



## 6. HOUSING IN CHANDIGARH

Provision of good quality housing was central to Chandigarh's planning objective of offering "all amenities to the poorest of the poor to lead a dignified life". Initially, two main categories of housing were planned in the city - **public and private**. Subsidized rental public housing for government employees of all categories was built by the government in the early years. In the case of private housing, residential plots varying in size from 125 sq. yds. to 4000 sq. yds. were made available at cost price to individual buyers for building their own houses.

### 6.1 GOVERNMENT HOUSING

Government housing in the city was initially divided into 13 categories ranging from house for the Chief Minister to the lowest paid class-IV employee. In addition hostels and flats for members of the Legislature were also planned. Plot sizes for government housing ranged from 37.5 sq. yds. to 4000 sq. yds. Most government houses in Phase I were single or double storeyed. Housing in Phase II has much higher density with the largest plot size restricted to 1000 sq. yd. and a large part of it consisting of four storeyed flats. In addition, 800 'cheap houses' were built for poorer non-government workers - the tonga driver, laundrymen, sweepers, and cobblers and later sold to them at nominal prices. Most government houses in the first phase were designed by the expatriate team of architects – Pierre Jeanneret, Maxwell Fry and Jane Drew assisted by a team of young Indian architects. A lot of attention was given to making their design suitable for local climate within severe economic constraints while using local building materials. A plan showing the location of Government housing is at **PLAN H 6.2**.

- **Institutional Housing**

In addition to government housing, institutional housing has been built by parastatal and/or autonomous bodies such as Panjab University, PGI, IMTACH, CSIO, defence establishments and Survey of India, for their employees. In the early years, 620 housing units for industrial workers were also built by the government in sectors 29 and 30 adjoining the industrial area.



AN ARCHED ENTRY TO A  
GOVERNMENT HOUSING CLUSTER

LOWER CATEGORY SINGLE STOREYED  
HOUSING. EACH HOUSE HAS  
COURTYARD IN THE FRONT AND REAR  
OF THE HOUSE



GOVERNMENT HOUSING DESIGNED BY PIERRE JEANNERET, MAXWELL FRY AND  
JANE DREW CELEBRATE VISUAL ORDER AS DESIGN DISCRETION.



**INSTITUTIONAL HOUSING** AT THE PANJAB UNIVERSITY. SEVEN CATEGORY OF  
HOUSING (WITH PEONS IN A TYPE PROGRESSING TO THE HIGHER  
ACADEMICIANS IN LARGER G TYPE )

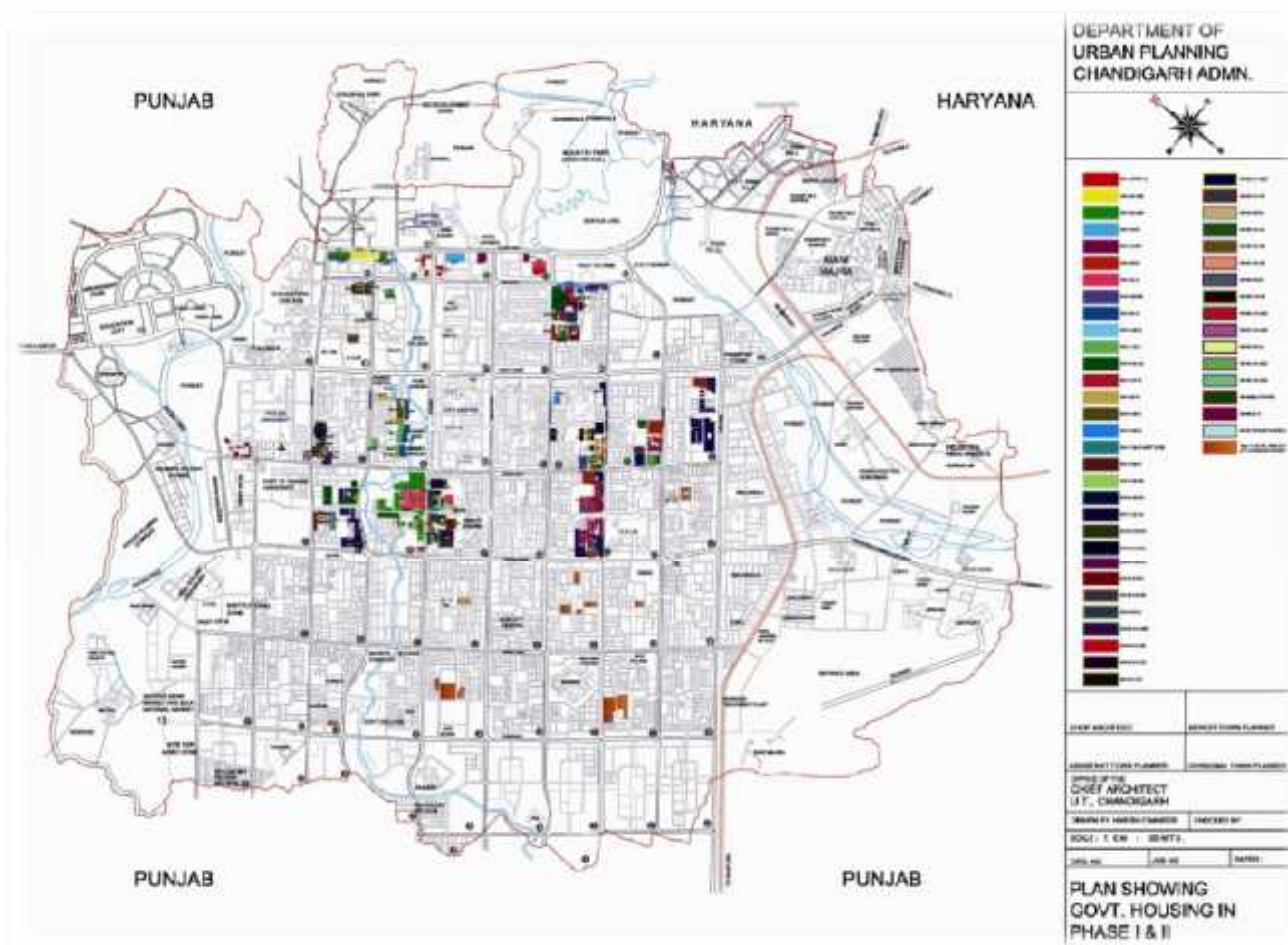


**PLAN H6.1 --HOUSING IN CHANDIGARH**





## PLAN H6.2: LOCATION OF GOVERNMENT HOUSING



### Sectors with high concentration of Government Housing

#### PHASE I

Sectors 7B, 16, 19, 20, 22 A/D, 23 A/B/C, 24 A/D, 26, 27C, 28 B/C, 29 A/C/D, 30 A.

#### Phase II

Sectors 31 (Defence), 32 A/B/C, 33A, 35A/B, 38, 39 B/C/D, 41 B/C, 42 A, 43B, 46 B/D, 47B





## 6.2 HOUSES BUILT BY THE CHANDIGARH HOUSING BOARD

The mandate of Chandigarh Housing Board (CHB) is to build affordable, reasonably priced dwelling units for different socio-economic categories of the city's residents. The detail of dwellings provided year-wise by CHB is at **ANNEXURE-H.1**. The board was established in 1976 by extending the Haryana Housing Board Act of 1971 to the Union Territory. The board also undertakes construction of commercial units and other schemes for Chandigarh Administration and other organizations. CHB is also the nodal agency for implementing the administration's schemes for rehabilitating the residents of unauthorized settlements in the city.

