CHAPTER-1 INTRODUCTION

Lalru is a small town about 35 km from Chandigarh, the capital of both Haryana and Indian Punjab, on the Chandigarh-Ambala National Highway (NH 22), in vicinity of Derabassi, Banur and Zirakpur Towns of Punjab. Lalru Town falls in the S.A.S. Nagar District of Punjab in the north latitude 30°-29'-12" and 76°-48' - 02" in east longitude. Lalru has one of biggest chilly market of this Region. Subsequently various industrial houses such as Agro-duch, Nutrica, Rana, Polycot, Punjab Chemicals and other industries started flourishing in this area .

The area north- east of this Land Use Plan touches the already declared F.E.Z. area. The NH-22, NH-72 and Chandigarh- Ambala railway line passes through the town. Besides, Regional Plan GMADA which was prepared and notified in the year 2009, wherein regional linkages such PR-1(Express Way), PR-8 and PR-10 also passes through this area connecting the surrounding areas in near future . The various choes criss-cross this region besides, Ghaggar forming boundary in west side of the town. The ammunition dump falls in the Dapper, Bair Majra and Nagla villages. The ultimate vision for Lalru Land Use Plan is to develop the town into a World class and premium industrial hub to accommodate the small and major units in this area . The Land Use Plan Lalru includes 2 towns and 75 villages. This planning area spreads over an area of 22429 hectares (55399Acres) with a population of 112462 persons in 2011 census.

The Regional Plan of GMADA was prepared under "The Punjab Regional and Town Planning and Development Act 1995." and was notified vide notification no. 12/71/06-4HGI/750, dated 27.02.2009. The Regional Plan of GMADA comprises of 472 villages and spread over an area of 1190 Sq. Km. Already for orderly and planned growth/development of the area Master Plans of S.A.S. Nagar, Zirakpur, Derabassi, Kharar, Banur and New Chandigarh have already been prepared and notified. The grey area comprising of villages around Lalru which are venerable to grow in an its unorderly manner. The Govt. has decided to plan this area in an orderly manner by developing the area into industrial hub for creating employment opportunities to the youth. The Land Use PlanLalru includes 2 towns (Lalru and Dapper) and 75 villages.

1

Physiography

The elevation ranges from about 400m above mean sea level in the foot hills to about 200m mean sea level in the plains. The slope is moderate gentle towards south western part of the area, where all the rivers and streams drain through the GMR. Ghaggar River with its tributaries forms the main surface hydrological feature in the area. Due to the flat topography, at many places the water channels (locally known as choes) are dry during the inter-monsoon period but swells during the monsoons. The protection of these floodable zones is of paramount importance for ground water aquifers. The soils in the area are very fertile with annual deposition of river silt and as such very productive for raising multiple crops.

Climate

The region experiences extreme weather conditions. Period of April to June experiences hot and dry season with the maximum temperature reaching 45°C. November to February is subjected to cold weather and in winters the minimum temperature goes down to about 1°C. In Punjab, the average annual rainfall ranges from 58 cms in plains to 96 cms in sub mountain regions and decreases from North to South. The annual average rainfall in Greater Mohali Region is 114 cm and is heavy during the monsoon season. The monsoon season starts in the first week of July and continues till middle of September.

CHAPTER-2

EXISTING LAND USE & INFRASTRUCTURE

Demographic profile of the area in terms of the population, growth rate, population density, literacy rate etc. helps in determining the social as well as the economic character of the area. The study of population growth and characteristics plays an important role in defining the urban limits of a town/city. The following studies related to population growth and characteristics for Land Use PlanLalru have been conducted to know the characteristics of Lalru and Dapper town and its rural area.

Population growth of Greater Mohali Region(GMR)

Population Growth: The population of the Greater Mohali Region was just over 0.7 mn in 2001, with 38.9% of the population residing in urban areas and the balance in rural areas. It may be said that the Greater Mohali Region is more urbanized compared to both India as a whole (27.8% urban population in 2001) and the state of Punjab (33.9%). In terms of distribution, the urban population of the Greater Mohali Region is spread across ten towns as shown in Table 5.1. There is a high degree of concentration in S.A.S. Nagar (Mohali), which accounted for close to 45% of the total urban population in 2001. Based on an assessment of population using National Sample Survey (NSS)data, Sample Registration System (SRS) data, etc. the current population (2006) of the Greater Mohali Region is estimated at 0.8 mn.

	Number of	Number of	Number of	Number of
	Households	Persons	Males	Females
Urban Areas	58,730	2,76,699	1,49,022	1,27,677
Rural Areas	75,225	4,34,511	2,37,400	1,97,111
Total for	1,33,955	7,11,210	3,86,422	3,24,788
Greater Mohali				
Region				

Table: Population of the Greater Mohali Region (Census 2001)

(Source Regional Plan GMADA)

The total Population, the Urban Population and Implied annual growth rates at 25 years and
50 years intervals are provided below for the four scenarios presented:

	2001		2031		2056	
Growth	Population	Urbanization	Population	Urbanization	Population	Urbanization
Scenario						
Low	711210	38.00	1538380	49.5	2316381	50.9
Growth						
Moderate	711210	38.00	1782208	49.2	2836966	56.0
Growth						
High	711210	38.00	2117980	49.8	3865760	64.7
Growth						
Very	711210	38.00	2365861	67.8	4514846	84.6
High						
Growth						

(Source Regional Plan GMADA)

Population growth of Lalru

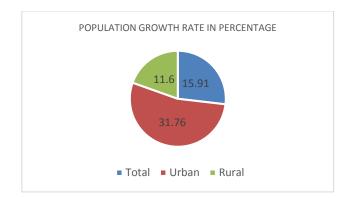
Land Use PlanLalru includes two urban settlements i.e. Lalru and Dappar and 75 villages . Lalru experienced growth rate of 15.91% during the year 2001 - 2011 decade . Similarly the growth rate of urban population of Lalru and Dapper town is 31.76%. But in case of rural population, the growth rate is about 11.60% during 2001-2011 decade.

The growth trend of population of Lalru and its surrounding areas are given in table below:

	Population			Growth rate in %	Growth rate in %
	1991	2001	2011	1991-2001	2001-2011
Total	72831	97023	112462	33.22	15.91
Urban	13238	20742	27330	56.68	31.76
Rural	59593	76281	85132	28.00	11.60

Population Growth Rate of Land Use PlanLalru 1991- 2011:

Source: Census of India, Punjab 1991, 2001 & 2011.



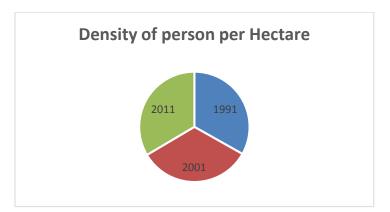
Population density

The gross population density of Lalru and Dapper Town has constantly increased during the period of 1991-2011, from 7.47 persons per hectare in 1991 to 11.70 persons per hectare in 2001 and 15.42 persons per hectare in 2011. Therefore the analysis of population density is done keeping this area in view.

