURA W NO 37	213	1035	25	11.74%	187	0	1	0	18	7	0	0	0	213	800
152	16	37	153	JAGRITI NAGAR	587	2513	36	6.13%	535	1	12	26	8	5	0	0	0	587	2000
153	16	37	154	TITURIYA COLONY	70	208	66	94.29%	44	16	10	0	0	0	0	0	0	70	50
154	16	37	155	SHANTI NAGAR W NO 37	191	819	13	6.81%	166	2	16	0	6	0	0	0	1	191	1500
155	16	37	156	AMAN KA PURA	32	112	2	6.25%	17	10	5	0	0	0	0	0	0	32	100





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
									Supply Source									Pipelines (Rmts)	
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
156	17	38	157	GOL PAHADIYA	794	3216	54	6.80%	697	13	10	16	58	0	0	0	0	794	1200
157	17	38	158	GUPTESHWAR PAHADI	277	1191	45	16.25%	44	0	0	7	197	29	0	0	0	277	600
158	17	38	159	AMAR PAHAD	336	1332	13	3.87%	231	0	0	42	63	0	0	0	0	336	1500
159	17	38	160	RAJA GAS GODAM	474	2067	74	15.61%	153	3	20	48	250	0	0	0	0	474	1500
160	17	38	161	GANESH MANDIR, RAJA GAS GODAM	133	537	16	12.03%	64	0	0	0	69	0	0	0	0	133	1800
161	17	38	162	HARKOTA NO 1	601	2230	10	1.66%	580	0	8	1	10	2	0	0	0	601	1200
162	17	38	163	BHUMIYA KA PURA	63	247	0	0.00%	60	0	1	0	2	0	0	0	0	63	1000
163	17	38	164	LAL KUAR KA PURA	358	1404	18	5.03%	300	0	0	15	43	0	0	0	0	358	1500
164	17	38	165	MEHRA SAHAB KI TALAIYA	109	340	10	9.17%	69	26	14	0	0	0	0	0	0	109	400
165	17	39	166	KAMBAL KENDRA, HARIJAN BASTI	304	1036	1	0.33%	239	0	65	0	0	0	0	0	0	304	800
166	17	39	167	SATH BHAI KI GOTH	158	539	18	11.39%	110	19	25	4	0	0	0	0	0	158	400
167	17	39	168	JATAR GALI, SWARNA REKHA NALA	87	340	3	3.45%	52	0	33	0	2	0	0	0	0	87	400
168	17	39	169	DHOLIBUA KA PUL	130	322	130	100.00 %	130	0	0	0	0	0	0	0	0	130	400
169	17	39	170	BAI SAHAB KI PARED	230	867	9	3.91%	199	5	3	2	21	0	0	0	0	230	650
170	18	40	171	BHOORE BABA KI BASTI	694	1357	0	0.00%	584	65	45	0	0	0	0	0	0	694	800
171	18	40	172	GADI WALA MOHALLA W	94	157	19	20.21%	87	6	1	0	0	0	0	0	0	94	325





Tab 23: Consolidate Information About Infrastructure Available in Slums

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S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
				NO 40															
172	18	40	173	BHAISA CHOKEY	60	168	4	6.67%	36	15	9	0	0	0	0	0	0	60	750
173	16	41	174	TOPEEWALA MOHALLA	411	1641	34	8.27%	387	1	4	0	18	1	0	0	0	411	1800
174	19	44	175	KHURJE WALA MOHALLA	472	1497	19	4.03%	355	5	41	5	63	0	3	0	0	472	2500
175	12	45	176	JATAVPURA, LALITPUR COLONY	124	566	1	0.81%	84	0	10	0	30	0	0	0	0	124	200
176	19	46	177	TAPU MOHALLA	519	2008	101	19.46%	424	60	35	0	0	0	0	0	0	519	2200
177	19	46	178	TELI KI BAZARIYA	102	389	14	13.73%	73	19	10	0	0	0	0	0	0	102	900
178	20	47	179	KAMATHIPURA, JATAV MOHALLA	151	464	64	42.38%	72	0	79	0	0	0	0	0	0	151	275
179	20	47	180	KABUTAR KI HAAT	47	50	0	0.00%	22	0	23	0	2	0	0	0	0	47	225
180	20	47	181	ROXY PUL LAKKAD KHANA	244	805	97	39.75%	94	0	28	0	122	0	0	0	0	244	750
181	20	47	182	UTTAR KHANA	100	334	1	1.00%	100	0	0	0	0	0	0	0	0	100	325
182	20	48	183	KADAM SAHAB KA BADA	103	388	9	8.74%	67	26	10	0	0	0	0	0	0	103	300
183	20	48	184	JAMBUR KHANA	211	666	5	2.37%	210	0	1	0	0	0	0	0	0	211	550
184	20	48	185	HEM SINGH KI PARED	376	1238	11	2.93%	342	0	10	24	0	0	0	0	0	376	2200
185	20	48	186	HAIDARGANJ	141	484	25	17.73%	112	19	10	0	0	0	0	0	0	141	650
186	20	48	187	AAPA GANJ, KARIGARON KA MOHALLA	262	1023	25	9.54%	164	60	38	0	0	0	0	0	0	262	800





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General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
187	17	49	188	HARI ANNA KA PAYGA	236	805	17	7.20%	160	64	12	0	0	0	0	0	0	236	1400
188	17	49	189	BANJARSHAH KA NALLAH	119	410	115	96.64%	103	1	5	0	10	0	0	0	0	119	1800
189	17	49	190	KALA SAIYYED	244	974	17	6.97%	161	54	29	0	0	0	0	0	0	244	1250
190	17	49	191	NAYAPURA W NO 49	197	785	17	8.63%	24	0	0	0	70	102	1	0	0	197	0
191	20	51	192	IMLI NAKA	245	679	10	4.08%	29	26	0	0	190	0	0	0	0	245	900
192	20	51	193	JATAV MOHALLA	110	277	0	0.00%	1	38	1	70	0	0	0	0	0	110	0
193	20	51	194	SIKANDAR KAMPU	381	1217	108	28.35%	360	0	17	3	0	1	0	0	0	381	900
194	20	51	195	AAPA GANJ, HAATHI KHANA	360	1467	163	45.28%	92	54	32	174	7	0	0	0	1	360	800
195	21	52	196	GUDDI NAKA	83	397	3	3.61%	0	0	0	5	0	78	0	0	0	83	0
196	21	52	197	PAYGA, GUDDI GUDDA KA NAKA	226	794	213	94.25%	178	27	21	0	0	0	0	0	0	226	600
197	21	52	198	NADARIYA WALI MATA	574	1287	541	94.25%	448	80	46	0	0	0	0	0	0	574	1000
198	21	52	199	GUDDI UPAR	456	1372	28	6.14%	268	117	71	0	0	0	0	0	0	456	1500
199	21	52	200	BELGAIYA KA PURA	74	283	7	9.46%	45	19	10	0	0	0	0	0	0	74	550
200	20	53	201	LAKKAD KHANA	70	234	34	48.57%	69	0	0	1	0	0	0	0	0	70	250
201	20	53	202	MUNSHIYON KA MOHALLA	113	493	3	2.65%	70	0	14	0	29	0	0	0	0	113	100
202	20	53	203	DEV NAGAR	128	557	25	19.53%	117	0	0	10	1	0	0	0	0	128	160
203	20	53	204	KARWARI MOHALLA	111	456	52	46.85%	22	0	1	75	0	9	0	0	4	111	1000





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S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
204	20	53	205	NAYAPURA W NO 53	87	386	47	54.02%	8	0	0	31	3	26	19	0	0	87	700
205	20	53	206	INGALE KI GOTH	87	205	4	4.60%	69	0	17	1	0	0	0	0	0	87	250
206	20	53	207	GANJI WALA MOHALLA W NO 53	147	380	32	21.77%	88	0	13	0	41	1	0	3	1	147	350
207	20	53	208	PAN PATTE KI GOTH	240	931	36	15.00%	144	0	25	0	68	3	0	0	0	240	650
208	20	53	209	RISHI NAGAR	43	217	8	18.60%	38	1	0	0	3	0	1	0	0	43	130
209	20	53	210	SURYA NAGAR	31	145	5	16.13%	31	0	0	0	0	0	0	0	0	31	150
210	21	54	211	HARIJAN BASTI, JAWAHAR COLONY	80	361	2	2.50%	23	0	3	50	1	3	0	0	0	80	1200
211	21	54	212	ARMY KI BAJARIYA	149	679	29	19.46%	71	0	13	44	20	1	0	0	0	149	600
212	21	54	213	CHANA KOTHAR	97	402	11	11.34%	6	0	2	35	47	7	0	0	0	97	800
213	21	55	214	AWADHPURA	1571	6131	98	6.24%	157	96	28	1190	14	34	52	0	0	1571	3500
214	21	55	215	KHAJANCHI BABA	829	3269	4	0.48%	17	4	3	800	0	0	5	0	0	829	1800
215	12	56	216	MUDHIYA PAHAD	865	3522	22	2.54%	856	1	4	1	3	0	0	0	0	865	1200
216	12	56	217	GADDE WALA MOHALLA W NO 56	141	749	2	1.42%	133	2	0	0	6	0	0	0	0	141	750
217	12	56	218	PARDI MOHALLA W NO 56	225	654	31	13.78%	107	0	0	0	118	0	0	0	0	225	600
218	13	58	219	GANJI KHO GALI NO 1	37	143	0	0.00%	37	0	0	0	0	0	0	0	0	37	150
219	12	56	220	LABHEDPURA	196	791	1	0.51%	125	0	11	0	58	2	0	0	0	196	400