The list of housing schemes by CHB is at **ANNEXURE-H.2 & ANNEXURE-H.2(A)**. Out of these, nearly 42.5% comprising of all the sites and services and most of the EWS units have been provided under different rehabilitation schemes exclusively for the residents of unauthorized settlements. Units in rehabilitation colonies are generally allotted on a hire purchase or license basis with ownership rights being granted only after completing 20 years of stay.

Chandigarh Housing Board has also constructed houses for the poor under schemes like Valmiki Ambedkar Awas Yojna (VAMBAY) and more recently under Jawahar Lal Nehru Urban Renewal Mission (JNNURM).

Prior to creation of the Housing Board, Chandigarh Administration had rehabilitated approximately 12,000 households from unauthorized colonies itself.



CHANDIGARH HOUSING BOARD HOUSING



CHANDIGARH POLICE HOUSING SOCIETY



IAS OFFICERS HOUSES



### 6.3 PRIVATE HOUSING

Nearly one - third of the private plots have an area of one kanal or above. These account for over two- thirds of the total area allocated for private residential plots in the original master plan. The first phase of the city had low density with residential plots ranging from 5 marla to 8 kanal. The second phase has much higher density with a switch mostly to three to four storey flats with the largest plot size being 2 kanals. About 70% of housing in the city was to be built privately.



PRIVATE HOUSING SECTOR 19 CHANDIGARH



PRIVATE HOUSING SECTOR 18 CHANDIGARH



MIDDLE CLASS PRIVATE HOUSING SECTOR 22 CHANDIGARH



#### 6.4 CO-OP HOUSING SOCIETIES

The southern sectors, including the ones in Phase III of the city are being developed as a high density area. Various Co-operative Housing Societies and Chandigarh Housing Board have been allotted land in these sectors for construction of HIG, MIG, LIG and EWS flats.

#### 6.5 CHEAP HOUSES

A special category of low cost houses was built in sectors 15, 19, 20 and 24 for low income non-government workers during the 1950s and 60s and their ownership transferred to the allottees on payment of nominal charges. Initially built as single storied units, additional floors have been added to them by the owners over time.

#### 6.6 PROVISION OF STUDENTS/WORKING WOMEN'S HOSTELS

Although Chandigarh already has Young Women Christian Association (YWCA), Young Men Christian Association (YMCA), working women's hostels together with students' hostels for various colleges and the university, their availability is inadequate for the increasing demand for such accommodation. The dearth of hostel accommodation, results in outstation students opting for Paying Guest accommodation/hired accommodation in the city/villages. Feedback indicates that despite the deficit within the city to meet the city's own requirement, the limited hostel facilities are often used by the premier institutes of the neighbouring states which lack in adequate facilities.

#### 6.7 RESIDENTIAL ACCOMMODATIONS THROUGH PAYING GUEST SCHEME

Through orders dated 05.09.2006, the Chandigarh Administration permitted the use of residential buildings for paying guest accommodation. The minimum area of the house for paying guest accommodation has been fixed as 10 marla with a condition that portion of the house has to be used by the owner. No extra/new kitchen is allowed and a minimum of 50 sq. ft. is to be provided for each paying guest has to be 50 sq. ft. with provision of toilets at one W.C. for five persons. The norms are being violated much to the disadvantage of the residents of the neighbourhood, who complain of the rowdy environs, parking problems and disturbance throughout the day and night. The students too are left free, unattended and unchecked which is detrimental to the society at large.



COOPERATIVE HOUSING SOCIETIES IN THIRD PHASE SECTORS



STUDENTS/WORKING WOMEN'S HOSTELS IN PANJAB UNIVERSITY



## 6.8 HOUSING IN UNAUTHORISED SETTLEMENTS

One of the biggest problems of planned urban development is that it is preceded by unplanned settlements of construction labour and other service providers needed for undertaking the planned development. Despite being a totally planned new city the emergence of non-plan settlements and services was an inevitable outcome of the non-integration of socio-economic planning in implementation of the Chandigarh Plan and the virtual absence of holistic housing and employment policies. Recently a policy has been adopted to make it mandatory that all new large housing projects must make at least 15% provision for EWS housing.

Shortage of low cost housing also resulted in villages in the periphery becoming concentrations for lower income urban residents.

The initial unauthorized settlements were located near the Capitol Complex and other areas where city development work was started. Resettlement in peripheral sites with allotment of serviced plots and one room tenements was first undertaken in the mid-1970s mostly on land acquired in villages surrounding the master plan area. Some resettlement was undertaken in the southern sectors. Most of the present unauthorized settlements are located in the southern and eastern parts of the UT. As per a biometric survey undertaken by the Estate Office in 2006, the number of households considered eligible for rehabilitation living in the 18 unauthorized settlements was 23974. The details of unauthorized settlements as per Census 2011 are given in **ANNEXURE H.3.**

Various rehabilitation schemes for residents of unauthorized settlements have been provided as under:

- Sites and Services - (Indira Colony, Dadumajra, Dhanas, Sector 55 & 56).
- Plinth sites - (West of Sector 24, Palsora Colony etc.)
- EWS houses - (Mauli Jagran Maloya, Dadumajra etc.)
- Bare sites - (Bapu Dham Colony Sector 26, Ram Darbar, Sector 56, Khuda Lahora )
- One room tenements in diverse locations.



UNAUTHORISED SETTLEMENTS IN THE CITY



OVERHEAD WIRES –ILLEGAL CONNECTIONS



UNAUTHORISED SETTLEMENTS IN THE CITY





Efforts have been made to provide all basic facilities to the residents of rehabilitation settlements. But major drawback of these resettlements colonies can be summarized as additional encroachment and violation of building bye-laws.

Cramped for space, many households have built additional rooms or toilets and even additional floors (in the case of those provided independent sites). In spite of that, Chandigarh's Sites and Services Scheme in Dadu Majra won a national prize from HUDCO in 1979. More recently, Chandigarh was given a national award under JNNURM for setting aside the maximum area for slum rehabilitation. The Slum Rehabs are provided with 2 bed-room Houses in order to maintain a healthy lifestyle and better living conditions.

#### 6.9 RELAXATIONS ACCORDED BY THE CHANDIGARH ADMINISTRATION :

The biggest problem being faced by most categories of private housing is the need for additional habitable space. This is evident from the large number of building violations being witnessed all over the city, be it in small marla houses or houses on larger plots. Chandigarh Administration has already accorded relaxations to provide relief to all categories of residences. Detailed tabulation of relaxations is given at Annexure H5 (see Annexure Page No. 25). Following is brief of the relaxations

##### Private Housing

- The FAR of marla houses has been increased up to 2.0 with ground coverage upto 70%.
- The FAR of one kanal but less than two kanal category plots has been increased upto 1.50 and ground coverage upto 50%.
- The FAR of two kanal category has been increased upto 1.25 and ground coverage upto 45%.  
The FAR of above two kanal category has been increased upto 1 and ground coverage upto 35%.  
An additional habitable floor by permitting use of 2<sup>nd</sup> floor (barsati floor) is allowed by marginally increasing the height of the houses. Use of upto 25% of the house area has been allowed as office space to professionals such as architects, doctors and lawyers.

