



# **Redevelopment Strategy for the Central Government Employees' Housing by Central Public Works Department: Case Study - R.K. Puram, New Delhi**

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## **Abstract**

*We need to seriously think about the direction of growth our cities are taking and how we would like to see them develop in future. Uncontrolled spatial growth is already having negative consequences and needs to be checked. The author believes that redevelopment is the answer. As our existing city areas grow old and obsolete, they need to be transformed. This could absorb growing urban population and at the same time rejuvenate and make them more livable. It has been proved that redevelopment will not cost much to the government. By using land as the basic resource, local government can manage redevelopment of its precincts in a self-financing manner. This paper aims to provide a redevelopment and densification strategy for the Central Government Employees' General Pool Residential Accommodation (GPRA) by the CPWD in Delhi.*

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## **1. INTRODUCTION**

Delhi has been reeling under the pressure of population explosion, and has grown spatially to accommodate this growth. New housing development is also taking place at the fringes of Narela, Bawana, and Dwarka. Urban sprawl is the most expensive method of urban development and it is frightening to see the consequences of this policy including the loss of valuable agriculture land, staggering costs of providing services, and increased travel distances and time.

Density situation in Delhi is unique. Starting as a bipolar city with a traditional dense core and low density new capital area, the Master Plan for Delhi, 1962 adopted low density planning. Consequently, the Master Plan for Delhi, 2001 increased overall density. Therefore, one can see a gradual increase in densities as one move to the outlying areas, whereas the core remains practically empty with low-density development (Kumar, 2000). A significant portion of this low density development is occupied by government employees housing areas. Some of these colonies such as Lodhi Colony, Kaka Nagar, Sarojini Nagar, RK Puram developed during 1950s and 1960s are fast getting dilapidated, and are losing context in modern times. Socially, functionally and physically these areas have reached a state of obsolescence.

Delhi needs to rethink its growth strategy of sub-urbanization. As the Master Plan for Delhi, 2021 has been prepared; it is a good opportunity for planners to think on the lines of redevelopment and densification of low density, underutilized lands in the city. In this manner more housing stock will be added to the centrally located places by taking advantage of the established physical and social infrastructure. It also presents an opportunity for infrastructure upgradation and augmentation that will result in improved efficiency. Total contribution to the exchequer in the

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form of stamp duty and property tax will be additional apart from direct profits from redevelopment.

This paper aims to provide a redevelopment and densification strategy for the Central Government Employees' General Pool Residential Accommodation (GPRA) by the CPWD in Delhi.

## **2. CENTRAL GOVERNMENT EMPLOYEES' HOUSING IN DELHI**

The Central Public Works Department (CPWD) is among the oldest government departments supplying housing for central government employees employed in various organizations. Delhi being the capital city holds a unique position as it forms the birthplace of this subsystem. In India, Delhi has the maximum demand and land available under this subsystem is almost twice that of all other cities put together. At present GPRA, Delhi, excluding Lutyens Bungalow Zone, comprises of 30 colonies covering a total area of approximately 1,190 hectare. Total housing stock in Delhi is 64,190 dwelling units as against the demand for 1,03,110 dwelling units that is a shortage of 38,920 dwelling units. Thus overall satisfaction achieved is only 62 percent.

### **2.1 Area and Specification Norms**

The GPRA is classified into 11 categories from Type I to Type VIII. Entitlement of an applicant for a particular type of house is determined on the basis of pay scales. Type I accommodation is allocated to an employee having the lowest pay scale and Type VIII to an employee having the highest pay scale. Different plinth areas and specification norms have been prescribed for different types. Type I has a plinth area of 365 sq ft, which rises to 2,400 sq ft for Type VII. Norms set by the CPWD come in conflict with the Master Plan provisions of density, ground coverage, and FAR. For example, height restrictions due to concept of sleeping outdoors, provision of lifts only for higher type quarters of type V, VI and VII, ground coverage determined by fixed plinth areas, etc.

Government housing schemes are developed mainly as low rise and low cost schemes. Design of a unit or neighborhood layout is not governed by market forces but is more dependent on the availability of land and funds for construction allocated by the government. The attitude of maximizing permissible built up area on a piece of land does not exist. Therefore, in the GPRA one finds gross under utilization of land.

