Sites and Services Projects in India's Secondary Cities An Evaluation Study

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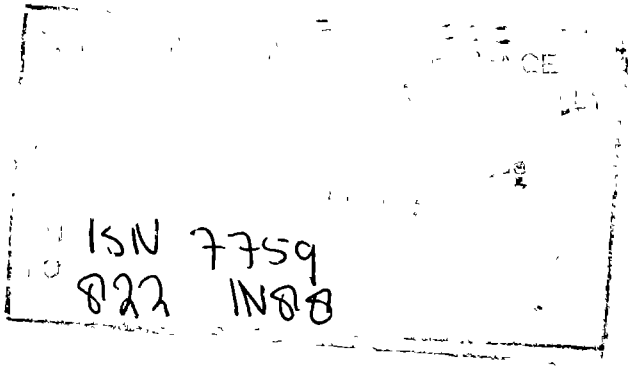
Sites and Services Projects in India's Secondary Cities An Evaluation Study

(Prepared for the Ministry of Urban Development)



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PREFACE

For over a decade, the question how to meet the shelter needs of the growing number of low-income and poor households has assumed a high priority in most developing countries. Almost universally the experiences have shown that conventional solutions involving the provisions of built houses are neither feasible nor financially viable in the context of the conditions prevailing in the developing countries.

Of the many options, the one involving the provision of sites with services to the low-income and poor households is currently on trial in many countries including India. It offers scope for self construction. Unlike other forms of low-income housing, it brings security of tenure to such households. Two questions have arisen with regard to the concept and approach of the "sites and services":

i. Does the sites and services approach offer an alternative to conventional low-income housing?

ii. What has been the performance of the sites and services projects? Have these served the purpose for which they were designed?

This report deals with the second question, and presents the results of an evaluation study of sites and services projects in two cities, namely (1) Kota and (2) Ghaziabad. These projects have different legacies. The Kota projects have been designed by the Urban Improvement Trust, Kota as a part of its overall efforts to increase the supply of low-income housing in Kota. The Ghaziabad project came into being as a pilot project under the International Year of Shelter for the Homeless.

This study traces the history of these projects from their very inception. It has examined in this regard the pre-project preparatory work that was undertaken and carried out by the concerned agencies. It has analysed the total processes of planning and implementation of the selected projects. It has identified the inadequacies in their planning and implementation and management, and has offered suggestions for improvement in the future designing of sites and services projects.

This study is, at best a pilot attempt on the part of the National Institute of Urban Affairs to evaluate the sites and services projects in the country. We at this Institute consider it important that "sites and services" as an approach to providing low-income housing should be examined on the national scale. Within a matter of years of this approach coming into being, doubts have arisen whether this is the most efficient and effective way of dealing with shelter problems of low-income and poor households. It is thus only appropriate that a larger study be undertaken to evaluate its efficacy and relevance in the Indian context.

My two colleagues, namely Dr.M.P. Mathur and Mr. K.K. Pandey have carried out this study and prepared the report. They deserve to be complimented for the hard work they have put in this study. I would also like to place on record my thanks to the Housing and Urban Development Corporation (HUDCO), the Urban Improvement Trust, Kota the Ghaziabad Development Authority and other agencies in the two cities

for their assistance and cooperation on this study. I would like to thank the Ministry of Urban Development for entrusting this pilot study to us.

January 1988

Om Prakash Mathur
Director

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CONTENTS

LIST OF TABLES

Maps

Executive Summary

The concept of public sector intervention in the field of low income housing is intended to meet the basic needs of the urban poor. In recent years the 'Sites and Services' (S/S) projects have been one of the most widely applied tools to facilitate the low income urban population in terms of incremental rather than the conventional housing. In India too, these projects have been replicated on a large scale in all types of towns. However, most of these projects form a part of composite housing schemes.*

Unlike the metropolitan and major cities the small and intermediate cities have limited technical, managerial and financial resource capability. The 'top-down' approach as applied in this regard has at times resulted in a failure or partial success of such projects in the sense that they either do not get realised fully or pass into the hands of higher income groups due to varied reasons. The main constraints remain in the financing, generation, realisation and absorption processes. The present study tends to look into these reasons and processes in order to suggest how the S/S approach can be more effectively applied to facilitate the low-income urban population in the wider context of improvements in the access to shelter and infrastructure and urban community development.

The Sites and Services (S/S) projects selected for the study belong to representative small and intermediate cities in India: Kota in Rajasthan and Ghaziabad in Uttar Pradesh. Care was taken to select

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* Composite housing schemes here comprise the housing options of plotted and flatted development for high,middle and low income groups.

one project from the average S/S type, apart from a project executed within stipulated time (Kota Projects) and one pilot project specifically geared for the provision of shelter and improvement of infrastructure for a low-income population (Ghaziabad Project). In Kota, the projects selected (Keshopura - VI & VII) are adjacent to each other practically forming a single project site, with the same dates of commencement and completion. One of the Kota projects won the first prize from HUDCO for timely completion (Keshopura VI). The Ghaziabad project (Vijai Nagar S/S), has been formed by clubbing together the S/S components of five different, composite housing projects into one project site.

The study indicates the Kota experience to be a failure when compared to the better conceived case of Ghaziabad. It is imperative to understand at this stage the indicators and reasons that can be attributed to the success or failure as also the negative and positive elements of both cases.

Finally, the implications of such studies on policy formulation and the replicability of S/S projects in a similar context are the major issues that form the broad objectives of this study. (For detailed objectives please refer to chapter 1 of the main report).

Tables 1 to 5 summarise the main conclusions of the report in respect of project designing, organisation, comparison of objectives and achievements, efficiency of implementation and indicators of project impact. Each of these items is discussed at length in the main report.

Table 1 indicates that the sites and services projects at Kota were poorly designed in comparison with those at Ghaziabad, because the project components such as locations, types of plot options, infrastructure—both utility and social were not based on the real life needs of implicit target groups. An almost total neglect of user consultation in both the cities has resulted in a lack of identification of actual priorities. However, in Ghaziabad on-the-spot registrations and verification of slum/squatter dwellers have enabled the formation of intended target groups. This has resulted in the successful occupation by allottees at the post allotment stage which helped form a powerful pressure group to interact with all the agencies concerned.

Table 2 shows that the project organisation is throughout poor in Kota. Initiation, planning, internal organisation of development agencies such as Urban Improvement Trust (UIT), interagency co-ordination, user interaction and financing are components ignored while formulating the project. At Ghaziabad, however, the same components are quite adequately organised with the exception perhaps of the internal organisation of the development agencies — here the Ghaziabad Development Authority (GDA) — and project financing. The GDA's accounting system is not based upon performance budgeting, making it difficult to have a meaningful performance evaluation.

The costing and funding of S/S projects in Ghaziabad, in the context of composite housing schemes are not correlated with proportionate funding and the numerical housing supports available to

various income groups in the sense of increasing the housing stock to the extent possible.

Table 3 summarises the project achievements and progress as compared to targets and objectives. The investment in the Kota project has been to the tune of nearly Rs.5 million. But, due to lack of operation and maintenance, the waste disposal and circulation network, plantation and green provision are among the facilities that are getting destroyed. No plans have been made regarding the provision of secondary infrastructure. Symptoms of deterioration are visible and an almost total absence of the shelter consolidation process: only two out of a total number of 1390 allottees have put up some form of shelter. Bottlenecks in planning, designing, organisation and implementation — virtually all along the line — can be citied as reasons for the failure of the scheme (Tables 1,2 and 4).

In the case of Ghaziabad, Table 3 further reveals that the development of land, shelter consolidation and primary infrastructure has been well conceived. But the position in respect of secondary infrastructure development is not very encouraging. The components of such infrastructure are still in the process of being established. Even the development agency (GDA) has delayed the construction of commercial support. Public sector development agencies often delay auctions of such plots in order to maximise sale prices : a case of development agencies displaying a commercial outlook.