- A green house/implement store has been allowed in the rear courtyard of frame control marla houses and on kanal houses under architectural control. Subsequently however the zoning plans of housing were revised and additional ground coverage and covered area permitted as part of the main house
- 3' wide balcony/projections have been allowed in front and rear of the frame control marla houses.
- For the purpose of storage, basement is now allowed under the entire ground floor area instead of the maximum 50% allowed earlier.
- Car porch of temporary material has been allowed within the front courtyard of marla houses.
- Flexibility in size and shape of windows has been allowed in marla houses.
- Mumties permitted in one kanal and above category of houses to facilitate access for maintenance of services provided on top terrace.
- Additional entry gate in all houses.
- Boundary wall in the rear courtyard of kanal and above houses increased to 5'-11½".

##### Government housing:

Construction of additional porch, car sheds, security accommodation, additional servant quarters have been allowed as per approved plan to meet the requirements of the occupants.

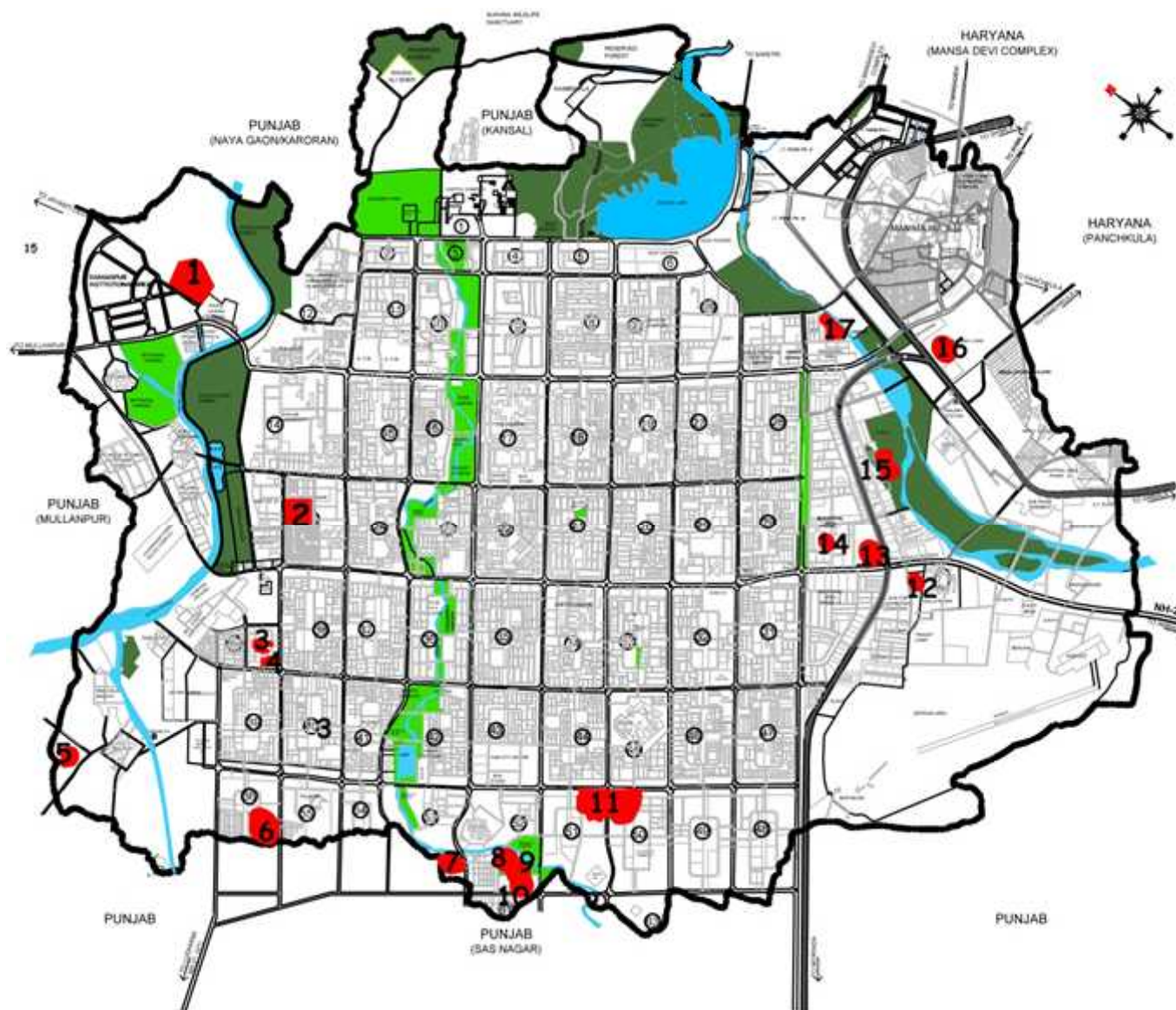
##### Cheap houses:

Additional covered area has been permitted in cheap houses by allowing construction of additional floor and increasing the maximum permissible ground coverage from an average of 57% to 75%.





PLAN H6.3: LOCATION OF UNAUTHORISED COLONIES AS PER BIOMETRIC SURVEY OF 2006

**UN-AUTHORISED COLONIES**

S.NO.	DESCRIPTION
1	KALYAN COLONY
2	KUMHAR COLONY
3	SHAHPUR COLONY
4	RAJIV COLONY
5	GURU SAGAR COLONY
6	L.B.S. COLONY
7	NEHRU COLONY
8	PANDIT COLONY
9	KULDIP COLONY
10	MAZDOOR COLONY
11	COLONY NO. 5
12	AMBEDKAR COLONY
13	KABAR COLONY
14	SANJAY COLONY
15	COLONY NO. 4
16	S.B.S. COLONY
17	MADRASI COLONY
18	JANTA COLONY

Due to pro-active steps taken by the Chandigarh Administration, new rehabilitation colonies have been constructed as per Rehabilitation Plan. Some of the aforesaid colonies have thus been rehabilitated.