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
									Supply Source									Pipelines (Rmts)	
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
220	12	56	221	NAKA CHANDRA BADANI, GALI NO 2, 4, 5	859	2721	376	43.77%	849	8	1	0	1	0	0	0	0	859	1100
221	12	56	222	DEV NAGAR	108	387	19	17.59%	0	0	0	0	108	0	0	0	0	108	0
222	13	57	223	OFO KI BAGIYA	89	379	2	2.25%	85	0	3	1	0	0	0	0	0	89	100
223	13	57	224	RANIPURA	693	2682	22	3.17%	515	0	151	3	23	1	0	0	0	693	1700
224	13	58	225	NIRDHAN NAGAR	154	281	10	6.49%	76	74	0	0	4	0	0	0	0	154	450
225	13	59	226	LABHEDPURA	549	2424	21	3.83%	537	1	2	0	8	0	0	1	0	549	250
226	13	59	227	VICKY FACTORY	267	837	13	4.87%	5	65	0	0	10	187	0	0	0	267	0
227	13	59	228	LALIYAPURA	50	150	13	26.00%	0	50	0	0	0	0	0	0	0	50	0
228	13	59	229	KHOTI GRAM	70	361	3	4.29%	16	1	10	0	36	6	0	1	0	70	0
229	13	59	230	BADI MADIYIAN	89	343	0	0.00%	0	0	3	0	40	16	5	12	13	89	0
230	13	59	231	CHOTI MADIYIAN	54	171	0	0.00%	0	0	0	0	39	0	0	15	0	54	0
231	13	59	232	NEEM CHANDOHA	160	642	13	8.13%	105	35	20	0	0	0	0	0	0	160	850
232	13	59	233	PARDI MOHALLA W NO 59	30	161	2	6.67%	29	0	0	0	1	0	0	0	0	30	0
233	14	60	234	SCINDHIYA NAGAR, MARGHAT WALI PAHADI	594	2420	65	10.94%	70	0	0	0	524	0	0	0	0	594	0
234	14	60	235	KOTE KI SARAY	85	310	1	1.18%	0	0	0	0	41	44	0	0	0	85	0
235	14	60	236	HURAWALI	687	2742	37	5.39%	0	6	0	35	646	0	0	0	0	687	0
236	14	60	237	HARKHEDA	88	269	32	36.36%	19	0	0	0	69	0	0	0	0	88	0





Tab 23: Consolidate Information About Infrastructure Available in Slums

General Information							BPL		Drinking Water										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	BPL Families	% of BPL Families	Supply Source									Pipelines (Rmts)	
									House Connection	Pub_Standpost	Neighbor	Municipal Tanker	Pub_TW_HP	Pvt_TW_HP	Pvt_Vendor	Well_Pond	Other	Total	Connectivity to Trunk Lines (Rmts)
237	14	60	238	DONGARPUR W NO 60	222	654	60	27.03%	36	0	0	0	186	0	0	0	0	222	200
238	14	60	239	SIROL COLONY	114	407	3	2.63%	114	0	0	0	0	0	0	0	0	114	325
239	14	60	240	NEW MEHRA COLONY	210	645	2	0.95%	40	13	47	0	0	0	0	0	110	210	500
240	14	60	241	ALAPUR	99	430	70	70.71%	4	0	0	0	0	6	0	0	89	99	0
241	14	60	242	OHADPUR	25	109	0	0.00%	0	0	0	0	25	0	0	0	0	25	0
242	14	60	243	GHOSIPURA W NO 60	334	1335	196	58.68%	24	0	0	0	310	0	0	0	0	334	700
243	14	60	244	BALE KA PURA	100	348	43	43.00%	0	0	92	0	8	0	0	0	0	100	0
				Total	64072	229644	9307	14.53%	41253	3852	3422	3265	9626	1892	364	62	336	64072	





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation	Community Facilities				
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutcha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
1	1	1	1	SHIV NANDI NAGAR	117	486	200	No	250	0	0	0	10	NA	NA	NA	NA	NA
2	1	1	2	ISLAMPURA	584	2232	800	Yes	1300	0	14	1300	380	NA	NA	1	NA	NA
3	1	1	3	JANAK TAAL KUSHWAHA MOHALLA	38	132	100	No	100	0	2	100	17	NA	NA	NA	NA	NA
4	1	1	4	RAMJI KA PURA	1045	3554	1600	Yes	2200	0	18	2000	990	NA	NA	NA	NA	NA
5	1	1	5	GRAM BARA	313	911	900	No	900	0	9	900	69	NA	NA	NA	NA	NA
6	1	1	6	JATAVPURA	165	528	450	No	450	0	0	0	31	NA	NA	NA	NA	NA
7	1	1	7	BEEES SUTRIYA NAGAR	86	296	600	Yes	600	200	7	800	86	NA	NA	NA	NA	NA
8	7	2	8	KACCHI SARAI, GHOSIPURA	63	216	200	Yes	200	0	2	200	61	NA	NA	1	NA	NA
9	7	2	9	SHIV NAGAR, GHOSIPURA	183	859	70	Yes	183	0	7	700	170	NA	NA	1	NA	NA
10	7	2	10	SUNAR KI BAGIYA	244	269	500	Yes	500	1600	22	2000	234	NA	NA	1	NA	NA
11	7	2	11	PANCHSHEEL NAGAR W NO 2	154	498	800	Yes	900	0	8	800	144	NA	NA	NA	NA	NA
12	7	2	12	JHADUWALA MOHALLA	267	944	250	Yes	250	0	3	250	221	NA	NA	1	NA	NA





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation		Community Facilities				
							Sewer Lines (Rmts)		Internal Roads										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)	
13	7	2	13	PURANA SCINDHIYA NAGAR	448	1710	700	Yes	700	0	2	200	428	NA	NA	1	NA	NA	
14	7	2	14	RAMPURI MOHALLA	334	1317	700	Yes	700	0	7	700	322	NA	NA	1	NA	NA	
15	7	2	15	AMBEDKAR NAGAR W NO 2	98	277	100	Yes	400	0	4	200	92	NA	NA	NA	NA	NA	
16	7	3	16	GHOSIPURA W NO 3	119	484	200	Yes	450	0	6	450	93	NA	NA	NA	NA	NA	
17	7	3	17	FARRASH KHANA	76	347	500	Yes	500	300	6	800	76	NA	NA	NA	NA	NA	
18	7	3	18	SHIV NAGAR	110	329	450	Yes	450	150	5	450	110	NA	NA	NA	NA	NA	
19	7	3	19	RAMGAD	186	848	450	Yes	450	50	8	450	166	NA	NA	NA	NA	NA	
20	1	4	21	INDRA COLONY	648	1973	1200	Yes	1200	900	14	1400	622	NA	NA	NA	NA	NA	
21	1	4	22	MEVATI MOHALLA W NO 4	443	827	1100	Yes	1200	600	12	1100	315	NA	NA	NA	NA	NA	
22	1	4	23	BANDA GHURA	151	782	300	No	450	150	5	450	132	NA	NA	NA	NA	NA	
23	1	4	24	GHATAMPUR	116	502	1100	No	1200	200	12	1400	100	NA	NA	NA	NA	NA	
24	1	4	25	MIRJAPUR	137	646	1000	No	1200	600	10	1600	120	NA	NA	1	NA	NA	
25	1	4	26	BULBULPURA	112	516	100	No	550	650	6	550	97	NA	NA	NA	NA	NA	
26	1	4	27	CHANDRA NAGAR	1997	9439	1100	Yes	1100	400	11	1100	1797	NA	NA	1	NA	NA	





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation		Community Facilities				
							Sewer Lines (Rmts)		Internal Roads										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)	
27	1	5	28				BADNAPURA	225	619	500	No	750	0	7	650	225	NA	NA	NA
28	1	5	29	RESHAMPURA	122	343	200	No	450	0	5	450	52	NA	NA	NA	NA	NA	
29	1	5	30	DAMODARBAG COLONY	50	242	100	Yes	100	125	4	225	50	NA	NA	NA	NA	NA	
30	1	5	31	KRISHNA NAGAR	270	964	600	Yes	600	200	12	600	176	NA	NA	NA	NA	NA	
31	1	5	32	KISHANBAG, AB ROAD	459	1130	900	Yes	900	0	10	900	309	NA	NA	NA	NA	NA	
32	2	6	33	MANGLESHWAR ROAD	218	391	900	Yes	900	0	10	900	208	NA	NA	1	NA	NA	
33	2	6	34	JOSIYANA MOHALLA	30	132	100	No	100	0	2	100	30	NA	NA	NA	NA	NA	
34	2	6	35	LADHEDI	602	1710	2700	Yes	2700	0	24	2700	577	NA	NA	1	NA	NA	
35	2	6	36	MEVATI MOHALLA W NO 6	180	547	450	Yes	550	350	9	900	171	NA	NA	NA	NA	NA	
36	2	6	37	HAVELI KA PICHWADA	285	690	1100	Yes	1300	300	15	1000	266	NA	NA	1	NA	NA	
37	2	6	38	JHANSIGANJ	96	484	200	Yes	450	0	6	450	87	NA	NA	1	NA	NA	
38	2	6	39	JHANGIR KATRA	192	584	500	Yes	500	0	5	500	141	NA	NA	NA	NA	NA	
39	2	6	40	MACHHI ADDI	89	248	1100	Yes	1300	300	15	1000	89	NA	NA	NA	NA	NA	
40	3	7	41	JAGNAPURA	53	212	1350	Yes	1850	0	26	1650	47	NA	NA	1	NA	NA	