Table 4 summarises the efficiency of project implementation. In Kota land development has yet to be completed, even though plots have

been allotted. Owing to lack of locational and land development, monitoring, post allotment support and follow-up, projects initiated are almost unoccupied. Unlike Kota, however, the Ghaziabad project appears to be well-conceived: the project site is completely occupied mostly by intended target groups.

It has been noticed that the project impact on users in terms of improvements in their access to social and utility infrastructure, tenurial rights of land, shelter structure and space has been positive in Ghaziabad. In contrast the Kota users could not enjoy such access except the tenurial rights to allotted plots which too remained ineffective as they - the intended target group - still live in squatter and slum settlements (Table - 5).

The impact on the city in terms of additions to the existing housing stock, environmental improvement and upgrading the social status of low-income people has again been negative, more so in Kota than in Ghaziabad.

The impact on policy relevance as noticed in Ghaziabad seems to be very useful innovative responses to low-income housing problems in terms of project formation and standards. The manner in which the users are selected, standards are lowered to a reasonable level, and the linkages are maintained with slum - improvement and reconstruction strategies, it appears, has made it possible to realise that a project can be called in real terms a low cost/low-income option. Project financing at both the places indicates a number of remedial measures to be taken to improve policy relevance in terms of a more

rational project financing, costing and facilitating users by providing some more incentives for putting up a shelter.

What follows are the issues that emerge from the present evaluation, the subsequent implications on policy formulation and project operation stages obtainable in low income/low cost housing. The issues outlined here are in the order in which they normally occur during project operations.

INFORMATION SYSTEM FOR LOW INCOME HOUSING

In the absence of a single project document as such in both Kota and Ghaziabad it was somewhat difficult to obtain the requisite information in regard to project objectives and targets vis-a-vis achievements. The information given in the main body of this report was collected through personal interviews and meetings with a cross - section of users and functionaries in both cities. Information about low income settlement types, existing housing backlog, effective demand and informal sector housing supply is utterly lacking and outdated not only at the development agency level, but also at city level.

Thus there is a case for improving existing information systems for low income housing both at the project and city scales. This will help the project initiation, realisation and replicability stages in order to identify the real-life needs, affordability and accessibility for the urban poor who are the implicit target groups for S/S projects.

NATURE AND TYPE OF PROJECT SCALE

The existing scale of the projects selected is far below the effective existing demand in both cities. It is a generally accepted conclusion that the entire housing backlog, particularly in low-income housing, cannot be met with the meagre resources that most developing countries have at their disposal. Low-income housing backlogs, however, are not just the absence of four walls and a roof but a more important need in this regard is the improvement of existing infrastructural back-up. Thus, the sites and services programme must work parallel to infrastructural improvement in the existing low-income housing areas. As achieved in Ghaziabad, at the initial stage the S/S users should belong to the clusters or lanes in slums that need relocation to make better utility and social infrastructure available to them.

It has been observed that housing support meant for the urban poor often goes to income groups that are at least a bracket higher. This diversion is attributed to the mismatch of supply and demand of overall housing development. Care should, therefore, be taken in this context to simultaneously provide adequate housing to Middle Income Groups.

PROJECT INITIATION AND PREPARATION

In both Kota and Ghaziabad no demand survey or evaluation of similar projects already executed have been undertaken to identify actual priorities and operational precautions. Such surveys ensure

smooth operation and obviate bottlenecks. A selection of project sites should be based on a positive work-place relationship for the intended target group. This was done in Ghaziabad which not only ensured shelter consolidation but also kept the site affordable for intended target groups.

PLANNING AND DESIGNING STANDARDS

As may be seen from the success of the Ghaziabad project, the planning and designing standards facilitate low-income groups only if these are reduced to reasonable levels for the formation of low-income neighbourhoods. It is thus essential in this regard to avoid and divert the attraction of the demand from higher income brackets by keeping the standards as low as possible. At the same time another important aspect is the 'willingness to pay' rather than the 'affordability' which normally reflects the social behaviour in this case the 'rural background' that the target groups inherit/belong.

FINANCING AND COST RECOVERY

Financing of S/S projects, at present, does not include the land cost. Land is the most important factor that decides the locational relevance upon which a project may be pronounced a success or a failure. With a proper cross-subsidisation mechanism, a system should be evolved to finance land acquisition which enables the development agency to obtain land at suitable locations.

The role of the financing agency should be defined properly. Recovery is not the only concern of the financing agent (HUDCO, a

public sector agency in this case). Unlike the situation in the Keshopura-VII (Kota) scheme the development status and the financial progress are equally important issues to be looked at. Even before land has been fully developed and the last instalment drawn by the Urban Improvement Trust (UIT), the financer is recovering costs without delay or time lag. The financer's role should also be to ensure that land is being developed, the loan fully disbursed and basic amenities such as water are provided before plots are allotted.

The budgeting and accounting system of the development agency is poorly managed in both cities. Staff in the agency comes on deputation from the State accounts departments in both cases. Such personnel do not necessarily have adequate exposure and knowledge of housing project finance. Consequently enforcement of housing finance mechanisms such as cost-recovery, cross-subsidisation, affordability, cash flow analysis and so forth becomes difficult to realise. It is also imperative for the department staff to be trained and exposed to the dynamics of housing finance to ensure efficiency. It may even be better to have a separate cadre for housing finance as in the case of engineers, architects and planners and such others. In furtherance of this the accounts system should also be improved by introducing performance budgeting.

ORGANISATIONAL STRUCTURE AND INTERAGENCY COORDINATION

The institutional framework in Ghaziabad and Kota within which the S/S projects exist vary considerably in the two cities. Most of the participating agencies (those mainly responsible for the

development of primary infrastructure) at Ghaziabad belong to the same department at the State level. In Kota, the agency responsible for installing and laying the water supply network belongs to the Public Health and Engineering Department (PHED) and not to the department of urban development, which holds such agencies under its purview in other States. This separation has lead to problems of interagency coordination and communication, that have resulted in extraordinary delays in providing the water supply network at Keshopura S/S-VII.

The Ghaziabad Development Authority, has a full time administrative head belonging to the Indian Administrative Services cadre. In Kota the District Collector (DC) is also ex-officio head of UIT. A DC is the busiest bureaucrat in a district and it is unwise to expect any wide ranging intervention from him in such matters.

It stands to reason, therefore, that there is need to rationalise the institutional framework at State, city and project levels to ensure optimum coordination among agencies concerned with land development at the pre-allotment stage.

Post allotment development involves several agencies belonging to different State level departments, such as medical and health, education, finance home and so on. It is not proper to suggest any change in their frame work. But it is recommended that a system should be evolved to integrate them at the city/district level so that their advice and expertise is available at every stage. Executing agencies should consult these agencies right from the preparatory stage so that the proper development at the post allotment

level is ensured. At this point in time, this area sadly lacks proper initiatives, as is obvious in both the cases.

Relationship with the city government the mother institution, acquires utmost importance as whatever inputs are to be provided will ultimately be handled by it in particular with regard to utility infrastructure. Being a body representing a cross-section of the people, it is also supposed to generate public awareness and participation in all urban development activities. At both the places as also in other cities in the two States, the elected city governments have long since been superseded. This position delinks the city government from the community resulting in constraints of identification of real life needs. This is what has happened at Kota and to some extent at Ghaziabad. There is thus a need to strengthen the development agencies' relationship with the city government and ensure that the elected body of the city government functions consistently.

SELECTION OF ALLOTTEES

The procedure for selecting allottees appears to have been diagnostic in Ghaziabad while being conventional in Kota. The manner in which the eligibility criteria are fixed in Kota leaves a lot of loopholes for the entry of higher income groups into the eligible categories often by merely submitting false affidavits. The registration fee was as high as Rs.100 in 1981 even for the lowest income groups.

Selection procedures in Ghaziabad are based upon on-the-spot registrations and verification of households in slums and squatter settlements, mostly on public land. Allotments have been made in such a way that house clusters or lanes can be cleared for the environmental improvement of existing shanty settlements. Registration fees charged in such areas were quite reasonable, being Rs.50 in 1984.