Source – Department of Urban Planning, Chandigarh Administration





# UNAUTHORISED COLONIES IN THE CITY



KALYAN COLONY



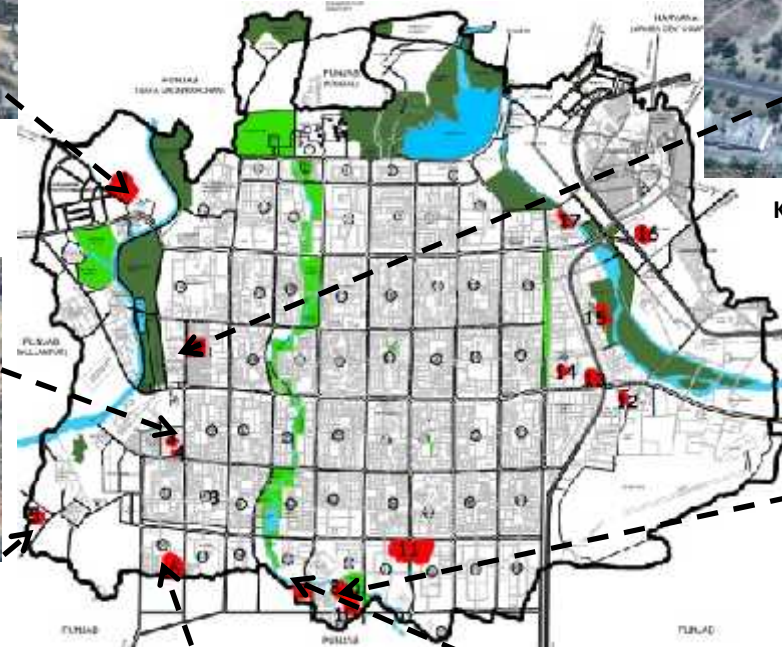
KUMHAR COLONY



SHAHPUR COLONY



PANDIT COLONY , KULDIP COLONY & MAZDOOR COLONY



GURU SAGAR COLONY



L.B.S. COLONY



NEHRU COLONY

Source – Google Earth images



## UNAUTHORISED COLONIES IN THE CITY (CONTINUED)

Chandigarh Master Plan – 2031



**MADRASI COLONY**



**LABOR COLONY NO. 4**



**AMBEDKAR COLONY**



**COLONY NO. 5**

Source – Google Earth images



#### 6.10 AUGMENTATION OF HOUSING STOCK WITHIN CHANDIGARH SUBSEQUENT TO ORIGINAL PLAN

##### **Additional residential sectors in the 3<sup>rd</sup> phase**

An area of 1870.54 acres (7.5 sq.kms) from sectors 48 to 56, part of 61 and 63 were carved out to provide high density private group housing, rehabilitation colonies, CHB housing and UT employees housing schemes of various categories.

##### **Residential housing schemes in Manimajra**

Land measuring 61.21 acres falling between Chandigarh Kalka Road and the interstate boundary with Panchkula was planned for construction of residential cum commercial scheme.

##### **Modern Housing Complex, Phase-I and II**

About 60 acres of land was acquired by the Chandigarh Administration in 1989 and was allotted to Chandigarh Housing Board. 2200 dwelling units of various categories have been constructed in the scheme area in the form of four storeyed flats:-

a) Category – I	480	c) Category – III	456
b) Category – II	384	d) Category – IV	960

##### **Modern Housing Complex Phase-III**

Land measuring 9.63 acres of land falling in Pocket 4 and 5 acquired by the Notified Area Committee Manimajra have been allotted to Chandigarh Housing Board. 600 HIG independent dwelling units have been constructed at site.

##### **Housing by Army Welfare Housing Organization -**

Land measuring 9.63 acres in Pocket No. 4 and 5 has been allotted to A.W.H.O. in the year 1994. 305 dwelling units of various categories in 3 storeyed blocs have been constructed

##### **Milkmen Colony, Dhanas**

With a view to relocate the persons keeping milch cattle and carrying on the business of dairying which was creating insanitary and unhygienic conditions in the city, the Chandigarh Administration in the year 1975 notified the Scheme Chandigarh Milk Colony Allotment of Sites Rules, 1975. Only those persons who were keeping milch cattle in Chandigarh for at least one year prior to the notification coming into force and were selling milk to general public and had at least 5 cattle were eligible. Various categories of plots ranging from 5 marla to 1 kanal were planned. The standardized unit was planned with cattle shed on ground floor and residential accommodation on the upper floor. Subsequently, however these houses were allowed conversion to residential plots subject to payment of charges which has defeated the very intent of the scheme. There is at present a mix of pure residential houses and those with cattle. In stead of restricting the cattle to within the premises large number of cattle owners leave them out in the open along road side berms and parks adversely impacting the sanitation and environment of the area.

##### **Government housing**

In addition to the government housing planned in the initial stages of the city, various projects for police housing, additional judges houses, officers' and officials' houses of state governments of Punjab and Haryana, Chandigarh Administration, Central Government and ministers' houses, have been developed in various sectors. There is however still a large deficit in the government housing stock which is shared by the governments of Punjab, Haryana and the Chandigarh Administration.





### 6.11 OVERVIEW OF THE HOUSING SITUATION

Chandigarh was initially planned for a population of 500,000. As per 2001 census however, the population of the Union Territory had increased to 9,00,635 out of which 8,08,515 was urban and 92,120 rural. The availability of dwelling rooms per household as per the 2001 Census is shown in the **Table** below:

**Table 6.1 Distribution of households by number of dwelling rooms (2001)**

	Total households	No exclusive room	One room	Two rooms
U.T. Chandigarh	201,878	1931 (0.95%)	84,489 (41.85%)	50,056 (24.79%)
Urban	180,576	1725 (0.95%)	69,310 (38.38%)	47,395 (26.24%)
Rural	21,302	206 (0.96%)	15,179 (71.25%)	2,661 (12.49%)

*Source: Census of India, 2001, H. Series, Chandigarh*

**Table 6.2 Distribution of households by number of dwelling rooms (2011)**

	Total households	No exclusive room	One room	Two rooms
U.T. Chandigarh	235061	1.4	39.3	25.4
Urban	228276	Breakup not available	Breakup not available	Breakup not available
Rural	6785	Breakup not available	Breakup not available	Breakup not available

*Source: Census of India, 2001, H. Series, Chandigarh*

Socio-spatial maps of the city, both within and outside the master plan's sectoral grid, show a remarkably skewed distribution of population density together with a ghettoisation of the poor in unauthorized settlements and the rehabilitation colonies in peripheral locations.

According to the 2001 Census, the average density of Phase I sectors was only 26 persons per acre and that in Phase II sectors 60 persons per acre. In contrast, densities in resettlement colonies in the city's periphery range between 360 to 700 persons per acre.



TABLE 6.3: PROPOSALS OF HOUSING AT GLANCE

1. SECTORAL GRID										
Phase	Sectors	Government . Plots		Private Plots		CHB		Other Plots	Total Units	Projected Population
		Existing Plots	Projected Units	Existing Plots	Projected Units	Plots	Units			
I	1 to 30	15063	19540	12110	36330	316	644	5349	89352	270086
II	31 to 47	9081	10385	10678	32034	1939	17144	15072	96333	345945
III	48 to 63 Vacant Areas	186	Yet to be developed	0	0		12910	8542	21638	201424

2. PERIPHERY				
Sectors	Area in acres	Proposed density (PPA)	Population in persons	Remarks
Pocket 2 Near Sarangpur	30	250	7500	Proposed
Pocket 7 near Maloya	178	250	45000	Proposed
Chandigarh Armed Police Complex	52.9	123	6500	Under process
Rehabilitation Colonies			264558	
Villages			117929	
Manimajra	855		136943	
Unauthorised colonies (to be rehabilitated)			69000	
Para Military			50000	
Total			Say 16 lakh	



## 6.12 MASTER PLAN PROPOSALS

### HOUSING POLICY FRAMEWORK

- I. A holistic housing policy framework with the following components shall be adopted to ensure that the needs of all socio-economic sections of the population are catered for to address some of the aberrations in the city's development in the past.
- II. **Ensured provision for EWS in all new housing schemes** - It is proposed that all future new housing schemes or housing built through redevelopment of existing government housing stock must ensure that at least 15% of the total units in them are built for economically weaker sections in line with the National Housing Policy.
- III. **Augmentation of infrastructure in relation to population** - It shall ensure expansion of infrastructure, services and amenities in relation to population to maintain the quality of life.

### JUDICIOUS USE OF LIMITED LAND

- I. It must be ensured that the limited land still available for housing development is allocated judiciously for meeting the unmet housing demand of all the different sections of the population.
- ii. **Group Housing in vacant plots of second phase**  
All vacant residential plots in the Phase II sectors which were earlier planned as plotted development should as far as possible be replanned and used for group housing instead of individual plots. This shall apply to cases where a whole cluster /row of unsold vacant plots are available and not to scattered individual plots.
- iii. **High density Group Housing in vacant areas in Phase III Sectors**  
Approximately 215 acres of land in the sectors has been allotted to CHB for housing which is yet to be developed in addition approximately 146 acres of land is also lying vacant in Phase III sectors which is proposed for high density housing development in 4 /6 storey flats to accommodate large number of flats with a gross density of 100 persons per acre. Individual plots allotment shall be discontinued.