Table: Population density of urban areas 1991-2011

Year	Population	Town Area (In	Density in
	(Persons)	Hectares)	Persons/hectare
1991	13238	1772	7.47
2001	20742	1772	11.70
2011	27330	1772	15.42

Source: Census of India, Punjab 1991, 2001 & 2011.



Existing Land Use:

The detail of break-up of existing land use of Land Use PlanLalru is given in table below:

Name of Land use	Area in hect.	% age to the
		total area
Residential	826	3.68
Commercial	39	0.17
Industrial	607	2.70
Recreational/choe/river	672	2.99
Rural and Agricultural	19978	89.07
Traffic and Transportation	195	0.87
Utilities & Services, Reserved Area, Government,		
Semi Public	112	0.50
Total	22429	100

Existing Land Use breakup of Urban Area :

Land Use PlanLalru covers the revenue estates of 75 villages and two urban centre i.e. Lalru and Dapper .The existing land use has been shown in Drawing No. DTP(SAS Nagar) 2249/2015, dated 07.12.2015.

Residential : It is very much clear from the above table that the residential use has a larger share of city area. Out of total area of 22429 hectares about 826 hectares i.e. 3.68 % of area is under residential use which includes both planned and unplanned development.

Commercial: The commercial use is the most important use of the urban areas. It may have lesser share in area but plays an important role in city character. In case of Lalru Land Use Planthe total area covered under commercial use is 39 hectares i.e. 0.17% of the area. There are so many shops existing in the various parts of the city. The commercial is developed all along the roads. There is a no organised commercial area except Mandi. The Wholesale Anaj Mandi covering an area of about 4 hectares is located on **Lalru - Handesra** road near ITI.

Industrial:

As Table depicts that the total area under industrial use is 607 hectares which is 2.70% of the total area. The Lalru town and its adjoining area has medium and large scale industrial units like Nahar Processing Industry, K.D.Tools, Shyam Indospin Industry, Gates Hydrolix, Bhandari Exports Ltd., Khandelwal Forgings, Anaesthetic Gases, Torex India, Crystal Pipes, MSL Ltd., JCBL, Condeurbiotech Industry, Rana Polycot, Paverblock Industry, S.J. Protiens industry, Meera Exports ,Nutricia Industry, Deepak Chemical, Agro-Duch Industry, T.C. Spinners etc.

Recreational

The total area under recreational use is 672 hectares which is 2.99 % of the total area. In this area there is one Stadium, which is located at Larlu town and some small parks are located as compared to norms and standard recreational area is very low.

Agricultural/Rural

There are some chunks of land falling within municipal limits which are still being used for agricultural purposes. The areas between the existing developed area and the proposed roads are largely under agriculture. 19978 hectares are under agricultural use which is 89.7 % of total area.

Physical Infrastructure:

The infrastructure provision could be further improved with proper planning and adequate provision in tandem with the population growth. At the moment there is limited availability of urban infrastructure such as water supply and sanitation facilities. Proper garbage disposal is necessary to minimize the pollution of environment.

Infrastructure which includes surface water drainage, sewerage pipe layout and water supply lines must consider seasonal monsoon changes as the water table tends to fluctuate during different seasons. A decentralized system that integrate with the temporal phasing of development is necessary to address this issue.

Water Supply System:

At present mostly ground water is used for the water supply in the town and villages. There are about 43 numbers of OHSR's in various parts of the town and villages in order to maintain the required water supply. The newly developed colonies have their own water supply arrangements and are self sufficient as far as water requirement is concerned.

Solid Waste Management and Sewerage:

The sewerage treatment plant which caters for the treatment of sewerage water of the entire area is located in Lalru, village Rampur Behal, Jaulan Kalan etc. As far as solid waste management is concerned, a site measuring 4.0 acres has been proposed in village Kauli Majra for dumping the solid waste.

Social infrastructure:

Educational Facilities: Educational facilities have a formative effect on the mind, character or physical ability of an individual. These facilities include the institutions by which society, through schools, colleges, universities and other institutions accumulates knowledge, values and skills. These facilities help in pacing the economic development and employment of the urban areas and its hinterland.

There are a few institutes in this area which cater to the educational requirement of Lalru town as well as its surrounding villages. Theses institutes include Swami Permanand College in village Jaulan Kalan, Punjab Engg. College in village Malakpur, Vidya Jyoti Hotel Management and Catering Institute in village Gholu Majra, Universal Group of Institution in village Ballopur and Industrial Training Institute in Lalru. Besides the higher level of educational institutions which are catering to the needs in the fields of higher education, Lalru area has number of schools at primary & secondary level which imparts education at school level.

Health Care: A health care provider is an organization that delivers proper care system in a systematic way to an individual in need of health care services. There is one civil hospital, two primary health centre and 2 community health centers, one ayurvedic dispensary and 6 veterinary hospitals and 3 veterinary dispensaries in this area. The study of health care systems reveals that due to lower number of govt. health care units in the city health care becomes unaffordable for the majority of the poor people due to high charges of private hospitals. So it will be important that sufficient number of health care sites should be created.

Sports, Recreational and religious Facilities: Recreational facilities constitute an important element of physical and social development of an individual and for that reason, their provision and balanced spatial distribution at the local, sub-city and city level assumes importance. According to ground-truthing, there are adequate religious places in all towns and villages within the Land Use PlanLalru. But this area is lacking in sports and

recreational facilities as compare to norms and standards.(NBC-2005).

Transportation: The total area under traffic and transportation is 195 hectares which is 0.87 % of the total areas, which is low as compared to norms and standards. The major problems related to this aspect are missing road hierarchy, lack of parking places, traffic bottlenecks, encroachment of roads, lack of traffic signals etc. The details of existing road network and other uses relating to traffic transportation are shown in Existing Land Use Plan, Lalru Drg No. DTP(SAS Nagar).2249/2015 dated 07.12.2015

Traffic & Transportation

The total area under traffic and transportation is 195 hectares which is 0.87 % of the total area, which is low as compared to norms and standards. The major problems related to this aspect are missing road hierarchy, lack of parking places, traffic bottlenecks, encroachment of roads, lack of traffic signals etc.

Lalru borders arround S.A.S.Nagar, Derabassi, Banur, Ambala and is located to the East of the Capital Chandigarh. The Lalru site is constrained by some of existing infrastructure. The proposed Airport extension plans for Chandigarh Airport extend into the western end of Lalru. The existing railway line Chandigarh and Ambala/ New Delhi cuts through Lalru. Lalru is served by NH-22 (Chandigarh- Ambala Highway) and NH-72 (Ambala- Naraingarh Road).

The existing railway line that runs across Lalru to the east of NH-22 connects Chandigarh to Ambala and continue further to Delhi. The line also proceeds from Chandigarh pass S.A.S.Nagar and on to Kharar and Ludhaina. A spur line off the main railway lines branches of from Chandigarh to Panchkula.