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation		Community Facilities				
							Sewer Lines (Rmts)		Internal Roads										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)	
41	3	7	42				INDRA NAGAR	1091	4569	1800	Yes	2100	0	22	2100	1019	NA	NA	NA
42	3	7	43	MADANPURA, MADAN KUI	104	399	600	Yes	900	200	9	900	100	NA	NA	NA	NA	NA	
43	3	7	44	LOOTPURA	494	1906	700	Yes	700	0	7	700	472	NA	NA	NA	NA	NA	
44	3	7	45	SHARMA FARM NO 2	62	223	0	No	375	0	0	150	50	NA	NA	NA	NA	NA	
45	3	7	46	SHARMA FARM NO 3	56	184	100	No	200	210	3	150	34	NA	NA	NA	NA	NA	
46	3	8	47	CHODE KE HANUMAN	930	2964	1200	Yes	1400	0	15	1400	930	NA	NA	NA	NA	NA	
47	3	8	48	NARSINGH NAGAR	478	1478	900	No	1200	0	12	1200	462	NA	NA	NA	NA	NA	
48	3	8	49	SHARMA FARM NO 1	58	176	150	No	350	0	4	350	15	NA	NA	NA	NA	NA	
49	2	9	50	RANIPURA	324	1223	1200	Yes	1300	0	14	1200	318	NA	NA	1	NA	NA	
50	2	9	51	RANGIYANA MOHALLA	304	1272	1200	Yes	1200	0	14	1200	270	NA	NA	1	NA	NA	
51	2	9	52	POSTHIKHANA	161	518	700	No	700	0	9	700	156	NA	NA	NA	NA	NA	
52	2	9	53	GOLPADE	347	1014	450	Yes	400	50	4	450	347	NA	NA	NA	NA	NA	
53	2	9	54	RAJA KI MANDI	304	902	2800	Yes	3200	0	30	2800	303	NA	NA	1	NA	NA	
54	2	9	55	SODA KA KUA	142	464	300	Yes	450	0	5	450	7	NA	NA	NA	NA	NA	





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation	Community Facilities				
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutcha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
55	2	9	56	MADDI KA BAZAAR	181	645	900	Yes	900	0	7	900	134	NA	NA	NA	NA	NA
56	2	9	57	MAIDAI KA MOHALLA	149	508	300	Yes	450	0	3	400	149	NA	NA	NA	NA	NA
57	2	10	58	GOLANDAJ	252	707	550	No	700	0	8	700	86	NA	NA	NA	NA	NA
58	2	10	59	KESHOBAG	102	325	400	No	450	0	5	450	57	NA	NA	NA	NA	NA
59	2	10	60	AAUKHANA	226	670	800	Yes	800	0	9	800	226	NA	NA	NA	NA	NA
60	2	10	61	JAMA MASJID, CHOWK BAZAAR	112	305	600	Yes	600	0	7	600	112	NA	NA	NA	NA	NA
61	2	10	62	KASHI NARESH KI GALI	66	260	200	Yes	200	50	3	200	31	NA	NA	NA	NA	NA
62	2	10	63	SUNAAR MOHALLA	160	622	350	Yes	475	0	6	450	151	NA	NA	NA	NA	NA
63	2	10	64	KANOON GOYAN	150	453	400	No	400	250	6	400	148	NA	NA	1	NA	NA
64	2	10	65	TAMESHWAR MOHALLA	150	500	350	Yes	425	0	5	425	133	NA	NA	1	NA	NA
65	2	10	66	HATHIKHANA	101	273	350	No	550	200	8	750	101	NA	NA	NA	NA	NA
66	4	11	67	GHOSH PURA NO 1	633	1309	1800	Yes	1800	900	16	1500	606	NA	NA	NA	NA	NA
67	4	11	68	GHOSH PURA NO 2	664	2130	2400	Yes	2400	500	30	2400	571	NA	NA	1	NA	NA





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation		Community Facilities				
							Sewer Lines (Rmts)		Internal Roads										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)	
68	5	12	69				RASULABAD	255	1072	800	Yes	800	400	12	800	246	NA	NA	NA
69	4	13	70	KOTAWALA MOHALLA	159	444	450	No	560	0	6	450	158	NA	NA	NA	NA	NA	
70	4	13	71	PACHEE PADA	137	297	550	Yes	550	100	5	600	137	NA	NA	NA	NA	NA	
71	4	13	72	KHIDKI MOHALLA	111	407	550	Yes	550	0	6	550	83	NA	NA	1	NA	NA	
72	4	13	73	HORIPURA	89	322	250	Yes	250	0	4	250	89	NA	NA	NA	NA	NA	
73	4	14	74	GUDARI	541	1960	2000	Yes	2000	0	5	500	497	NA	NA	1	NA	NA	
74	4	14	75	NOORGANJ	773	3129	1500	Yes	1700	0	12	1200	682	NA	NA	1	NA	NA	
75	4	14	76	KHWAJA NAGAR	254	1047	1200	Yes	1200	0	12	1200	239	NA	NA	NA	NA	NA	
76	4	14	77	RAMTAPURA NO 2	474	1423	1500	Yes	1600	0	18	1600	472	NA	NA	1	NA	NA	
77	4	14	78	KHWAJA KANOON	64	225	0	No	0	150	0	0	25	NA	NA	NA	NA	NA	
78	3	15	79	JATI KI LANE	311	1359	500	Yes	500	700	6	500	213	NA	NA	NA	NA	NA	
79	3	15	80	HARIJAN BASTI, LANE NO 5	85	320	50	Yes	400	0	4	400	32	NA	NA	NA	NA	NA	
80	3	15	81	NEW SANJAY NAGAR	405	1627	800	Yes	1000	1000	8	800	314	NA	NA	NA	NA	NA	
81	3	15	82	GADAIPURA	2192	8192	1800	Yes	1800	900	26	2400	2091	NA	NA	NA	NA	NA	





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation		Community Facilities				
							Sewer Lines (Rmts)		Internal Roads										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.		Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
82	5	16	83	NEW COLONY NO 2		37	138	300	Yes	300	0	4	300	37	NA	NA	1	NA	NA
83	5	16	84	NEW COLONY NO 1		354	1258	1100	Yes	1100	0	11	1100	350	NA	NA	NA	NA	NA
84	5	16	85	CHANDANPURA		128	495	450	Yes	450	0	6	450	114	NA	NA	NA	NA	NA
85	5	16	86	RESHAM MILL BASTI		348	1166	300	Yes	750	300	4	300	348	NA	NA	NA	NA	NA
86	5	17	87	ANAND NAGAR, CHAMDA MILL		85	164	300	Yes	300	0	4	300	80	NA	NA	NA	NA	NA
87	5	17	88	ARA MILL, HARIJAN BASTI		462	1564	2400	Yes	2600	0	27	2600	460	NA	NA	1	NA	NA
88	5	17	89	3B COLONY, LAL QUARTER		49	135	450	Yes	450	0	4	450	49	NA	NA	1	NA	NA
89	5	17	90	NEW KANCH MILL		120	394	600	Yes	600	0	6	600	119	NA	NA	NA	NA	NA
90	8	18	91	ADARSH NAGAR		110	501	300	Yes	300	100	4	350	35	NA	NA	NA	NA	NA
91	8	18	92	RASULPUR		148	551	0	No	0	100	3	100	0	NA	NA	NA	NA	NA
92	8	19	93	JADERUA KALAH		818	3281	1200	Yes	1200	1800	22	2000	818	NA	NA	NA	NA	NA
93	8	19	94	RACHANA NAGAR		91	379	0	Yes	350	150	0	0	67	NA	NA	NA	NA	NA
94	10	21	95	VIVEK NAGAR		29	100	800	Yes	800	0	8	800	26	NA	NA	NA	NA	NA





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation	Community Facilities				
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutcha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
95	10	21	96	PANCHSHEEL NAGAR W NO 21	59	214	450	Yes	450	0	6	450	55	NA	NA	NA	NA	NA
96	10	21	97	MELA DULPUR	497	1217	900	Yes	1450	0	12	1450	436	NA	NA	NA	NA	NA
97	10	21	98	SHANTI NAGAR W NO 21	52	183	0	No	0	350	1	0	0	NA	NA	NA	NA	NA
98	10	21	99	BAGIYA HANUMAN NAGAR	55	157	150	No	150	0	3	150	51	NA	NA	NA	NA	NA
99	10	22	100	BASTI GODAM	289	883	0	Yes	1200	200	0	0	281	NA	NA	1	NA	NA
100	10	22	101	SHIDHESHWAR NAGAR	511	1124	1600	Yes	2300	0	19	2000	482	NA	NA	1	NA	NA
101	10	22	102	KHALEefa COLONY	38	142	200	Yes	200	0	4	200	37	NA	NA	NA	NA	NA
102	10	22	103	GOPALPURA	103	238	0	Yes	500	100	2	200	102	NA	NA	NA	NA	NA
103	10	22	104	SHIDHARTH NAGAR	30	83	100	Yes	100	0	2	100	29	NA	NA	NA	NA	NA
104	10	23	105	NADI PAR TAL	666	2275	1200	Yes	1350	0	11	800	666	NA	NA	NA	NA	NA
105	10	23	106	GALLA KOTHER	338	1477	550	Yes	750	0	6	550	218	NA	NA	1	NA	NA
106	10	23	107	AMBEDKAR NAGAR W NO 23	62	127	175	No	175	0	4	175	60	NA	NA	NA	NA	NA
107	10	23	108	SHRI NAGAR COLONY	303	1029	1700	Yes	1700	0	17	1700	298	NA	NA	NA	NA	NA