### MIXED LANDUSE DEVELOPMENT ALONG VIKAS MARG

The mixed landuse, high rise and high density development proposed in the reserved belts flanking both sides of the Vikas Marg (See Chapter on Commercial Areas and Social infrastructure) shall have residential development on the upper floors and commercial and institutional areas on the lower floors. The proposal shall open up large areas for housing of various categories as per modern day requirements which shall include service apartments, guest houses, hostel accommodations etc. alongwith provisions for the essential community facilities.

The area under residential use shall be worked out on the basis of the comprehensive detailed urban design proposal of Vikas Marg and is over and above the residential areas required to meet the demands of the projected population of 2031 .

### PLAN SHOWING STATUS OF VACANT LAND IN PHASE III SECTORS







### **AUGMENTATION OF GOVERNMENT HOUSING**

There is need to make adequate provision of government houses for judges and the staff of the High Court , the ministers and legislative and for the large number of officers/officials serving in various offices in Chandigarh.

### **MANDATORY PROVISION OF FACILITIES FOR DOMESTIC SERVANTS WITHIN GOVERNMENT HOUSING**

No government houses in future shall be constructed without providing facility for domestic servants.



**Single Storeyed Government Housing in Sector-19**

### **RE-UTILISATION OF GOVERNMENT HOUSING OF THE FIRST PHASE SECTORS**

The Expert Heritage Committee constituted by the Government of India has identified certain single/double storey pockets of government housing pockets in the first phase of the city for redensification. After examining the proposal in detail it is recommended that redensification should not be carried out since it is a very complicated and complex issue and will create lot of problems. It will put pressure on existing infrastructure and would also require making adequate provision of physical and social infrastructure - drinking water, drainage system, parking, schools, colleges, hospitals etc.

However, the identified pockets can be re-utilized by the Chandigarh Administration if required. The heritage considerations shall be kept in mind while reutilizing the pockets. It must be ensured that the lower income group housing are not replaced by a smaller number of higher income group units, thereby further skewing the distribution of population of different socio-economic groups within the sectoral grid.

**REFER PLAN H6.4.** showing re-utilization of Government Housing pockets identified in the sectors of the first phase of the city by the Expert Heritage Committee constituted by Government of India.

### **Approval of the Chandigarh Heritage Conservation Committee**

Since Phase I sectors have been recommended for Heritage status, the re-utilization of the identified housing /institutional pockets in the first phase shall be undertaken with the prior approval of the Chandigarh Heritage Conservation Committee.



**PLAN H6.4:- RE-UTILIZATION OF GOVERNMENT HOUSING POCKETS IDENTIFIED IN THE SECTORS OF THE FIRST PHASE OF THE CITY BY THE EXPERT HERITAGE COMMITTEE CONSTITUTE BY GOVERNMENT OF INDIA.**





## HERITAGE STATUS TO GOVERNMENT HOUSING

The Government of India has approved the recommendations of the Expert Heritage Committee (EHC) with respect to according heritage status to identified pockets designed by the first team of architects.

There is, however, persistent demand from the occupants of the government housing for allowing need based changes in the government housing which include additional rooms, toilets, stores, office accommodations, servant rooms, construction of porch, car sheds, guard rooms, coverage of verandahs, enlarging window sizes and change of specifications.

The Chandigarh Administration has previously been allowing changes / modifications some of which have even included structural changes.

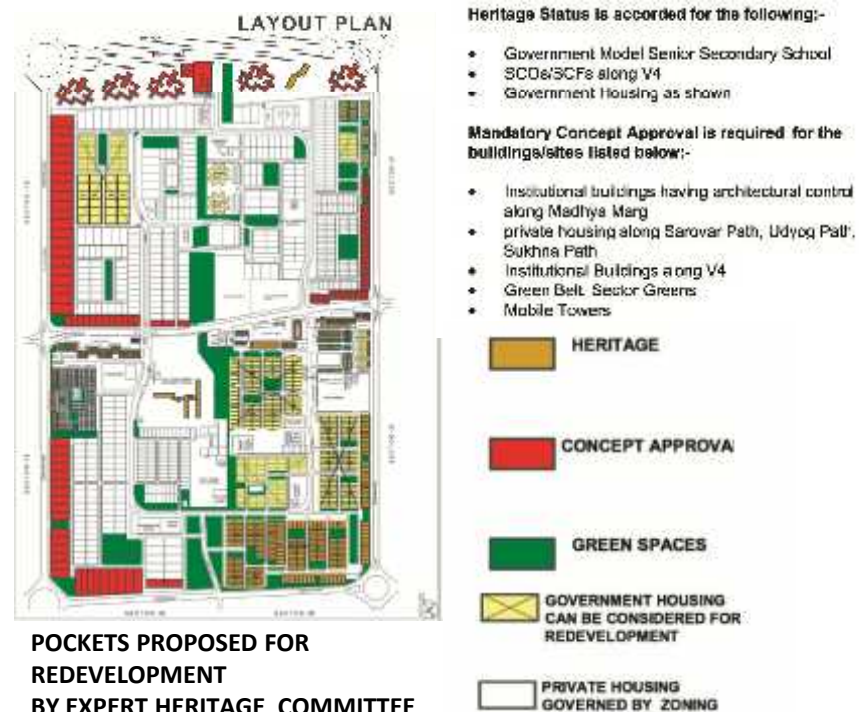
In view of the approved recommendations for according heritage status, further additions and alterations to the identified heritage housing stock should be put on hold till the heritage regulations are put in place. The heritage regulations stipulating the extent and nature of additions and alterations that are to be permitted are to be formulated by the Chandigarh Heritage Conservation Committee (CHCC). The matter is recommended to be put up to the CHCC on priority to address the long pending demands.

Large number of housing stock is also being used by the State Governments of Punjab and Haryana who also need to be sensitized on the heritage aspects and requested to put on hold further additions and alterations till the finalisation of the Heritage Regulations by the CHCC.



