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Planning, “Violations,” & Urban Inclusion: A Study of Ranchi

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Abbreviations Used

AMRUT	Atal Mission for Rejuvenation and Urban Transformation
CDP	City Development Plan
CISF	Central Industrial Security Force
CNT	Chhotanagpur Tenancy Act
ELU	Existing Land Use
EWS	Economically Weaker Sections
HEC	Heavy Engineering Corporation Limited
HH	Household
JnNURM	Jawaharlal Nehru National Urban Renewal Mission
LIG	Lower Income Group
MoUD	Ministry of Urban Development
NGO	Non-Governmental Organisation
PLU	Proposed Land Use
PPPP	Public Private People Participation
PSU	Public Sector Undertaking
RMC	Ranchi Municipal Corporation
RRDA	Ranchi Regional Development Authority
SPT	Santhal Pargana Tenancy Act
sq.km	Square Kilometre
ST	Schedule Tribe
TCPO	Town and Country Planning Organisation
UA	Urban Agglomeration
UD&HD	Department of Urban Development and Housing
UDD	Urban Development Department
ULB	Urban Local Body
VAMBAY	Valmiki Ambedkar Aawas Yojna

1. Introduction: Why study violations?

In many cities of the world, particularly those in the global south, patterns of inhabitation and settling do not follow the logics or the laws of planning. From the *favelas* in Rio to the *bastis* and unauthorised colonies in Delhi, the *musseques* in Luanda or the *shacks* in Durban, a significant part of these cities are built by residents themselves, often in some tension with law and planning. There is also significant amount of 'change in land use' that comes across through influence, which could be referred as development, by exception. Teresa Caldeira has described this shared process of city-building as "auto-construction" (Caldeira, 2014). Too often, auto-construction is misrecognised simply as the "failure" and "violation" of planning, what in the Indian landscape is called an "implementation gap." Yet how should we understand "violation" and "failure" when it is done often by the city's poorest residents as a claim to the city and shelter, and at the same time by the rich through influence? How can we understand an "encroachment" or "illegal" act if it is done by such a large proportion of city residents? Indeed, what does the fact that cities are auto-constructed tell us about planning? How should planning respond to such "violations" that combine both the difficulty of orderly urban development with concerns for urban equity and inclusion?

This set of reports seek to help find answers to such questions by undertaking literature review, and studying the nature, kind and quantum of violations in two Indian cities – Ranchi and Bhubaneswar. We do so in order to understand better and in-depth what kinds of violations occur in cities. We hope to de-mystify and unpack this broad category that, within it, encompasses a range of ways of settling and surviving in the auto-constructed. It is intended to better assess both the reasons that these violations become necessary as well as to think about how planning can engage with them. Doing so, we argue, is essential to understand the relationship between planning and urban inclusion in Indian cities.

This report presents the observations and findings from Ranchi. We chose Ranchi because it represents a mid-size city that is at the brink of a significant transition in its new role as the capital of the state of Jharkhand. The city is precariously poised. On the one hand, it has a new impetus for growth and change. On the other, the scalar shift it is about to make will bring new challenges for urban planning, governance, management and, specifically, inclusion. Mid-size cities across India face this transition but each still has the potential for transformation and early responses to inequality that mega-cities like Delhi and Mumbai can no longer access. Can understanding "violations" be one part of tilting the urbanization of the Indian mid-size city towards a more inclusive growth pattern?

The report proceeds as follows. First, we briefly locate the context of Jharkhand's urbanisation and then present an overview of Ranchi. Here, we note the particularity particularly of the state's urban history and the predominance of "company towns." Then, we look closely in Ranchi at one kind of violation- the "slum", and begin to follow another kind of violation- development in the green belt/ agricultural zone. In doing so, we do not imply that violations are solely done by slums - like all Indian cities, violations are much the domain of the elite (Bhan 2013). We focus on the "slum" because it is the kind of violation most closely related with urban vulnerability and represents a governmental category recognisable within urban governance in India. We argue that it is essential to dis-aggregate the category of "slum" into the varied historical, spatial and legal forms of settlement that are within this category. We do so by first mapping slums against Ranchi's Master Plans to assess the precise nature of the violation at hand and then drawing a typology of differential vulnerability and distance from formal planning. Given the study objectives, we focus on tenure, property rights and land use of slums; and not necessarily housing, infrastructure and services. In conclusion, we suggest how to understand these "violations," and how to frame the engagement between slums, "violations" and Master Plans.

2. Urbanisation in Jharkhand

2.1 Population Growth and Settlement Pattern

With a population of 32.9 million, Jharkhand is the 14th most populated state in the country and 27th most urbanised having urban population of 24 per cent. As of 2011, Jharkhand had 228 urban centres, with 40 of these being statutory towns having urban local bodies and accounting for more than 65 per cent of the total urban population in Jharkhand. Jharkhand's urban population has grown from approximately 0.9 million at the time of independence, to approximately 8 million as of 2011, with the period between 1951 and 1971 accounting for the fastest growth in urban population. This period coincides with the setting up of mineral-based industrial townships in the erstwhile undivided Bihar. The table below highlights these trends.

Census Year	Total Population	Growth of Total Population	Urban Population	Growth of Urban Population	Percentage Urban	Growth of Percentage Urban
1901	6,068,233		129,307		2%	
1911	6,747,122	11%	176,365	36%	3%	23%
1921	6,767,770	0%	264,557	50%	4%	50%
1931	7,908,737	17%	347,958	32%	4%	13%
1941	8,868,069	12%	507,133	46%	6%	30%
1951	9,697,254	9%	905,584	79%	9%	63%
1961	11,606,489	20%	1,153,304	27%	10%	6%
1971	14,227,133	23%	1,880,200	63%	13%	33%
1981	17,612,069	24%	2,948,090	57%	17%	27%
1991	21,843,911	24%	3,925,303	33%	18%	7%
2001	26,945,829	23%	5,791,744	48%	21%	20%
2011	32,988,134	22%	7,933,061	37%	24%	12%

Source: Census of India, Various Years.

Jharkhand has a very large proportion of tribal population: approximately 26 per cent of the total population is made up of Scheduled Tribes, accounting for more than 8 per cent of the total Scheduled Tribes population of India. However, only 9 per cent of the Scheduled Tribes population of Jharkhand live in urban areas, out of which a large proportion, approximately 62 per cent, live in the 40 cities with urban local bodies. This could indicate the existence of some form of barriers of entry for tribal populations into cities; however, the large presence of tribal population (and tribal lands) is an important aspect to consider in the physical expansion of urban areas in Jharkhand given the prevalence of tenancy laws, as discussed in the later sections.

The spatial distribution of major urban areas in Jharkhand (Map 1) is strongly correlated with the mineral rich region of Chhotanagpur Plateau and the trunk rail and road

linkages connecting the plateau with the port in Kolkata. At a macro level, all Class I cities of Jharkhand (except Deoghar) along with major industrial cities of Odisha (e.g., Rourkela, Jharsuguda) and Chhattisgarh (e.g., Korba, Bilaspur), form a closed ring around the Chhotanagpur Plateau. Interestingly, this belt, apart from Ranchi, also exhibits a skewed distribution of Scheduled Tribes population within the cities – averaging to less than 0.5 per cent of total population. This model of urbanisation driven by industry location and employment generated by these industries is discussed further in Box 1.

Box 1: Dominance of Company Towns in Jharkhand

As seen in the population growth and settlement pattern, company towns have had a big role to play in Jharkhand's urbanisation. Of the four major urban agglomerations in Jharkhand including Ranchi, Dhanbad, Jamshedpur and Bokaro, the latter two entirely started out as 'company towns' and the other two have also had a large company presence (Heavy Engineering Corporation Limited in Ranchi and coal/ steel companies in Dhanbad).

Company town is defined as "a settlement built and operated by a single business enterprise" (Garner, 1992) and then refined to make the distinction that in company towns the land ownership was also substantially under that enterprise (Borges and Torres, 2012, Crawford, 1995) In India, the legislative foundation for these new forms of corporate urbanism lies in the Constitutional provision of 'industrial township', incorporated as an exception to the representative municipal framework envisaged under India's 74th Constitutional Amendment in 1992.

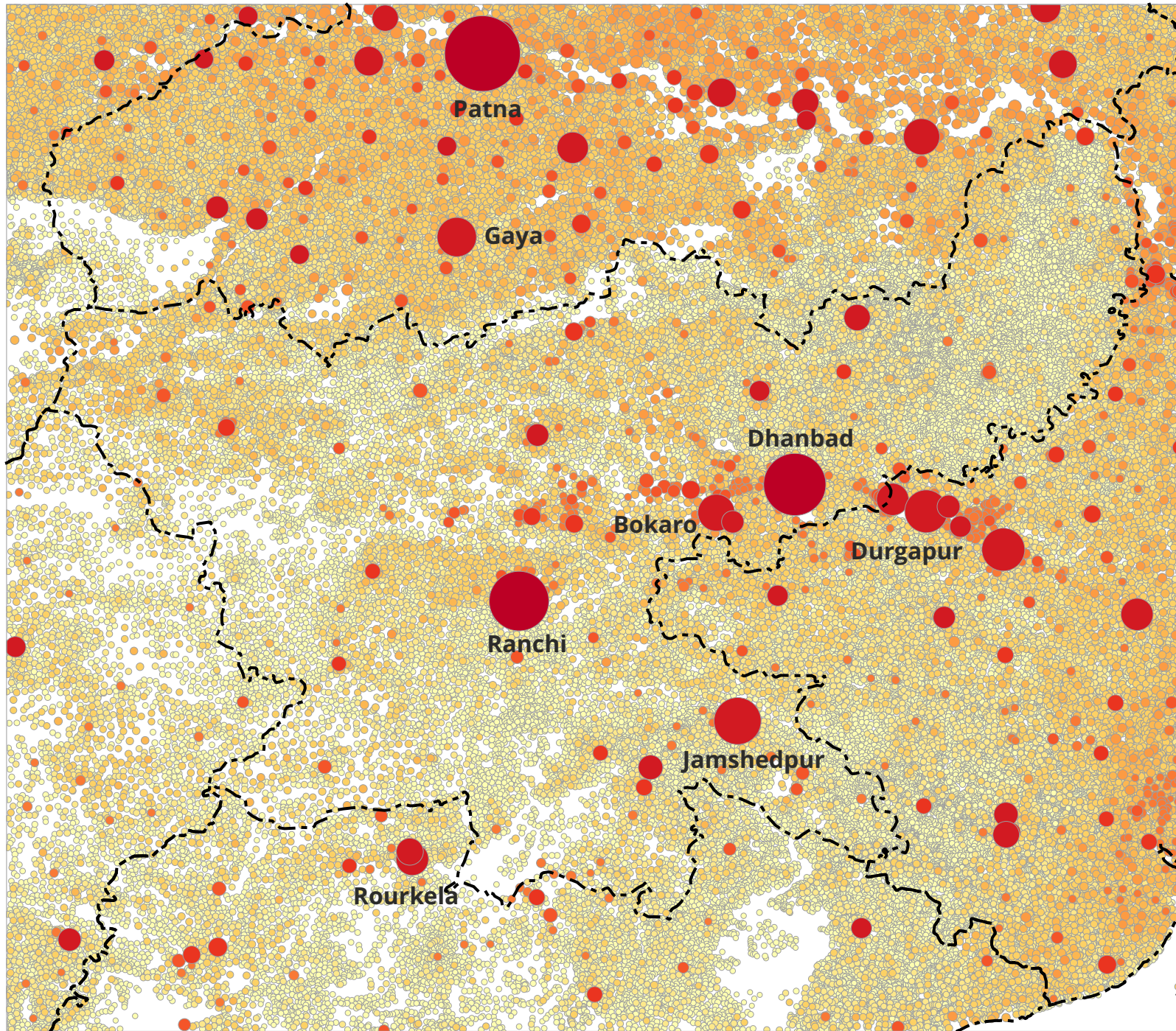
Kling in his work mentions Jamshedpur to be the largest company town in the world by population and also probably the oldest extant company town because it is still controlled and administered by the Tata Iron and Steel Company (TISCO) which founded it in 1909 (Kling, 1998). A point to note here is that the company towns in other countries have mostly been taken out from the sole control of the company and is integrated with the prevailing administrative system.

In India, moves to constitute municipal corporations and Notified Area Authorities in such areas were resisted (Sivaramakrishnan, 1977). For example, as per the notification no. 707 dated 28th December 2005 by the Government of Jharkhand, Bokaro Steel City, Chas, Bandhgora and the village of Kamaldih together formed the Chas-Bokaro Municipal Corporation (Chas Nagar Nigam). However, the Urban Development Department, Government of Jharkhand reduced the municipal boundary of Chas Municipality to exclude Bokaro Steel City, Bandhgora and Kamaldih village. So the present area of Chas Municipal Corporation is confined to the old municipal boundary (Chas Municipal Corporation).

The making of such cities is also criticised on account of building an industry while treating the settlement itself as an adjunct or subordinate (Sivaramakrishnan, 1977, Garner, 1992). The failure to recognize the physical and socio-economic issues of a growing town, lead to large housing shortages in these towns (Sivaramakrishnan, 1977, Sinha and Singh, 2011). Even American company towns faced housing shortage, leading to the lower level workers staying in cramped camps (Green, 2012, Carlson, 2014). The 'boom towns' of Australia also faced similar housing shortages leading to "people living in caravans, backyard sheds, tents, garages" (Haslam Mackenzie et al., 2009). However, there was government intervention or provision of housing to counter these issues unlike in industrial towns in India, where 'temporary camps' came up around these towns. The authorities assumed that these temporary camps would "vanish on a designated date" but they have endured and expanded (Sivaramakrishnan, 1977).

The issues of infrastructure provision, governance and land has been discussed extensively in K.C Sivaramakrishnan's report on New Towns in India, where he looks at the six new towns in the country: Rourkela, Bhilai, Durgapur, Bokaro, Jamshedpur and Bhubaneshwar, five of them being industrial towns.