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation		Community Facilities				
							Sewer Lines (Rmts)		Internal Roads										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)	
108	10	23	109				HARIJAN BASTI, SHAMSHAN GHAT	35	162	700	Yes	700	0	8	700	33	NA	NA	1
109	8	25	110	LEATHER FACTORY	199	523	350	Yes	500	150	7	650	199	NA	NA	NA	NA	NA	
110	8	25	111	SHITLA COLONY	39	172	100	Yes	100	0	2	100	39	NA	NA	NA	NA	NA	
111	9	26	112	TIKONIYA	138	472	700	Yes	700	0	7	600	54	NA	NA	NA	NA	NA	
112	9	26	113	HARIJAN BASTI, GURUDWARA	275	742	400	Yes	750	0	7	750	206	NA	NA	NA	NA	NA	
113	9	26	114	KHATEEK MOHALLA W NO 26	118	550	200	Yes	250	0	2	250	118	NA	NA	NA	NA	NA	
114	9	26	115	HANUMAN COLONY	100	356	300	Yes	300	0	4	300	100	NA	NA	NA	NA	NA	
115	9	26	116	TYAGI NAGAR	451	1384	100	Yes	750	0	17	750	437	NA	NA	NA	NA	NA	
116	9	26	117	PEETAL KARKHANA	149	485	325	Yes	325	0	2	200	149	NA	NA	NA	NA	NA	
117	9	26	118	KACHERI PARUSRAM	51	159	150	Yes	150	0	3	150	51	NA	NA	NA	NA	NA	
118	9	26	119	VINAY COLONY	123	460	300	Yes	300	50	5	350	120	NA	NA	NA	NA	NA	
119	9	26	120	GHAS MANDI	82	286	200	Yes	200	0	2	200	80	NA	NA	NA	NA	NA	
120	9	27	121	RAM NAGAR	176	750	550	Yes	550	100	7	550	144	NA	NA	NA	NA	NA	





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General Information							Drainage Sewerage		Road		Street Lights		Sanitation	Community Facilities				
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutcha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
121	11	28	122	HARNAMPURA	401	1261	1075	Yes	1075	175	7	1200	401	NA	NA	NA	NA	NA
122	11	28	123	BHIM NAGAR	405	1336	900	Yes	900	500	12	1200	404	NA	NA	NA	NA	NA
123	11	28	124	PHULE NAGAR	124	311	350	Yes	350	50	4	375	124	NA	NA	NA	NA	NA
124	11	28	125	KUMHARPURA	385	1161	900	Yes	900	0	6	900	371	NA	NA	NA	NA	NA
125	14	29	126	MAHAL GAON, KAROULI MATA	650	2310	1000	Yes	1000	200	8	800	438	NA	NA	1	NA	NA
126	6	31	127	GUJARATI MOHALLA	92	248	600	Yes	600	0	4	600	92	NA	NA	NA	NA	NA
127	6	31	128	LAXMANPURA	62	237	550	Yes	550	0	4	550	46	NA	NA	NA	NA	NA
128	6	32	129	MARI MATA	117	235	200	Yes	200	0	4	200	84	NA	NA	NA	NA	NA
129	6	32	130	MAHAL GAON, MARI MATA	495	2293	1400	Yes	1750	0	19	1750	327	NA	NA	NA	NA	NA
130	7	33	131	RAVIDAS NAGAR	534	2148	300	No	300	0	4	300	487	NA	NA	1	NA	NA
131	7	33	132	DONGARPUR W NO 33	299	1219	400	Yes	450	50	4	450	271	NA	NA	1	NA	NA
132	7	33	133	LAXMAN TALIYA	359	1289	1800	Yes	1800	0	20	1800	337	NA	NA	1	NA	NA
133	7	33	134	KHATEEK MOHALLA W NO 33	49	217	300	Yes	300	0	5	300	41	NA	NA	NA	NA	NA





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General Information							Drainage Sewerage		Road		Street Lights		Sanitation	Community Facilities				
							Sewer Lines (Rmts)		Internal Roads									
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
134	7	33	135	KHALASIPURA	587	2028	500	Yes	700	500	11	1000	539	NA	NA	NA	NA	NA
135	7	33	136	PIYAU WALI GALI	267	1084	200	Yes	200	0	4	200	244	NA	NA	NA	NA	NA
136	15	34	137	PARDI MOHALLA W NO 34	61	238	250	No	250	0	4	250	28	NA	NA	1	NA	NA
137	16	35	138	SHEIKH KI BAGIYA	282	1172	650	Yes	650	100	7	600	234	NA	NA	NA	NA	NA
138	16	35	139	SWARNALEKHA NALLAH, JIWAJIGANJ	50	182	100	Yes	100	50	2	100	50	NA	NA	NA	NA	NA
139	16	35	140	SUBEY KI GOTH	374	1236	800	Yes	750	150	8	800	349	NA	NA	NA	NA	NA
140	16	35	141	SHANTI NAGAR, NAI SADAK	112	400	375	Yes	450	75	5	450	82	NA	NA	NA	NA	NA
141	16	35	142	RASSI WALA MOHALLA	107	409	300	Yes	350	100	5	450	47	NA	NA	NA	NA	NA
142	16	35	143	DALIYA WALA MOHALLA	50	158	225	Yes	225	0	4	225	50	NA	NA	NA	NA	NA
143	16	35	144	GANJ WALA MOHALLA W NO 35	53	182	200	No	200	50	2	250	27	NA	NA	NA	NA	NA
144	7	36	145	DHOBI GHAT NO 2	135	400	850	Yes	850	50	8	900	121	NA	NA	NA	NA	NA
145	7	36	146	DHOBI GHAT NO 1	255	673	1200	Yes	1200	200	11	1400	245	NA	NA	NA	NA	NA
146	7	36	147	BAKRA MANDI	54	268	150	Yes	150	0	3	150	29	NA	NA	NA	NA	NA





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General Information							Drainage Sewerage		Road		Street Lights		Sanitation		Community Facilities				
							Sewer Lines (Rmts)		Internal Roads										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)	
147	7	36	148				SATYA NARAYAN KI TEKARI	493	2064	400	Yes	400	800	10	900	438	NA	NA	NA
148	16	37	149	MADHO NAGAR	451	2607	200	Yes	1000	100	2	200	406	NA	NA	NA	NA	NA	
149	16	37	150	SANJAY NAGAR	102	472	1000	Yes	1000	200	12	1200	88	NA	NA	1	NA	NA	
150	16	37	151	NIMBAJI KI KHO	653	2739	1500	Yes	2000	1000	15	1000	491	NA	NA	1	NA	NA	
151	16	37	152	NAYAPURA W NO 37	213	1035	1000	Yes	1000	0	3	300	185	NA	NA	NA	NA	NA	
152	16	37	153	JAGRITI NAGAR	587	2513	500	Yes	2000	100	5	500	523	NA	NA	1	NA	NA	
153	16	37	154	TITURIYA COLONY	70	208	0	Yes	0	100	0	40	70	NA	NA	NA	NA	NA	
154	16	37	155	SHANTI NAGAR W NO 37	191	819	1200	No	2000	0	10	1100	125	NA	NA	NA	NA	NA	
155	16	37	156	AMAN KA PURA	32	112	0	Yes	0	100	0	0	32	NA	NA	NA	NA	NA	
156	17	38	157	GOL PAHADIYA	794	3216	1000	Yes	1000	600	7	700	650	NA	NA	NA	NA	NA	
157	17	38	158	GUPTESHWAR PAHADI	277	1191	0	No	0	1600	2	100	37	NA	NA	NA	NA	NA	
158	17	38	159	AMAR PAHAD	336	1332	1500	No	1500	500	15	1500	296	NA	NA	NA	NA	NA	
159	17	38	160	RAJA GAS GODAM	474	2067	1500	No	2000	200	4	400	318	NA	NA	NA	NA	NA	
160	17	38	161	GANESH MANDIR, RAJA GAS	133	537	1200	Yes	1400	400	10	0	113	NA	NA	NA	NA	NA	





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S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutcha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
				GODAM														
161	17	38	162	HARKOTA NO 1	601	2230	100	Yes	1300	700	12	1300	571	NA	NA	NA	NA	NA
162	17	38	163	BHUMIYA KA PURA	63	247	1000	Yes	1000	0	5	1000	60	NA	NA	NA	NA	NA
163	17	38	164	LAL KUAR KA PURA	358	1404	1800	Yes	1800	300	18	1800	343	NA	NA	1	NA	NA
164	17	38	165	MEHRA SAHAB KI TALAIYA	109	340	400	Yes	400	50	6	400	109	NA	NA	NA	NA	NA
165	17	39	166	KAMBAL KENDRA, HARIJAN BASTI	304	1036	600	Yes	600	200	4	800	304	NA	NA	1	NA	NA
166	17	39	167	SATH BHAI KI GOTH	158	539	350	Yes	400	50	6	400	157	NA	NA	NA	NA	NA
167	17	39	168	JATAR GALI, SWARNA REKHA NALA	87	340	400	Yes	425	0	5	425	87	NA	NA	NA	NA	NA
168	17	39	169	DHOLIBUA KA PUL	130	322	400	Yes	400	0	4	400	130	NA	NA	NA	NA	NA
169	17	39	170	BAI SAHAB KI PARED	230	867	600	Yes	600	50	7	600	227	NA	NA	NA	NA	NA
170	18	40	171	BHOORE BABA KI BASTI	694	1357	500	Yes	800	0	8	800	653	NA	NA	NA	NA	NA
171	18	40	172	GADI WALA MOHALLA W NO 40	94	157	325	Yes	325	0	4	325	91	NA	NA	NA	NA	NA