As it happened in Kota, several individuals managed to get S/S plots for speculation through conventional selection. To eliminate this, it is essential in these circumstances to modify the conventional method of selection of allottees on the Ghaziabad pattern in order to accommodate and facilitate the intended target group under S/S schemes.

LAND DEVELOPMENT AND ALLOTMENT

Land development must be consistent at all levels. In Kota (Keshopura-VII), for instance, the whole package of land development except the water supply network has been provided. This alone has made the entire investment meaningless, because in the absence of water a number of willing allottees have not come forward to build shelters.

Allotment ought not to be merely a matter of publicity. It should be ensured that land has been developed, both in terms of internal and trunk infrastructure, before allotments are made. Despite the attractive allotment function held at Kota on 15 May 1982,

attended by State level dignitaries, projects realised here could not meet the objectives and targets. The basic lacunae remained in the allotment itself in the sense that the plots were allotted on land yet to be developed. Even water, which is a most essential requisite for human habitation had not been provided. Therefore it is essential to correlate land development - internal and external - to the allotment of plots.

FOLLOW-UP AND MONITORING

Many bottlenecks and problems, as mentioned earlier, resulted from a lack of proper monitoring and follow up. In Kota, land development constraints, bottlenecks of selection procedures, post-allotment development problems and user consultation and participation and so on, were the issues that would have been solved if an effective monitoring and follow-up had been done. In Ghaziabad, the constraints of developing secondary infrastructure also relate to the problems of follow-up. Though monitoring was better, a monitoring committee per se did not exist. It remained for the individual to initiate the best follow-up as could be done. As it happened in the case presently under review, the GDA, with better institutional framework, as well as the attention given to it by the financer (HUDCO), the State and Central Governments, and others, has been able to make a successful demonstration case for IYSH 1987.

An effective way of solving issues would be by forming a monitoring committee with adequately assigned administrative powers. This committee should be headed by the District Collector. Members

should include the representatives of all the participating agencies, including HUDCO and the engineers in charge of the projects. A few representatives from the intended user groups should also be nominated to this committee in order to obtain user consultation and participation. The administrative head of the development agency should be ex-officio secretary of the committee. Care should be taken to appoint a full time administrative head at the development agency level, rather than delegating this responsibility to some other functionary, already preoccupied with his own assignments. This committee should be given the task of periodical review, to speed implementation and to suitably modify any of the targets in case of an exceptional delay in their execution.

SHELTER CONSOLIDATION PROCESS

In both the cases there is no support provided in terms of construction loans. The lowest income groups, on their own can not spare the amount needed for this purpose. Some sort of institutional credit, either in cash or in kind, should be made available to users to avoid situations as in Ghaziabad, where 66 per cent of the sample allottees have borrowed the money from moneylenders on very heavy terms and conditions, for building shelter. This situation may have a long term implication: if the user cannot repay the loan, he will lose ownership of the house.

Another important point here is the promotion of self - and mutual help. No initiatives have been taken in this regard in Kota. However, in Ghaziabad the lenient approach of GDA in regard to the

enforcement of building bye-laws has allowed allottees to put up shelters in a manner that they could afford.

Thus, it is necessary to introduce construction loans in cash and in kind with all S/S projects together with flexible enforcement of building bye-laws.

DEVELOPMENT OF SECONDARY INFRASTRUCTURE

Even in the case of the Ghaziabad project, which is a successful one, development of secondary infrastructure has not been on time. The reason attributed to this is the involvement of several institutions, namely those of public health, education, medical, community development, among others. As suggested, at the monitoring stage, proper inter agency coordination and communication will obviate this constraint.

The commercial outlook of development agencies is another problem. As normally happens, the GDA delays the development of the shopping and commercial complex in order to get the maximum auction prices. But this delay causes a lot of inconvienience to the allottees who have put up shelters.

There is thus a case to strengthen the development of secondary infrastructure, by looking into and redefining the roles and responsibilites of various participating agencies. At the same time, the development of commercial and shopping components should be done within the stipulated time.

Table - 1
Evaluation of Project Designing

Designing component	Evaluation		Comments	
	Kota	Ghaziabad	Kota (Keshopura S/S VI & VII)	Ghaziabad (Vijai Nagar S/S)
1.	2.	3.	4.	5.
Scope of the S/S project	Good	Good	Almost one third of the city's population does not have a reasonable access to social, community and utility infrastructure as also the shelter structure and tenurial status.	Ghaziabad has a tremendous demand for low income/low cost housing. Not only the 15% slum population of the city but also a lot of people from core-city areas and Delhi's housing backlog require reasonable housing facilities.
Scale	Poor	Poor	Options offered under S/S do not take into account the existing housing backlog. In numerical terms supply is much less than effective demand.	Here too the options offered are placed in a mismatch with effective demand in negative terms.
Location	Poor	Good	Sites selected are significantly far from the core city as well as industrial belt; being open from three sides and facing an urban village from the fourth - the sites do not offer much security.	A majority of allottees either belong to the slum previously located on the same site or nearby areas; the city centre is located at a walking distance, this site has a strong potential as a low income neighbourhood as it is surrounded by settlements comprising the poorer and weaker sections of society.
User consultation	Poor	Mixed	No demand survey was carried out in order to identify the actual priorities that the implicit target groups have.	Despite having no demand survey, the projects have a strong element of formation of homogeneous user group through on-the-spot registrations and verification of people living in slums and squatters. This has resulted in a powerful pressure group to deal effectively with common causes.

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1.	2.	3.	4.	5.
Plot options	Poor	Good	Options vary from 38 sq.m.to 60 sq.m. size. Taking into account the heavy pressure on land, the higher income groups may reduce their demand and switch over to so-called S/S option as has happened in most of our Cities.	Options vary from 23 sq.m. to 39 sq.m.size. Unlike Kota these standards are substantially reduced and are well able to keep the attraction of better off groups away from this site.
On-plot provision	Good	Mixed	On-plot provisions proposed are subject to affordability and to being within the HUDCO guidelines and limits. The provisions to be made are two water taps, foundation up to plinth, one W.C. and 1 metre high enclosure of walls over W.C.	Provisions proposed here do not include 1 metre high enclosure of walls over W.C. This is because of the high construction and land development cost and the binding to be within HUDCO limits. Kota project was taken up earlier in 1981 as compared to the Ghaziabad one in 1983-84.
Land use distribution	Poor	Good	Land use proportions are quite high for residential and circulation thus inviting the attention of higher income groups to capture these options through pirate housing market.	Proportionately less land use for residential purposes accomodates a density significantly higher than in Kota. Although the proportion earmarked for infrastructure is at a higher level, the standards for it are reasonably low and favourable for low income and low cost housing.
Water supply	Mixed	Mixed	It would have been better to have user consultation at predesigning stage in order to know appropriate priority as per affordability in wider context, e.g. include installation charges in the plot-price.	Here also user consultation was needed as in Kota.
Circulation	Poor	Good	Standards adopted for circulation are quite high and do not remain positive for the formation of low cost/low income incremental housing. This also keeps the project cost at a higher level.	Standards adopted here are reasonably low and positive for low income neighbourhood. This also provides economy for the sponsors (GDA) and subsequently the users.

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1.	2.	3.	4.	5.
Waste disposal	Mixed	Mixed	The system proposed is good. But it would have been better to consult the city government right from the predesigning stage. Ultimately the city government is supposed to maintain and absorb the system.	Here too, despite a good system, consultation with city government was lacking. As usually happens it may lead to a set of operational problems before and after handing over the system to city government.
Electricity & street lighting	Good	Good	The system and standards proposed here are quite good provided the problems related to irregular electric supply are tackled.	Here too the only problem remaining is the irregular supply.
Education	Mixed	Good	Provision for primary education is made but secondary schooling is neglected.	Provisions are made for both primary and secondary education.
Health/ Medical	Poor	Good	There is no provision for any Health Clinic or Primary Health Centre.	There is a provision for one Health Clinic and one Medical Dispensary.
Commercial	Mixed	Good	Only two shopping centres comprising 28 shops are proposed.	Six shopping centres comprising 42 shops, 20 kiosks, two dairy shops and one bank are proposed.
Community centres	Poor	Good	No community centre is proposed for a settlement expected to have around 6000 population.	Two community centres are proposed.
Open spaces & greenery	Mixed	Good	Provision for a playground and green verge is lacking. However 11 parks are proposed.	In addition to 29 parks, a playground and green verge from all the four sides have been proposed.