Map 1: Settlement Structure of Jharkhand, 2011



Legend

--- State Boundary

POPULATION SIZE CLASSES

- Million-plus cities [Pop > 1m]
- Other Class I Cities [100k < Pop < 1m]
- Class II Towns [50k < Pop < 100k]
- Class III Towns [20k < Pop < 50k]
- Class IV Towns and Smaller [Pop < 20k]
- Very Large Villages [Pop > 10k]
- Large Villages [5k < Pop < 10k]
- Medium-sized Villages [2k < Pop < 5k]
- Small Villages [1k < Pop < 2k]
- Hamlets [Pop < 1k]



0 30KM 80KM

Source:
Census of India 2011; IIHS Analysis, 2016.

2.2 Town Planning in Jharkhand

As mentioned in the previous section, a large number of the urban areas in present Jharkhand have developed as planned company towns. After independence, Bihar formed the Bihar Town Planning and Improvement Trusts Act, 1951 and the town planning function was undertaken as per the provisions of this act. This act was repealed by the Bihar Regional Development Authority Act, 1981 (Md. Mustaque vs State of Bihar and Ors., 2004). In Ranchi, the RRDA was responsible for the preparation of the master plans and the Ranchi Municipal Corporation (RMC) along with the RRDA were the plan implementation agencies.

After the bifurcation, the Bihar Regional Development Authority Act, 1981 was adopted by Jharkhand as the Jharkhand Regional Development Authority Act, 1981 (also referred to as the Jharkhand Regional Development Authority Act, 2001). In 2011, the state passed the Jharkhand Municipal Act, 2011 under which the town planning function was entrusted to the municipalities and in the case of Ranchi, to the RMC.

The present governing body for town planning at the state level in Jharkhand is the Urban Development Department. Among the 40 statutory towns in Jharkhand, only five have an approved master plan (TCPO, 2015). In 2014, the Urban Development Department of Jharkhand decided to prepare GIS-based master plans and zonal development plans for 32 towns of the state (Government of Jharkhand, 2014). Some of the master plans have been prepared and the drafts are being made available online (UDD Jharkhand, 2016).

2.3 Prevalence of Tenancy Acts

Land and planning cannot be looked at separately from each other. Land becomes even more important given the focus of this study and the land in Jharkhand is governed by a set of laws: Bihar Land Reforms Act, 1950, the Chhotanagpur Tenancy Act, 1908 (will be referred to as CNT Act) and the Santhal Pargana Tenancy Act, 1949 (will be referred to as SPT Act). The provisions of the SPT Act are applicable in the Dumka, Sahebganj, Godda, Jamtara, Godda, Deogarh and Pakur districts of Jharkhand and that of the CNT Act in the other districts of Jharkhand. The CNT Act is applicable to Ranchi and thus only the provisions of this Act are discussed in some detail in this report.

The history of these tenancy acts goes back to pre-independence times when the British introduced the zamindari system to make land revenue collection easy. As the land under present Jharkhand fell in the then Bengal province, the system was introduced here also. However, the land revenue collection led to exploitation of the tribal

communities and thus a tribal unrest. The tenancy act was introduced as a way of protecting the interest of the tribal communities and the possession of their land. Thus, the act aims at two things: integrating the traditional land systems and restricting transactions to avoid exploitation.

The Act lays down the different types of tenure holdings and the classes of tenants. It is necessary to understand the exact category of the land to determine the provisions for that piece of land, in terms of alienability, transferability and inheritability. One has to understand that in a given settlement, each piece of land might fall under a different category and thus have different provisions and it is vital to know the exact category to which the land belongs. This and other details of the land can be found in the revenue record. The “record of right in respect of one holding in which plot no. area, boundary, nature of holding, etc.” is mentioned is called a *khata* and the “volume containing *khata*s” is called a *khatian*, which is a common term used in the area while talking about land ownership (Judicial Academy Jharkhand).

The details of some of the record-of-right types in the area have been studied, and presented in Box 2.

Box 2: Excerpts from Chhotanagpur Tenancy Act, 1908

For the purposes of this Act, there shall be following classes of tenants:

1. Tenure holders, including under-tenure-holders;
2. *raiyyat*, namely
 - a) occupancy-*raiyyats*, that is to say *raiyyats* having a right of occupancy in the land held by them,
 - b) non-occupancy *raiyyats* that do not have such occupancy right, and
 - c) *raiyyats* having *khunt-katti* rights;
3. under *raiyyats*, that is to say, tenants holding, whether immediately or mediately, under *raiyyats*; and;
4. *Mundari Khunt-kattidar* – A *Mundari* who cleared the jungle and made the land fit for cultivation and his descendants in the male line.

[The classification of tenant is not exhaustive, but the Act deals only with the enumerated class of tenants. Others are governed by Transfer of Property Act.....]

Source: Section 4, Chapter II, CNT Act, 1908.

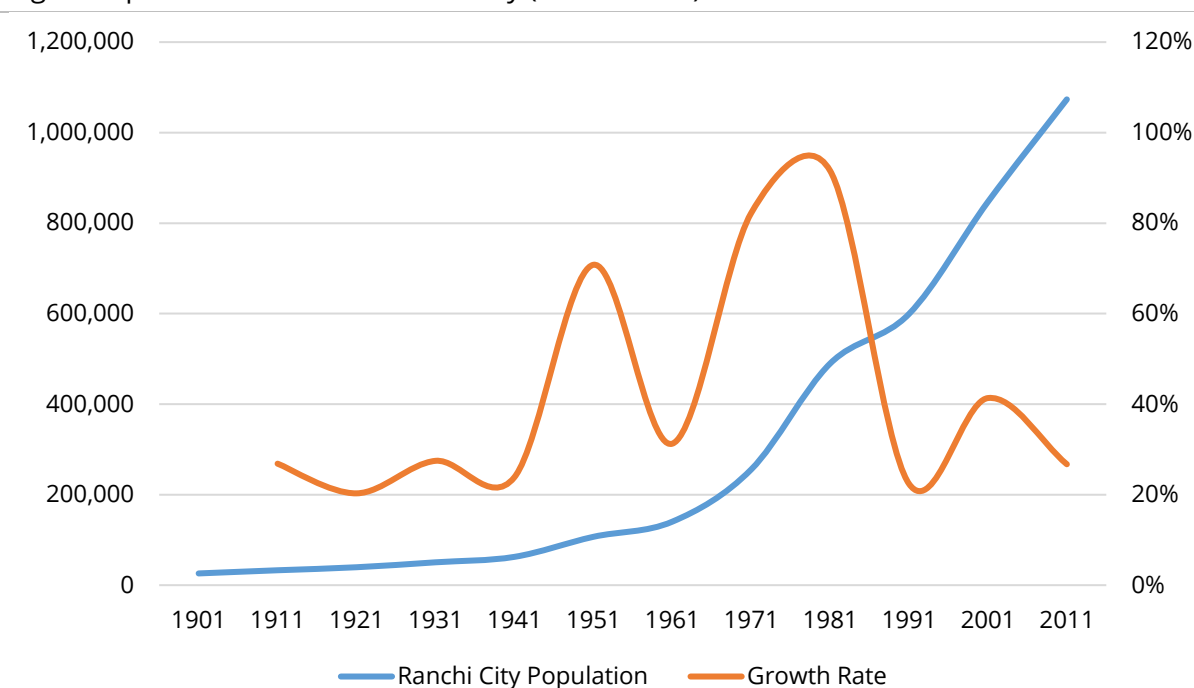
3. Ranchi

3.1 Brief Overview

Set up for administrative purposes in 1834 by the British, the city housed several offices and remained just an administrative headquarter till 1950s. In 1958, with the establishment of the Heavy Engineering Corporation Ltd. (HEC), the city started attracting people to its industrial establishments. Several educational institutions were also established in the city which made it an educational hub in the area. Through all these years, the city continued serving as a regional center and an administrative center, as the district headquarters and also as the summer capital of Bihar. With the creation of the state of Jharkhand in 2000, the city became the new capital and will house the state’s administrative departments, regaining its prominence as an administrative headquarter.

With a population of around 1.13 million, Ranchi Urban Agglomeration (UA) is the third largest in the state, after Jamshedpur and Dhanbad. Ranchi Municipal Corporation with almost 1.07million population is the second largest in the state, after Dhanbad. Ranchi City witnessed the maximum rate of growth in 1960s and 1970s with the setting up of Heavy Engineering Corporation Limited (HEC) in 1958 and MECON Limited in 1973.

Fig. 1: Population Growth in Ranchi City (1901 – 2011)



Source: Census of India, Various Years.

Almost 20 per cent of population in Ranchi Municipal Corporation area belong to the Scheduled Tribes. Ranchi city has a higher than average proportion of Scheduled Tribes population in urban areas, and accounts for close to 28 per cent of all tribal population living in urban areas, and more than 45 per cent of all tribal population living in Statutory Towns. This could be because of the fact that Ranchi was only partially developed as company town as against Jamshedpur, Dhanbad and Bokaro. Furthermore, as evident in the table below, rural areas in the neighbourhood of Ranchi city that form part of Ranchi Planning Area have even larger share of Scheduled Tribes population than the city itself.

Location	Area (sq.km.)	Population	ST Population	%age ST Population
Jharkhand	79,716	32,988,134	8,645,042	26%
Jharkhand Urban	2,424	7,933,061	776,892	10%
All Statutory Towns in Jharkhand	1,082	5,371,345	478,592	9%
Ranchi District	5,097	2,914,253	1,042,016	36%
Ranchi Planning Area	652	1,388,482	343,699	25%
Ranchi City	175	1,073,427	217,024	20%
Ranchi District without Ranchi City	4,922	1,840,826	824,992	45%
Ranchi Planning Area without Ranchi City	477	315,055	126,675	40%

Source: Census of India, 2011; Ranchi Master Plan – 2037.

Ranchi is, in a sense, a dual city. One part of it is with the Heavy Engineering Corporation Ltd. The HEC was established in 1958 and is “one of the leading suppliers of capital equipment in India for steel, mining, railways, power, defense, space research, nuclear and strategic sectors” (HEC, 2016). It is a Public Sector Undertaking (PSU). In 1958, HEC acquired approximately 7,200 acres of land. Of this, it utilized only 2,743 acres (118 acres for offices, 431 acres for residential and 2195 acres under plant & machinery). Of the remaining unused land, 2,804 acres was transferred to Government of Jharkhand & Government of India for different purposes such as for formation of Core Capital Area, CISF establishment, etc. Currently, 1,653 acres is still available with HEC and is vacant / unutilized (MoUD, 2016).

3.2 Master Plans of Ranchi

The first attempt to prepare a master plan for Ranchi started in 1965, however this plan was not approved. After years of delay, in 1972, a master plan was notified vide Government Notification No. 6972/LSG dated 28.07.1972, with 1983 as the perspective year. This plan was prepared by the Ranchi Improvement Trust with the assistance of the State Town & Country Planning Organization and covered an area of 129.50 sq.km. (RMC, 2015, CRISIL, 2013).

This master plan was revised in 1983 and the master plan for 1983-2001 was prepared by the RRDA. The master plan covered an area of approximately 175 sq.km and was approved vide Government Notification No. 1095/82 dated 25.10.1983.

The latest proposed revised master plan for 2037 has been prepared by the consultants Feedback Infra Private Limited and BE Consultants for an area of approximately 652.20 sq.km (including Greater Ranchi Phase – I area of 8.32 sq.km); clients being Urban Development and Housing Department, Ranchi Municipal Corporation and Ranchi Regional Development Authority. The complete area is referred to as the Ranchi Planning Area (RPA). This master plan was approved and notified by the Urban Development and Housing Department, Government of Jharkhand, vide Government Notification No. 02/UD/Master Plan – 104/2008/4371 dated 30.11.2015.

What is important to note in this Master Plan (or earlier Master Plans) is that it makes no distinction in lands that come under the CNT Act at all. As we shall argue later, this is a crucial distinction that deeply affects the implementation of the plan and the landscape of “violations.”

In addition to Master Plans, Jharkhand also has building bye-laws (2015) that apply to all development and building activities in all regional development authorities and urban local bodies. However, in case ‘Master Plan/Development Plans/Zonal Plans are notified by the authority subsequent to the publication of these bye-laws, the corresponding provisions made in the master plan/development plans/zonal plans shall override the provisions made in these bye-laws’ (UD&HD, 2015).

3.3 Other Plans for Ranchi

There are a number of other plans that exist for the Ranchi city. These are not statutory in nature but mostly prepared under a scheme with funding attached to them for implementation, and thus, have a bearing on how city is shaped. For example, City Development Plan for Ranchi was prepared under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). More recently, Service Level Improvement Plans (SLIPs) are being prepared under the Atal Mission of Rejuvenation and Urban Transformation (AMRUT). The Smart City Proposal of Ranchi envisages greenfield development of 341 Acres of land, situated in close proximity to the proposed capital complex.

4. Research Objectives and Methodology

4.1 Objective

The underlying aim of the research was to study informal settlements in the context of the Master Plan. Specific objectives included:

1. Mapping the informal settlements, with a particular focus on the recognized slums;
2. Developing a typology of recognized slums with respect to their tenurial arrangements;
3. Analysing Master Plan provisions for the land under recognized slums;
4. Mapping violations (with regard to Master Plan Land Use) other than recognized slums.

4.2 Methodology

1. Secondary Data Collection and Review: As a first step, secondary information was gathered about Ranchi, including Acts, Master Plans, other Plans, studies, reports, and available documentation on “slums” and informal settlements.
2. Database Creation: A list of “slums” was obtained from the Ranchi Municipal Corporation which included location data as well. A spatial database was created combining the location and other available data on “slums”. Land use maps from the Master Plan were extracted, geo-referenced and combined with the “slum” data. This entire dataset formed the backbone of further fieldwork and analysis.
3. Ground Truthing, Validation and Profiling: Since the “slum” lists gave no information on the tenure and other characteristics like level of services, it was decided to undertake primary field work and visit a sample of “slums” to enable profiling of some of these “slums” in terms of tenurial rights, land ownership, age of settlement, service provision, housing quality, etc. A sample of 63 recognised “slums” was covered, in a way to ensure balanced geographical spread of the sample. The primary visits also helped in ground truthing and validation. In addition to these “slums”, eviction, resettlement and redevelopment sites were also visited.