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							Sewer Lines (Rmts)		Internal Roads									
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
172	18	40	173	BHAISA CHOKEY	60	168	650	Yes	750	0	7	750	60	NA	NA	NA	NA	NA
173	16	41	174	TOPEEWALA MOHALLA	411	1641	1800	Yes	2200	0	20	500	370	NA	NA	1	NA	NA
174	19	44	175	KHURJE WALA MOHALLA	472	1497	2500	Yes	2600	0	26	2500	469	NA	NA	NA	NA	NA
175	12	45	176	JATAVPURA, LALITPUR COLONY	124	566	200	Yes	690	0	14	400	78	NA	NA	NA	NA	NA
176	19	46	177	TAPU MOHALLA	519	2008	1800	Yes	2200	0	25	2200	493	NA	NA	NA	NA	NA
177	19	46	178	TELI KI BAZARIYA	102	389	900	Yes	900	0	10	900	100	NA	NA	NA	NA	NA
178	20	47	179	KAMATHIPURA, JATAV MOHALLA	151	464	275	Yes	275	0	3	275	151	NA	NA	NA	NA	NA
179	20	47	180	KABUTAR KI HAAT	47	50	225	Yes	225	0	4	225	34	NA	NA	NA	NA	NA
180	20	47	181	ROXY PUL LAKKAD KHANA	244	805	750	Yes	750	0	8	750	244	NA	NA	NA	NA	NA
181	20	47	182	UTTAR KHANA	100	334	250	Yes	250	75	3	300	100	NA	NA	NA	NA	NA
182	20	48	183	KADAM SAHAB KA BADA	103	388	300	No	350	0	4	350	103	NA	NA	NA	NA	NA
183	20	48	184	JAMBUR KHANA	211	666	550	Yes	550	0	5	450	211	NA	NA	NA	NA	NA
184	20	48	185	HEM SINGH KI PARED	376	1238	2100	Yes	2100	100	24	2200	368	NA	NA	NA	NA	NA





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							Sewer Lines (Rmts)		Internal Roads									
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
185	20	48	186	HAIDARGANJ	141	484	650	Yes	650	0	5	650	139	NA	NA	NA	NA	NA
186	20	48	187	AAPA GANJ, KARIGARON KA MOHALLA	262	1023	800	No	950	0	10	950	262	NA	NA	NA	NA	NA
187	17	49	188	HARI ANNA KA PAYGA	236	805	1000	Yes	1200	400	15	1000	219	NA	NA	NA	NA	NA
188	17	49	189	BANJARSHAH KA NALLAH	119	410	600	Yes	900	900	8	600	112	NA	NA	NA	NA	NA
189	17	49	190	KALA SAIYYED	244	974	1100	Yes	1100	300	14	900	244	NA	NA	NA	NA	NA
190	17	49	191	NAYAPURA W NO 49	197	785	150	No	150	200	4	350	67	NA	NA	NA	NA	NA
191	20	51	192	IMLI NAKA	245	679	700	Yes	900	0	9	900	223	NA	NA	NA	NA	NA
192	20	51	193	JATAV MOHALLA	110	277	250	Yes	600	0	7	600	110	NA	NA	NA	NA	NA
193	20	51	194	SIKANDAR KAMPU	381	1217	900	Yes	950	0	10	950	381	NA	NA	NA	NA	NA
194	20	51	195	AAPA GANJ, HAATHI KHANA	360	1467	800	Yes	950	0	11	800	253	NA	NA	NA	NA	NA
195	21	52	196	GUDDI NAKA	83	397	200	No	200	75	2	100	74	NA	NA	NA	NA	NA
196	21	52	197	PAYGA, GUDDI GUDDA KA NAKA	226	794	250	Yes	250	450	6	550	216	NA	NA	NA	NA	NA
197	21	52	198	NADARIYA WALI MATA	574	1287	200	Yes	200	1000	7	200	550	NA	NA	1	NA	NA





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S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
198	21	52	199				GUDDI UPAR	456	1372	1200	Yes	1200	600	10	1400	456	NA	NA
199	21	52	200	BELLGAIYA KA PURA	74	283	550	Yes	550	50	7	600	69	NA	NA	NA	NA	NA
200	20	53	201	LAKKAD KHANA	70	234	250	Yes	250	0	4	250	69	NA	NA	NA	NA	NA
201	20	53	202	MUNSHIYON KA MOHALLA	113	493	100	Yes	140	0	0	0	80	NA	NA	NA	NA	NA
202	20	53	203	DEV NAGAR	128	557	140	Yes	160	0	3	160	121	NA	NA	NA	NA	NA
203	20	53	204	KARWARI MOHALLA	111	456	1000	Yes	1000	0	10	1000	109	NA	NA	NA	NA	NA
204	20	53	205	NAYAPURA W NO 53	87	386	600	Yes	800	0	8	800	59	NA	NA	1	NA	NA
205	20	53	206	INGALE KI GOTH	87	205	25	Yes	250	0	4	250	86	NA	NA	NA	NA	NA
206	20	53	207	GANJI WALA MOHALLA W NO 53	147	380	250	Yes	300	150	4	300	118	NA	NA	NA	NA	NA
207	20	53	208	PAN PATTE KI GOTH	240	931	650	Yes	650	0	7	650	231	NA	NA	NA	NA	NA
208	20	53	209	RISHI NAGAR	43	217	130	Yes	130	0	3	130	43	NA	NA	NA	NA	NA
209	20	53	210	SURYA NAGAR	31	145	125	Yes	150	0	3	150	27	NA	NA	NA	NA	NA
210	21	54	211	HARIJAN BASTI, JAWAHAR COLONY	80	361	800	Yes	1200	0	8	1200	28	NA	NA	NA	NA	NA





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S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchra	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
211	21	54	212				ARMY KI BAJARIYA	149	679	600	Yes	600	0	6	400	100	NA	NA
212	21	54	213	CHANA KOTHAR	97	402	1300	Yes	1300	0	4	1300	95	NA	NA	NA	NA	NA
213	21	55	214	AWADHPURA	1571	6131	2400	Yes	3700	0	30	2900	721	NA	NA	1	NA	NA
214	21	55	215	KHAJANCHI BABA	829	3269	1800	Yes	1800	0	18	1800	122	NA	NA	NA	NA	NA
215	12	56	216	MUDHIYA PAHAD	865	3522	1200	Yes	1200	0	12	1200	767	NA	NA	NA	NA	NA
216	12	56	217	GADDE WALA MOHALLA W NO 56	141	749	650	Yes	750	0	5	750	133	NA	NA	NA	NA	NA
217	12	56	218	PARDI MOHALLA W NO 56	225	654	600	Yes	650	0	10	650	214	NA	NA	NA	NA	NA
218	13	58	219	GANJI KHO GALI NO 1	37	143	100	No	100	50	3	150	37	NA	NA	NA	NA	NA
219	12	56	220	LABHEDPURA	196	791	400	Yes	400	0	7	400	193	NA	NA	NA	NA	NA
220	12	56	221	NAKA CHANDRA BADANI, GALI NO 2, 4, 5	859	2721	1100	Yes	1100	0	15	1100	819	NA	NA	NA	NA	NA
221	12	56	222	DEV NAGAR	108	387	650	Yes	650	0	7	650	108	NA	NA	NA	NA	NA
222	13	57	223	OFO KI BAGIYA	89	379	100	Yes	150	0	2	50	88	NA	NA	NA	NA	NA
223	13	57	224	RANIPURA	693	2682	1700	Yes	1700	0	18	1700	683	NA	NA	NA	NA	NA





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							Sewer Lines (Rmts)		Internal Roads										
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.		Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutchha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
224	13	58	225	NIRDHAN NAGAR		154	281	450	Yes	450	0	6	450	152	NA	NA	NA	NA	NA
225	13	59	226	LABHEDPURA		549	2424	200	Yes	500	0	5	500	538	NA	NA	NA	NA	NA
226	13	59	227	VICKY FACTORY		267	837	200	No	200	350	3	200	41	NA	NA	NA	NA	NA
227	13	59	228	LALIYAPURA		50	150	150	No	300	0	0	300	0	NA	NA	NA	NA	NA
228	13	59	229	KHOTI GRAM		70	361	0	Yes	600	0	4	300	34	NA	NA	NA	NA	NA
229	13	59	230	BADI MADIYIAN		89	343	0	No	600	0	40	300	1	NA	NA	NA	NA	NA
230	13	59	231	CHOTI MADIYIAN		54	171	0	No	0	700	0	0	3	NA	NA	NA	NA	NA
231	13	59	232	NEEM CHANDOHA		160	642	750	Yes	750	100	8	800	160	NA	NA	NA	NA	NA
232	13	59	233	PARDI MOHALLA W NO 59		30	161	150	Yes	150	0	3	150	26	NA	NA	NA	NA	NA
233	14	60	234	SCINDHIYA NAGAR, MARGHAT WALI PAHADI		594	2420	0	Yes	0	1250	0	0	115	NA	NA	NA	NA	NA
234	14	60	235	KOTE KI SARAY		85	310	0	No	0	400	3	200	85	NA	NA	NA	NA	NA
235	14	60	236	HURAWALI		687	2742	800	No	800	0	9	800	46	NA	NA	NA	NA	NA
236	14	60	237	HARKHEDA		88	269	0	Yes	0	500	6	500	88	NA	NA	NA	NA	NA





Tab 24: Consolidate Information About Infrastructure Available in Slums

General Information							Drainage Sewerage		Road		Street Lights		Sanitation	Community Facilities				
							Sewer Lines (Rmts)		Internal Roads									
S. No.	Zone No.	Ward No.	Slum_ID	Name of the Slum & Slum No.	Households	Population	Sewer Lines (Rmts)	Connectivity to Trunk Sewers (Yes/No)	Pucca	Kutcha	No. of Street Light Poles	Road_Length_with_Street Lights	HHs with in-house Toilets	Community Halls	Livelihood/Production Centers	Primary School	Health Centre (PHC)	Others (Old age Home Night Shelter, Child Rehab Centre)
237	14	60	238	DONGARPUR W NO 60	222	654	0	No	250	300	6	550	95	NA	NA	NA	NA	NA
238	14	60	239	SIROL COLONY	114	407	100	No	100	225	4	325	14	NA	NA	NA	NA	NA
239	14	60	240	NEW MEHRA COLONY	210	645	0	No	400	350	5	400	50	NA	NA	NA	NA	NA
240	14	60	241	ALAPUR	99	430	0	No	0	600	7	600	0	NA	NA	NA	NA	NA
241	14	60	242	OHADPUR	25	109	150	No	150	250	4	100	25	NA	NA	NA	NA	NA
242	14	60	243	GHOSIPURA W NO 60	334	1335	200	No	200	1200	14	200	264	NA	NA	1	NA	NA
243	14	60	244	BALE KA PURA	100	348	0	No	100	250	4	350	48	NA	NA	NA	NA	NA
				Total	64072	229644												





Household Survey Format – Appendix

B





Multipurpose Household Survey Questionnaire

बहुउद्देशीय पारिवारिक सर्वेक्षण प्रश्नावली

Component B

Socio-economic Households survey – slum households only

सामाजिक आर्थिक सर्वेक्षण – केवल झुग्गी बस्तियों में रहने वाले परिवारों के लिये

CITY

प्रश्नावली संख्या			
जानकारी			
पता	घर/ बिल्डिंग/ प्लॉट अपार्टमेंट संख्या		
	सड़क क्र.		
	कालोनी/ मोहल्ला		
	शहर		
	पिन कोड		
जोन क्र.	वार्ड क्र.	संपत्ति संख्या	मकान नं.