Major economic activities in various LPAs within GMR as under:

Lalru	:Chemical Industry, Textiles, Steel industry, Petroleum-gas Industry, Food					
	Processing					
Derabassi	:Pharmaceutical, Breweries, Electronics, Paper Mills, Poultry					
	Farms, Textiles, Copper Industry and Life Sciences					
Kharar	:Textiles, pesticides/chemicals, warehousing. retail/hotel, small and					
	medium industrial establishments					
Mullanpur	:Residential					
Banur	:Agricultural activities, Pharmaceutical, distillers					

9

Zirakpur:Automobiles, warehousing commercial/retail activities (presence of malls)S.A.S Nagar:Bulk material marketing, specialized medical activities,
commercial/retail, tourism (presence of holiday resorts), warehousing,
agriculture activities, entertainment, heavy equipment

manufacturing(manufacturing of tractors),

CHAPTER 3.

SHORTCOMINGS

The weaknesses and shortcoming although minor are listed down as under:

- 1. Unplanned growth of industrial activities
- 2. Limited infrastructure provisions for industrial development
- 3. Poor quality of roads for transportation of industrial goods
- 4. Incompatible uses like brick kilns
- 5. Seasonal nature of rivers
- 6. There are scattered non-compatible industries in the surrounding area of Lalru.
- 8. The presence of the heavy industries in the surrounding vicinity of Lalru such as brick kilns and stone crushers emit air and noise pollution to the surrounding areas. Some measures would have to be imposed on these activities to mitigate the pollution impact.

CHAPTER 4. KEY DEVELOPMENT STRATEGIES

Based on the assessment of the existing scenario and the future growth potential of the Greater Mohali Region, following key development strategies have been formulated to pave way for future development in the region.

- Attain a balance development within the GMR through reaffirming distribution and to promote development efficiency by concentrating development in certain corridors, linkages and nodes
- Preserve and conserve natural, open space resources to achieve a more wholesome, vibrant and sustainable life styles.
- Introduce critical strategic economic growth initiatives that will be the focal points for growth within the region.
- Promote comprehensive planned township that will enhance quality living
- Ensure accessibility through enhancing the regional and international linkages
- Manage overall growth particularly in the areas surrounding the designated urbanized Areas.

CHAPTER 5. PROJECTIONS

Population Projections 2031

The population is the basic human factor for which planning is done. The requirements of different types of infrastructure for Lalru and surrounding villages of Land Use PlanLalru in 2031 would be based on the projected population for that year and also migration of population that seeks livelihood in the city. For the purpose of population projections, following three types of recommended methods have been applied:

In addition to this, the government policies and the opportunities affecting the growth of towns and rural areas of Land Use PlanLalru have also been kept in mind. The following table gives the decadal growth rate of population of Urban areas, population of rural areas and total population of Land Use PlanLalru:

Table: Growth Rate of Population of Urban Area, Rural Area and Land Use PlanLalru – 1991,2001, 2011

Year	Urban		Rural		Total	
	Population	Growth	Populatio	Growth	Population	Growth
		rate (in	n	rate (in		rate (in
		percent)		percent)		percent)
1991	13238	-	59593	-	72831	-
2001	20742	56.68	76281	28.00	97023	33.22
2011	27330	31.76	85132	11.60	112462	15.91

(Source: Census of India, Punjab, 1991, 2001, 2011)

The Projected population of Urban and Rural Area and Master Plan, Lalru is given in the table below:

Year	Urban Area		Rural Areas		Land Use PlanLalru	
	Projected Population	Growth rate (in percentage)	Projected Population	Growth rate (in percent)	Projected Population	Growth Rate (in percent)
2021	36000	-	95000	-	131000	-
2031	47000	32	106000	12	151000	16
2041	62000	32	118000	12	171000	16

Table : Projected Population and Growth Rate of Urban and RuralAreas and Land UsePlanLalru

ARITHMETICAL INCREASE METHOD:

This method is suitable for large and old city with considerable development. If it is used for small, average or comparatively new cities, it will give lower population estimate than actual value. In this method the average increase in population per decade is calculated from the past census reports. This increase is added to the present population to find out the population of the next decade. Thus, it is assumed that the population is increasing at constant rate. Since dp/dt=C i.e., rate of change of population with respect to time is constant.

Therefore, Population after nth decade will be = P=n.C

Where, P n is the population after 'n'decades and 'P' is present population.

Year	Population	Increment
1991	72831	-
2001	97023	24192
2011	112462	15439

Average increment 19815

Population forecast for year 2021 is P_{2021} = 112462+19815x1= 132277 Similarly, P_{2031} = 112462+19815x2= 152092 P_{2041} = 112462+19815x3= 171907

GEOMETRICAL INCREASE METHOD:

In this method the percentage increase in population from decade to decade is assumed to remain constant, Geometric mean increase is used to find out the future increment in population. Since this method gives higher values and hence should be applied for a new industrial town at the beginning of development for only few decades. The population at the end of end of n^{th} decade 'P_n' can be estimated as:

 $P_n = P(1+1_G/100)^n$

Where, $I_{G=}$ geometric mean (%)

P = Present population

N= no. of decades

Year	Population	Increment	Geometrical increase rate
			of growth
1991	72831	-	-
2001	97023	24192	(24192/72831)
			= 0.33
2011	112462	15439	(15439/97023)
			= 0.16

Geometric mean I_{G} = (0.33x0.16)^{1/2}

= 0.230 i.e.23.0%

Population in year 2021 is, $P_{2021} = 112462x(1+0.230)^1 = 138328$

Similarly for the year 2031 & 2041 can be calculated by

 $P_{2031} = 112462x(1+0.230)^2 = 170143$

 $P_{2041} = 112462x(1+0.230)^3 = 209276$

INCREMENTAL INCREASE METHOD:

This method is modification of arithmetical increase method and it is suitable for an average size under normal condition where the growth rate is found to be in increasing order. While adopting this method the increase in increment is considered for calculating future population. The incremental increase is determined for each decade from the past population and the average value is added to the present population along with the average rate of increase.

Hence, population after n^{th} decade is $P_n = P+n.X+\{n(n+1)/2\}.Y$

Where, $P_n = Population$ after n^{th} decade

X = Average increase

Y = Incremental increase

Year	Population	Increase (X)	Incremental increase (Y)
1991	72831	-	-
2001	97023	24192	-
2011	112462	15439	-8753
Total		39631	-8753
Average		19815	8753s

Population in year 2021 is $P_{2021} = 112462 + (19815x1) + \{1(1+1)/2\}x8753$

= 141030

For the year 2031 is $P_{2031} = 112462 + (19815x2) + \{2(2+1)/2\}x8753$

For the year 2041 is $P_{2041} = 112462 + (19815x3) + \{3(3+1)/2\}x8753$

= 224425

Table: Average of Projected Population of Lalru Land Use Planby 3 methods with base year 2011:

Year	Arithmetical	Geometrical	Incremental	Average
	increase method	increase method	increase method	increase
2021	132277	138328	141030	137211
2031	152092	170143	178351	166862
2041	171907	209276	224425	201860

The population of Lalru Land Use Plan under average increase is expected to reach a figure of 201860 persons for the year 2041 due to increase in industrial growth. The population is expected to grow by almost 3 times its current level during the given period. Here it is assumed that there would be a rapid increase in industrial development of the region, increase in job opportunities and private investment that would feel the region's economic growth at a very rapid rate and this leads to higher migration in the Lalru Area.