The information recorded is on the basis of self-reporting; a group of residents or a minimum of three residents were spoken to in order to avoid individual bias and/or misreporting as much as possible. Due to time constraints, only parts of the slums

were visited; in case of large slums, some of the characteristics may differ in other parts of the same slum.

4. Typology Development: A typology of the “slums” was developed based on the reported tenurial rights and land ownership. Three broad categories emerged: 1. No tenurial rights (primarily on government land); 2. Clear record-of-right over land and property; 3. Unclear right over property. This helped in understanding the nature of recognised “slums”, which is very important in working out a strategy with them.
5. Overlay Analysis with Land Use Plans: Overlay analyses of slum map were done with the existing land use plan and proposed land use plans to identify the instances and nature of violations. Further layers of analyses were added to this analysis including typology, location, etc. While the following was not verified on ground, an attempt was made of overlay google earth imagery on the proposed land use map and identify constructions (hence, violations) in the proposed green belt.

4.3 Scope, Limitations and Challenges

1. Due to resource and time constraints, only a sample of “slums” could be visited for ground truthing and understanding tenurial arrangements.
2. Again, due to resource and time constraints, existing list of “slums” was used; no new surveys to identify ‘slum-like’ settlements were done. However, a note was made wherever ‘slum-like’ conditions were observed during ground-truthing.
3. In-depth understanding of tenurial rights is of utmost importance to study planning, violations and urban inclusion in Jharkhand; however, only a cursory understanding of tenurial rights was possible in such a short span of time.
4. Since the raster images of existing and proposed land use maps were manually georeferenced and digitised, there may be some mismatch in the overlay analysis between the maps and the actual condition on ground.
5. Mapping other sites of “violation” was found to be difficult in such a short span of time; an attempt was made to identify sites of construction in agricultural zone, the same has been discussed in the later sections of the report.

5. Key Findings and Analysis

5.1 Recognised slums in Ranchi

There are 254 recognised slums^{1,2} in the city as per the survey conducted by RMC in 2013. As mentioned in the methodology, we obtained slums lists from several sources and the numbers varied. Other sources included: Studies, Master Plan, City Development Plan (CDP), Census, etc. Table 1 presents the slum estimates from various sources. The variation in the estimations tell their own tale of how “violations” are understood and accounted for in the city.

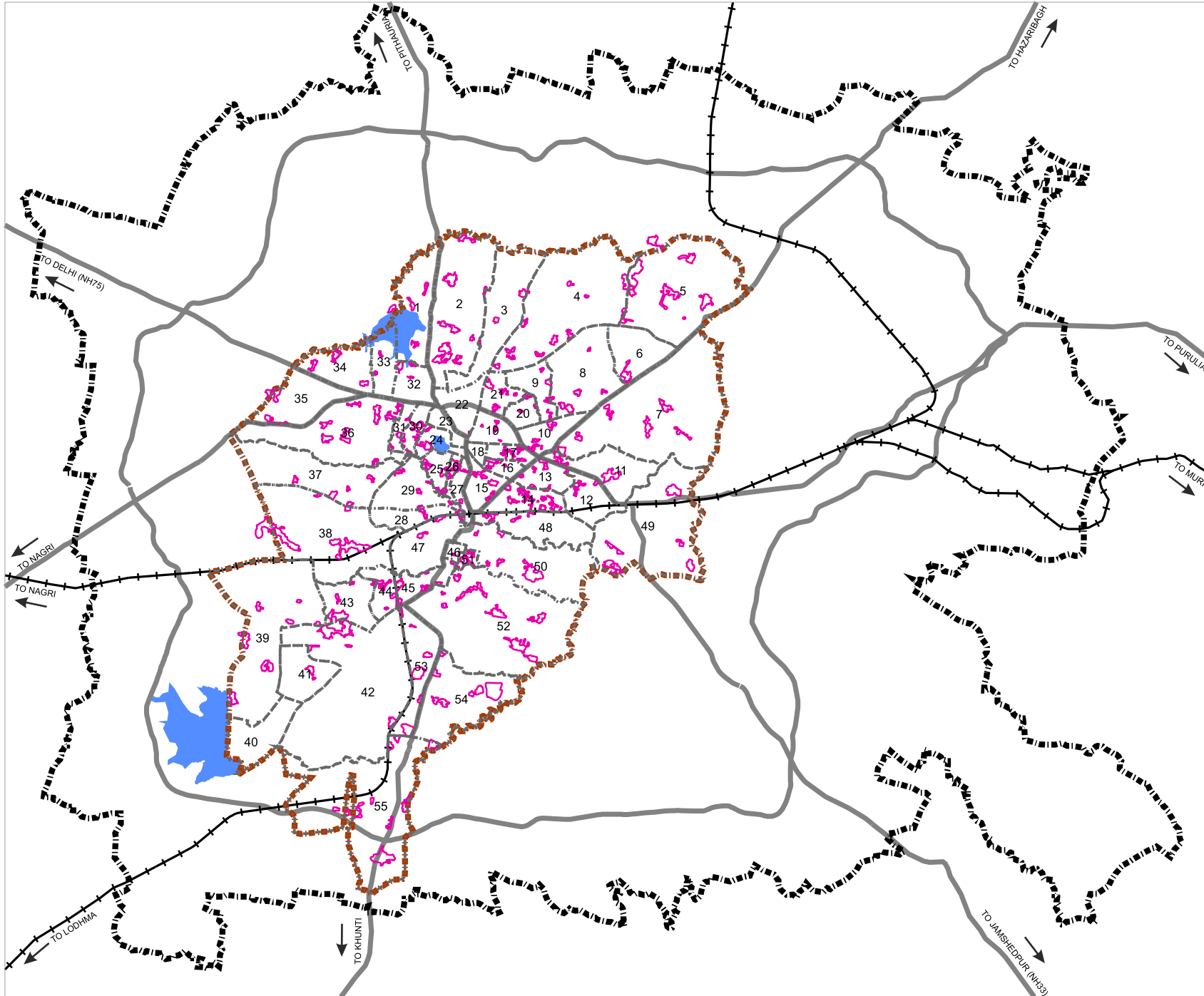
Source	Number of Slums	Number of Households	Proportion of households	Slum population	Proportion of total population
RMC (2013)	254	47,733	22.99%	2,32,023	21.6%
Census of India (2011)	-	14,426	6.95%	74,287	6.9%
Master Plan 2037 (2011)	95	-	-	82,816	7.7%
Jaruar and Saxena (2013)	215	-	-	~3,60,000	34.0%
CDP (2006)	52	35,037	-	2,37,191	-

A comprehensive list of “slums” (with location) was provided by the RMC (Map 2). The sizes of the slums range from 1.2 hectares to 308.4 hectares, the smallest being Pakka Kuwa in ward 14 and the largest being Pundag in ward 38. The number of households in these slums also vary, from as low as 12 households to as high as around 1400 households. The slums listed by the RMC cover an area of around 7.5 sq.km. which is 4.3 per cent of total municipal area of 175 sq.km. The total number of households living in these slums is almost 50,000.








¹ 'Notified Slums: All notified areas in a town or city notified as “slum” by State, UT Administration or Local Government under any Act including a ‘Slum Act’; Recognised Slums: All areas recognised as “slum” by State, UT Administration or Local Government, Housing and Slum Boards, which may have not been formally notified as slum under any act; Identified Slum: A compact area of at least 300 population 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’ (Source: Census of India, 2013).

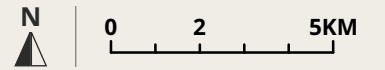
² The definition of a slum as per Dr. Pronab Sen Committee Report on Slum Statistics/Census says that ‘a slum is a compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions’ (MoHUPA, 2010). This is also the definition used by the Rajiv Awas Yojana (MoHUPA, 2011) for which the RMC list was prepared. Five slums in the list have less than 20 households, which by the above definition do not qualify to be recognised as a slum.

Map 2: Location of Recognised Slums in Ranchi, 2013



Legend

-  Recognised Slums
-  Planning Boundary
-  Municipal Boundary
-  Ward Boundary
-  Railway Line
-  Major Roads
-  Water Bodies



Source:
Slum data collected from RMC, 2016;
Master Plan of Ranchi - 2037.

5.2 Characteristics of Recognised Slums

As stated earlier, a sample of 63 slums (Map 3) were visited to understand the broad characteristics of slums in terms of tenure, land ownership, age of settlement, housing and services. This section gives an overview of these characteristics for the sample slums based on observations and self-reporting by residents. Further details for some of these settlements are provided in the Annex.

5.2.1 Spatial Distribution

Most of the recognised slums in the city are located in the central parts of the city. The other concentration of the slums is in HEC area.

5.2.2 Age of Settlement

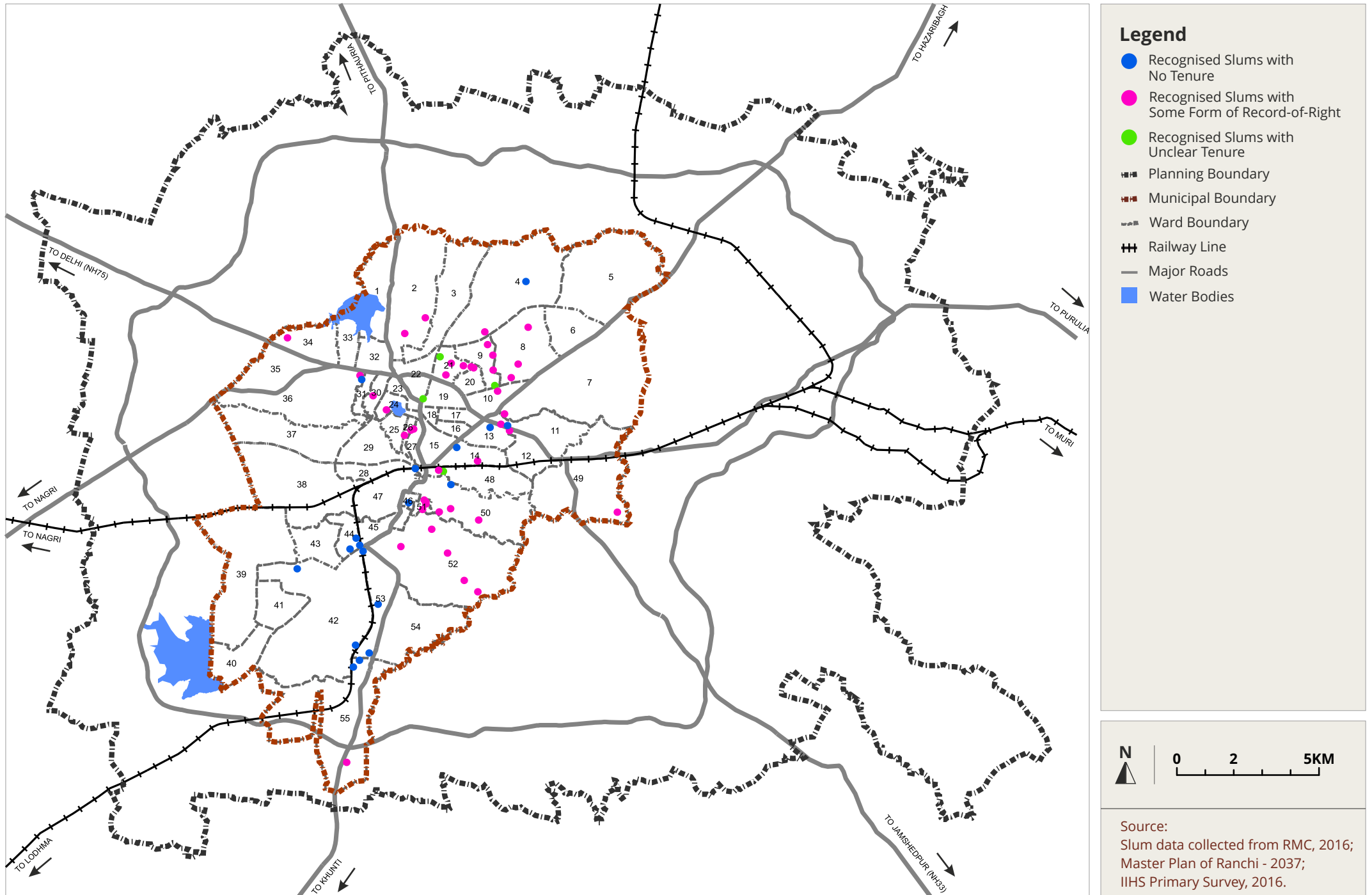
The average age of the recognised slums visited during field visit was reported to be over 75-100 years. A possible explanation of this is that most of them were former villages, which over the years became part of the urban area, but do not have services yet. Even the recognised “slums” on HEC land were like old villages that came back to the same place after land acquisition. Of 63, only two “slums” were relatively new; they too were around 25-30 years old.

5.2.3 Tenure

The city, especially due to its history and prevalence of the CNT Act, has a diverse set of tenurial classes. The classification would need detailed work but the brief field work revealed three broad classes (Map 3):

1. Settlements located on government/ HEC land with no tenurial rights.
2. Settlements where households had some record-of-right; this means that they had some papers for the land (locally known as *khatian*), however, the exact nature of the *khatian* and its terms and conditions are not known. The *khatian* could range from full ownership (including sale and transfer) to just the right to occupy.
3. Settlements where the land ownership was not clear, and it is not known whether the households had any papers or not; these included donated lands, lands purchased from brokers, etc.

Map 3: Location of Sample Recognised Slums in Ranchi and their Reported Tenurial Arrangements



The primary survey revealed that households in majority of the settlements (63.5 per cent) had some record-of-right. The nature of this record-of-right varied across the “slums” and also within the “slum”. For example, in Tupudana *basti*, some of the residents team spoke to had *Bhumihari* record while some had *Rayati* record. The settlement also had *Pahanai* land where few houses existed. About one-third of the settlements visited were located on lands belonging to the government. Eight out of them were on land belonging to the HEC. The rest were on lands belonging to the railway, RMC and other state government departments like Fisheries Department. In four settlements, tenurial status of the households was not clear (Table 2).