1. उत्तरदाता का नाम	
2. परिवार के मुखिया का नाम	
3. परिवार के मुखिया पिता/पति का नाम	
4. वैवाहिक स्थिति (कोड : 1 – विवाहित, 2 – विधवा और विधुर, 3 – तलाकशुदा, 4 – अविवाहित)	





5. परिवार का विवरण

सदस्य नाम	मुखिया से संबंध	उम्र	लिंग	2010 तक उच्चतम शैक्षणिक योग्यता	कार्य आय का साधन	अनुमानित मासिक आय	शैक्षणिक संस्था / पढ़ाई कार्यक्रम में सतत रहे हुए हैं	पारंपरिक कौशल	कौशल का प्रशिक्षण प्राप्त किया	संस्था जहाँ से प्रशिक्षण प्राप्त किया	किस क्षेत्र में प्रशिक्षण प्राप्त करना चाहते हैं	
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	परिवार का मुखिया											
2												
3												
4												
5												
6												
7												
8												
9												
10												
कुल												
कोड												
(1)	पुरुष: M महिला F											
(2)	कोड: 1 - अशिक्षित 2 - प्राथमिक 3 - माध्यमिक शाला 4 - हाई स्कूल 5 - हायर सेकण्डरी 6 - तकनीकी शिक्षा, 7 - स्नातक या उससे अधिक											
(3)	1 = वैतन मोगी, 2 = असंगठित क्षेत्र में कार्यरत मजदूर 3 = स्वरोजगार 4 = किराया, पेंशन अथवा संपत्ति से आय 5 = कोई कार्य नहीं											
(4)	कुल मासिक आय कितनी है 1 1000 से कम 2 1000-3000, 3 3000-5000, 4 5000-10,000, 5 10,000 से अधिक 9 कोई आय नहीं											
(5)	1 = हाँ, 2 = नहीं.											
(6)	1 = हाँ, 2 = नहीं.											





(7)	1 = हाँ, 2 = नहीं.									
(8)	(कोड: 1 - आई.टी.आई. 2. पॉलिटेक्निक में, 3. एक्सक्यूटिव टाइसम, प्रशिक्षण केंद्र, 4. कृषि विज्ञान केंद्र, 5. राज्य ग्रामीण विकास संस्थान (एस. आई. आर. डी.), 6. विस्तृत प्रशिक्षण केंद्र, 7. गैर सरकारी संगठन 8. स्वयं सेवी संस्थान 9. खादी एवं ग्रामीण विकास उद्योग केंद्र / खादी एवं ग्रामीण उद्योग 10. अन्य सरकारी प्रशिक्षण संस्थान 11. अन्य निजी प्रशिक्षण संस्थान 12. प्राइवेट औद्योगिक इकाई 13. सार्वजनिक औद्योगिक इकाई, 14. अन्य कृपया बताइए)									
(9)	1 व्यावसायिक प्रशिक्षण (टेलरिंग, स्क्रीन प्रिंटिंग, कम्प्यूटर, इत्यादि) 2 पारंपरिक कौशल प्रशिक्षण (बढ़ई, लोहार, इत्यादि)									
6.	यदि महिला परिवार की मुखिया है, या मुख्य कमाने वाली है तो उसकी वैवाहिक स्थिति बताएं – वैवाहिक / विधवा / परित्यक्ता / एकल / तलाकशुदा / अन्य									
7.	सामाजिक कल्याण के अर्न्तगत लाभ लेने वाले सदस्यों की संख्या						संख्या			
i.	स्वर्ण जयन्ती शहरी रोजगार योजना									
ii.	सामाजिक सुरक्षा पेंशन									
iii.	परिवार कल्याण योजना									
iv.	स्वास्थ्य बीमा योजना									
v.	कोई अन्य योजना									
8.	यदि परिवार में बेरोजगार सदस्य है तो बेरोजगारी का कारण									
अशिक्षा - 1 औपचारिक शिक्षा का अभाव - 2 उपयुक्त रोजगार का अभाव - 3										
9.	परिवार का औसत मासिक खर्च कितना है ?									
	1 1000 से कम		2 1000-3000		3. 3000-5000		4. 5000-10,000,		5 10,000 से अधिक	
10. धर्म ?	हिन्दू 1	मुस्लिम 2	सिख 3	क्रिश्चन 4	जैन 5	बौद्धधर्म 6	जैससत्रिनिस्म 7	अन्य 8		
11. जाति ?	सामान्य 1	अनु. जाति 2	अनु. जनजाति 3	अन्य पिछड़ा वर्ग 4						
12. पिछले वर्ष परिवार में कोई बीमारी हुई थी? (संख्या लिखें)			मलेरिया, पोलिया, उल्टी दस्त				टी. बी. अन्य कोई नहीं			
13 पिछले वर्ष परिवार में किसी सदस्य की मृत्यु हुई थी?			कोई नहीं				1 वर्ष से कम उम्र का लड़का 1 वर्ष से कम उम्र की लड़की 1 वर्ष से अधिक और 5 वर्ष से कम उम्र का लड़का 1 वर्ष से अधिक और 5 वर्ष से कम उम्र की लड़की		1 वर्ष से अधिक और 5 वर्ष से कम उम्र का लड़का अन्य	
14 क्या परिवार में कोई विकलांग है यदि है तो विकलांगों की संख्या लिखिए			शारीरिक योग				मानसिक			





15. जमीन की कार्यकाल स्थिति क्या है।		पट्टा 01	सार्वजनिक भूमि अतिक्रमण 04						
		अधिग्रहण का अधिकार प्रमाणपत्र - 02	किराया 05						
		निजी भूमि अतिक्रमण - 03	अन्य - 49						
16. क्या आपका घर कच्चा या पक्का है?		कच्चा	पक्का						
17. छत कौनसी है?		घास, कपड़ा, लकड़ी	टाइल, कानक्रीट						
18. दीवार की सामग्री?		मिट्टी, लकड़ी, बांस	पत्थर, ईट						
19. फर्श की सामग्री?		मिट्टी, सीमेंट, ईट	पत्थर, सीमेंट						
20. यदि घर पक्का है तो कृपया कुल क्षेत्रफल बताएं		400 वर्ग फीट से कम	यदि 400 वर्गफीट से अधिक हो तो क्षेत्र बताएं.....						
21. घर कब बनाया गया था (सन्)									
22. प्रकाश का स्रोत क्या है		विद्युत कनेक्शन - 01							
		कैरोसिन: जलाऊ लकड़ी - 06	अन्य - 49						
23. घर के सामने का रोड कैसा है		मोटर जाने योग्य पक्का - 01 मोटर जाने योग्य कच्चा - 02, मोटर न जाने योग्य पक्का - 03 मोटर न जाने योग्य कच्चा, - 04							
24. खाना पकाने के लिए क्या ईंधन उपयोग किया जाता है		गैस : 01, बिजली : 02, कैरोसीन : 03, कोयला : 04 जलाऊ लकड़ी : 05, अन्य : 49							
25. आपके घर में पीने के पानी का मुख्य स्रोत क्या है?									
मौसम	घरेलू कनेक्शन	सामुदायिक स्टेड	पड़ोसी के घर का कनेक्शन	निगम का टैंकर	सार्वजनिक हेन्ड पम्प अथवा द्यूबवेल	प्राइवेट द्यूबवेल हेडपम्प	प्राइवेट टैंकर वाला	कुआ	अन्य कृपया बताएं
1. शुष्क/गर्मी/सूखा मौसम									
2. गीला/आर्द्र/सर्द मौसम									
26. आपके घर में पीने के पानी का द्वितीय स्रोत क्या है?									
मौसम	घरेलू कनेक्शन	सामुदायिक स्टेड	पड़ोसी के घर का कनेक्शन	निगम का टैंकर	सार्वजनिक हेन्ड पम्प अथवा द्यूबवेल	द्यूबवेल/हेडपम्प	प्राइवेट टैंकर वाला	कुआ	अन्य कृपया बताएं
1. शुष्क/गर्मी/सूखा									
2. गीला/आर्द्र/सर्द									