CHAPTER 6. PROPOSALS

Planning Intention for Land Use PlanLalru:

The intention of the planning strategy for Lalru is for the town to realize and optimize its potential economic growth through efficient use of its abundant resources from its industrial sector and an overall comprehensive regularization of existing uses in the planning area. With the planned outlook for a more efficient and realistic industrial framework, the industrial landscape for Lalru planning area can realize its potential, to achieve and to foster a more vibrant and bustling economy in a more well-planned manner through developing key target industries and improving basic infrastructure that is essential to support the industrial activities. The planning intention for Lalru as set out in the context of the Greater Mohali Regional Plan is:

"to accommodate the full spectrum of industrial types through the safeguarding of sufficient land at appropriate locations for the different industrial clusters/ business parks in a planned manner "

In accordance to the Regional Plan set out for GMADA, this objective focus is to be achieved through strategic planning in developing business parks and R&D setups at strategic locations and to allow for clustering of similar/ complementary industries For Lalru, the major growth-poles for the Land Use Planare:

- *Pharmaceuticals & Chemicals* industry where there is presently in Lalru, there are already well-established pharmaceuticals and chemicals companies garnering focus for this industry in this Punjab region. Companies such as *General & Heavy industries*, which are booming at various locations of Lalru along the National highway. It will be good that similar industries be clustered and consolidated in one zone so as to define the industrial corridor and also to mitigate pollution impact of such industries in a more controlled environment.
- *High Technology & IT* industry so as to introduce diversity in the industrial economy of Lalru. As high technology and IT are generally well-received and forthcoming industry in

India, attention to cultivate and foster this industry will give Lalru a well-diversed industrial outlook. With the diversity of technical schools in the built-up areas, this area will serve as an employment centre and seed of research for those graduates and academics in the sciences and bio-ecological fields of work.

• *Logistics* hub so as to capitalize on the very existence of railway infrastructure in Lalru. The logistics and warehousing use can support the transportation and storage of produced goods and agriculture produces from all parts of Lalru and in this region to other major cities in other states through the rail system.

DEVELOPMENT FRAMEWORK FOR LALRU MASTER PLAN:

This report will provide a development framework for the transformation of Lalru into one of Punjab's key industrial town. The Land Use PlanLalru is defined by recommended and achievable urban renewal strategies which outlines the vision for Lalru.

The report will outline general planning guidelines and set the most apt planning direction for the overall future economic as well as physical growth of Lalru. It will also identify key industrial drivers which will influence good economic growth for Lalru while ensuring that the proposals will be in line with the targeted intentions and goals set out in the Regional Plan for Greater Mohali Area 2006-2056.

Vision & Objectives for Lalru Mastr Plan:

The Lalru Land Use Planis envisioned to create a strong identity as one of Punjab's core industrial towns where full spectrum of industrial businesses and activities will be accommodated through balanced allocation of adequate land for the different industrial clusters via the following intents:

- To develop and nurture the industrial spectrum of Lalru by promoting and creating the town as one of Punjab's modern and planned industrial centre with vibrant specialized and industrial parks and catering to a variety of industrial types.
- To strike a balance in the distribution of land use for predominant industrial uses alongside adequate supporting uses such as technical schools and sports/recreational facilities.

- To create conducive park-like environment for industrialists to carry out their business/ industrial activities through proper planning for good infrastructure and efficient transportation network with supporting social amenities.
- To place greater environmental emphasis on landscaping at all important nodes and entrances in the specialized and industrial parks and industrial areas so as to project themselves as eco-friendly and green specialized and industrial parks and introduce new planned urbanized image for Lalru

The purpose of this detailed Land Use Planis to formulate a set of comprehensive planning guidelines for the industrial development of Lalru Master Plan. For Lalru to be self-sufficient and a fully infrastructured and to be efficiently managed, goals and objectives should be clearly stated so that the planning processes are working towards achieving and realizing them.

Objective:

- (a) To provide a strong identity for Lalru in the industrial sector of GMADA.
 - To maintain well-established and reliable reputation for business investments and fostering partnerships from the foreign and local private sector investors.
 - To boost industrial employment opportunities.
 - To ensure community health and safety is given priority in the establishment and operation of all industry.
 - To safeguard valuable river-frontage land for new premium residential uses.
- (b) To provide an efficient infrastructure system with a wide range of supporting institutional and recreational facilities within the designated industrial zones so as to serve the workers as well as the local population.
- Lalru Land Use Plancan be planned to assume greater role in creating more than just basic infrastructures to sustain an excellent business environment for industrialists. Existing railway infrastructure should be better capitalized to enable the growth of the logistics sector to enhance the development & improve the level of accessibility of the manufacturing goods to other parts of India.

- (c) To provide for the various levels of housing for the different income groups, ensuring that they will blend in compatibly with the other uses within the Master Plan.
- To fulfill the residential needs of the community living in Lalru Master Plan.
- (d) To achieve clear and neater clustering concept of the major industrial uses and promote industrial focal point in Land Use PlanLalru.
- To display careful and thorough considerations have been given to ensure systematic and effective planning approach of the Master Plan.
- (e) To provide for sufficient educational and recreational needs, to ascertain the good living standards of the new residents coming to Land Use PlanLalru.

To give Lalru a unique aspect where industry and recreational can come to work and play and at the same time, realize its necessary focus on fostering educational needs for the younger generation in Land Use PlanLalru.

Key Economic Drivers

It is clear that given the long period over which manufacturing activities have had the option of locating in the Greater Mohali Region, it is unlikely that manufacturing activities will drive the economy of the Greater Mohali Region to any great extent beyond the level already established. This is also indicated by the fact that the Greater Mohali Region, like the rest of the state of Punjab, is land-locked and will always face a competitive disadvantage in manufacturing given the distance from ports to handle imports and exports. In case of Greater Mohali Region, the extent of environmentally sensitive area within the GMADA boundaries also indicates that manufacturing will have to be largely restricted to "clean" industries with limited potential for damage to the environment. On the other hand, the rapid growth in IT/ITeS units as well as employment and exports by these units in the Greater Mohali Region over the last 8-9 years indicates that IT/ITeS units have significant potential to drive the economic growth of the Greater Mohali Region. Apart from the established trend of rapid growth, the fit between IT/ITeS and the Greater Mohali Region is driven by a number of factors:

• Largely urban character of the Greater Mohali Region with proximity to Chandigarh providing access to connectivity by air. With the likely up-gradation of the Chandigarh

airport to handle international flights, the limited drawbacks in terms of international travellers having to route through Delhi and Mumbai will also get addressed.

- The cosmopolitan nature of the population with migrants driving the growth in population, coupled with higher rates of literacy than the state and national average.
- Competitive advantages for IT/ITeS operations in terms of lower rentals/capital costs for floor space, lower manpower costs and lower levels of attrition in the employee base as compared to the metropolitan cities.
- The established base of institutions of higher education and the current pipe-line of institutes being set up provides a natural fit with IT/ITeS as well as other knowledge based economic activities.