Table - 2
Evaluation of Project Organisation

Organisation Component	Evaluation		COMMENTS	
	Kota	Ghaziabad	Kota (Keshopura S/S VI & VII)	Ghaziabad (Vijai Nagar S/S)
1.	2.	3.	4.	5.
Preparation & initiation	Poor	Good	Neither a demand survey nor an evaluation of a similar case was conducted in order to identify actual priorities and precaution while framing the proposals.	Registration of dwellers who have squatted on public land provided a genuine demand and potential for low income housing support. This also resulted in proper access to the implicit target group. Being a pilot project for IYSH, it was carefully initiated by GOI, HUDCO and GDA.
Planning and designing strategies	Poor	Good	Merely translating the HUDCO formats into a project does not really strengthen the low income housing support. Excessively high standards thus adopted in project attract higher income groups. This group successfully managed to get into the project as a genuine applicant. Rigid enforcement mechanism together with loose management led to a failure of projects undertaken.	Clubbing together of S/S components from five different composite housing schemes was an attempt to do better than routine planning. Plot options and standards have been lowered in order to create a strong low income neighbourhood. Flexible enforcement of building bye-laws and smooth management led to a successful case.
Financing standards.	Poor	Mixed	Financer (HUDCO) should not be concerned merely with the disbursement and recovery of loan as per the prescribed based only upon numerical basis of options Correlation between the funds released, spent and physical progress vis-a-vis the plot allotment should be critically reviewed at different stages of funding. A purely technical approach as happened in Keshopura - VII may lead to wastage of public investment. A system should be	In case of composite housing schemes, the overall costing and loaning should not be offered. The proportionate share of funding as earmarked for various income group categories should also have a balanced approach. Care should be taken to make additions to the existing housing stock at a maximum possible level. These additions should be mostly in favour of low income

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1.	2.	3.	4.	5.
			evolved to bear the land cost for the project properly which is at present not included in S/S funding.	options followed by middle and high income groups.
Principal executing agency: internal organisation	Poor	Mixed	Financial management, liason with other participating agencies and monitoring and follow-up areas are the fields utterly lacking in terms of internal organisation at UIT-Kota. There is a need for proper exposure of accounts personnel to housing project finance mechanisms so that performance evaluation can be done in real terms. Overall documentation of project information also needs to be done in an orderly way. Communication between planning, engineering, architectural and fiscal wings of UIT needs to be strengthened further.	At GDA also the accounting system needs a fresh look in order to introduce performance budgeting so that a proper assessment and evaluation can be made available in due course. Project information consisting of different stages is not properly documented.
Institutional framework and Inter-agency coordination	Poor	Good	Institutional framework within which these projects are placed seems to be complex. Follow-up and monitoring responsibilities are not properly fixed and maintained. It has resulted in a long delay even in the land development component (Keshopura VII). Total lack of interaction with city government may have further long term implications. A proper intervention from State Government who is also guarantor can hopefully set things right in this regard.	Institutional framework is very well conceived. Monitoring and follow-up stages are promptly covered due to the inclusion of the participating agencies in the same State Government department. Further the GDA head also looks after the city government's work.
User interaction	Poor	Good	User interaction at both the pre-allotment and post-allotment stages is almost nil. Zero level of post-allotment development also accounts for the lack of user-interaction among other things.	User interaction at both the stages is quite strong physical occupation mostly by genuine allottees does not need any other evidence.

Table - 3
Comparison of project objectives/targets and achievements

Objective/ component	Kota						Ghaziabad		
	Keshopura S/S - VI			Keshopura S/S - VII			Vijai Nagar S/S		
	Targets	Achievements as on		Targets	Achievements as on		Targets	Achievements as on	
		May 1982*	July 1986**		May 1982*	July 1986**		July-Dec'85*	Oct.1986**
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Land development (Ha)	4.73	Done	PC	13.139	Half done (Water supply work not yet executed)	Half done (Water supply work not yet executed)	19.0275	Half done	Done:OK.
Plots to be developed	380	380	380	1010	1010	1010	1359	651	1359
Allotment of plots	380	380	380	1010	1010	1010	1359	651	1255
Shelter consolidation	380 (by May'84)	-	Only 2	1010 (By May'84)	Nil	Nil (By Dec.87)	1359	-	1250
Water supply network	May 1982	Done	PC	May 82	Done	PC	July-Dec. 1985	Half done	Done:OK
Circulation network	May 1982	Done	PC	May 82	Done	PC	July-Dec. 1985	Half done	Done:OK
Street lighting	May 1982	Done	PC	May 1982	Done	PC	July-Dec. 1985	Half done	Done:OK

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1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Plantation and green provision	May 1982	Done	PC	May 1982	Done	PC	July-Dec. 1985	Half done	Done:OK
Primary school	1	NA	NA	1	NA	NA	2	UP(2)	UO(1)
Secondary education	NP	-	-	NP	-	-	1	UP	UP
Medical clinic/ dispensary	NP	-	-	Np	-	-	2	UP	UP
Shopping centre	1	NA	NA	1	NA	NA	6	UC	UC
Kiosks	NP	-	-	NP	-	-	20	UC	UC
Community centre	NP	-	-	NP	-	-	2	UP	UP
Bank	NP	-	-	NP	-	-	1	UC	Done:OK
Development of parks	4	NA	NA	7	NA	NA	29	(21)UP	(29)UP
Development of playground	NP	-	-	NP	-	-	1	UP	UP
Green verge	NP	-	-	NP	-	-	From 3 sides + 4th side military farm land	UC	UC

NA - No Appointments NP - No Provision - as per project objectives
OK - All right in the context of operational viability at postinstallation stage.
PC - Poor condition due to maintenance and operational problems. UP - Under Process - matters are not yet physically initiat
UC - Under construction - execution work has been taken up
* - Month includes the date of completion of project
** - Month includes the dates of visit to the project by NIUA's evaluation mission.

Table - 4
Efficiency of the Project Implementation

Implementation component	Evaluation		Comments	
	Kota	Ghaziabad	Kota (Keshopura S/S VI & VII)	Ghaziabad (Vijai Nagar S/S)
1.	2.	3.	4.	5.
Land acquisition	Mixed	Good	Since it was public land there was no problem with regard to its acquisition but UIT did not take into account the locational suitability.	Despite a portion of land being encroached upon by illegal squatters the acquisition has been very smooth. Original dwellers have been absorbed on the same site among others.
Selection of allottees	Poor	Good	22% sample allottees belong to middle and high income groups. 97% have the work-place away by >3 km. from the allotted site as compared to only 15% for the original living place. Registration charges are quite high, Rs.100 in 1981; Eligibility criteria are loose.	Only 7% sample allottees belong to M/HIG category. Only 6% have the workplace away b >3 km. Registration charges are significantly low : Rs.50 in 1984. Eligibility through on-the-spot organisation of slums and squatters with proper verification.
Allotment	Poor	Good	Plots are allotted even without laying down of water supply network (Keshopura-VII) and fully developed liquid waste system at both adjoining sites.	Plots are allotted gradually as soon as land is developed and plot provisions are made. Delay in allotment thus caused does not lead to negative achievement.
Shelter consolidation	Poor	Good	Out of 1390 allottees only two have been able to put up a shelter. Rigid enforcement of building bye-laws etc., wrong selection of beneficiaries; land development constraints;lack of construction loan; negative work-place relationship etc. are among the reasons why allottees have not put up a shelter. Due to a lack of	Almost all the allottees have put up a shelter. Sponsors adopted a very lenient view with regard to enforcement of typical building bye-laws. Allottees have put up a shelter - whatever they could afford including thatched roof and scrap material Location, selection of beneficiaries and adequate land development are the other

Contd.....