Maximum demand is for Type II housing which is followed by Type III and Type I. But overall satisfaction level is also more in these categories and average satisfaction level in these categories is 64 percent. Much lower satisfaction level exists in Type VI and VII with average satisfaction level in these categories is down to 46 percent. This shows that there is a greater shortage of Type VI and VII accommodation as against the demand.

## **3. ANALYSIS OF EXISTING SITUATION**

### **3.1 Age of Structures**

At present 43 percent colonies are as old as 50 years and above. Within 5 to 10 years another 20 percent colonies will be added to this, bringing the total to



63 percent. Therefore more than half the colonies would have outlived their structural life in another 5 to 10 years, and will be ripe for demolition.

### **3.2 Density**

Sixty five percent colonies have densities only upto 300 persons per hectare. 35 percent of these colonies are in the range of 300 to 600 ppha. Therefore, all colonies have half of the densities prescribed in the Master Plan Delhi, 2001, which is 875 ppha for group housing. This suggests that there lies enormous potential to increase densities.

### **3.3 Number of Storeys**

Maximum number of colonies that is 39 percent has ground plus one structure. In nearly 53 percent colonies there are ground or ground plus one structure. Even if the notion of low rise and high density living style is propagated by the MPD, 2001, ground plus three structures could be designed. The GPRA colonies fall even below these standards.

### **3.4 Site Location**

Fifty two percent colonies could be valued in the range of Rs. 7,500 per sq ft and above, which indicates that more than half the colonies fall in the highest property rate bracket. Location of most GPRA colonies is enviable with respect to the city; they are centrally located on the prime land with real estate values highest in the city. Redevelopment provides an opportunity to better utilize this land by taking into account opportunity costs.

### **3.5 Type of Planning**

More than 55 percent colonies were planned before the first Master Plan for Delhi was enforced in 1962. 93 percent colonies were planned before the Master Plan for Delhi, 2001. At present design and planning norms adopted in most colonies has become obsolete falling below current MPD, 2001 norms of ground coverage, FAR, and density standards. Colonies are marked by high percentage of ill-defined open spaces that lack a sense of territoriality.

### **3.6 Unit design and image**

Unit designs too have reached a high level of obsolescence. Poor specifications have resulted in low standards of external and internal finishes. Buildings give largely drab look, and are monotonous in appearance producing sterile housing environments. There is a lack of legibility in neighborhoods with poor street edge definition.

### **3.7 Estate management**

Management of housing estates is in a bad shape. Allotment of government accommodation can take 20 to 25 years also. Problem of subletting as well as of resisting evacuation is quite common. License fee collected is unrealistically



low. Estate management should be streamlined and should be restructured taking into account present realities.

#### **4. REDEVELOPMENT STRATEGY FOR GPRA IN DELHI**

##### **4.1 Future housing needs**

Considering high construction and maintenance costs, government policy regarding housing as a perk for employees needs to be reassessed. Keeping this in mind, it is assumed that housing need for the future, say 2011 will be nearly 72,177 dwelling units considering 70 percent prescribed satisfaction level for Delhi.

##### **4.2 Re-densification**

Substantial increase in densities could be achieved by considering provision of housing at 3 different density scenarios.

##### **4.3 Method of redevelopment**

The most viable method of redevelopment is demolition and rebuilding on higher densities.

##### **4.4 Type of redevelopment**

Redevelopment is an opportunity to break out of a stereotyped mold and envisage new forms of housing development. Embracing higher densities and FAR will help to change to a high rise built form; a mixture of 4 to 12 storeys as per specific site conditions.

##### **4.5 Model for redevelopment**

Redevelopment of the GPRA is proposed on the lines of a joint venture with the private sector. In this, the CPWD will place land as its share of the equity while the private sector will be responsible for the design, construction, relaying of infrastructure and sale of the assets created. In this manner land can be used as an asset to generate finances for redevelopment. Municipal government and other concerned departments will have to augment city level infrastructure to meet the demands of expanding population. For this purpose, these bodies will be paid infrastructure charges from the profits generated by new projects. In addition to the above, local government will also get revenue in terms of stamp duty and property tax.

##### **4.6 Phasing**

Phasing is envisaged in a manner that redevelopment programme can be sustained in a self-financing manner, and also should cause minimum dislocation to the existing inhabitants of these areas. Entire redevelopment of all the GPRA colonies is proposed in a span 20 years. Phasing of work should be in tandem with the process of raising finances. Property rates should determine salability and in turn phasing. Altogether 87 percent colonies are close to either the Ring Road or



Metro, and enjoy good accessibility. Phasing can be worked out in tandem with development of the Metro so that proposed higher densities could be absorbed by this fast moving corridor.