GOVERNMENT HOUSE IN SECTOR 5  
ACCORDED HERITAGE STATUS BY  
GOVERNMENT OF INDIA ON THE  
RECOMMENDATIONS OF THE EXPERT  
HERITAGE COMMITTEE

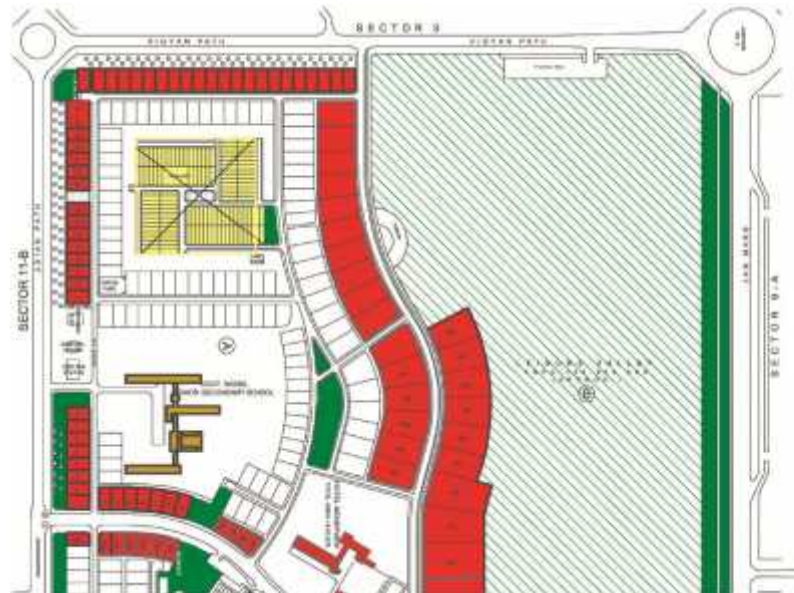
**POCKETS OF GOVERNMENT HOUSING PROPOSED FOR REDEVELOPMENT IN VARIOUS PHASE I SECTORS BY EXPERT HERITAGE COMMITTEE CAN BE PUT TO RE-UTILISATION IN KEEPING WITH THE LOW RISE CHARACTER OF THE CITY AND WITH THE PRIOR APPROVAL OF CHCC. REDENSIFICATION IS NOT RECOMMENDED.**



**POCKETS PROPOSED FOR  
REDEVELOPMENT  
BY EXPERT HERITAGE COMMITTEE  
FOR SECTOR 19**



**POCKETS OF GOVERNMENT HOUSING PROPOSED FOR REDEVELOPMENT IN THE PHASE I SECTORS BY EXPERT HERITAGE COMMITTEE CAN BE RE-UTILISED. REDENSIFICATION IS NOT RECOMMENDED.**



**Heritage Status is accorded for the following:-**

- Government Museum & Art Gallery campus
- Government College of Art
- Museum of Science
- Government Model Senior Secondary School which functioned as assembly in the initiate stages
- SCFs/SCOs along V4
- Leisure Valley: Fitness Trail, Monsoonal Gorge, Tennis Stadium

**Mandatory Concept Approval is required for the buildings/sites listed below:-**

- Tennis Courts should retain their earth-sheltered form
- Private Housing along Vigyan Path, Udyan Path, V4 & V5 with back towards Leisure Valley
- Government Polytechnic along Udyan Path
- Home Science College along Udyan Path and Madhya Marg

**POCKETS PROPOSED FOR REDEVELOPMENT SECTOR 10**





## RE-UTILIZATION OF ADDITIONAL INSTITUTIONAL POCKETS

In addition to the government housing recommended for Re-utilization there are other areas in the Phase I sectors with single / double storeyed government houses/institutional housing which shall also be taken up for Re-utilization to enable utilization of the limited land resource in the land starved city after undertaking systematic and comprehensive surveys and review.

The replanning shall involve preparation of a detailed plan for each such identified pocket and a participatory approach involving the stakeholders. The physical and social infrastructure shall also be augmented proportionately.

- Since Phase I sectors have been recommended for Heritage status, the re-utilization of the identified housing pocket in the first phase shall be undertaken in consultation and subject to the approval of the Chandigarh Heritage Committee.
- Some other Tentative Pockets that can be considered for Re-utilization within the first and second phase sectors one enlisted below. These pockets shall however be finalized after detailed stocktaking of ground realities /norms.
- Re-utilization of the Tentative Pockets have however not been included while calculating the holding capacity of the city since the same is subject to feasibility /approval of the private owners.

## TENTATIVE POCKETS WHICH CAN BE CONSIDERED FOR RE-UTILIZATION:

- Industrial Houses in Sectors 29 and 30.
- Sector 31 government houses for defence personnel.
- Sector 35B – underutilised spaces & old houses of BBMB Govt. General Pool Houses etc. can be considered for re-planning.
- Sector 35 – double / three storeyed houses of Sector 35 can be considered for conversion into 4 storey houses.
- Sector 37 - EWS houses.
- Sector 47 – vacant plots / double storeyed government housing for defence personnel subject to defence clearance.
- Sector 40 – EWS housing
- Sector 41 – government housing.
- Sector 43/A – large number of vacant plots which can be clubbed and utilised for group housing.
- Sector 44 – large number of vacant plots which can be clubbed and utilised for group housing.
- Sector 50 & 51- approximately 38 acres land can be re-utilized.
- Sector 61 – Housing to be replanned with multi-storeyed flats instead of plotted houses.



### ADDITIONAL FAR AND GROUND COVERAGE TO PRIVATE HOUSING

The Chandigarh Administration vide notification dated 16/10/2008 has already permitted increased ground coverage and FAR for all sizes of private residential plots and introduced the concept of zoning in place of frame control. Under these regulations, all private plots can build upto 3 floors with each floor having potential of having an independent unit. There are approximately 23000 private plots of all categories within the sectoral grid of the Chandigarh Master Plan. Assuming that each plot will eventually be built upto 3 storeys with one unit per floor, the total dwelling units available will be 69000 which can house approximately 3,00,000 population.

Approximately 9175 units built by the CHB are single storeyed. By permitting the owners to build upto 3 storeys, another 18350 dwelling units can be added.

**Mandatory concept approval of identified areas recommended (see chapter on Chandigarh Heritage )**



The varying heights of boundary-walls, construction of green-rooms, covering of courtyards, poor maintenance, uneven setbacks, and other additions and violations, have adversely impacted the order of the Built-Environment, and are a cause of serious concern.



**Additional covered area and shifting of rear setback of Frame Control of private houses has impacted the streetscape along V3.**

Refer 19.8 of Chapter on Chandigarh Heritage

### ENSURING SAFE HOUSING - STRUCTURAL AUDITING OF PRIVATE HOUSING STOCK

There is a large stock of non engineered buildings within Chandigarh which have been constructed without following the codal provisions. The city falls within the high risk prone Seismic Zone IV wherein special measures need to be taken to equip the buildings to be able to withstand earthquakes. Due to the high density development, the unsafe buildings which share common walls, can endanger the life and property of the neighbouring buildings. Some of the major observations are that

- (i) The brick work is not of good quality, mortar between brick work is not adequate
- (ii) Majority of walls are without plaster which make them more vulnerable to salt attack and less durable
- (iii) There are no RCC lintels over wide windows and door openings
- (iv) RCC bands required for structural safety during quakes are not provided
- (v) Vertical reinforcement at corner of masonry walls are not provided.
- (vi) Four storeyed non engineered buildings are very unsafe during quakes. Due to height of four storeyed structures, large bending moments and shear forces are developed at the base which a non engineered building is unable to bear.
- (vii) Vertical alignment of walls is not proper which can cause additional tensile stresses which may cause failure.
- (viii) Clear space between buildings on either side of lane is not adequate due to cantilever projections on both sides.
- (ix) Masonry columns taking load of upper floors on the floor itself without foundation. Due to lateral movement of the ground during seismic activity, the column can become a critical component.
- (x) Masonry columns originating from walls without adequate bond with the wall. During earth quakes, the columns can become critical.
- (xi) Staircases in many buildings are resting on cantilever slab which is not desirable.



- (xii) Load bearing masonry wall of upper storey is not placed above the masonry wall of the storey below. The walls are displaced by about a feet which is not a proper structural arrangement.

There are a large number of buildings which were designed /allotted as single storeyed initially but have been constructed with additional floors without following the structural safety norms /provisions. Such housing stock also needs to be structurally audited.