Table 4: Tenurial Rights in Sample Recognised Slums

S. No	Tenure Type	Number of Sample “slums”	Percentage
1	No Tenurial Rights	19	30.2%
a	<i>On Railway Land</i>	4	6.3%
b	<i>On HEC Land</i>	8	12.7%
c	<i>Other Government Land</i>	7	11.1%
2	Possess Some Form of Record-of-Right	40	63.5%
3	Unclear Tenurial Rights	4	6.3%
a	<i>Donated</i>	2	3.2%
b	<i>Broker</i>	1	1.6%
c	<i>Agricultural</i>	1	1.6%

N = 63

Source: As reported by residents during IIHS Primary Survey, 2016

Box 3: Recognised Slums in HEC Area

HEC was originally transferred around 7,200 Acres of land. Of this, HEC has handed over a total of 2,342 Acres of land back to the Government of Jharkhand as part of a revival package (Hindustan Times, 2015). Based on the tentative original boundary of the HEC indicated by the HEC officials, 21 recognised slums fall within the HEC land. Among these, many now fall in the area allocated for Greater Ranchi, for which the land has already been transferred to the Government of Jharkhand by the HEC. Even at present, after the transfer of land for the development of Greater Ranchi, around 13 slums fall on HEC land while the rest fall on land allotted for Greater Ranchi.

Newspaper reports and discussions with local NGOs indicate that there could be more than 21 settlements in the area, which are not included in the ‘recognised slums’ list of the RMC (Hindustan Times, 2015). It is estimated that more than 40,000 squatters live on the HEC land who are not facing eviction (ibid).

5.2.4 Housing

The houses in the settlements which had some record-of-right were mostly permanent as compared to settlements on government land where more temporary materials for roofing (asbestos/ tin/ plastic sheets) could be seen. Some of the very old “slums” had houses made of mud walls and tiled roofs, remnants of the village-like features of the settlement. They were often in contrast with the surrounding buildings which were newly built, concrete and multi-storied.

5.2.5 Services

In general, Ranchi city has poor infrastructure and services, it is infact difficult to distinguish the recognized slums from the rest of the city with respect to access to services, particularly sewer connection and drainage network. Even though census reports access to piped sewer (14 per cent total households, 12 per cent slum households), it was found out that the city had no functional sewerage system. In case of treated tap water as well, overall Ranchi is only marginally better than “slums”; 35 per cent total households have access to treated tap water compared to 30 per cent slum households with the same access.

Field work also revealed that in many ‘slums,’ piped water supply was unavailable and residents depended on community hand pumps. However, a lot was dependent on the location; inner city settlements had more piped water supply compared to settlements in the outskirts. In the case of the settlements on the HEC land, the distinction was very clear between the planned colonies and the “slums.” The latter had none of the services (except electricity, which is present in almost the whole of Ranchi), which were otherwise available to the other residents in the HEC area.

5.3 Master Plan, Slums and Violations

Land Use Zoning and Development Control Regulations (DCRs) are the two main instruments in Master Plan that guide the urban growth and development. While land use zoning at the city level indicate the broad land use zones, DCRs give details of uses/ activities permitted under each of the broad land use zone category. For example, Residential Use Zone (R) is a broad category under which permitted activities include plotted housing, group housing, night shelters, convenience shopping, high school, community hall, etc. The uses and activities permitted in each of the land use zones are listed in Annex 2.

Please note that the following analysis is done on the layer of broad land use zones, as earmarked in the Master Plan.

5.3.1 Understanding Land Use Violations: Overlay Analysis

a. Existing Land Use, 2012

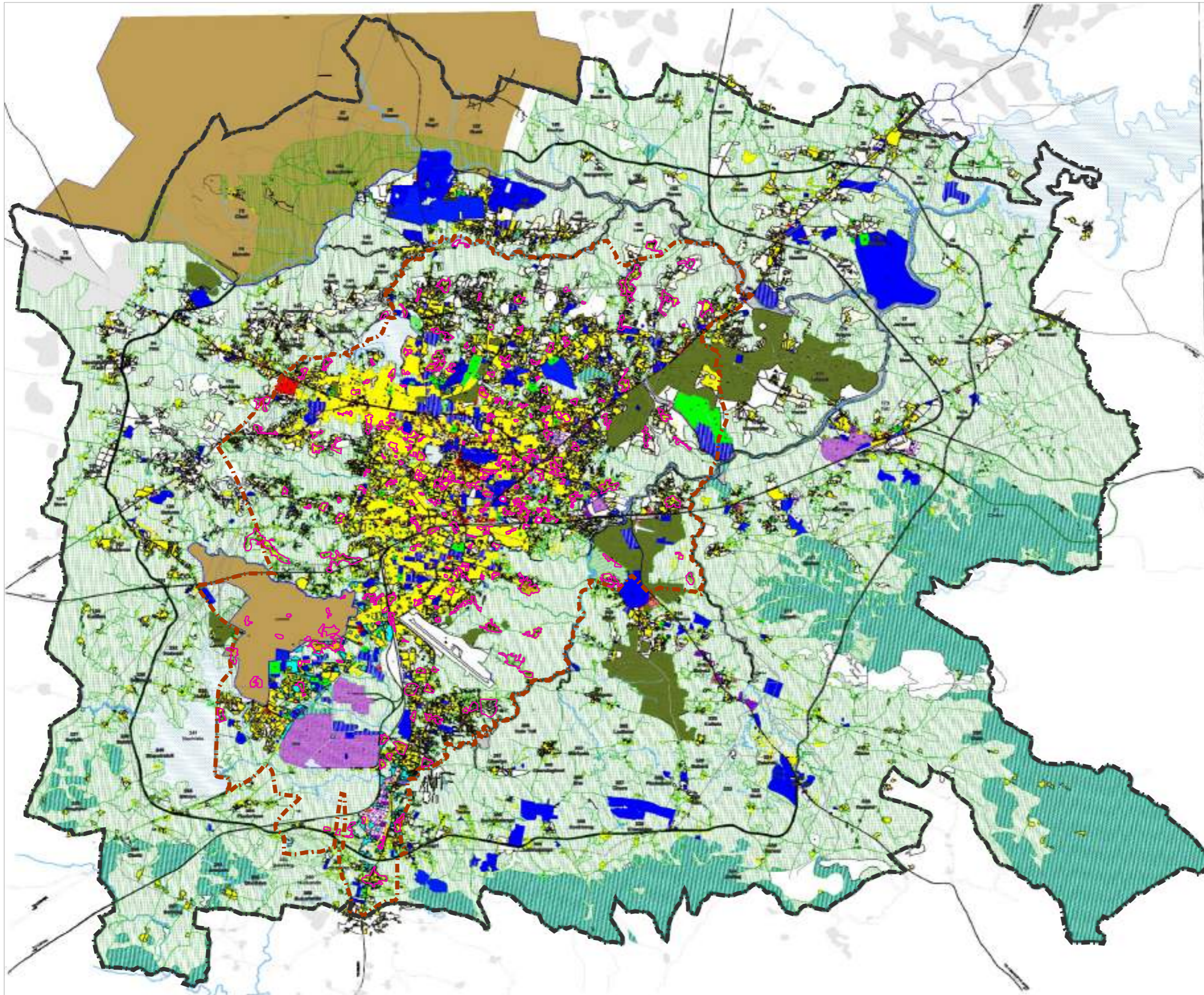
Overlay analysis of recognised “slums” on Existing Land Use (2012) revealed that majority of the settlements (~ 60 per cent) have been marked as entirely residential (either primary residential or unplanned/ informal residential; in some cases, a mix of both). Twenty nine recognized “slums” have been marked as unplanned/ informal residential entirely, and another 54 partially. A number of land parcels (~ 20 per cent) where the settlements exist are partially marked as residential vacant land. Another 17 per cent of the settlements lie on the lands that have been partially marked as residential and partially non-residential. About 3 per cent settlements are in the Greater Ranchi area. Only one recognised “slum” has been marked as entirely non-residential in the existing land use map. However, during survey, it was found out that another 2-3 ‘slum-like’ settlements that did not form part of the “slum” list existed on the lands marked as entirely non-residential in the existing land use map.

Table 5: Overlay Analysis of Existing Land Use (2012) and Recognised Slums

S. No	Existing Land Use	No. of “slums”	Percentage
1.	Primary Residential	86	33.9%
2.	Unplanned/ Informal Residential	29	11.4%
3.	Partly Primary Residential, Unplanned/ Informal Residential	37	14.6%
4.	Partly Primary Residential, Residential Vacant Plot	42	16.5%
5.	Partly Unplanned/ Informal Residential, Residential Vacant Land	3	1.2%
6.	Partly Primary Residential, Unplanned/ Informal Residential, Residential Vacant Land	4	1.6%
7.	Partly Primary Residential, Other Use(s)	33	13.0%
8.	Partly Unplanned/ Informal Residential, Other Use(s)	3	1.2%
9.	Partly Residential Vacant Land, Other Use(s)	1	0.4%
10.	Partly Primary Residential, Unplanned/ Informal Residential, Other Use(s)	4	1.6%
11.	Partly Primary Residential, Residential Vacant Plot, Partly Other Use(s)	2	0.8%
12.	Partly Primary Residential, Unplanned/ Informal Residential, Residential Vacant Land, Other Use(s)	1	0.4%
13.	Greater Ranchi	8	3.1%
14.	Non-residential Use(s)	1	0.4%
Total		254	100.0%

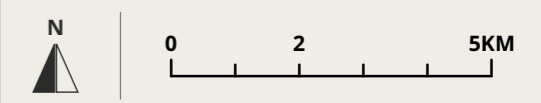
Source: IIHS Analysis, 2016.

Map 4: Existing Land Use of Ranchi - 2012 with Recognised Slums



Legend

RESIDENTIAL	TRANSPORT & COMMUNICATION
R1 Primary Residential	T-1 Roads
R2 Mixed Residential	T-2 Railways
Informal Residential	T-3 Airport
Vacant Plots	T-4 Taxi/Truck/Auto Stand
COMMERCIAL	T-5 Parking Space
C1 Retail Shopping	T-6 Telecom Tower
C2 Business, Commercial	B Bus Terminal
C3 Wholesale trade	AGRICULTURE
C4 Weekly Markets, Haats etc	A-1 Agriculture
INDUSTRIAL	A-2 Forest Area
M1 Service/Light/HH Industry	A-3 Brick Kiln/ Mining
M2 Medium Scale Industries	A-4 Water Bodies
M3 Large Scale Industries	A-5 Plantation/Nursery
PUBLIC AND SEMI PUBLIC	SPECIAL AREA
Govt. & Semi Govt.	S-3 Hills
Government Vacant Land	S-4 Other Open Area
School	S-5 Army Area
College/ITI/Prof. College	OTHERS
Other Educational Institute	Recognised Slums
Medical & Health Facility	Planning Boundary
Community Hall etc	Municipal Boundary
Religious Building	Greater Ranchi Boundary
Sarna Sathal	
UTILITIES AND SERVICES	
Water Supply System	
STP Sewage Treatment Plant	
D Dumping Ground	
ES Electric Sub Station	
OTHER COMMUNITY FACILITIES	
OCF1 Petrol Pump, Milk Booths	
OCF2 Dhobi Ghats, Ghats	
OCF3 Cinema Hall, Recreational Clubs	
OCF4 Police Station/Fire Station/Post Office	
CREMATION AND BURIAL GROUND	
PS:7 Graveyards, Shashan Ghats	
RECREATIONAL	
P-1 Playground, Stadium, Sport Complex	
P-2 Parks & Gardens (Public Open Spaces)	
P-3 Multipurpose Open Space (Maidan)	



Source:
 Master Plan of Ranchi - 2037;
 Slum data collected from RMC, 2016;
 IIHS Analysis 2016-17.

b. Draft Proposed Land Use, 2037

Compared to Existing Land Use (2012), overlay analysis of identified/ recognised slums on Draft Proposed Land Use (2037) revealed that almost 9 per cent of the settlements are on the land parcels entirely earmarked for non-residential uses, and another 3 per cent on the land earmarked for Greater Ranchi (Table 4). Unlike existing land use map that has a different category for informal residential, residential land use in the draft PLU is further sub-divided only based on densities. While at some level this drop flattens the distinction between formal and informal; no distinction also means losing on the possibility of differential treatment that might be necessary for these informal settlements.