1.	2.	3.	4.	5.
			appropriate selection no users' pressure group was formed.	reasons that attracted the allottees to consolidate the shelter at the earliest. Allottees formed a powerful pressure group as they mostly belonged to actual EWS group.
Monitoring and followup	Poor	Good	Neither sponsor (UIT), guarantor (State Government), nor financer (HUDCO) bothered to see how and why the land has not been fully developed and sites are not physically occupied by allottees (May'82 to July'86). Even after cancellation of 197 allotments the UIT did not make any alternative arrangement.	Sponsors (GDA) have their own site office. Interagency coordination and communication are properly maintained.
Cost recovery	Poor	Good	The recovery of funds for financer (HUDCO) is hundred per cent. But the same from allottees is extremely poor. The first one has been possible due to unforeseen diversion of funds from the revolving kitty generated through a set of activities. This diversion will have long-term implications. It has been difficult to monitor the recovery properly as the allottees are scattered all over the city.	Daily collection of dues has practically become weekly based. The bank in which dues are to be deposited is situated right in the settlement. Monitoring in this regard is very effective as the allottees are living at one particular site.
Development of on-plot provisions	Mixed	Good	On-plot provisions are not properly linked with infrastructure.	On-plot provisions provided are properly linked with infrastructure.
Water supply	Poor	Good	Due to varied reasons the water supply work was yet to be executed at Keshopura VII.	Water supply work was completed on time.
Liquid waste disposal	Mixed	Good	City government is not properly consulted. Although the work was executed almost in time, the system is getting blocked due to lack of any operation and maintenance.	System is not only developed in time but also remains under operation due to constant use.

Contd...

1.	2.	3.	4.	5.
Circulation	Mixed	Good	Standards adopted are quite high. Existing condition is very poor due to a total absence of maintenance.	Standards adopted are reasonably low. Pavement is done with bricks which is more economical. So far the maintenance has been adequate.
Street lighting	Poor	Good	Only electricity poles stand as witnesses to the installation. There have been a number of thefts of wiring and bulbs.	Electric system exists and is under satisfactory operation. Irregular supply is a common problem that is faced here also.
Plantation and green provisions	Poor	Good	Although the money spent in this regard is more than the proposals, not even a single tree is visible. This has happened due to a total lack of maintenance.	Site is not only well developed through internal plantation but also a green verge is coming up from three sides leaving the fourth side for an already existing military farm.
Primary schools	Poor	Mixed	There is no evidence that the sponsors (UIT) have made any efforts to initiate even the preliminary inspection and estimates through the respective implementing agency. Lack of a user group contributed to it further.	Out of two schools proposed one has already come up. The provision for the other is under process. This has been possible due to a prompt communication maintained by sponsors (GDA) with other participant agents. Existing community has further provided the scope.
Secondary education	No proposal	Mixed	Any provision for secondary education was not designed.	Matters are still under process in this regard and the land earmarked for this purpose is lying vacant.
Medical and health support	No proposal	Mixed	As per the project designing, the sites selected totally lack any such provisions.	Although two dispensaries/clinics are proposed - the physical presence of the support is yet to be made. However, the preliminary initiatives in this regard have already been taken.

Contd.....

1.	2.	3.	4.	5.
Business and commercial support	Poor	Mixed	There is no evidence of efforts with regard to the development of the proposed shopping centres.	Construction of shopping places is yet to begin. However, the bank is already there. The delay in this regard is attributed to the commercial outlook of most of the development agencies who try to earn as much as possible through late auctions.
Community centre	No proposals	Mixed	Project designing does not include this.	There are two centres proposed but the physical development is still being awaited. Initial liaison is maintained by GDA with responsible agent.
Parks and playgrounds	Poor	Mixed	Parks proposed can only be seen as vacant land. Lack of any pressure from users has further encouraged the inaction present in this area.	Parks and playgrounds are not adequately developed. Perhaps the agency is waiting for the handing over to the city government who will ultimately handle it.

Table - 5

Indicators of the Project Impact

Impact type component	Degree of impact		INDICATORS	
	Kota	Ghaziabad	Kota (Keshopura S/S VI & VII)	Ghaziabad (Vijai Nagar S/S)
1.	2.	3.	4.	5.
I Impact of Users				
i. Utility infras-tructure	Neutral	Positive	Since the physical occupation is almost nil this question does not arise. Presently only 57% respondent allottees have access to protected water and in-house latrines at their original living places. Public drainage system is available to only 61% sample	Most of the allottees did not have access to protected water and public drainage system at their original dwelling place. At allotted site not only water and drainage system but also septic tanks have been introduced.
ii. Social infras-trcture	Neutral	Positive	51% sample allottees did not have reasonable access to social infrastructure at their original dwelling place.	At the original dwelling place nobody used to have a reasonable and affordable access to social infrastructure. Allotted site is going to provide a package access to various infrastructure types. (Refer to Table 3).
iii. Tenurial status	Positive	Positive	Only 40% respondent allottees had access to (legal or illegal) owner-occupied housing. (Although on paper they denied owning a house in order to become eligible applicants). This project provides tenurial rights to all the allottees on lease-hold basis.	Only 20% respondent allottees had access to ownership housing. All the allottees now have a legal shelter tenure.
iv. Shelter structure	Neutral	Positive	At the original dwelling place 51% sample allottees have got katcha houses.	69% sample allottees have now got access to pucca, or semi pucca house as against 35% at original dwelling place.

Contd.....

1.	2.	3.	4.	5.
v. Access to rooms	Neutral	Positive	At the original dwelling place 78% sample allottees have access to two or more rooms.	80% sample allottees have access to two or more rooms at allotted site as compared to only 10% at original dwelling place.
vi. Fiscal equilibrium	Negative	Positive	Only 29% respondent allottees are repaying loans regularly to UIT. 197 allotments have been cancelled in case of allottees who have not paid any instalment. Drop-outs through private land market are very few because of lack of speculation of plot price 92% respondent allottees wish to put up a shelter with financial help from credit institutions but do not know how to obtain access to it.	80% sample allottees are repaying loans regularly to GDA. Only a few dropout cases can be observed because settlements that have emerged have constituted very strong lo income neighbourhood thus keeping the attraction away from higher income group users. Only 14% sample allottees have access to institutional finances for house construction as against 66% to moneylenders and 20% from their own savings or from friends and relatives. Even then it seems that the overall cost benefit aspects for the user are not very negative as the as the recovery ratio and drop-outs are quite reasonable.
II Impact on City				
i. Housing stock	Negative	Positive	There has been no addition to city's housing stock.	Shelters have come up on the developed sites. More important is the level of access to the implict target group.
ii. Environmental improvement	Negative	Positive	This project is not linked with the improvement of existing shanty structures or slums/squatters settlements.	Since the allottees belong to the squatters and slums located on public land, care has been taken that the land/houses vacated by them are not encroached again by others and are used for the provision of public services and amenities as originally earmarked.

Contd....

1.	2.	3.	4.	5.
iii. Social impact	Neutral	Positive	The social status of the low income population in general and the allottees in particular remained almost constant. They still lack access to protected services and affordable infrastructure.	Not only have the allottees got a better social status as a result of improved living standards, the other low income population is likely to have a better infrastructure provided on the land vacated by the allottees.
III Impact on Policy Relevance				
i. Project formation	Negative	Positive	S/S projects are formulated here in isolation by overall low income housing suppliers (UIT and Rajasthan Housing Board) who did not correlate and coordinate their efforts. Since after commencement of this project Rajasthan Housing Board flooded the supply for MIG/HIG users as a result these users did not come up to this site. Thus, plots retained were for speculation.	On-the-spot registration and verification of allottees living as squatters and in slums located on public land provided a way for the city government to have access to land vacated by allottees. City government tends to use this land for upgradation of respective areas.
ii. Standards	Negative	Positive	Standards adopted here are by and large quite high and attract the entrance of higher income groups through private land market.	Standards adopted here are reasonably low and do form a strong case for the development of low-income neighbourhood.
iii. Project financing	Neutral	Neutral	Both the projects are based upon sites and services concept. 100% financing does not include the land cost resulting in locational disadvantage for the formation of low income/low cost housing settlement.	These schemes heavily support the High Income Group Housing to the extent of 33% to 45% proportionate funding/costing comprising merely 5% house units. More Middle Income Group Housing can be provided in this.
iv. Selection of users	Negative	Positive	Eligibilty criteria are generally misused by fake affidavits, many got plots for speculation purposes. (40% allottees reside in posh localities.) Registration fee (Rs.	Selection through on the spot registrations and verification keeps genuine people in the list. Registration fee (Rs.50 in 1984) is also fairly low.