Name of landuse	Area in hects.	% age to the total area
Residential	3090.0	13.78
Commercial	13.0	0.05
Industrial	9199.0	41.01
Recreational	147.0	0.66
Rural and Agricultural	6601.0	29.43
Traffic and Transportation	94.0	0.42
Mixed Land Use	257.0	1.15
No Construction Zone	1551.0	6.91
Industrial and Mix	1477.0	6.59
Total	22429.0	100.0

Break up of Major Proposed Land Uses Land Use PlanLalru -2031

Source: PRSC, PAU, Ludhiana

THE PROPOSED ROAD NETWORK:

The proposed Land Use Planroad network as been developed in collaboration with the land use proposals for the area. The ultimate vision for the Lalru Land Use Planis to develop into industrial town. The proposed road network has the following features:

- The network is built around the existing road network to strengthen and improve the existing road network's effectiveness and coverage.
- The road network has adequate capacity to cater for the projected traffic flows.
- The network links major destinations directly to facilitate the direct the routing of trips and avoid the routing of extraneous traffic within neighborhoods and precincts.

• The network permits the staging of construction so that roads need only be built and extended when required.

Even though the development time frame for this Land Use Planis year 2031, the proposed road network was actually designed based on the traffic forecasts done for the year 2056 and at the Regional Plan level (i.e. for the entire GMR). The full right-of-way required for the long term road reserves has also been safeguarded in the Land Use Plans.

a) Proposed Roads

The proposed transportation Land Use Planinclude the following:

- The GMADA Expressway (PR-1) :The proposed GMADA Expressway passes through the Land Use PlanLalru from southern side of already approved Banur Master Plan.
- **PR-8(R-1):**This proposed major arterial road passes through the Land Use PlanLalru from southern boundary line of already approved Land Use PlanDerabassi.
- **PR-10(R-1):**This proposed major arterial road runs generally southwards from Panchkula Sector 20 along an alignment generally east of and parallel to NH-22 to the proposed GMADA Expressway and further southwards towards Delhi.

Sr.	Category of Road	Proposed Right of way of the	No construction
No.		road Meters(in feets)	zone on both sides of
		Outside M.C. Limits	the R.O.W. (in
			meters)
1.	Existing NH-22 Ambala-	60(200)	30
	Delhi Road (R-1)		
2.	Proposed PR-1 (Gmada	60(200)	30
	Express Way) (R-1)		
3.	Proposed PR-8 (R-1)	60(200)	30
4.	Proposed PR-10(R-1)	60(200)	30

Proposed Road Hierarchy, Land Use PlanLalru:

Note:

- No Construction zone should be beyond the proposed road widening.
- All the existing link roads are to be widen proportionate on both side to 40 feet

PROPOSED DEVELOPMENT STRATEGY

- 1. Development of the area for accommodating the industries by developing the industrial focal points as abundant cheap land available to develop this area, which will include General type of Industries including heavy, medium and low industries.
- To achieve the objectives the region has a very well knitted network of existing roads and rail i.e. NH-22, NH-72 and Chandigarh-Ambala-Delhi Rail Link. Besides these in GMADA Regional Plan, proposed road network such as PR-1, PR-8 and PR-10 has been given. These connect NH-64, NH-22 and NH-95.
- 3. Recently Govt. of Punjab has announced the incentives for installing industries in the State vide which ratio of and electricity @ Rs. 4.95 unit for the first five years will be given. To stream line and clearance of the industrial projects in the State of Punjab. has already set up single window clearance by the name PBIP wherein a time bond system has been introduced under one roof consisting of all the departments.
- 4. All existing industrial units which have been marked or spot zoned before the preparation of Land Use Plan will be allowed to expand within the existing premises. And the site on which various projects have been approved or whose change of land use has already been permitted by competent authority/Govt., such sites shall be deemed to be adjusted as sanctioned/ permitted.
- 5 All existing red and green category of industries which have been set up before the date of notification of Land Use Plan Lalru shall be dealt according to the decision taken in the 26th meeting of The Punjab Regional and Town Planning and Development Board held on 28.05.2013, as per item no. 26.08.

All those rural/agro based industries which have taken the approval from Department of Town and Country Planning, after the notification of the GMADA Region shall stand adjusted.

- A truck terminal is proposed on PR-1 road, which will take care of transportation of the industrial pressure and ample space has been created for parking of Tempo and Rehras .
- Along NH-22 and Railway line, space shall be left for Dry Port, for feeding Tempo Union Site, Rehra Union site etc.

- 8. The prescribed distance for residential development in the Industrial Mixed land use zone from the existing red industries shall be a minimum of 15 metres in the form of green buffer with thick leafy trees. This 15 metres buffer shall be for new residential i.e. if residential is coming near the existing red category industry then promoter of residential development shall provide 15 metres green buffer.
- 9. The development of all activities shall take place as per the building rules/norms and other govt. policies as amended from time to time.
- 10. T.D.R. will be given to persons whose land is going to be acquired by the Government, as per government policies, norms and rules as amended from time to time.
- The industries/units which have been running before the notification of GMADA Regional Plan shall also be allow to operate, but they can only expand within their existing premises.
- 12. The minor 'choes' shall have minimum 15 metres wide green strips on each side. Other major 'choes' shall have minimum 30 metres green strips on each side. Realignment of 'choes' shall be permissible, wherever feasible, subject to the certification by Engineering Department to ensure free flow of storm water. After any such realignment, the river mouth, the river bed and the green strip on either side shall be maintained at least to the minimum prescribed level for this choe before realignment. In these green strips, golf course, sports and recreational activities shall be permissible but no construction would be allowed. The support facilities for these activities shall be constructed outside the green strips.
- 13. Sites for Sewerage treatment plant, effluent treatment plant and solid waste management plant shall be selected by the State Level Committee or Government.

CHAPTER 7.

SPECIAL AND DETAILED CONTROLS

Section – I: Zoning Regulations

The purpose of the Development Control Regulations is to assist developers and endusers within Land use plan Lalru to strive for a more quality and environmentally friendly development, following the requirement under clause (d) of sub section 1 of Section 70 of the Punjab Regional and Town Planning and Development (Amendment) Act, 2006 hereby makes following Zoning Regulations as a part of the Land Use Plan prepared for the Local Planning Area.

The zoning regulations proposed under this Land Use Plan are primarily concerned with the control of land use. The proposed land use plan includes broadly following land use zones:

- ➢ Residential
- ➢ Commercial
- Mixed land use/Industrial Mix Land use
- ➢ Industry
- Recreational
- Rural and Agricultural

Developers are requested to abide to the zoning and planning intention of the plan. Development proposals that have been granted approval by the Competent Authority previously will continue to be honored and shall not be affected by these controls.