**On the basis of visual surveys, the following areas are recommended for structural auditing:**

- Cheap houses in various sectors – Sector 15, 19, 20, 24, 32 etc.
- Rehabilitation colonies - Bapu Dham Colony etc
- Site and Services schemes of Sector 25.
- EWS houses of Sector 29B, & TBRL, OFC houses in Sector 29.
- Housing stock within the old abadi deh of Manimajra as well as in the organic developments around it including, Gobindpura, Mori Gate, Bhara Mal Nagar, Dehra Sahib, Mata Raj Kaur, Darshini Dagh, Thakur Dwara, Shanti Nagar Pipliwala Town, Mariwala Town, Subhash Nagar and Bank Colony.
- Housing stock within and outside the **abadi deh of villages**
- **A systematic examination of the structural safety of the housing units shall be undertaken which will guide follow up action – redevelopment /retrofitting /urban renewal to be undertaken.**

#### **REDEVELOPMENT /URBAN RENEWAL /CONSERVATIVE SURGERY OF EXISTING OLD AREAS AND VILLAGES WITHIN MUNICIPAL LIMITS**

In addition to ensuring structural safety in the existing old areas, there are certain congested residential areas in the city, especially in and around the old Manimajra Town which are characterized by poor urban form, high densities, inadequate urban infrastructure, services and lack of community facilities. For these areas, the owners can jointly prepare redevelopment plans on the basis of the redevelopment guidelines to be framed by the Chandigarh Administration.

For each of the identified areas, detailed development plans shall be drawn up which will ensure minimum necessary/feasible level of services and community facilities and services. In addition, building byelaws of these areas should be suitably amended and liberalised to facilitate redevelopment of property. While planning, care shall be taken to ensure that commercial establishments if any should be allowed basically to serve the needs of those living in the lal dora and are to be developed in a manner that they do not open onto main roads and have adequate parking.





## Summary

### IMPROVEMENT OF THE LIVING ENVIRONMENT OF VILLAGES

The villages retained and integrated within the sectoral grid of the second phase and third phase and those which fall in the periphery controlled area outside the sectoral grid have undergone considerable socio – economic changes and are fast changing their residential character to a mixed landuse development. However, these villages still have a major residential component. The present status of the villages and the pressures and challenges being faced have been dealt in detail in the Chapter on Development of Villages.

Comprehensive development plan for each village shall be prepared based on detailed survey of ground realities to ensure an enriched quality of life for the residents of the villages. Permissibility of mixed landuse to the extent in the Village Rules so as to ensure that it is not detrimental to the predominant residential area, removal of non conforming landuses, upgradation of physical and social infrastructure to address the gaps and meet future requirements. While planning care shall be taken to ensure that commercial establishments should be allowed basically to serve the needs of those living in the lal dora and are developed with adequate parking and without opening onto the main roads.

Dormitory accommodation shall be permitted only as per building rules to ensure healthy and safe living with adequate air, light and ventilation.

Conservative surgery shall be carried where found essential to enable proper road widths for fire tender movement and emergency vehicles and laying of services etc. Since construction activity is going on at a rapid pace in the villages, there is need for regulating construction activity and landuses through strict enforcement with immediate effect and timely preparation of the Development Plans and their integration with the surrounding areas.

Early notification and implementation of villages rules after taking feedback from the public/villagers. It is recommended that the vacant areas around the villages should not be further developed till such time as the development plans are finalised. A participatory approach is to be adopted, involving the residents, panchayats and stakeholders.

### PROPOSALS FOR MAKING CHANDIGARH ‘SLUM FREE’

- Chandigarh’s rehabilitation policy conforms with Government of India’s current vision of Rajiv Awas Yojana which aims at inclusive and equitable cities with every citizen having access to basic social and civic services.
- In order to prevent the emergence of new unauthorized settlements, the Administration has already adopted the policy of making it mandatory that 15 % of the dwelling units in all future public residential development must be for EWS/LIG and the same will become applicable even to private residential development. However it is pertinent to mention that in the year 2006 the population living in the slums was approximately 69,000. However as per the Chandigarh census 2011 the population residing in slums is 94,950 persons (Annexure H4). Therefore, strong measures need to be taken to check the further growth of slum’s for making Chandigarh slum free.



## NEW HOUSING FOR THE URBAN POOR

- Chandigarh Administration aims to make Chandigarh a 'Slum Free city' by building 25728 small flats for rehabilitating all the residents of unauthorized settlements as per the biometric survey conducted in 2006 under BSUP.
- These flats are being built in 8 identified locations in the U.T. namely, sector 49(1024 small flats), Sector 38 (West) (1120 small flats), Ramdarbar (576 small flats), Maloya-I (8896 small flats), Maloya-II (3648 small flats), Mauli Jagran-I (320 small flats), Mauli Jagran-II (1696 small flats) and Dhanas (8448 small flats). CHB has already initiated work on building 12864 dwelling units.
- All rehabilitation schemes are being planned with neighbourhood community facilities –shopping centres, schools as per norms so as to provide essential facilities within easy reach of the residents .
- Rehabilitation units planned earlier as single room unit with a total covered area of 25 sqm. have now been revised to provide two room units with toilet and kitchen space.

## URGENT NEED FOR NEIGHBOURING STATES TO AUGMENT HOUSING FOR THE URBAN POOR

There is an urgent need for the neighbouring states to also increase provision of housing for the urban poor to reduce pressure on the limited undeveloped land left with the UT.

- Two bedroom houses proposed for rehabilitation schemes**

VIEWS OF PROPOSED TWO ROOM DWELLING UNIT SMALL FLAT SCHEME, MALOYA- I& II, MAULI JAGRAN-I





### PROPOSALS FOR IMPROVING EXISTING REHABILITATION COLONIES

- Their planning will be improved to better integrate livelihood opportunities in these colonies.
- Provision shall be made for **community parking spaces** to ease the traffic problems. Provision shall be made for parking not only vehicles but also cycle and auto rickshaws, horse carts, rehris, etc.
- A diversity of designs in terms of size and improved use of open spaces shall be promoted.
- **Participatory planning by CHB** in consultation with the women and men of those to be resettled to ensure improved integration of their needs and priorities in the design of rehabilitation colonies shall be promoted.

**Need based changes** as per the requirements of the public may be allowed as per norms.

**A systematic examination of the structural safety** of the housing units shall be undertaken and retrofitting carried out accordingly.

**In situ Upgradation - potential of self-help and incremental housing** for in-situ development of unauthorized settlements shall be explored. In the case of long established unauthorized settlements, such as Labour Colony No. 4, in-situ upgradation instead of resettlement in peripheral locations shall be given serious consideration.

**In view of the scarcity of land in Chandigarh rental housing scheme** is proposed to facilitate temporary stay for migrants to the city to avoid slums.

### Provision for accommodation of domestic servants / industrial workers

Owners of houses above 1 kanal using services of domestic servants shall be encouraged to make provision for servants within the premises as per norms .