Contd....

1.	2.	3.	4.	5.
			100 in 1981) is fairly high for low income group. No demand survey was made in order to know actual priorities .	
v. Cost recovery	Negative	Positive	Financers (HUDCO) of the project did not look into the level and status of physical development and their correlation with financial progress. Merely the release of instalment on the basis of expenditure incurred as against proposed does not cover real life achievements. Keshopura-VII is not yet fully developed but repayments are made in time. Recovery from allottees is extremely poor. Proper monitoring is not introduced.	Repayment to financer is well in time. Cost recovery from allottees is also noticed at a very reasonable ratio.
vi. Project implementation: pre-allotment stage	Negative	Positive	Coordination among participating agencies is very poor. Monitoring is again slack.	Unlike Kota most of the participating agencies for primary development belong to same State Government department. Coordination and communication at local level are very smooth.
vii. Shelter consolidation	Negative	Neutral	No institutional credit is available for the users. No building material support. Rigid building bye-laws. No efforts by sponsors to see how and why the shelter is not coming up. Even after cancellation of 197 allotments no efforts were made to choose alternative allottees.	No institutional credit. But flexible enforcement of building bye-laws supported consolidation efforts strongly.
viii. Post-allotment development	Negative	Neutral	Since shelter consolidation is zero, the development of secondary infrastructure is very likely to get delayed. But in the meantime the sponsors (UIT) did not attempt liaison with responsible agents to initiate preliminary designing.	Although the site is almost fully occupied secondary development is by and large incomplete. But most of the components are under process and likely to be provided in due course.

CHAPTER I

APPROACH TO THE STUDY

BACKGROUND

The concept of serviced sites for the urban poor contains principles and approaches borrowed from the literature on low income housing options. The pioneering studies of Abrams, Koenigsberger, Turner, Margin, Peattie, Nelson and others have provided the moral and intellectual moorings on which 'sites and services', 'community upgrading', and other basic housing programmes are based.

Literature on low income housing clearly indicates the desire and ability of the urban poor to provide shelter and services for themselves. The idea of mutual aid, self-help construction, community action, gradual housing consolidation, core housing and progressive development are derived from the actual practice of squatters and slum dwellers. These are, at present, the main ingredients of basic housing policies.

'Sites and services' projects are based upon the concept of shifting the focus from providing finished housing to serviced lots. The attempt is to develop a policy instrument to cater to the needs of families at the lower end of the income spectrum, and to harness the energies of the occupants themselves in providing low income housing stock. On the one hand, it improves the quality of housing conditions of the low income population, and on the other, enables them to improve housing facilities, service and infrastructure standards as and when they can afford them. This makes the process of house

consolidation easy and smooth for the urban poor and spreads the demand for scarce building material over a number of years. In contrast, the massive conventional low income housing programmes generate high levels of competition for procuring scarce material in the market, leading to high prices, scarcities and speculation.

Right from the mid 1980s, the sites and services projects have been replicated on a large scale in third world countries. The International Bank for Reconstruction and Development (IBRD) is the initial promoter of these projects. In a 1974 World Bank paper - 'Sites and Services Projects', it was argued that "Sites and Services Projects and Slum Improvement Programmes are complementary strategies that hold out considerable hope of overcoming pressing needs in low income urban housing".

To begin with, from Arumbakkam (World Bank-aided), the sites and services projects in India have been replicated in all types of towns. These projects either form parts of composite housing schemes or form separate schemes/projects by themselves. Most of these projects are financed by Housing and Urban Development Corporation (HUDCO). During the Sixth Plan (1980-85) the total number of plots in the schemes financed by HUDCO was 1.73 lakhs, in 669 cities. Of these plots, 80 per cent belonged to the low income plotted development and the sites and services components, specifically geared for low income groups, including the Economically Weaker Sections (EWS), that is, the poorest of the poor, according to the Indian terminology.

SCOPE AND OBJECTIVES

The Government of India is making tremendous efforts to upgrade housing and urban development conditions in small and intermediate cities, in addition to metropolises. These cities have a solid potential for low income housing development as the rate of growth in these towns varies from 2.5 per cent to 10 per cent per year during 1971-81 (as per 1981 census). A few cities have even recorded a growth rate of over twenty per cent per year. Most of this growth is attributed to the low income migrants from the rural hinterland and small towns. HUDCO alone has funded S/S housing in 657 small and medium sized cities during 6th Plan period.

The pace of implementation of S/S projects in small and medium cities however, has been considerably slow due to a variety of reasons. Unlike in metropolitan cities, development agencies responsible for executing S/S housing in these towns do not have adequate expertise and resources for implementation. They involve quite a few participating agencies, often facing coordination problems and communication gaps. Lack of technical expertise also leads to hurdles in approval procedures. Many of the projects thus initiated are found ill conceived and lack affordability, accessibility and popular participation.

With this in view the present study has evaluated the sites and services projects in selected intermediate cities according to the following objectives:

i. To compare the initiation, preparation, planning and designing of projects in the wider context of actual priorities for low income housing;

ii. to examine the 'project implementation stage' including inter-agency coordination, financing, allotment procedures, infrastructure standards and post-allotment services with a view to analyse the levels of achievement as compared to the targets and the reasons thereof;

iii. to evaluate the effectiveness of the house consolidation process including the elements of self-help and mutual help;

iv. to assess the programme impact on the quality of life of the target population and access to various civic services available in the project areas; and

v. to suggest precautionary measures and lessons for the replicability of S/S projects in similar contexts.

Useful conclusions and lessons may be drawn for revising policy guidelines, financing, planning and designing strategies and finally in replicating S/S projects in small and intermediate cities.

METHODOLOGY

The cities selected in this study are Kota (Rajasthan) and Ghaziabad (UP). Both the cities are medium sized with a population of around 300,000 in each. These are multifunctional cities with a predominantly industrial character. Care has been taken to select one successful and one average case including a project executed within stipulated time so as to compare the evaluations. To all appearances the Ghaziabad project has been a success in contrast to the Kota projects where physical occupation of sites and shelter construction has been almost nil. Two adjacent projects have been selected in Kota, while in Ghaziabad the project selected is a pilot project of the Ghaziabad Development Authority (GDA), undertaken at the instance of Housing and Urban Development Corporation (HUDCO) and Government of India for the International Year of Shelter for the Homeless - 1987 (IYHS).

Preliminary discussions were held with the functionaries of various implementing agencies before selecting the projects and finalising 'information sheets' and questionnaires.

A detailed survey of allottees with a ten per cent sample, was conducted in both the cases. In Kota, the allottees were contacted at addresses shown in their application forms because out of the 1390 allottees, only two had built shelters and were living in them.

In the absence of any single document giving systematic information of project operations in both the cases, an exhaustive information sheet was prepared and filled in after consulting various departments and sections in relevant agencies.

CHAPTER II

THE PROJECT SETTING

CITY CONTEXT

Kota

Kota is one of the fastest growing cities in the country. Though the city has been growing since 1931, a significant increase in population was noticed only during the 1951-61 census period when the Rajasthan Government announced several concessions to enable the setting up of industrial units in Kota. Consequently, a number of large and medium scale industries came up in the Kota district as a whole and the urban centre in particular, creating a demand for people in both the formal and informal sectors. As a result, a large number of people from nearby areas migrated to Kota for better employment opportunities.

Not surprisingly, population figures jumped from 0.65 lakh in 1951 to 1.20 lakhs in 1961. Since then, the high rate of growth has been sustained by the city's enlarging shape in every sphere of urban activity. Table 2.1 gives the picture of urban growth for the three decades between 1951 and 1981.