RESIDENTIAL

Minimum area and development of a residential colony within Master Plan Lalru shall be as per the provisions of PAPR Act, 1995 and guidelines issued by govt. from time to time:

Minimum Plot size Category

Minimum Plot size Category	Minimum Plot size (Outside M.C. Limit)
Residential Plotted	10 acres
Group Housing General	2 acres independent
EWS	2.5 acres

Note:

i. Minimum area of colony within M.Cl. limits shall be as per Local Govt. Norms or as amended from time to time

- *ii.* The lowest hierarchy street within residential zone of Master Plan shall be minimum 40 feet wide or as prescribed in the guidelines issued by govt. from time to time.
- *iii.* The saleable area of any plotted residential colony shall be as per the provisions of PAPR Act, 1995 or as amended from time to time.

Group Housing	outside MC Limits
---------------	-------------------

Group Housing (outside M.C. limits) Minimum Plot size		
For General Category For EWS	2 acres 2.5 acres	
Minimum Road width	For group housing stand-alone projects, minimum width of approach road is 60".	
Minimum Frontage	20 meters	
Permissible FAR	As per PUDA Building Rules 2013 or as amended from time to time.	
Permissible Height	There shall be no restriction on the height of building subject to clearance from Air Force Authority and fulfilment of other rules such as setbacks, distance between buildings etc. However, structural safety and fire safety requirements as per N.B.C. shall be compulsory.	
Parking provisions	For group housing developments, the requisite parking provision is as per Puda Building rules, 2013 or as amended from time to time.	

Note:

1. Construction of residential houses sold by promoters on floor basis shall also be considered as Group/ Flatted housing developments and parking requirements shall be as per the norms governed by PUDA Building rules 2013 or as per amended from time to time.

2. For group housing within M.C. limits, the norms/ rules of local government shall be applicable.

Commercial

At local level There shall be provision for small scale, double storey commercial subject to the condition that abutting road shall have a minimum width of 60 feet with minimum 20 feet front setback from road for parking purposes. However the norms for low rise commercial developments within M.C. limits shall be as per the local body/Municipal council"s rules and regulations.

Stand-Alone Commercial Complexes For stand-alone commercial complexes with height more than double storeys, the additional criteria listed in following table shall apply.

Criteria for stand – alone commercial complexes (more than double storey's) Item	Permissible Norms / Standards	
Minimum Plot size	1000 sq. m	
Minimum Road width	80 feet	
Minimum Frontage	20 m	
FAR	As per PUDA Building Rules 2013 or as amended from	
	time to time.	
Maximum Ground coverage	40%	
Parking	As per PUDA Building Rules 2013 or as amended from	
	time to time.	

Criteria for stand - alone commercial complexes (more than double storey's) Item

Landscaping	If the site area is one acre or above, minimum 15% of
	the total area is to be reserved for landscaping purposes

Note:

1. The plot size, ground coverage, F.A.R., Height of the building and parking norms shall be as provided in the local body/municipal building byelaws, if the project is located within M.C. limit of the town.

2. The ECS shall be counted as below:

- 23 square meters for open parking
- 28 square meters for parking under stilts on ground floor
- 32 square meters for parking in the basement.
- The Development controls/Guidelines/Norms & Standards revised from time to time by the Government shall have overriding effect on the Development controls mentioned in the master plan.
- Commercial facilities are intended to serve the needs of local residents only and will not be shown separately on the Master Plan. Instead, they are subsumed under the predominant residential land use.

INDUSTRIAL

Presently, the Lalru area is heavily regarded as one of Punjab's key industrial towns as many industrial developments have been allowed to reside and operate in this town. There is a crucial need to enforce vital environmental provisions around these industrial developments so as to preserve the quality of life for the surrounding land uses such as the existing villages, schools and agricultural lands. Environmental impact can be mitigated by ensuring that the different types of industrial development are sited in designated areas and pollution control measures are incorporated in their design.

Various categories of industries shall be allowed in the respective landuse zones of Landuse plan Lalru and that categorization of industries will be as per PPCB guidelines as amended from time to time. Like in Industrial mix landuse zone only green category of industries (as per PPCB guidelines amending from time to time) shall be permissible.

Environmental considerations:

- All the textile / dying and electroplating units shall set up treatment plants individually or collectively to achieve zero liquid discharge.
- Minimum buffer of 15 meters green belt of broad leaf trees should be provided around the boundary of village abadies falling in industrial zone of Master Plan. A buffer strip of 15 meters of broad leaf trees shall also be provided between residential areas and industries falling in industrial use of Master Plan, boundaries of which are located within 100 m from the boundary of such areas. It is clarified that 15 meter buffer shall be provided by the owner of the project who comes later.

 All residential colonies, commercial establishments like shopping malls, multiplexes etc shall maintain a minimum distance of 250 meters from the hazardous (maximum accident hazardous) industries notified by the competent authority. The distance should be measured from source of pollution / hazard in the industrial premises to the building lines as per zoning plan of the colony / complex. However for specified type of industry like Rice Sheller / sella plants, stone crushers, hot mix plants, brick kilns etc standards prescribed by PPCB or any other agency shall apply as amended from time to time

Parking guidelines for Industrial Use: Parking shall be as per PUDA building rules, 2013 or as amended from time to time.

Residential Density for Plotted Development: upto 200 ppa **Residential Density for Flatted Development:**

- 🗆 E.W.S. NA
- \Box < DU 1200 sq ft. 450 pp acre
- □ 1200 3000 sq ft. 300 pp acre
- \Box > 3000 sq ft. 250 pp acres

Density for Affordable Housing shall be as per prevalent policy of the Government.

Other development controls and guidelines required

□ The existing HT-lines shall be shifted along the road but outside the Right of Way to ensure unhindered R.O.W. for traffic and other services for all times.

□ The minor "choes" shall have minimum 15 metres wide green strips on each side. Other major "choes" shall have minimum 30 metres green strips on each side. Realignment of "choes" shall be permissible, wherever feasible, subject to the certification by Engineering Department to ensure free flow of storm water. After any such realignment, the river mouth, the river bed and the green strip on either side shall be maintained at least to the minimum prescribed level for this choe before realignment. In these green strips, golf course, sports and recreational activities shall be permissible but no construction would be allowed. The support facilities for these activities shall be constructed outside the green strips.

□ Expansion of village Abadies: The contigous expansion of village abadies falling under industrial/ agricultural zone of Local Planning Area shall be permissible to accommodate the natural growth of village abadies.

Exceptions

1. Any land use which is not mentioned in the legend of permissible land uses but found compatible for a particular land use zone by the Chief Town Planner, Punjab may be allowed in the respective zones.

2. Use of land covered under Optimum Utilization of Vacant Government Land (OUVGL) Scheme or any other project of the State / Central Government shall be determined by the Government at any appropriate time notwithstanding the provisions of this Master Plan. 3. Development / projects approved prior to coming in to force of these regulations shall be deemed to be in compliance with these Regulations.

4. In case the area of a project falls partially under no construction zone along a water body, relaxation of maximum upto 5% on the total area of the project shall be allowed towards calculation of saleable area in lieu of the area falling under the no construction zone. In case, the area falling under no construction zone is less than 5% of the total area of the project then the relaxation shall be proportionately less.