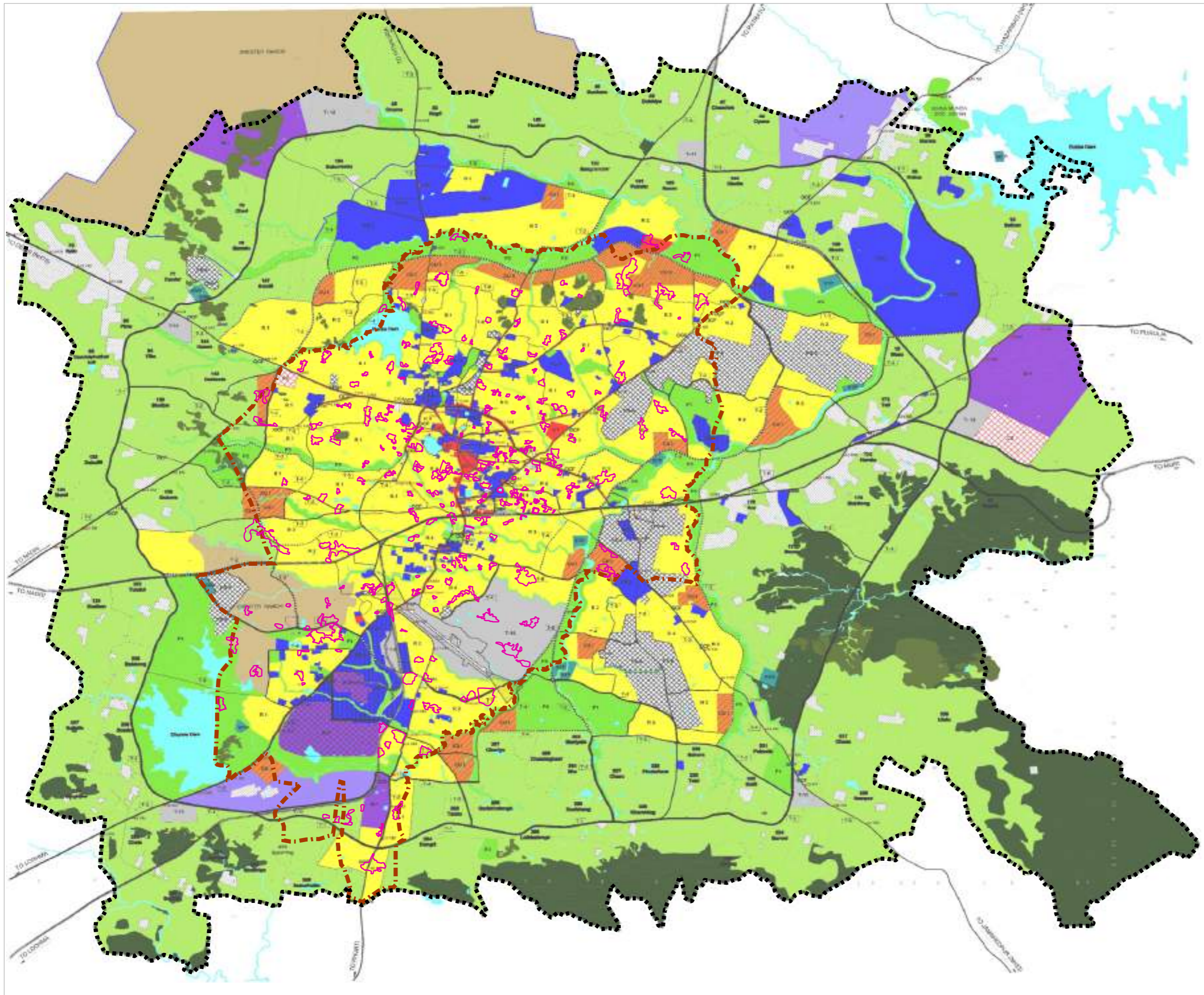
Almost 71 per cent of the settlements are on the lands earmarked for the residential use (of varying densities), and another 9 per cent are on the lands earmarked partially for residential use and partially for other use(s). 7 per cent settlements are marked as composite use zones, fully or partially.

Again, another five 'slum-like' settlements were seen in the draft proposed green belt/ agricultural zone during field work.

Table 6: Overlay Analysis of Draft Proposed Land Use and Recognised Slums

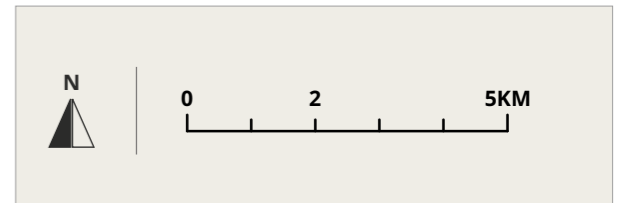
S. No	Draft Proposed Land Use	No. of Slums	Percentage
1.	Residential	181	71.3%
2.	Composite Use	2	0.8%
3.	Partly Residential, Composite Use	11	4.3%
4.	Partly Residential, Other Use(s)	24	9.4%
5.	Partly Composite Use, Other Use(s)	1	0.4%
6.	Partly Residential, Composite Use, Other Use(s)	4	1.6%
7.	Greater Ranchi	8	3.1%
8.	Transportation	5	2.0%
9.	Agricultural	4	1.6%
10.	Recreational	4	1.6%
11.	Public Semi-Public	3	1.2%
12.	Industrial and Manufacturing	2	0.8%
13.	Water Bodies	1	0.4%
14.	Mix of Two or More Non-Residential Uses	4	1.6%
Grand Total		254	100.0%
Source: IIHS Analysis, 2016-17.			

Map 5: Draft Proposed Land Use of Ranchi - 2037 with Recognised Slums



Legend

RESIDENTIAL	TRANSPORTATION & COMMUNICATION
R1 Low Density	T-1 Road (ROW= 60M)
R2 Medium Density	T-2 Road (ROW= 45M)
R3 High Density	T-3 Road (ROW= 30M)
R4 Very High Density	T-4 Road (ROW= 24M)
Village Settlement	T-5 Road (ROW= 18M)
COMMERCIAL	T-6 Road (ROW= 15M)
C1 Retail Shopping Zone	Existing Roads
C2 Wholesale Trade	Proposed Roads
COMPOSITE USE	T-11 Bus Terminal/ Depot
CU-I Composite Use I	T-12 Truck Terminal
CU-II Composite Use II	T-13 Logistic Park/ Truck Terminal
INDUSTRIAL & MANUFACTURING	T-14 Railway Station
IT IT Park	Railway Line
M-1 Service & Light Industry	T-15 Airport
M-2 Extensive & Heavy Industry	Airport Funnel Zone
PUBLIC & SEMI PUBLIC	T-16 Transportation & Communication
PS-1 Govt./Semi Govt.	AGRICULTURAL
PS-2 Education & Research	Agriculture
PS-3 Medical & Health	NATURAL FEATURES
PS-4 Social, Cultural & Religious	Reserved Forest
PS-5 Cremation & Burial Grounds	Hillocks
PS-6 Defence/Army Area	Water Bodies
UTILITIES & SERVICES	OTHERS
WTP Water Supply System	Recognised Slums
STP Sewage Treatment Plant	Planning Boundary
SWS Solid Waste Landfill Site	Municipal Boundary
ESS Electric Sub Station	Greater Ranchi Boundary
High Tension Line	Contour
OCF Other Utilities & Services	Milestones
RECREATIONAL	
P-1 Playground, Sport Complex	
P-2 Parks & Gardens	
P-3 Special Recreational Zones	
P-4 Multipurpose Open Space	
P-5 Reserved Green/Green Belt	



Source:
Draft Master Plan of Ranchi - 2037;
Slum data collected from RMC, 2016;
IHS Analysis 2016-17.

Box 4: Draft Proposed Land Use vs. Notified Proposed Land Use – 2037

The draft Master Plan of Ranchi was put forward for public feedback in 2013-14; the final Plan was notified on 30th November 2015. There are significant changes between the two plans. To highlight a few, a large proportion of agricultural zone has been made residential; proportion of composite use has increased significantly; an affordable housing zone has been introduced; and the residential land use zones are no longer differentiated in terms of densities at the Master Plan level.

c. Notified Proposed Land Use, 2037

Similar to Existing Land Use (2012) and Draft Proposed Land Use (2037), analysis of Notified Proposed Land Use (2037) shows that majority of the “slums” (60 per cent) fall entirely in the residential category, including affordable housing and village settlement.

A significant proportion (20 per cent) now fall under composite use either fully or partially along with the residential use, which means the possibility of work in these “slums” is enhanced. However, this could also lead to an increase in land value and the pressure it brings with itself.

About 11 per cent of the slums are partially on lands earmarked for uses other than residential/ composite use, and almost 9 per cent of slums are entirely on lands earmarked for non-residential uses.

Table 7: Overlay Analysis of Notified Proposed Land Use and Recognised Slums

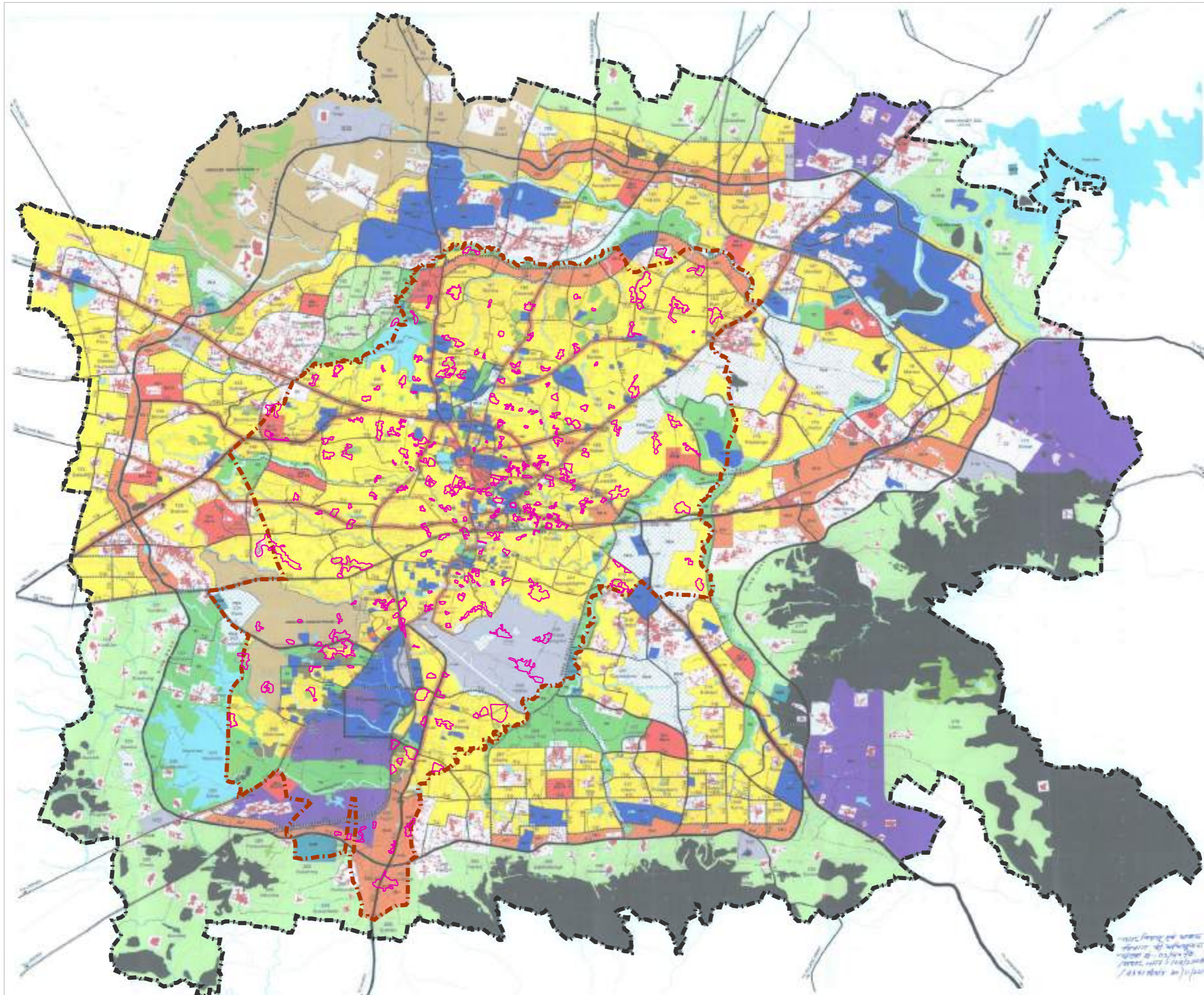
S. No	Notified Proposed Land Use	No. of Slums	Percentage
1.	Residential	149	58.7%
2.	Affordable Housing	1	0.4%
3.	Village Settlement	2	0.8%
4.	Partly Residential, Village Settlement	1	0.4%
5.	Composite Use	11	4.3%
6.	Partly Residential, Composite Use	40	15.7%
7.	Partly Village, Residential, Composite Use	1	0.4%
8.	Partly Residential, Other Use(s)	23	9.1%
9.	Partly Composite Use, Other Use(s)	1	0.4%
10.	Partly Residential, Composite Use, Other Use(s)	3	1.2%
11.	Greater Ranchi	8	3.1%
12.	Transportation	5	2.0%
13.	Industrial and Manufacturing	2	0.8%
14.	Water Bodies	3	1.2%
15.	Recreational	1	0.4%
16.	Public Semi-Public	1	0.4%

Table 7: Overlay Analysis of Notified Proposed Land Use and Recognised Slums

S. No	Notified Proposed Land Use	No. of Slums	Percentage
17.	Mix of Two or More Non-Residential Uses	2	0.8%
Grand Total		254	100.0%

Source: IIHS Analysis, 2016-17.

Map 6: Notified Proposed Land Use of Ranchi - 2037 with Recognised Slums



Legend

RESIDENTIAL	TRANSPORTATION & COMMUNICATION
Residential	Road (ROW=91M)
Affordable Housing	Road (ROW=60M)
Village Settlement	Road (ROW=45M)
COMMERCIAL	Road (ROW=36M)
Retail Shopping Zone	Road (ROW=30M)
Wholesale Trade	Road (ROW=24M)
City Commercial Centre	Road (ROW=21M)
COMPOSITE USE	Road (ROW=18M)
Composite Use I	Road (ROW=9-15M)
Composite Use II	Other Road
INDUSTRIAL & MANUFACTURING	Bus Terminal/ Depot
Extensive & Heavy Industry	Truck Terminal
Service & Light Industry	Railway Station
IT Park	Railway Line
PUBLIC & SEMI PUBLIC	LRTS/MRTS Line I
Education & Research	LRTS/MRTS Line II
Medical & Health	LRTS/MRTS Line III
Govt./Semi Govt.	Airport
Social, Cultural & Religious	Airport Funnel Zone
Cremation & Burial Grounds	Tele Communication
Defence/Army Area	AGRICULTURAL
City Facility Centre	Agriculture
Other Community Facility	NATURAL FEATURES
UTILITIES & SERVICES	Plantation/Forest
Water Supply System	Hillocks
Sewage Treatment Plant	Water Bodies
Solid Waste Landfill Site	Contour
Electric Sub Station/ Grid Sub Station	OTHERS
High Tension Line	Recognised Slums
RECREATIONAL	Planning Boundary
Playground, Sport Complex	Municipal Boundary
Parks & Gardens	Village Boundary
Special Recreational Zones	Greater Ranchi Boundary
Multipurpose Open Space	Milestones
Reserved Green/Green Belt	
Open Spaces as per Ranchi Master Plan-1983	

Source:
 Master Plan of Ranchi - 2037;
 Slum data collected from RMC, 2016;
 IIHS Analysis 2016-17.