Table - 2.1

Urban Growth 1961-1981

Census year	Population	Decadal growth rate (%)	
		Kota	Rajasthan (Urban)
1961	120,345	84.8	11.0
1971	212,991	76.9	38.4
1981	358,241	68.2	58.6

As seen in Table 2.1 during the 1961-81 census period, the city experienced a growth rate of nearly 10 per cent per annum, adding more than 11,000 persons every year to the city's urban population. It has been estimated that by the year 1990, Kota's population will rise to 5.79 lakhs.

However, as mentioned earlier the provision of planned housing and serviced plots has not kept pace with the needs of the growing population and a deficit in housing supply has manifested itself in the formation of slums and squatter settlements. According to official data, in 1981 nearly 110,000 thousand persons were living in informal settlements like slums and squatters which constitutes more than 30 per cent of the city's total population. It has been estimated that by 1990 the city's slum population will further rise by 63 per cent and will probably become over 173 thousand inhabitants. This will be an alarming situation for the local authorities to handle. Considering the magnitude of the problem, the Urban Improvement Trust (UIT) at Kota has taken the initiative with the commencement of 'Sites and Services' projects in May 1981.

Ghaziabad

Located on the outskirts of Delhi, Ghaziabad is one of the most prominent industrial and commercial centres of western Uttar Pradesh. It had a population of about 2.75 lakhs in 1981. The annual population growth rate during the 1971-81 census period was 11.5 per cent, being almost double that of the state average of 6.0 per cent. A growth rate of 115.2 per cent during 1971-81 represented an absolute increase of over 1.4 lakh persons during a short span of ten years. It has been estimated that by 1990, the city's population will further rise to 6.45 lakhs.

Table - 2.2

Urban Growth : 1961-1981

Census year	Population	Decadal growth (%)	
		Ghaziabad	UP (Urban)
1961	63190	65.3	9.9
1971	128169	102.8	30.6
1981	275815	115.2	60.6

Provision of planned housing and serviced plots, however, has not kept pace with their need. This deficit in housing supply has manifested itself in the formation of slums and unauthorised settlements. Official statistics reveal that in 1981 about 39,000 persons lived in slums and the growth of the slum population was faster than the growth of the overall population.

B-A

KOTA

REVISED SITE & SERVICE SCHEME AT KESHOPURA PHASE VI

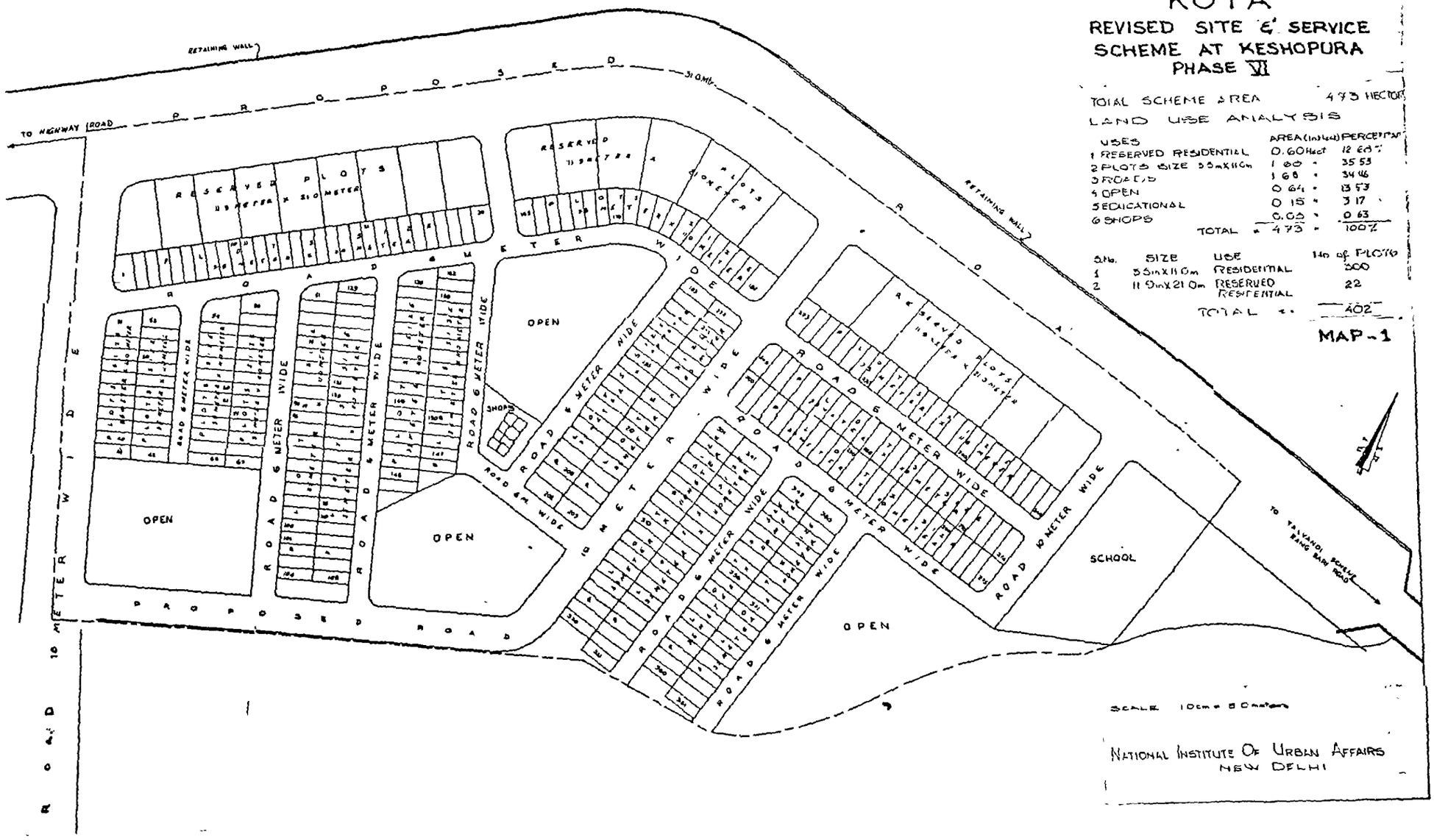
TOTAL SCHEME AREA 4.73 HECTOR

LAND USE ANALYSIS

USES	AREA (in Hect)	PERCENTAGE
1 RESERVED RESIDENTIAL	0.60 Hect	12.68 %
2 PLOTS SIZE 5.5m X 11.0m	1.68 "	35.53
3 ROADS	1.63 "	34.46
4 OPEN	0.64 "	13.53
5 EDUCATIONAL	0.15 "	3.17 "
6 SHOPS	0.03 "	0.63
TOTAL	4.73 "	100%

S.No.	SIZE	USE	No of PLOTS
1	5.5m X 11.0m	RESIDENTIAL	380
2	11.0m X 21.0m	RESERVED RESIDENTIAL	22
	TOTAL		402

MAP - 1



SCALE 10cm = 8 Chains

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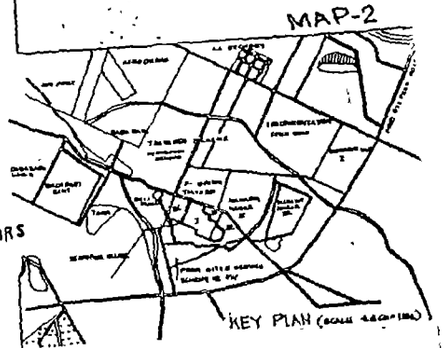
KOTA

SCHEME AT KESHOPURA (RAJ.)
PHASE-VII

MAP-2



SCHEDULE OF AREA

TOTAL SCHEME AREA		
LAND USE ANALYSIS :-		
SR. NO.		
1 RESIDENTIAL	8.906	
2 EDUCATIONAL	0.409	
3 OPEN	2.530	
4 ROAD	4.170	
5 COMMERCIAL (SHOPS)	0.030	
TOTAL	16.149	
SCHEDULE OF PLOTS :-		
SR. NO.		
1 RESIDENTIAL		
2 COMMERCIAL		
TOTAL NOS OF PLOTS	1030	