27. यदि बस्ती में पानी की पाइप लाइन है तो आपूर्ति अवधि	रोज घंटे से कम/ रोज 1 से 2 घंटे/ रोज 2 घंटे से ज्यादा/ सप्ताह में एक बार/ सप्ताह में दो बार/ नियमित नहीं/ आपूर्ति नहीं
28. यदि घर से बाहर है तो पीने के पानी का स्रोत निवास स्थान से कितनी दूर है	1. आधा कि. मी. से कम 2. आधे से 1 कि. मी. 3. 1-2 कि. मी. 4. 2 से 5 कि. मी. 5. 5 कि. मी. से ज्यादा
29. पानी के लिए कितना पैसा खर्च करते हैं।	साप्ताहिक रु.
मुख्य स्रोत	
द्वितीय स्रोत	
30. क्या आप घर के कनेक्शन के लिए मासिक शुल्क देने को तैयार हैं	हाँ नहीं
30. 1. यदि हाँ तो आप कितना वहन कर सकते हैं	
31. क्या आपके घर में शौचालय है?	
हाँ	नहीं
32. यदि हाँ तो किस प्रकार का है ? (संकेतांक लिखें)	पुरुष महिला बच्चे
1. निगम के सीवेज लाइन से जुड़ा हुआ है	
2. सैप्टिक टैंक से जुड़ा हुआ है	
3. Pour Flush pit latrine	
4. Dry / bucket latrine	
5. खुली नालियाँ से जुड़ा हुआ	
6. Shared Septic tank/flush latrine	
7. Shared dry latrine	
8. Community Septic tank/flush latrine	
9. अन्य कृपया बताएं	
यदि नहीं तो प्रत्येक कालम में से बच्चों, पुरुष एवं महिला सही पर निशान लगाएं	पुरुष महिला बच्चे
1. पडोसी	
2. पानी वाला प्राइवेट शौचालय	
3. शुष्क प्राइवेट शौचालय	
4. पानी वाला सार्वजनिक शौचालय	
5. शुष्क सार्वजनिक शौचालय	
6. खुले में शौच	
7. अन्य कृपया बताएं	
33. स्नानगृह सुविधा की जानकारी । (टिक करें)	<ul style="list-style-type: none"> घर के अंदर घर के बाहर सामुदायिक स्नान स्नानगृह नहीं



34. टिकाउ उपभोक्ता सामान	हाँ 01	नहीं 02
1 बिजली का पंखा		
2 फ्रिज		
3 कूलर		
4 लैंडलाइन फोन		
5 मोबाईल		
6 ब्लैक एण्ड व्हाइट टी. वी.		
7 कलर टी. वी.		
8 सिलाई मशीन		
9 फर्नीचर		
10 साइकिल		
11 रिक्शा		
12 हाथ टेला		
13 बैलगाड़ी		
14 दुपहिया वाहन मो.सा. आदि		
15 तिपहिया वाहन ऑटो आदि		
16 टैक्सी		
17 कार		
35 लाइव स्टॉक	हाँ 01	नहीं 02
• भैंस		
• गाय		
• भेड़ / बकरी		
• सुअर		
• मुर्गी / मुर्गा		
• खच्चर		
36. क्या आपका परिवार पलायन करके आया है -	हाँ 01	नहीं 02
37. शहर कस्बे में निवासरत वर्ष की संख्या		
0-1 वर्ष : 01		
1-3 वर्ष : 02		
3-5 वर्ष : 03		
पॉच वर्ष से अधिक : 04		
38. विस्थापन होकर कहाँ से आए हैं (ग्रामीण क्षेत्र से शहरी क्षेत्र : 01, शहरी क्षेत्र से शहरी क्षेत्र 02)		
39. विस्थापन के प्रकार (मौसमी 01, स्थायी 02)		
40. विस्थापन के कारण		
बेरोजगारी 01		





कम मजदूरी	02		
ऋण	03		
सूखा	04		
विवाद-लड़ाई	05		
शिक्षा	06		
विवाह	07		
अन्य	09		
41. क्या आपका नाम बी पी एल सूची में है	हाँ		नहीं
42. आपके पास इनमें से क्या है			
राशन कार्ड	मतदाता पहचान पत्र		बिजली कनेक्शन
बी पी एल कार्ड	ए पी एल कार्ड		
43. क्या आप सदस्य हैं स्वयं सहायता समूह / डी डब्ल्यू सी. ए. बचत एवं ऋण समिति / बस्ती डेवलपर समिति / युवा संघ / महिला संघ / महिला समिति	हाँ		नहीं
44. समूह स्पष्ट करें	1. SHG 2. CIG 3. NHG		
45. यदि हाँ तो किस विभाग: योजनातंत्रगत बनाए गए हैं	SJSRY-1		
46. स्वयं सहायता समूह से कितने वर्षों से जुड़े हुए हैं			
47. स्वयं सहायता समूह वर्तमान में कार्यरत है	हाँ		नहीं
स्वास्थ्य			
48. आप कौनसे अस्पताल में इलाज हेतु जाते हैं	प्राइवेट चिकित्सालय		सरकारी अस्पताल
49. शासकीय अस्पताल घर से कितनी दूरी पर है			
50. प्रत्येक माह में कितना व्यय अस्पताल में करते हैं	रुपए		
ऋण की स्थिति			
क्या आपने किसी प्रकार का ऋण प्राप्त किया है	हाँ		नहीं
51. ऋण का स्रोत क्या है	बैंक		साहूकार
52. किस ब्याज दर पर ऋण लिया गया है			
53. ऋण लेने का कारण क्या है			
54. आज दिनांक तक ऋण की क्या स्थिति है			

सर्वेयर के हस्ताक्षर





Filled up Survey Format – Appendix

C

(1052)

Multipurpose Household Survey Questionnaire
बहुउद्देशीय पारिवारिक सर्वेक्षण प्रश्नावली

Component B
Socio-economic Households survey – slum households only
सामाजिक आर्थिक सर्वेक्षण – केवल झुग्गी बस्तियों में रहने वाले परिवारों के लिये

CITY -GWALIOR

प्रश्नावली संख्या			
जानकारी			
पता	घर/ बिल्डिंग/फ्लैट/अपार्टमेंट संख्या		
च-५-१०१८	सड़क क्र.		
कोटेरा	कालोनी/मोहल्ला		
	शहर	गवां च-५-१०१८	
	पिन कोड	५४५०१८	
जोन क्र. ०१	वार्ड क्र. ०५	संपत्ति संख्या	मकान नं.
		०१	

1. उत्तरदाता का नाम	संदेशा शर्मा
2. परिवार के मुखिया का नाम	उदीप शर्मा
3. परिवार के मुखिया पिला का नाम	नरेश्वर राय शर्मा
4. वैवाहिक स्थिति (कोड : 1 – विप्रहित, 2 – विधवा और विधुर, 3 – तलाकशुदा, 4 – अविवाहित)	०१

1





5 परिवार का विवरण

सदस्य नाम	मुखिया से संबंध	उम्र	लिंग (1)	2010 तक उच्चतम शैक्षणिक योग्यता (2)	कार्य आय का संचयन (3)	अनुमानित मासिक आय (4)	शैक्षणिक सहायता / पढ़ाई कार्यक्रम में सहायता लगे हुए हैं (5)	पारंपरिक कौशल (6)	कौशल का प्रशिक्षण प्राप्त किया (7)	संस्था जहाँ से प्रशिक्षण प्राप्त किया (8)	किस क्षेत्र में प्रशिक्षण प्राप्त करना चाहते हैं (9)
1. उदीप	परिवार का मुखिया	35	9	04	02	03	62	02	-	-	-
2. संध्या	पत्नी	26	02	04	05	09	02	02	-	-	-
3. स्मिता	पुत्र	08	01	02	05	09	01	02	-	-	-
4. अरुण	पुत्र	07	01	02	05	09	01	02	-	-	-
5.											
6.											
7.											
8.											
9.											
10.											
कुल	04										
कोड											
(1) पुरुष 1 महिला 2											
(2) (कोड: 1 - अशिक्षित 2 - प्राथमिक 3 - माध्यमिक शाला 4 - हाई स्कूल 5 - हायर सेकण्डरी 6 - तकनीकी शिक्षा, 7 - स्नातक या उससे अधिक)											
(3) 1 = वृत्तन भोगी, 2 = असंगठित क्षेत्र में कार्यरत मजदूर 3 = स्वरोजगार 4 = किराया, पेशन अथवा संपत्ति से आय 5 = कोई कार्य नहीं											
(4) परिवार की कुल मासिक आय कितनी है 1 1000 से कम 2 1000-3000, 3 3000-5000, 4 5000-10,000, 5 10,000 से अधिक 9 कोई आय नहीं											
(5) 1 = हाँ, 2 = नहीं											
(6) 1 = हाँ, 2 = नहीं											





(7)	1 = हाँ, 2 = नहीं								
(8)	(कोड: 1 - आई.टी.आई. 2. पॉलिटेक्निक में, 3. एक्सल्यूसिव डाइसम, प्रशिक्षण केंद्र, 4. कृषि विज्ञान केंद्र, 5. राज्य ग्रामीण विकास संस्थान (एस. आई. आर. सी), 6. विस्तृत प्रशिक्षण केंद्र, 7. (गैर सरकारी संगठन) 8. स्वयं सेवी संस्थान 9. (खादी एवं ग्रामीण विकास उद्योग केंद्र / खादी एवं ग्रामीण उद्योग) 10. (अन्य सरकारी प्रशिक्षण संस्थान) 11. (अन्य निजी प्रशिक्षण संस्थान) 12. (प्राइवेट औद्योगिक इकाई) 13. सार्वजनिक औद्योगिक इकाई, 14. अन्य कृपया करके बताइए)								
(9)	1 व्यावसायिक प्रशिक्षण (टेलरिंग, स्क्रीन प्रिंटिंग, कंप्यूटर, इत्यादि) - 1 2 पारंपरिक कौशल प्रशिक्षण (बकई, लोहार, इत्यादि)								
8	वैवाहिक / किस्वा / परितयकता / एकल / तलाकशुदा / अन्य 01								
7.	सामाजिक कल्याण के अर्न्तगत लाभ लेने वाले सदस्यों की संख्या							संख्या	
i. स्वर्ण जयन्ती शहरी रोजगार योजना								0	
ii. सामाजिक सुरक्षा पेंशन									
iii. परिवार कल्याण योजना									
iv. स्वास्थ्य बीमा योजना									
v. कोई अन्य योजना									
8.	यदि परिवार में बेरोजगार सदस्य है तो बेरोजगारी का कारण								
अशिक्षा - 1 औपचारिक शिक्षा का अभाव - 2 उपयुक्त रोजगार का अभाव - 3 03									
9.	परिवार का औसत मासिक खर्च कितना है ?								
1 1000 से कम 2 1000-3000 3 3000-5000 4 5000-10,000 5 10,000 से अधिक									
10.	धर्म ?	हिन्दू	मुस्लिम	सिख	क्रिश्चन	जैन	बौद्धधर्म	जैरासात्रिनिस्म	अन्य
01		✓	2	3	4	5	6	7	8
11.	जाति ?	सामान्य	अनु. जाति	अनु. जनजाति	अन्य पिछड़ा वर्ग				
01		✓	2	3	4				
12.	पिछले 2008-09 वर्ष में परिवार में कोई बीमारी हुई थी?		मलेरिया,		टी. बी				
No			पोलियो		अन्य				
			उल्टी दस्त		कोई नहीं				
13.	2008-09 पिछले 2008-09 वर्ष में परिवार में किसी सदस्य की मृत्यु हुई थी?		कोई नहीं		1 वर्ष से कम उम्र का लड़का				
No			वर्ष से कम उम्र की लड़की		1 वर्ष से अधिक और 5 वर्ष से कम उम्र का लड़का				
			वर्ष से कम उम्र की लड़की		अन्य				
14.	क्या परिवार में कोई विकलांग है यदि है तो विकलांगों की संख्या लिखिए		शारीरिक		मानसिक				
No			योग						