### Systematic examination of structural safety of non engineered housing stock



NON ENGINEERED HOUSING STOCK



REHABILITATION COLONY  
SECTOR 25 W



REHABILITATION COLONY –BAPU DHAM COLONY

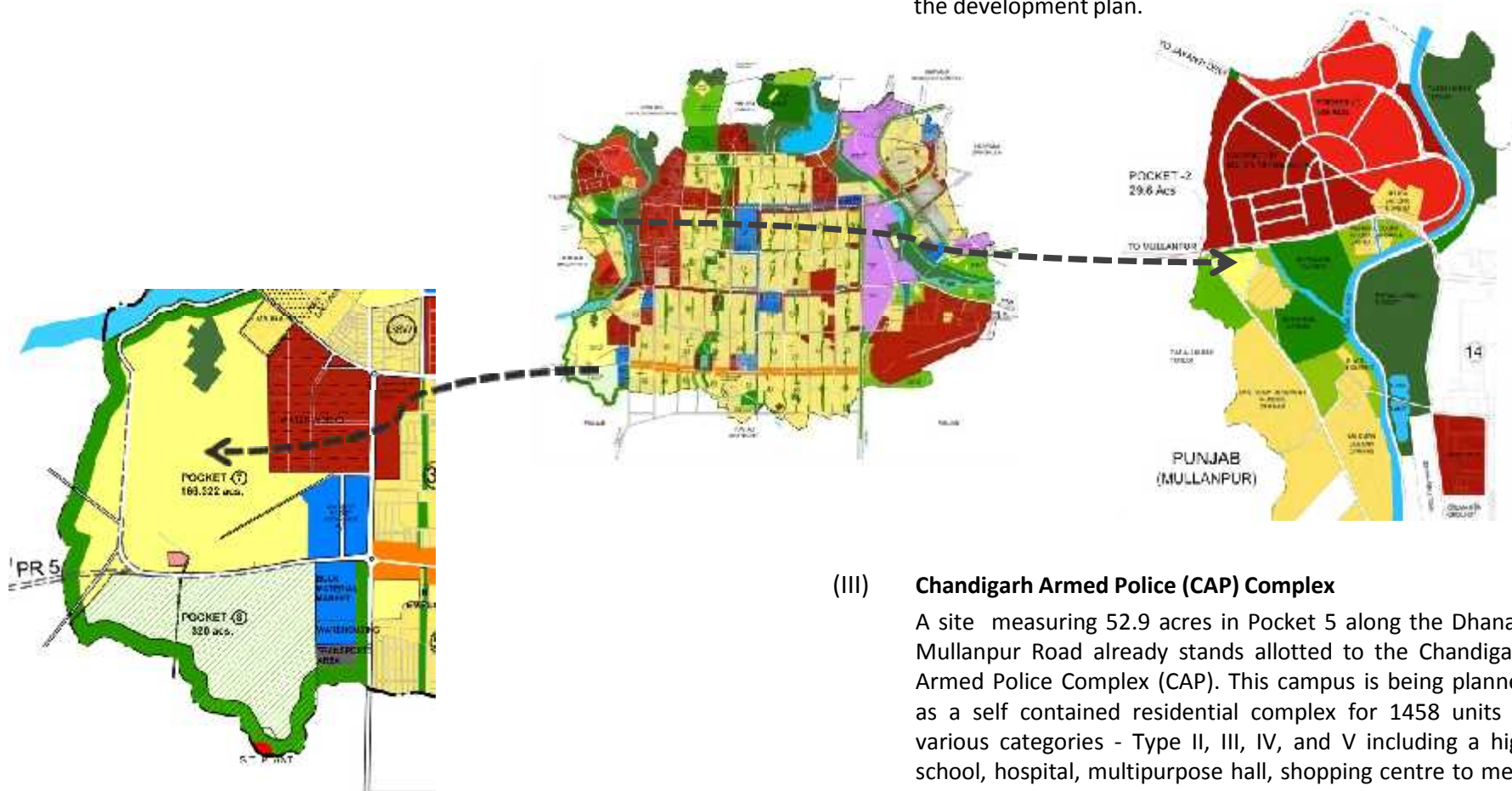




#### DEVELOPMENT OF VACANT AREAS IN PERIPHERY FOR RESIDENTIAL USE

- (I) In the proposed land use in Pocket 7 near village Maloya, 178 acres of land has been proposed for residential use. The tentative density of the area will be 250 PPA i.e 45000 persons can be provided.

- (II) In addition to above approximately 30 acre of area in Pocket 2 near Village Sarangpur has been proposed for residential use. Comprehensive Integrated Development Plan of the abadi deh of village and the areas around it is to be undertaken as per the principles highlighted in the Chapter on Villages. No further development should be taken up in the area till such time as the finalisation of the development plan.



#### (III) Chandigarh Armed Police (CAP) Complex

A site measuring 52.9 acres in Pocket 5 along the Dhanas-Mullanpur Road already stands allotted to the Chandigarh Armed Police Complex (CAP). This campus is being planned as a self contained residential complex for 1458 units of various categories - Type II, III, IV, and V including a high school, hospital, multipurpose hall, shopping centre to meet the requirements of the Indian Reserve Battalion as well as that of the CAP. An area of approximately 10.0 acres has been reserved for future use. The residential buildings are planned as six storeyed apartments.



## GENERAL PROPOSALS

### HOSTEL / LOW COST RENTAL ACCOMMODATION

The shortage of low cost rental accommodation for students, single working women and other similar groups shall be addressed by increasing their number in location close to educational institutions and major employment centres. Surveys to assess demand for such accommodation should inform detailed planning.

### ACCOMMODATION FOR STAFF AND VISITING FACULTY IN LARGE INSTITUTIONS

Institutions having large plots of land shall be encouraged to develop low cost facilities for conferences, training programmes etc. as well as accommodation for the participants attending them. The Chandigarh Administration shall make suitable policy and zoning provisions to allow provision of houses for regular faculty and other staff members within the campus.

### HOMES FOR THE ELDERLY SHALL BE INCREASED BASED ON AN ASSESSMENT OF DEMAND

Night shelters for the homeless shall be increased and designed more sensitively for their needs. An analysis of the shortcomings of existing night shelters together with a study of the experiences with them in other cities, should provide a basis for improving their design and management.

### SHELTER FOR THE CYCLE RICKSHAW PULLERS

Cycle rickshaw pullers living at authorized rickshaw stands shall be provided basic shelter and services including drinking water, toilet facilities and drainage. Rickshaw pullers who need to stay at the stands to provide an important service during late nights and early mornings have remained one of the most neglected marginalized groups within city.

**POTTERS COLONY** in front of cremation ground Sector 25 needs to be constructed at the earliest to accommodate maximum number of potters.

### NO NEW PLOTTED DEVELOPMENT

There shall be no new plotted development in the city and only Group housing shall be allowed. The existing height restrictions in the first phase and second phase sectors shall continue to prevail to maintain the low rise character of these sectors. In the 3<sup>rd</sup> phase sectors and in the residential pockets earmarked in the periphery, a minimum of four storeyed group housing shall be mandated unless otherwise specified in the Master Plan .

### STRICT ENFORCEMENT OF BUILDING BYELAWS

There should be strict enforcement of building byelaws and check on illegal encroachments to avoid setting up of slums so that situation of rehabilitation does not arise at all.

### MANIMAJRA

As per the approved land use plan of Manimajra in the year 1999, the total area under the residential use has been given as 346 acres. The existing population of Manimajra is approx. 136000 persons. Thus, overall density worked out to 395 PPA, which is on extremely higher side and is not desirous.

It is therefore, recommended that the additional housing stock should not be added for new population/migrants to the town as there are no additional pockets available for residential use. However, an urban renewal exercise of the congested pockets within the town area needs to be carried out to decongest the existing residential pockets and for augmenting the facilities in the area.