5. The buildings / premises for which the existing (present) land use has been retained as such in the Master Plan may continue to operate without time limit. However, in case the present use of the buildings / premises is discontinued (partially or wholly) these buildings / premises or part thereof may be put to any other compatible use with the surrounding use zone in the Master Plan provided it fulfills the other development regulations / controls as laid down in the Master Plan or as prescribed by the Govt. / Local Body from time to time.

Note:-

- Any other notification/ order issued by the Government, which is not covered above shall be applicable wherever required.
- The Development controls/Guidelines/Norms & Standards revised from time to time by the Government shall have overriding effect on the Development controls mentioned in the master plan.

10.4 Transferable Development Rights

To facilitate development, it is necessary to accord top priority to the implementation of public utilities and infrastructure (such as roads, parks, green belts etc.) which will in turn encourage planned development/regulated urbanization. However, the respective technical agency or authority will not be able to proceed with its implementation programmes until the ownership of private land affected by these public utilities and infrastructure has been transferred to the state or to the relevant authority(s).Acquisition of private land for this purpose is proposed to be carried out through one of the following options:

□ Cash compensation to be paid to affected land owners whose land is to be acquired or a landpooling scheme may be formulated and implemented.

Of these options, use of mechanism of TDR (Transfer of Development Rights) is recommended due to the reasons specified below:

- It is relatively simple and direct mechanism to implement and execute.
- The requisite public infrastructure projects can be implemented quickly, thus facilitating rapid urban development.
- The interests of affected landowners are protected.

The TDR scheme shall be restricted to development projects for public infrastructure and facilities which shall be announced from time to time. The additional FAR shall not be transferable from one

LPA to another. The Competent Authority on priority shall finalize detailed policy guidelines on the operation and implementation of TDR Scheme.

S/No.	Proposed Zone	Uses	Examples of Development
1	Residential	These are areas used or intended to be used mainly for residential development. Serviced apartments and student hostels may also be allowed. Commercial and institutional uses are allowed within residential areas if these comply with the stipulated criteria.	 Residential developments include: Flat Group Housing Apartments Townhouse Semi-detached house Detached House Detached House Strata-landed Housing Retirement Housing Serviced Apartment Hostel (e.g. for working women, students & youths) Institutions Allowable commercial developments in residential areas include: Single-storey commercial on road having R.O.W of at least 60 feet. Stand alone / commercial projects on road with a minimum R.O.W 80 feet.
	Permissible Landuse with in Residential Landuse	The following landuses are not separately demarcated or marked in the landuse plan. But these landuses are allowed within residential areas, if these comply with stipulated criteria. Health & Medical care	1. Hospitals
			 Polyclinic Clinic Dental clinic

Proposed Land Use & Zoning Interpretation For Land Use Plan Lalru :

Civic & Community Institution	Civic Institutions1. Courts2. Government Offices3. Foreign Mission/ Chancery4. Police Station5. Fire Station6. Prison7. Reformative Centre8. Disaster Management Centre8. Disaster Management Centre1. Association premises2. Community Institutions1. Association premises2. Community Centre/ Club3. Community Hall4. Welfare Home5. Childcare centre6. Home for the Aged7. Home for the Disabled8. Workers' Dormitory9. Facility Centre
Place of Worship	 Gurudwaras Temple Mosque Church
Educational Institution	 8. Family Welfare Centre 9. Dispensary 1. Kindergarten 2. Primary school 3. Secondary school 4. Junior college 5. Technical institute 6. Polytechnic 7. University 8. Religious school/institute 9. Foreign school 10. International school 11. Special education school (e.g. School for the Disabled)
	 5. Veterinary clinic 6. Nursing Home 7. Maternity Home

			 <u>Cultural Institutions</u> 1. Television/ Filming Studio Complex 2. Performing Arts Centre 3. Library 4. Museum 5. Arts Centre 6. Science Centre 7. Concert Hall 8. Socio-cultural Complex
2	Industry	These are areas used or intended to be used as red industries, orange industries, general and warehouse uses.	 Developments for: All heavy, red and orange categories of industries (as per PPCB guidelines amended from time to time) are permissible. Besides this, the following activities can come up: 1. High-technology/ IT park 2. Business park 3. Knowledge park 4. Science park 5. Laboratories 6. Media hubs 7. Computer software development 8. Assembly and repair of computer hardware and electronic equipment 9. Logistics Park 10. Pharmaceutical & Chemical Park 11. Industrial Labour quarters 12. Financial Weaker Section Housing (as envisaged in Housing & Urban Development Department's Notification no. 17/91/08-1HG2/7069 dated 7th Nov, 2008 subject to environmental safeguards) 13. ITI/Technical Institutes/Skill Development Centre 14. Hotels/Hospitals/Workshops/Repair Shops 15. Cold Stores/Godowns/Warehouse
3	Industry-Mix	These are areas used or intended to be used mainly for industries with other stipulated uses	 Developments for: 1. Industries (only green category industry as per PPCB) 2. Plotted residential 3. Group housing 4. Institutions 5. Hospitals 6. Hotels

4	Mixed Land Use	For Educational, Institutional and Residential	 Uses defined in land use zone of residential Green Category Industry Group Housing Hotels.
5	Stadium & Sports complex	These areas are used or to be intended to be used as sports and recreational uses.	 Sports complex Indoor stadium Swimming complex Golf course Golf driving range Recreation club Camp site Water sports centre Adventure camp Theme park Turf club Cricket club Handicraft-thematic fair
6	Open space/ parks	These areas are used or to be intended to be used as open space and no commercial activity is allowed.	 Forest reserve Wooded area Swamp area Natural open space Public promenades
7	Water Body	These are areas used or to be intended to be used for drainage purposes and water areas such as reservoirs, ponds, rivers and other water channels.	 River Major drain Canal Water channel Reservoir Pond
8	River Reserve/ Green belt	These are areas safeguarded for the river/ water channel during the wet season.	 Open space Maintenance access road
9	Road	These are areas used or intended to be used for existing and proposed roads.	 Expressway Major Arterial Road Minor Arterial Road Collector Road Primary Access Road

10	Railway	These are areas used or intended to be used for existing and proposed railway	
11	Utility	These are areas used or intended to be used mainly for public utilities and telecommunication infrastructure, including water works, sewage disposal works and other public installations such as electric substations.	 Electric sub- & grid station, solar power plant Gas-fired power station Raw & local water treatment works Sewage treatment plant Sewage pumping station Sewage disposal work Incineration plant Landfill site Transfer stations Treatment storage & disposal facility Telecommunications station
12	Rural & agriculture	These are areas used or intended to be used mainly for agriculture purposes and includes plant nursery.	 Agro-technology park Aquaculture farm (e.g. aquarium fish) Plant nursery Hydroponics farm Agriculture research/experimental station Floral mile (i.e., nursery cum wholesale centre) Utilities (solar power plant also) All agriculture related activities which require raw material directly from agricultural products)

Note:

1. The requisite guidelines/ notifications issued and amended from time to time by the concerned ministry regarding Gas/ Oil pipe lines/ corridors shall be applicable to irrespective of the land use shown on Proposed Land use plan Drawing No. DTP(SAS Nagar)2271/2016, dated 21.07.2016.