15. जमीन की कार्यकाल स्थिति क्या है।	पट्टा 01 ✓ अधिग्रहण का अधिकार प्रमाणपत्र - 02 निजी भूमि अतिक्रमण - 03	सार्वजनिक भूमि अतिक्रमण §04 किराया 05 अन्य - 49							
16. क्या आपका घर कच्चा या पक्का है?	कच्चा	पक्का ✓							
17. छत कौनसी है?	धास, कपड़ा, लकड़ी	टाइल, कांक्रिट							
18. दीवार की सामग्री?	मिट्टी, लकड़ी, बास	कच्चा ईट							
19. फर्श की सामग्री?	मिट्टी, सीमेंट, ईट	कच्चा, सीमेंट							
20. यदि घर पक्का है तो कृपया कुल क्षेत्रफल बताएं	400 वर्ग फीट से कम	यदि 400 वर्गफीट से अधिक हो तो क्षेत्र बताएं							
21. घर कब बनाया गया था (सन्)	2006								
22. प्रकाश का स्रोत क्या है	01 विद्युत कनेक्शन - 01 ✓ कैंरोलिन, जलाउ लकड़ी - 06	49 अन्य - 49							
23. घर के सामने का रोड कैसा है	04 मोटर जाने योग्य पक्का - 01 मोटर जाने योग्य कच्चा - 02 मोटर न जाने योग्य पक्का, - 03 मोटर न जाने योग्य कच्चा - 04								
24. खाना पकाने के लिए क्या ईंधन उपयोग किया जाता है	01 गैस, 01 बिजली : 02, कैंरोलिन : 03, कोयला : 04 जलाउ लकड़ी : 05, अन्य - 49								
25. आपके घर में पीने के पानी का मुख्य स्रोत क्या है?									
मौसम	घरेलू कनेक्शन	सामुदायिक स्टैंड	पड़ोसी के घर का कनेक्शन	निगम का टैंकर	सार्वजनिक हेन्ड पम्प अथवा ट्यूबवेल	प्राइवेट ट्यूबवेल हेन्डपम्प	प्राइवेट टैंकर वाला	कुआ	अन्य कृपया बताएं
1. शुष्क/गर्मी/सूखा मौसम						✓			
2. गीला/आर्द्र/सर्द मौसम						✓			
26. आपके घर में पीने के पानी का द्वितीय स्रोत क्या है?									
मौसम	घरेलू कनेक्शन	सामुदायिक स्टैंड	पड़ोसी के घर का कनेक्शन	निगम का टैंकर	सार्वजनिक हेन्ड पम्प अथवा ट्यूबवेल	प्राइवेट ट्यूबवेल/हेन्डपम्प	प्राइवेट टैंकर वाला	कुआ	अन्य कृपया बताएं
1. शुष्क/गर्मी/सूखा						✓			
2. गीला/आर्द्र/सर्द						✓			





27. यदि बस्ती में पानी की पाइप लाइन है तो आपूर्ति अवधि	रोज 1 घंटे से कम/ रोज 1 से 2 घंटे/ रोज 2 घंटे से ज्यादा/ सप्ताह में एक बार/ सप्ताह में दो बार/ निश्चित नहीं/ आपूर्ति नहीं		
28. यदि घर से बाहर है तो पीने के पानी का स्रोत निवास स्थान से कितनी दूर है	<input checked="" type="checkbox"/> 1. आधा कि. मी. से कम <input type="checkbox"/> 2. आधे से 1 कि. मी. <input type="checkbox"/> 3. 1-2 कि. मी. <input type="checkbox"/> 4. 2 से 5 कि. मी. <input type="checkbox"/> 5. 5 कि. मी. से ज्यादा		
29. पानी के लिए कितना पैसा खर्च करते हैं।	साप्ताहिक रु. 00		
मुख्य स्रोत	00		
द्वितीय स्रोत	00		
30. क्या आप घर के कनेक्शन के लिए मासिक शुल्क देने को तैयार हैं	हाँ <input checked="" type="checkbox"/> नहीं <input type="checkbox"/>		
30. यदि हाँ तो आप कितना वहन कर सकते हैं			
31. क्या आपके घर में शौचालय है?	हाँ <input checked="" type="checkbox"/> नहीं <input type="checkbox"/>		
32. किस प्रकार का है?			
1. निगम के सीवेज लाइन से जुड़ा हुआ है	02	02	02
2. सेप्टिक टैंक से जुड़ा हुआ है			
3. Pour Flush pit latrine			
4. Dry / bucket latrine			
5. खुली नालियों से जुड़ा हुआ			
6. Shared Septic tank/flush latrine			
7. Shared dry latrine			
8. Community Septic tank/flush latrine			
9. अन्य कृपया बताएं			
यदि नहीं तो प्रत्येक कालम में से बच्चों, पुरुष एवं महिला सही पर निशान लगाएं	पुरुष	महिला	बच्चे
1. पड़ोसी			
2. पानी वाला प्राइवेट शौचालय			
3. शुष्क प्राइवेट शौचालय			
4. पानी वाला सार्वजनिक शौचालय			
5. शुष्क सार्वजनिक शौचालय			
6. खुले में शौच			
7. अन्य कृपया बताएं			
33. स्नानगृह सुविधा की जानकारी	<input checked="" type="checkbox"/> ? घर के अंदर <input type="checkbox"/> ? घर के बाहर <input type="checkbox"/> ? सामुदायिक स्नान <input type="checkbox"/> ? स्नानगृह नहीं		





34. टिकाउ उपभोक्ता सामान	हां 01	नहीं 02
1 बिजली का पखा ✓	01	
2 फ्रिज		
3 कूलर ✓	01	
4 लैडलाईन फोन		
5 मोबाईल		
6 ब्लैक एण्ड व्हाइट टी. वी. ✓	01	
7 कलर टी. वी.		02
8 सिलाई मशीन		
9 फर्नीचर ✓	01	
10 साइकिल ✓		
11 रिक्शा		
12 हाथ ठेला		
13 बैलगाड़ी		
14 दुपहिया वाहन मो.सा. आदि		
15 तिपहिया वाहन ऑटो आदि		
16 टैक्सी		
17 कार		
35 लाइव स्टॉक	हां 01	नहीं 02
? भैंस		
? गाय		
? भेंड़ / बकरी		02
? सुअर		
? मुर्गी / मुर्गा		
? खच्चर		
36. पलायन करने वाले परिवार की जानकारी	हां 01	नहीं 02
37. शहर कसबे में निवासरत वर्ष की संख्या		
0-1 वर्ष : 0		
1-3 वर्ष : 02		
3-5 वर्ष : 0	05	
पाँच वर्ष से अधिक : 05 ✓		
38. विस्थापन होकर कहाँ से आए हैं (ग्रामीण क्षेत्र से शहरी क्षेत्र : 01, शहरी क्षेत्र से शहरी क्षेत्र 02)	02	
39. विस्थापन के प्रकार (मौसमी 01, स्थायी 02)	02	
40. विस्थापन के कारण		
बेरोजगारी (01)	01	





Drawings- Appendix

D

Dwg. No – 1	Location of Slums in Gwalior City
Dwg. No – 2	Slum Pockets on Geo-referenced City Base Map
Dwg. No – 3	Gwalior Development Plan 2005
Dwg. No – 4	Tenability Status of Slums
Dwg. No – 5	Tenure Status of Slums Households
Dwg. No – 6	Land Ownership Status of Slums
Dwg. No – 7	Residential Density of Slums
Dwg. No – 8	Tenable Area Density of Tenable/Partly Tenable Slums
Dwg. No – 9	Land Value Range for Slums (Collectorate Guideline 2010-11)
Dwg. No – 10	% of Kuchha Dwellings Units in Slums
Dwg. No – 11	Housing Condition Status of Slums
Dwg. No – 12	Infrastructure/Service Level Status of Slums
Dwg. No – 13	Socio-economic Condition Status of Slums
Dwg. No – 14	3X3X3 Matrix Analysis Results for Slums
Dwg. No – 15	Resulting Interventions in Slums as per 3X3X3 Matrix Analyses
Dwg. No – 16	Proposed Strategies for Existing Slums
Dwg. No – 17	Proposed Development Options for Existing Slums
Dwg. No – 18	Year wise Up gradation Priority in Slums
Dwg. No – 19	Year wise Redevelopment Priority in Slums
Dwg. No – 20	Year wise Relocation Priority in Slums
Dwg. No – 21	Year wise Implementation Priority in Slums