5.3.2 Land Use Zoning and Tenurial Rights

Table 8 presents the cross-tabulation between proposed land use for the sample settlements and their tenurial rights. It is seen that a relatively higher proportion of settlements that possess record-of-right have proposed land use as residential/ composite use (83 per cent) compared to settlements with no tenurial rights where 58 per cent settlements are marked as residential/ composite use zones (one is under the affordable housing zone). For the “slums” (especially without tenure), which are on lands earmarked for residential/ composite use, this means that the extra step of ‘conversion of land use’ is not required to bring them under legal framework.

S. No	Notified Proposed Land Use	No Tenurial Rights	Possess Some Form of Record-of-Right	Unclear Tenure	Notified PLU Total
1.	Residential	9	27	2	38
2.	Affordable Housing	1			1
3.	Composite Use		1		1
4.	Partly Residential, Composite Use	1	5	1	7
5.	Partly Residential, Other Use(s)	3	4	1	8
6.	Partly Residential, Composite Use, Other Use(s)	2			2
7.	Mix of Two or More Non-Residential Uses	1			1
8.	Transportation	1	3		4
9.	Water Bodies	1			1
Typology Total		19	40	4	63

Source: IIHS Analysis, 2016-17.

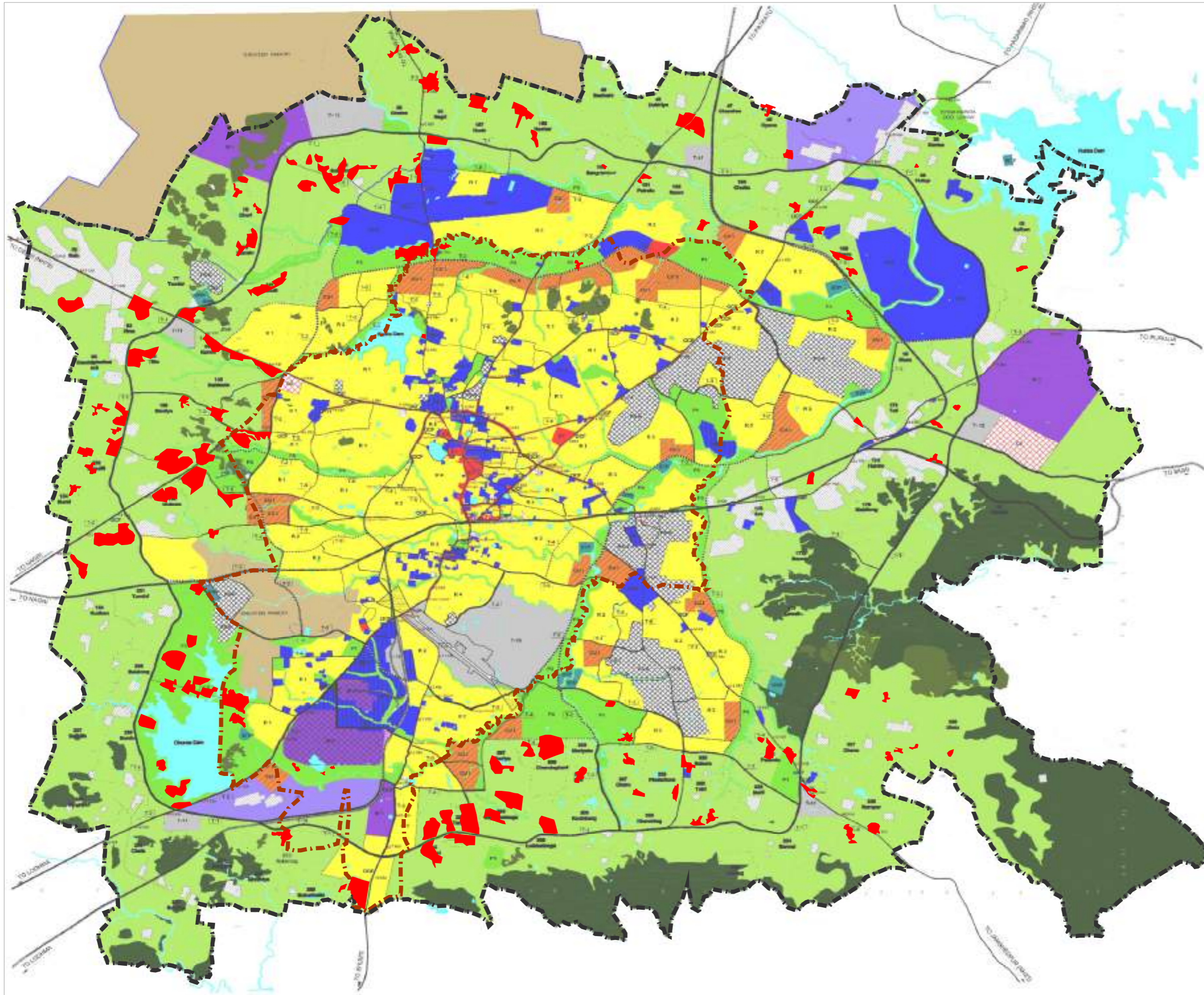
5.3.3 Incidence of Built-scape in Agricultural Zone³

Map 7 presents an overlay analysis of google earth on the draft proposed land use. It was attempted to highlight built areas (indicated in red) on the agricultural zone using google earth imagery. A number of the built-up areas can be seen in the agricultural zone; most of these areas are in close proximity of the constructed section of ring road. This would have implied not only the violation of the Master Plan, but also the Tenancy Act since most of this land originally belonged to the Scheduled Tribes and the transfer of land is not permitted.

³ This analysis is not verified on ground and needs to be followed up in future. This will enable identification of areas in violation of the Master Plan, which are not necessarily “slums”.

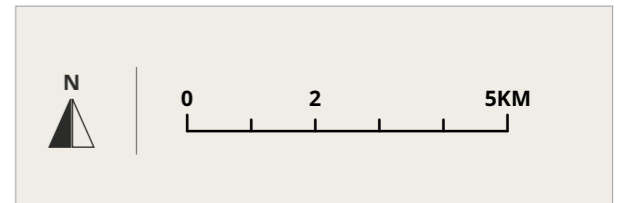
However, when the same built-up zones are overlaid on the notified proposed land use map, a different picture emerges (Map 8). As highlighted in Box 4, a large proportion of agricultural zone in draft land use is finally notified as residential or other non-agricultural use zones. This implies that a lot of construction happening around the ring road would no longer be in “violation” of the Plan.

Map 7: Incidence of Building Activities in Proposed Agricultural Zone in Draft Ranchi Master Plan - 2037



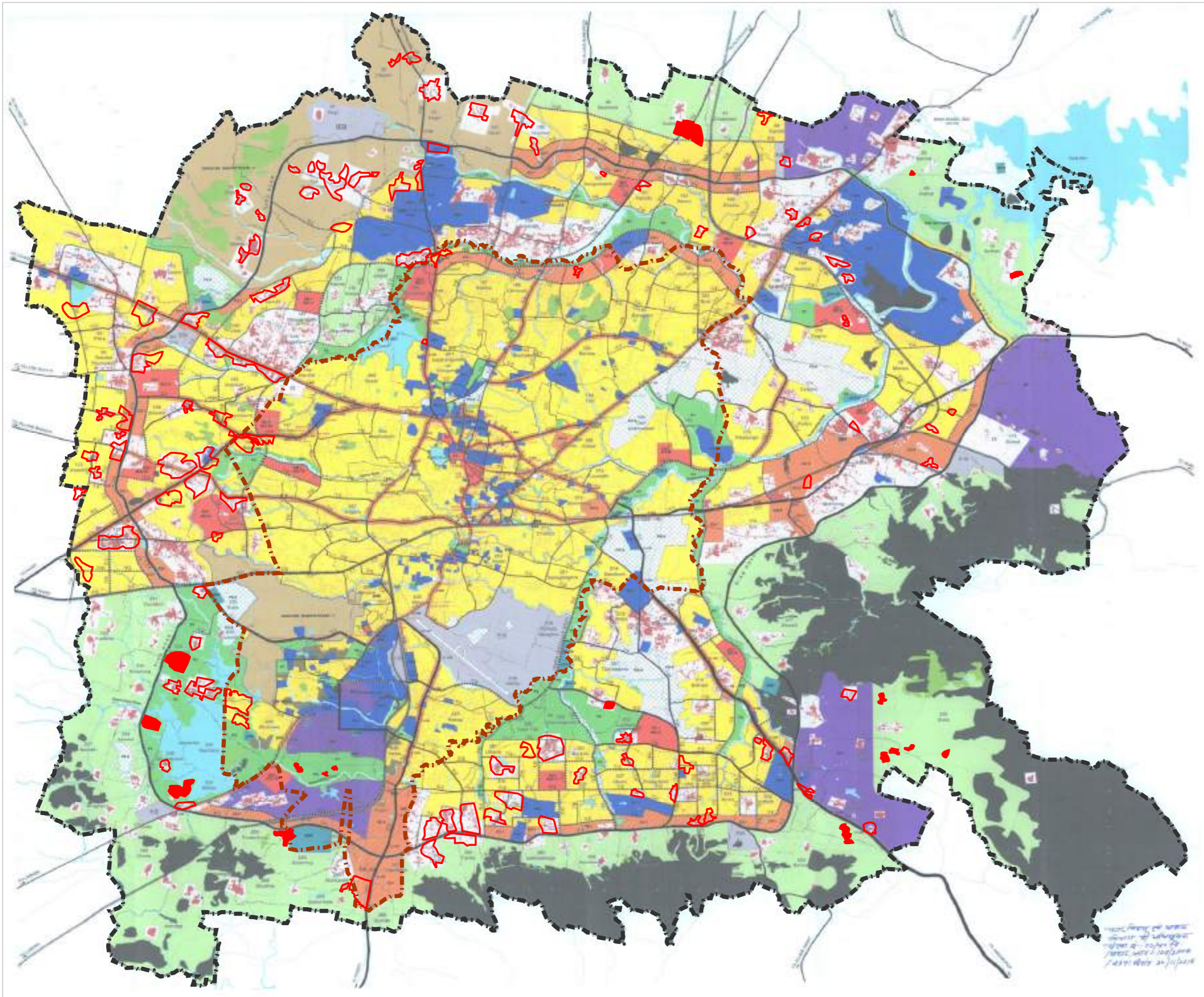
Legend

RESIDENTIAL	TRANSPORTATION & COMMUNICATION
R1 Low Density	T-1 Road (ROW= 60M)
R2 Medium Density	T-2 Road (ROW= 45M)
R3 High Density	T-3 Road (ROW= 30M)
R4 Very High Density	T-4 Road (ROW= 24M)
Village Settlement	T-5 Road (ROW= 18M)
COMMERCIAL	T-6 Road (ROW= 15M)
C1 Retail Shopping Zone	Existing Roads
C2 Wholesale Trade	Proposed Roads
COMPOSITE USE	T-11 Bus Terminal/ Depot
CU-I Composite Use I	T-12 Truck Terminal
CU-II Composite Use II	T-13 Logistic Park/ Truck Terminal
INDUSTRIAL & MANUFACTURING	T-14 Railway Station
IT IT Park	Railway Line
M-1 Service & Light Industry	T-15 Airport
M-2 Extensive & Heavy Industry	Airport Funnel Zone
PUBLIC & SEMI PUBLIC	T-16 Transportation & Communication
PS-1 Govt./Semi Govt.	AGRICULTURAL
PS-2 Education & Research	Agriculture
PS-3 Medical & Health	NATURAL FEATURES
PS-4 Social, Cultural & Religious	Reserved Forest
PS-5 Cremation & Burial Grounds	Hillocks
PS-6 Defence/Army Area	Water Bodies
UTILITIES & SERVICES	OTHERS
WTP Water Supply System	Recognised Slums
STP Sewage Treatment Plant	Planning Boundary
SWS Solid Waste Landfill Site	Municipal Boundary
ESS Electric Sub Station	Greater Ranchi Boundary
High Tension Line	Contour
OCF Other Utilities & Services	Milestones
RECREATIONAL	Built-up/Construction Zones in Agricultural Land
P-1 Playground, Sport Complex	
P-2 Parks & Gardens	
P-3 Special Recreational Zones	
P-4 Multipurpose Open Space	
P-5 Reserved Green/Green Belt	



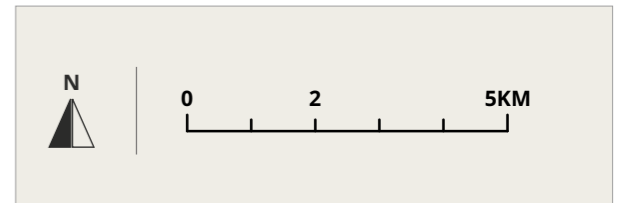
Source:
Draft Master Plan of Ranchi - 2037;
Google Earth; IIHS Analysis 2016-17.

Map 8: Incidence of Building Activities in Proposed Agricultural Zone in Notified Ranchi Master Plan - 2037



Legend

RESIDENTIAL	TRANSPORTATION & COMMUNICATION
Residential	Road (ROW=91M)
Affordable Housing	Road (ROW=60M)
Village Settlement	Road (ROW=45M)
COMMERCIAL	Road (ROW=36M)
Retail Shopping Zone	Road (ROW=30M)
Wholesale Trade	Road (ROW=24M)
City Commercial Centre	Road (ROW=21M)
COMPOSITE USE	Road (ROW=18M)
Composite Use I	Road (ROW=9-15M)
Composite Use II	Other Road
INDUSTRIAL & MANUFACTURING	Bus Terminal/ Depot
Extensive & Heavy Industry	Truck Terminal
Service & Light Industry	Railway Station
IT Park	Railway Line
PUBLIC & SEMI PUBLIC	Airport
Education & Research	Tele Communication
Medical & Health	LRTS/MRTS Line I
Govt./Semi Govt.	LRTS/MRTS Line II
Social, Cultural & Religious	LRTS/MRTS Line III
Cremation & Burial Grounds	Airport
Defence/Army Area	Tele Communication
City Facility Centre	Airport Funnel Zone
Other Community Facility	Tele Communication
UTILITIES & SERVICES	AGRICULTURAL
Water Supply System	Agriculture
Sewage Treatment Plant	NATURAL FEATURES
Solid Waste Landfill Site	Plantation/Forest
Electric Sub Station/ Grid Sub Station	Hillocks
High Tension Line	Water Bodies
RECREATIONAL	Contour
Playground, Sport Complex	OTHERS
Parks & Gardens	Recognised Slums
Special Recreational Zones	Planning Boundary
Multipurpose Open Space	Municipal Boundary
Reserved Green/Green Belt	Village Boundary
Open Spaces as per Ranchi Master Plan-1983	Greater Ranchi Boundary
	Milestones
	Built-up/Construction Zones in Agricultural Land
	Built-up/Construction Zones in Agricultural Land in Draft Master Plan



Source:
Master Plan of Ranchi - 2037;
Google Earth IHS Analysis 2016-17.