2. The requisite guidelines/ notification issued and amended from time to time by the concerned ministry regarding Defence lands and Airports (including Airport, Ammunition dumps, missile/ Radar based stations etc.) shall be applicable to irrespective of the land use shown on Proposed Land use plan Drawing No. DTP(SAS Nagar)2271/2016, dated 21.07.2016.

3. The requisite guidelines/ notification issued by the Department of culture (Archaeological survey of India) regarding protect monuments shall be applicable in the Land Use Plan irrespective of the land use shown on Proposed Land use plan Drawing No. DTP(SAS Nagar)2271/2016, dated 21.07.2016.

SPECIAL CONDITIONS

- The siting of Petrol Pump / Filling Station shall be subject to instructions/guidelines of IRC/MORTH/TCPO /Punjab Govt. Notifications issued from time to time.
- Marriage Palaces shall be permitted as per the Norms and Guidelines issued by the Govt. from time to time.
- In case of the standalone projects having depth more than the prescribed depth of the mixed land use in the Proposed Land use Plan, such projects shall be considered for approval irrespective of the prescribed depth of the mixed land use.
- In case of any ambiguity/clarification regarding the interpretation of the Land Use Plan, the master copy of drawing based on GIS shall be referred.
- The siting and location of major traffic nodes including Bus Terminus, Truck Stand, etc. and physical infrastructure including STP, Electric Grid Station, Solid Waste Dumping Site, Water Works, etc. shall be as decided by the Govt. from time to time.
- Use of land covered under Optimum Utilization of Vacant Government Land (OUVGL) Scheme or any other project of the State / Central Government shall be determined by the Government at any appropriate time notwithstanding the provisions of this Master Plan.
- In case the area of a project falls partially under no construction zone along a water body, relaxation of maximum up to 5% on the total area of the project shall be allowed towards calculation of saleable area in lieu of the area falling under the no construction zone. In case, the area falling under no construction zone is less than 5% of the total area of the project then the relaxation shall be proportionately less.
- Provision for Rainwater Harvesting shall be made compulsory in all buildings subject to the guidelines issued by the Competent Authority from time to time.
- All new buildings to be constructed shall be made energy efficient based on design and use of energy efficient electrical appliances. Retrofitting of all existing buildings to make them energy efficient shall be taken up on priority.

- No Construction Zone around ammunition depot at village Dapper as per notification dated 5th August, 2015.
- The Proposed Landuse Plan does not indicate in any manner the ownership pattern of land falling within the Master Plan. The Proposed Landuse Plan defines broadly the land use pattern proposed for the land falling within the Land Use Plan.

The activities/ uses not mentioned in the above table but found compatible for a particular land use zone shall also be permissible with permission of the competent authority.

S.No.	Name of Village	H.B.No.	Area in	Population	Population	Population
			Hectares	1991	2001	2011
1.	Lalru	218(Urban)	1485	9949	15824	21394
2.	Daper(Urban)	20	287	3289	4918	5936
3.	Kheri Gujjran	6	200	1097	1402	1696
4.	Bijjanpur	7	416	965	1204	1393
5.	Hansala	21	291	390	488	496
6.	Chudiala	24	458	1145	1347	1443
7.	Bair Majra	26	285	645	713	905
8.	Dangdehra	150	177	392	385	455
9.	Sadhanpur	151	194	763	920	1043
10.	Mandi	152	172	447	541	603
11.	Sarsini	153	435	1245	1993	1856
12.	Sitarpur	154	166	307	411	485
13.	Ramgarh Rurki	155	159	898	998	1101
14.	Mirpur	156	200	706	790	895
15.	Batauli	157	261	986	1262	1305
16.	Kurli	158	194	803	886	1039
17.	Jharmari	159	353	1164	1311	1357
18.	Sangotha	160	74	567	468	536
19.	Jarout	161	654	2317	2731	3023
20.	Dhire Majra	162	197	622	736	801
21.	Kasauli	163	129	382	411	470
22.	Basauli	164	643	1231	1388	1438
23.	Tasimbli	165	573	1508	1884	2075
24.	Hamayupur	166	512	1819	2836	3068
25.	Deshpura	167	45	Uninhabited	60	73
26.	Nagla	168	655	1800	2227	2584
27.	Khelan	169	361	1601	2130	2339
28.	Razapur	170	290	716	914	1091

List of	villages	falling i	n Landuse	plan Lalru
		8		r

29.	Jodhpur	171	83	181	194	215
30.	Mahlan	172	86	646	728	781
31.	Utalan	173	400	992	1223	1351
32.	Sarangpur	174	208	325	409	491
33.	Handesara	175	486	1342	1689	1929
34.	Sinhpur	176	125	194	203	199
35.	Rani Majra	177	473	1500	1791	2116
36.	Barhana	178	302	1008	1070	1139
37.	Jaula Khurd	179	312	680	826	944
38.	Jaulan Kalan	180	703	1439	1632	1817
39.	Bartana	181	365	807	894	936
40.	Chhachharauli	182	194	98	30	252
41.	Jandauli	183	246	519	649	699
42.	Jeoli	184	270	1148	1753	1641
43.	Abbu Chhappa	185	95	309	649	381
44.	Kheri Jattan	186	215	856	1030	1176
45.	Punser	187	125	698	824	976
46.	Tarrak	188	207	646	796	934
47.	Sanauli	189	185	566	732	168
48.	Haripur	190	149	Uninhabited	107	56
49.	Jhawansa	191	185	633	787	949
50.	Bhukhri	192	251	515	600	716
51.	Bhagsi	193	179	716	926	1008
52.	Sangaundi	194	141	188	191	213
53.	Rampur Bahal	195	164	450	687	578
54.	Samgoli	196	656	2150	2367	2714
55.	Fatehpur	197	298	791	1059	1218
56.	Mussapur	203	161	Uninhabited	Uninhabited	Uninhabited
57.	Bhagwasi	204	257	555	757	918
58.	Mianpur	205	206	1015	1183	1375
59.	Tohffapur	206	295	484	836	1654
60.	Gholu Majra	209	277	1203	1511	1680

61.	Toganpur	210	196	619	862	971
62.	Aganpur	211	114	608	812	831
63.	Chaundheri	212	271	671	1145	1137
64.	Kauli Majra	213	480	272	474	563
65.	Samalheri	214	125	13	85	98
66.	Lehli	215	128	835	1173	1255
67.	Hassanpur	216	174	697	962	1111
68.	Jalalpur	217	126	171	1257	2400
69.	BalloPur	219	245	788	1394	1615
70.	Malakpur	220	573	1248	1456	1718
71.	Jastana Khurd	221	229	851	965	1118
72.	Jastana Kalan	222	317	918	1129	1266
73.	Dharamgarh	223	310	1880	2317	2491
74.	Dehar	224	274	1138	1715	1679
75.	Alamgir	225	309	532	656	694
76.	Tiwana	226	306	1004	1102	1170
77.	Hambran	236	87	178	208	221
	Total		22429	72831	97023	112462