## 5. A CASE STUDY OF RAMA KRISHNA PURAM, DELHI

A detailed redevelopment strategy has been prepared for a neighborhood of RK Puram. RK Puram is being envisaged as a trigger project in the redevelopment strategy for the GPRA in Delhi. Its location advantages ensure good salability which is very essential for return flows to be generated and ploughed back into development. Since this project is large, it qualifies for foreign direct investment.

A number of land uses are extremely essential that must be retained despite redevelopment, for example, Bhikaji Cama Place, East and West Block Government Offices, all religious buildings, and monuments. Total area of RK Puram is 442.32 hectare out of which area that has to be retained is 79.35 hectare. Therefore, area left for redevelopment is 362.97 hectare. For this area a number of possible scenarios could be worked out. The most feasible and viable model in terms of overall objectives and returns achieved has been adopted. The area for redevelopment in this scenario is 345 hectare. Land use breakup for this area has been worked out as per the UDPFI guidelines of the ITPI (Government of India, 2004).

## 6. RECOMMENDATIONS

Redevelopment project will be taken up as a joint venture project. The CPWD's investment shall be value of land as per the market value. Developers' investment in the project shall be the present value of all costs incurred by them to build the project and successfully market it.

Financial calculation has been undertaken for this viable scenario to showcase the level of profit to be generated from this redevelopment project. The project has been envisaged as a multi-storied housing scheme. Entire existing housing stock of the concerned sectors will be replenished with new stock and the remaining stock will be sold in the open market. The joint venture partners will share profits out of this sale in proportion to their equity. A financial model has been worked out with appropriate phasing of construction and project marketing.

Calculations have proved that if the CPWD is ready for a joint venture, and is able to find out suitable partners, realizable outcomes will be lucrative. They can not only renew the entire housing stock but also make huge profits which will be to the tune of Rs. 450 crores at 140 dwelling units per hectare density. If the CPWD intends to take the entire redevelopment programme by itself, then they can make profits of at least Rs. 1,001 crores at 140 dwelling units per hectare density besides the renewing the entire old housing stock. With increase in densities there is a commensurate increase in profits.



At policy level, the CPWD should set up a task force or special committee for establishing guidelines for redevelopment of the GPRA colonies. This task force should conceive redevelopment as an integrated, flexible and realistic programme. Redevelopment project should be implemented through public private partnership mode. The CPWD should be able to form strategic joint venture with any willing developer (s) for redevelopment work creating a Special Purpose Vehicle.

At subsystem level, there is a great need to revamp the entire subsystem: its method of provision, design, construction, maintenance, allotment, etc. A new employees' housing benefit policy should be prepared so that eligibility for government accommodation can be reestablished. Area and specification norms for the GPRA should be revised. Housing type should change from predominantly low rise and low specifications to high rise and high specifications. Major changes are proposed to streamline management and maintenance of general pool housing estates.

At project level, it is proposed that area specific redevelopment programmes should be prepared, which should have greater flexibility and adaptability to meet specific needs. It is recommended that schemes should have greater variety in built form and should have high urban design content. Redevelopment presents the opportunity to reorganize land uses and make up for any deficiencies perceived at the city level. In this way more wholesome environments will be created.

## 7. CONCLUSIONS

We need to seriously think about the direction of growth our cities are taking and how we would like to see them develop in future. Uncontrolled spatial growth is already having negative consequences and needs to be checked. I believe that redevelopment is the answer. As our existing city areas grow old and obsolete, they need to be transformed. This could absorb growing urban population and at the same time rejuvenate and make them more livable. It has been proved that redevelopment will not cost much to the government. By using land as the basic resource, local government can manage redevelopment of its precincts in a self-financing manner. This process in turn will not only generate profits for the public agencies but also contribute to the augmentation of city level infrastructure.

## REFERENCES

- Government of India (2004) *The UDPFI Guidelines*, Government of India, New Delhi.
- Kumar, A. (2000) 'The Inverted Compact City of Delhi', in Mike Jenks and Rod Burgess (Eds.) *Compact Cities: Sustainable Urban Forms for Developing Countries*, Spon Press, Taylor and Francis, London.