5.3.4 Master Plan and Housing for the Urban Poor

According to the Master Plan estimates for 2011-12, almost 51 per cent of the households in Ranchi belong to the LIG and EWS categories. The Plan also puts forward a number of 95 slums in Ranchi. Total housing deficit was estimated to be 88,434 units in 2012, and total housing demand for 2037 was projected at 5,08,410 units. EWS and LIG housing demand is proposed to be met through site and services scheme, with finances from the various centrally sponsored schemes.

Regarding slums, the Master Plan proposes the following:

1. Upgradation of existing slums on government lands that are not needed for development of any infrastructure or other urban activities;
2. Resettlement of other slum pockets with due consideration of distance from their work places;
3. Financial assistance to all beneficiaries under the housing/ slum upgradation schemes to improve structural conditions of their houses.

Additionally, all new development schemes shall reserve one per cent land for informal sector/ vendor markets, part of the land shall be developed for night shelter.

The final notified Master Plan for Ranchi has also introduced 'Affordable Housing Zone' in Ranchi, essentially located in the HEC area. The document, however, makes no reference to the 'Affordable Housing Zone' and provides no further details.

Box 5: Affordable Housing in Jharkhand

Department of Urban Development and Housing (UD&HD), Government of Jharkhand has also passed Affordable Urban Housing Policy for the state of Jharkhand in 2016 (Resolution No.-2135). The Policy aims at creating an enabling environment for providing 'affordable housing for all in urban areas' with special emphasis on EWS and LIG, and other vulnerable sections of the society. Public Private People Participation (PPPP) is advocated for addressing the shortage of adequate and affordable housing.

The policy puts forward a range of supply side, demand side, service provisioning, livelihood, and land bank strategies to fulfill the aims and objectives. For example, some of the supply side strategies that the Policy advocates include: mandatory reservations in both public and private housing development projects, constitution of housing land bank under the control of UD&HD, etc. The Policy also suggests making mixed use housing zones, in-situ development, public transport linkages, etc. as part of the livelihood strategies.

A number of models have been proposed for development of affordable housing including: mandatory development of EWS housing; development of affordable housing projects; in-situ slum development; relocation and redevelopment; beneficiary-led

individual house construction or enhancement; credit-linked subsidy scheme; rental housing; housing projects by cooperative societies; and development of EWS/LIG housing on whole of private land.

Source: Affordable Urban Housing Policy – 2016 for the State of Jharkhand.

5.4 Evictions in Ranchi

Unlike big metro cities in India like Delhi, Mumbai, etc. there has not been a massive eviction drive in Ranchi. This could also be because of the fact that majority of the “slums” in Ranchi are in fact not co-terminus with squatters/ encroachments; they are settlements with tenurial rights but without services. However, the Jharkhand High Court judgement in 2010-11 asking for ‘removal of encroachments on public land’ instigated a number of evictions in the recent past.

Most of the evictions in Ranchi were not accompanied with resettlement, for example, Islam Nagar (polytechnic land), Naga Baba Khatal (disputed land), settlement next to railway station (railway land), etc. The only settlement that got resettled to some extent was the one evicted from the Khadgarha Bus Station site for its expansion. Residents were resettled in G+3 apartments near Pahadi Mandir. Another recent site of eviction, next to Banas Talaab, is now being offered resettlement, again near Pahadi Mandir. There is one more resettlement site in Ranchi, Chiranuji, which is far from the city, and offers inhumane conditions to its residents. This resettlement was done under VAMBAY.

Few sites of evictions and resettlement are documented in the Annex.

6. Conclusion

The detailed study of violations, disaggregated by tenurial rights and relationship to land use zones in the existing, proposed and notified Land Use Plans, suggests several important insights that must be investigated further as an extension of this study or through more studies.

The characterization and use of the word “slum” flattens diverse land and property regimes, and neighbourhoods. This is particularly true in transitioning, mid-size urban centres like Ranchi where expansion of municipal boundary would bring erstwhile villages in urban limits, and applying “slum” definition to these villages in the same way as it is applied in bigger cities (to ensure recognition and therefore, protection) could possibly have opposite effect. It would mean that the “slums” with tenure and without tenure could potentially be approached in a similar fashion under a “slum” improvement programme. It is important to have the two layers of tenurial rights and physical environment as separate. Even from a physical environment point of view alone, it may not be ideal to call erstwhile villages as “slums” as soon as they enter the urban limits, especially when the entire city lacks basic infrastructure and services.

In this study, we note that a significant part of our sample of “slums” possesses some record-of-right. These claims then counter a simplistic reduction of settlements with varied histories to the “slum” that signals not just inadequacy of services but also violation of planning and law. Here, the category of “slum” hides more than it reveals about the nature of supposed violation. In Ranchi, particularly because of the history of the CNT act, there is a range of claims to property and land that have their own valid and legitimate histories. This is critical because it alters the kind of policy interventions that are possible in settlements that lack infrastructure and services but do possess strong claims of varying kinds to tenure. Many of these “slums” were simply villages that came into urban limits with municipal expansion. Categorizing them as “slums” and not “villages” has a land use implication as well because while villages are permissible in all land use zones, “slums” (residential areas) are not. With Master Plan making no reference to CNT Act in the case of Ranchi while planning for the city, it is both dangerous and counterproductive because land is essential resource for any Plan implementation.

Here, the overlay analysis is important. Even if residents in these “slums” have tenurial rights, if they are against land use zoning, they would still be in a different mode of violation of the Plan. Our analysis, however, shows that most slums are within residential use whether one goes by Existing Land Use or the Proposed Land Use for 2037. However, here, it is critical to note that the provisions for “informal residential” that exist currently are not included in the proposed Master Plan 2037. What does the

loss of this sub-zoning category entail? On the one hand, it could be beneficial so as not to mark informal housing as separate from residential. On the other, the absence of such distinction also prevents land use zoning from being used to protect urban land and reserve it for what is currently informal housing. Such reservations could take the form of Affordable Housing Zones, which in the notified Master Plan have been restricted to a small area in the original HEC township. There are also no Affordable Housing Zones in the expansion area, which is already under construction through a different form of “violation”.

Ranchi clearly has what Bhan has called an “upgrading dividend” (Bhan 2013). Even with the current definition, the area under “slums” is only 4.3 per cent of total municipal area, but it houses more than 20 per cent of the population. At this juncture, settlements that require infrastructure and services are both at good locations within the city (where employment and transportation are viable) and they have strong tenurial rights that makes upgradation politically feasible. This is precisely the possibility that a mid-size city before its big urban transition could take. How should the Master Plan for 2037 use its zoning categories and land allocations to protect and upgrade these settlements rather than inadvertently turn them into violations? As new zones change around settlements – such as the case of Chadri (refer Annex), the risk is that a planning process not sensitive to existing “slums” will turn them into violations despite their long existence. Here, it will be planning that regulates and creates illegality rather than the other way around (Bhan 2013).

For settlements that lack tenurial rights but are on government land, the recognition that they do not violate zoning categories also provides the possibility of arguing for in-situ forms of development and expansion of tenure. After all, the nature of the “violation” is simplified – residential land is being used for its intended purpose and is publicly owned. Here, upgradation and tenure expansion would not require a change of land use, and municipal acts, in particular, give the state authority to grant more expansive tenure. Such a move would be much more complicated and, indeed, very difficult politically, if most “slums” had violated land use zones in addition to not having legal claims to the property they are built on. Again, a closer look at the nature of violations suggests certain pragmatic, feasible and possible political moves that are otherwise not evident.

There is a need to demand for second tier of Plans, be it zonal plans or town planning schemes or in some cases, even layout plans. There is provision for preparation of Town Planning Schemes under the Jharkhand Municipal Act. The second tier plans not only make the Master Plan provisions clearer and detailed out, but are also easier to comprehend by the local people. This would also give an opportunity to the people to participate in the plan making. A case in point is the Greater Ranchi area; it is currently

marked as one solid patch on Master Plan, it is not clear what exactly will come over there, whether there is a residential component and the “slums” in the area could co-exist or not.

Assessing the nature of violations, and deepening the size of our sample as work continues, will allow us to create a complete typology of Ranchi’s recognised slums. Such data is a powerful tool in engaging with the municipality and urban planning authorities to argue about nuanced, contextual and particular solutions to addressing the tenurial and infrastructural needs of “slums”. Breaking the sense that “slums” are simply “violations” that can be dispensed with, such analysis instead argues that different grades and nature of violations can represent opportunities for incremental solutions to be tried that are both effective and politically feasible.




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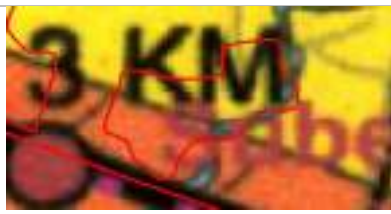
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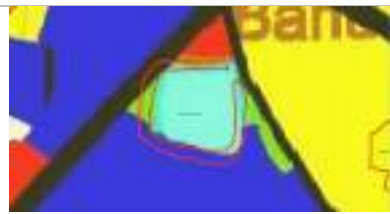
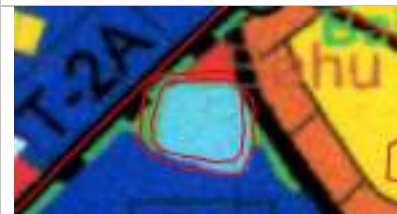
Annex 1: Case Studies

Chadri		Location Map
Ward No.: 22	No. of Households: 175	
<p>The <i>basti</i> lies in the center of the city near the Albert Ekka Chowk. Predominant community in the settlement belongs to the Scheduled Tribes, and most of them work as labourers.</p> <p>Land ownership of the area is uncertain; according to the residents, the land belonged to a Bengali landlord who donated the land to the current settlers (and their descendants) around 100 years ago. However, it was said that the land ownership documents were with the government. People here did not fear the threat of eviction as such.</p> <p>Houses here were predominantly semi-<i>pucca</i> with few <i>kutchha</i> houses as well. The settlement had community taps for water supply but the drainage/ sewerage was absent.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2010	Google Earth Imagery 2016
		
Existing Land Use 2012: Unplanned/ Informal Residential	Draft Proposed Land Use 2037: Partly Retail Commercial, Residential	Notified Proposed Land Use 2037: Partly Retail Commercial, Residential
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		





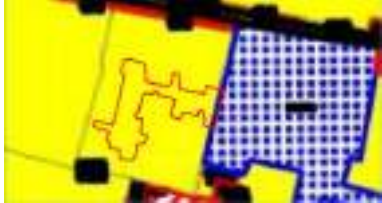


Chuna Bhatta		Location Map
Ward No.: 09	No. of Households: 63	 
<p>Chuna Bhatta is located on Hazaribagh road. The area doesn't look like a slum but is still categorised as one by the RMC. It used to be a village, settled around 60 years ago. Chuna Bhatta has polarity in terms of housing quality. The plots having greater proximity to Hazaribagh road had <i>pucca</i> houses and the ones away from the road had <i>kutchra</i> houses. The primary reason for the transformation of village was stated as selling of road-side plots by original residents, and building of <i>pucca</i> houses by the successive owners.</p> <p>All the houses are built on the tribal land; however, the people living here are tribal as well as non-tribal. The land is transferred to the non-tribal people through a broker.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2010	Google Earth Imagery 2016
		
Existing Land Use 2012: Primary Residential	Draft Proposed Land Use 2037: Low Density Residential	Notified Proposed Land Use 2037: Partly Residential, Composite Use I
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		







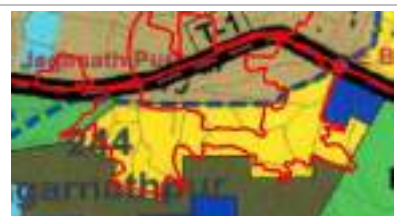
Malhar Kocho		Location Map
Ward No.: 11	No. of Households: 42	  
<p>The residents, belonging to the Malhar tribe, were originally nomads; few generations back they decided to settle in the nearby village of Pakal Kudwa. At that time, they were allowed to settle there upon payment of rent. After years of staying there, they decided to buy a piece of land and settle permanently. However, later they realized that the land owner had sold the same land to two parties. They then moved to and started living on the government land (present place of stay); still without basic services.</p> <p>In the last 5-10 years, construction around has increased. The <i>basti</i> was in a court case in the Ranchi Civil Court and then the Jharkhand High Court. 'Red Flag' police were also brought to evict them once. The residents had also given request to the Mayor asking the Corporation to shift them to a nearby government land which was earlier used for rock mining.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2010	Google Earth Imagery 2016
		
Existing Land Use 2012: Partly Primary Residential, Water Bodies	Draft Proposed Land Use 2037: Partly Low Density Residential, Water Bodies, Composite Use I	Notified Proposed Land Use 2037: Partly Low Density Residential, Water Bodies, Composite Use I
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		

Birsa Bus Stand		Location Map
Ward No.: 13	No. of Households: 88	  
<p>The settlement is on the land in close proximity to the Ranchi Bus Station in Khadgada. A large number of houses were displaced from here to make way for the expansion of the bus station. The residents have been resettled in G+3 apartments near Pahadi Mandir.</p> <p>There are a few houses still present on the site and they have applied for houses under BSUP however nothing has been done so far. The residents claim to have been there for over 90 years.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2010	Google Earth Imagery 2016
		
Existing Land Use 2012: Primary Residential	Draft Proposed Land Use 2037: Very High Density Residential	Notified Proposed Land Use 2037: Residential
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		





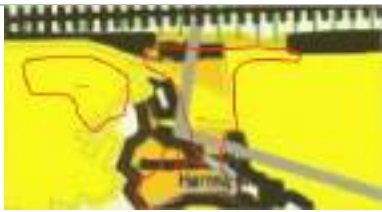


Banhas Talaab Chutia		Location Map
Ward No.: 14	No. of Households: 36	  
<p>A row of 60-70 houses lined the pond in Bahu Bazar. They claimed to have been residing on the land for 60-70 years. They said that the land belonged to the fisheries department. The residents here were offered flats under a government scheme but they were not ready for the shift saying that their livelihood and access to facilities would be affected as resettlement sites are usually far from the city. Some said that they were not used to the flat system and as their families are large, members of the family are used to sleeping outside the house in the open and this wouldn't be possible in a flat. Some said that they would not be able to pay the beneficiary amount. A few residents were okay with the idea of resettlement in order to get a house with legal documents. However, as a basti they did not want to relocate but preferred in-situ rehabilitation. The follow-up visits to Ranchi revealed that the site was due for eviction any time.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2010	Google Earth Imagery 2016
		
Existing Land Use 2012: Partly Water Bodies, Informal Residential	Draft Proposed Land Use 2037: Partly Water Bodies, Green Belt	Notified Proposed Land Use 2037: Partly Water Bodies, Green Belt
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		



Purani Ranchi		Location Map
Ward No.: 24	No. of Households: 420	 
<p>The area had boards put up that mentioned which survey number fell under which <i>pahan</i>, etc. We found one of the <i>pahans</i> and spoke to him. He mentioned that the records were still in his grandfather's name who was the then <i>pahan</i>. He said that he had no right to sell the land and that in this area the laws are strict. He also mentioned that this area is one of the oldest in Ranchi 'city' as such.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2010	Google Earth Imagery 2016
		
Existing Land Use 2012: Partly Informal Residential, Primary Residential	Draft Proposed Land Use 2037: Very High Density Residential	Notified Proposed Land Use 2037: Partly Residential, Composite Use I
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		

Bangali Mohalla		Location Map
Ward No.: 36	No. of Households: 196	
<p>Bangali Mohalla is a residential colony named after 4-5 Bengali families that settled here around 60 years ago. Some of the houses in the colony belong to the tribal community and they have <i>raiya</i>t rights to the land. These are also the houses which seemed to be older and still semi-<i>pucca</i> (tile-roofed) as compared to the other multistoried buildings in the area. The people here said that they have applied to various government schemes multiple times (Indira Awas Yojna being one of them) but there was no betterment done to the housing here. The basti had one toilet which everyone used.</p> <p>We tried speaking to the residents of the other houses, which as said were mostly multistoried buildings. The people there were hostile and did not give clear answers when asked about land tenure or history, some said that their fathers might know more and that they had papers for the land.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2010	Google Earth Imagery 2016
		
Existing Land Use 2012: Primary Residential	Draft Proposed Land Use 2037: Low density residential	Notified Proposed Land Use 2037: Primary Residential
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IHS primary survey 2016</p>		

Mosi Badi		Location Map
Ward No.: 42	No. of Households: 1240	
<p>The <i>basti</i> is located on land which belongs to the HEC. The <i>basti</i> settled right after the establishment of the HEC, that is around 1957. The residents comprised mostly of those who had migrated to the city as labourers for the construction of the industrial area or for contract work at the industry. Several of the residents also belonged to the villages that existed before the acquisition for the HEC, who had come back to their original village land after seeing that it was lying vacant and no alternative development was happening on their land.</p> <p>In 2005, there was news of evicting the <i>basti</i> and in this context '<i>Basti Bachao Andolan</i>' was started and a committee formed to pursue the matter. The evictions did not occur then and they were told that the further master plans of the HEC would recognise these bastis. There has been no progress on this front ever since.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2009	Google Earth Imagery 2016
		
Existing Land Use 2012: Partly Informal Residential, Greater Ranchi	Draft Proposed Land Use 2037: Partly Low Density Residential, Greater Ranchi, Recreational	Notified Proposed Land Use 2037: Partly Residential, Greater Ranchi, Recreational
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IHS primary survey 2016</p>		

Mali Mohalla		Location Map
Ward No.: 46	No. of Households: 26	
<p>The site is located in between large government quarter houses. One of the residents we spoke to acknowledged that they were living on land which belonged to the government and said that the area/site was called Miskot Maidan and not Mali Mohalla. Mali Mohalla, she said (and few others) was nearby. She said that they had been living for 25-30 years on this site, and that they have been told to vacate the site in the past and have been given a notice as well in 2009-10. She mentioned that a similar settlement nearby called 'Bina Pani Talab' was also given notice along with them and the residents there had vacated.</p> <p>The houses were brick walled and asbestos sheet roofed. The residents were getting water from a nearby municipal hand pump and they did not have a toilet. Most of the residents were daily wage workers.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2009	Google Earth Imagery 2016
		
Existing Land Use 2012: Primary Residential	Draft Proposed Land Use 2037: Low density residential	Notified Proposed Land Use 2037: Residential
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		

Anantpur (Opp. Mandir)		Location Map
Ward No.: 48	No. of Households: 102	
<p>This cluster of houses, on what looked like a single large plot, has been in existence since the 1950s. It was a tribal land purchased by the ancestors of the current residents. However, no change was made in the land revenue records and thus the present residents do not have any land revenue record in their or their ancestors' names. However, they do have a record of the payment made for the purchase of the site. The original owner from whom the land was bought is no more and the descendants of the original owner claim ownership to the land. Thus, a case is running between the present residents and the descendants of the original owner in the court.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2009	Google Earth Imagery 2016
		
Existing Land Use 2012: Partly Informal Residential, Primary Residential	Draft Proposed Land Use 2037: Low density residential	Notified Proposed Land Use 2037: Residential
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		

Satranji		Location Map
Ward No.: 55	No. of Households: 392	 
<p>The settlement is almost at the southern edge of the Ranchi municipal boundary. Discussions with 4-5 women residents (one of whom was a shopkeeper as well) revealed that this settlement was earlier under Panchayat, and it was included in the corporation area about 6-7 years back. This was also the site of relocation for households that were displaced from the land allotted to the HEC in the 1950s. The residents said half the village consisted of native villagers and the other half is essentially displaced population. The words 'displaced <i>zameen</i>' were used to describe the land situation. The women were not too certain about the kind of papers they received for the land.</p> <p>There are some government installed hand pumps in the settlement; very few households have toilets.</p>		
		
Google Earth Imagery 2004	Google Earth Imagery 2009	Google Earth Imagery 2016
		
Existing Land Use 2012: Partly Primary Residential, Government Vacant Land	Draft Proposed Land Use 2037: Low Density Residential	Notified Proposed Land Use 2037: Composite Use I
<p>Sources: Name of Slums and boundaries: Ranchi Municipal Corporation Data, 2013 Existing and proposed land use maps: Ranchi Master Plan 2037 Photographs: IIHS primary survey 2016</p>		

Annex 2: Land Use Permissibility in Different Use Zones

S. No	Land Uses ¹	Use Zones in which Permitted									
		R	C	I	P	T	G	E	CU1	CU2	A
1	Airport, Helipad, Flying Club					■					
2	Art Gallery, Museum, Exhibition Centre	■	■		■				■	■	
3	Auto Supply Store and Showroom for Motor Vehicle and Machinery		■	■					■	■	
4	Automobile Service and Repairing Station			■						■	
5	Bank and Safe Deposit Vault	■	■	■	■	■			■	■	
6	Bird Sanctuary						■	■			
7	Boarding or Lodging House	■	■		■				■	■	
8	Botanical Garden						■				
9	Bus Depot		■	■		■				■	
10	Bus Terminal	■				■					
11	Canteen and Eating House Serving the Industries			■						■	
12	Cemetery, Crematorium, Burial Ground, Electric Crematorium				■						■
13	Children Traffic Park				■		■				
14	Cinema	■	■						■	■	
15	Clinic for Pets	■	■		■				■	■	
16	Clinical Laboratory		■		■				■	■	
17	Club House not Conducted Primarily as Business	■	■		■		■		■	■	
18	Club House or Other Recreational Activities Conducted as Business		■						■	■	
19	Cold Storage and Ice Factory			■						■	
20	College				■				■	■	
21	Commercial/ Business Offices ²		■	■					■	■	
22	Community Hall and Welfare Centre	■	■	■	■				■	■	
23	Contractor Plant and Storage for Building Material			■						■	
24	Convenience Shopping Centre	■	■	■	■	■			■	■	
25	Convention Centre				■				■	■	
26	Cottage, Handloom and Household Industries ³	■	■	■					■	■	
27	Court				■				■	■	
28	Creche and Day Care Centre	■	■	■	■				■	■	
29	Cultural and Information Centre		■		■				■	■	
30	Customary Home Occupation	■	■						■	■	
31	Defence	■	■	■	■	■			■	■	
32	Dairy and Poultry Industry			■							■
33	Dispensary	■	■	■	■				■	■	
34	Dry Cleaners-Cleaning and Dyeing		■	■					■	■	
35	Educational and Research Institution	■	■		■				■	■	
36	Electric Sub-Station	■	■	■	■	■	■		■	■	■
37	Existing Village ⁴	■	■	■	■	■	■	■	■	■	■

S. No	Land Uses ¹	Use Zones in which Permitted									
		R	C	I	P	T	G	E	CU1	CU2	A
38	Fair Ground										
39	Film Studio ⁵										
40	Fish Curing ⁶										
41	Flatted Group Industry										
42	Flood Control Work										
43	Forensic Science Laboratory										
44	Forest										
45	Gas Godown										
46	General Industries ⁷										
47	Golf Course										
48	Green House										
49	Gymnasium										
50	Health Centre										
51	Hospital										
52	Hostels for Educational Institution										
53	Hotel										
54	Indoor Games Hall										
55	Jail										
56	Junk Yard ⁸										
57	Local, Municipal, State or Central Government Office										
58	Mechanical Workshop with Lathes, Drills, Grinders, Spot Welding Set										
59	Medical, Eye and Dental Practitioners' Clinic										
60	Monument ⁹										
61	Motor Driving Training Centre										
62	Municipal Facility										
63	Music, Dance, Drama Training Centre										
64	Neighbourhood Shopping Centre- convenience and local shopping with vegetables, fruits, flowers, fish and meat										
65	Night Shelter										
66	Nursery, Horticulture and Orchards										
67	Nursing Home										
68	Oil Depot ¹⁰										
69	Open Air Theatre										
70	Orphanage										
71	Park, Play Ground, Playfield and Recreational Area										
72	Personal Service Shop										
73	Petrol Filling Station										
74	Photograph Studio and Laboratory										
75	Piggery										
76	Planetarium										
77	Police Headquarter and Police Lines										
78	Police Station, Out Post and Fire Station										

S. No	Land Uses ¹	Use Zones in which Permitted												
		R	C	I	P	T	G	E	CU1	CU2	A			
79	Post Office, Telephone Exchange, Telegraph Offices													
80	Professional Office of a Resident of the Premise													
81	Public Library													
82	Radio Broadcasting Studio													
83	Railway Station													
84	Reformatory (Juvenile Home)													
85	Refinery ¹¹													
86	Religious Place like Temple, Namghar, Sarna Sathal, Mosque, Church, etc.													
87	Research and Development Centre													
88	Residence cum Work Plot													
89	Residential Dwelling													
90	Residential Plot – Plotted Housing													
91	Restaurant, Cafeteria, Milk Bar													
92	Retail Shop ¹²													
93	Satellite and Telecommunication Centre													
94	Schools													
95	Service Centre													
96	Sewage Treatment Plant													
97	Social, Cultural and Religious Institution													
98	Specialised Park/ Ground													
99	Sports Training Centre													
100	Stadium													
101	Storage of Petroleum and Other Inflammable Materials													
102	Storage, Warehouses and Godown													
103	Swimming Pool													
104	Taxi Stand and Bus Stand, Cycle and Rickshaw Stand													
105	Theatre, Assembly or Concert Hall, Dance and Music Hall and Such Other Place of Entertainment													
106	Truck Terminal													
107	Vending Booth													
108	Vocational Training/ Technical Training Institute													
109	Watchmen or Caretaker's Lodges													
110	Water Treatment Plant													
111	Weekly Market/ Informal Sector Unit													
112	Wholesale Trade													
113	Wireless Transmitting and Weather Station, Transmission Power													
114	Zoological Park													

Index of Use Zones:

R – Residential

C – Commercial

I – Industrial

P – Public and Semi-Public

T – Transportation

G – Green Belt (Recreational and Open Space)

E – Eco-sensitive

CU1 – Composite Use I

CU2 – Composite Use II

A – Agricultural Use

Notes:

1. All existing non-nuisance, non-polluting uses to continue in the following use zones:

- Residential
- Commercial
- Industrial
- Public/ Semi-Public
- Transportation and Communication
- Composite Use I
- Composite Use II

All existing non-nuisance, non-polluting uses may be allowed to continue/ discontinue after an application for special permission to the Authority in following use zones:

- Recreational
- Eco-sensitive
- Agricultural

2. To be permitted in commercial areas to be indicated in Industrial Use Zones in Local Area Plans/ Layout Plans
3. In Residential use zone, existing uses to continue and new ones to come on special permission from the Authority. Also refer Annexure – 13.1 of the Master Plan.
4. No further expansion of residential area

5. In the New Development proposed Recreational Area
6. Only existing uses to continue
7. Only those industries as listed in Annexure – 13.1 of the Master Plan
8. Permitted only in Heavy Industrial Zone
9. Existing locations to continue
10. Permitted only in Heavy Industrial Zone
11. Permitted only in Heavy Industrial Zone
12. In commercial centres
13. In industrial areas
14. Parks, parking, circulation and utilities can be located in any of the use zones. In recreation and eco-sensitive zone, these would be permissible with special permission from the Authority.



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