SCALE :- 1CM = 5 METERS

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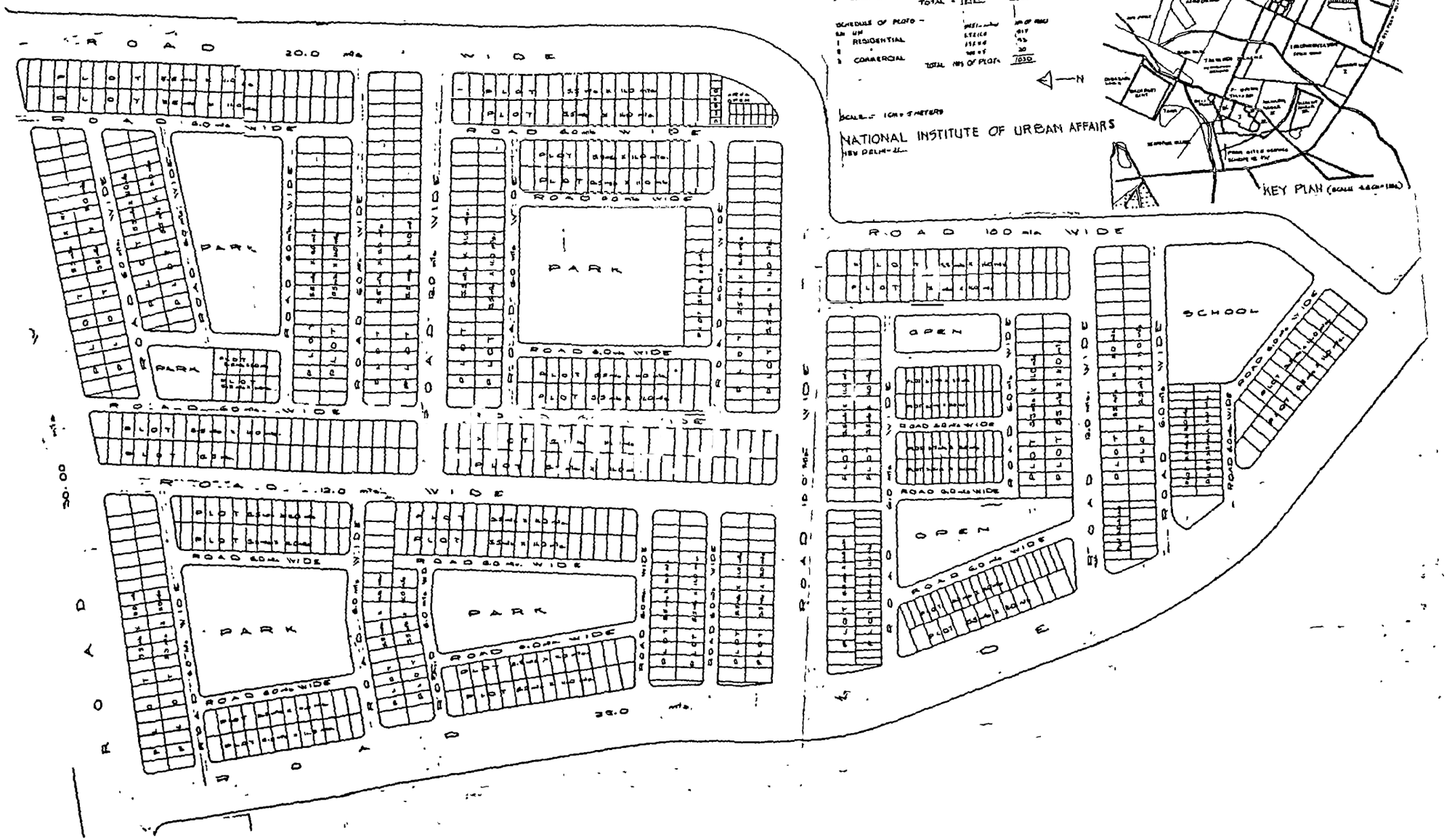
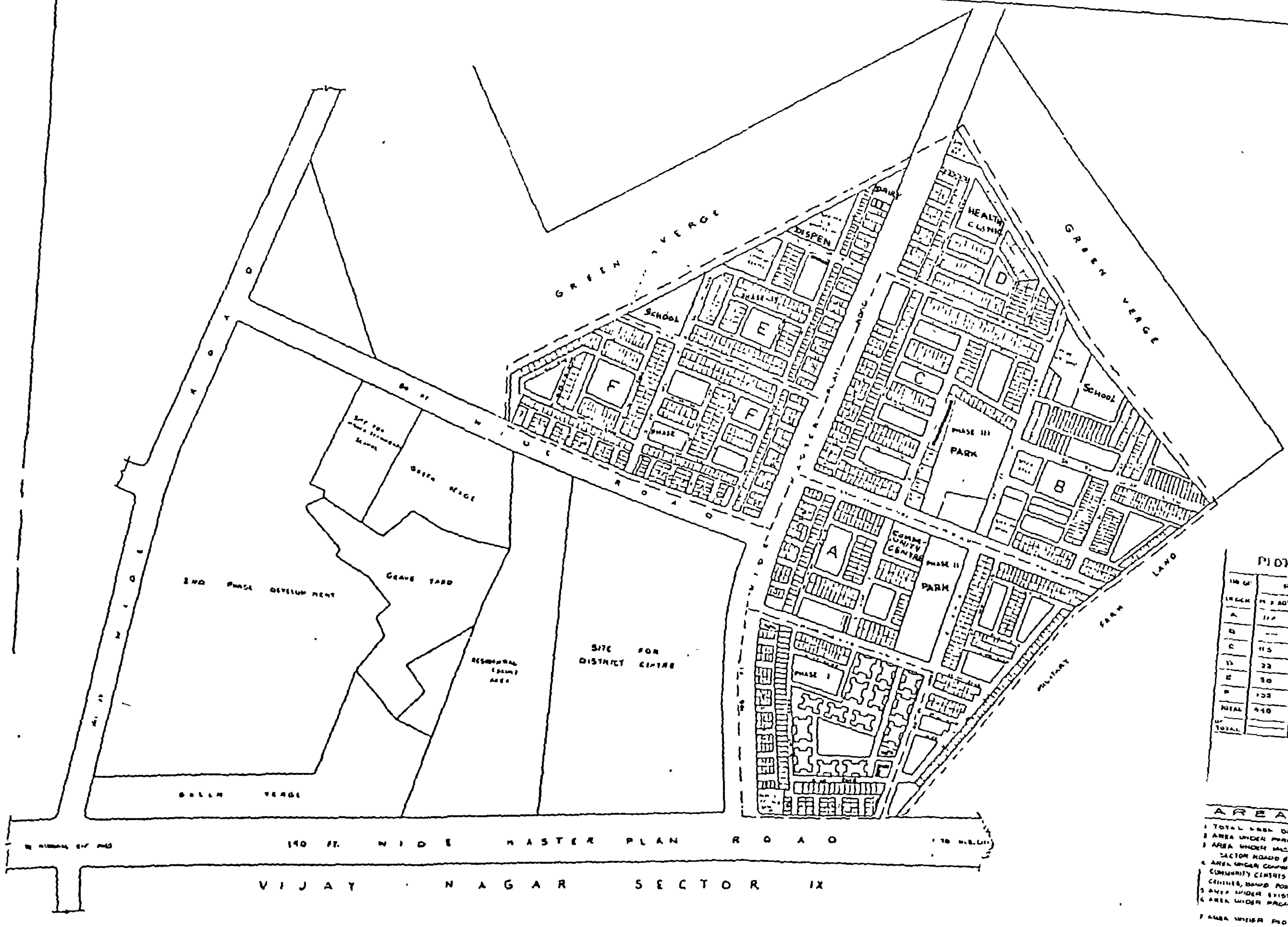


B-C

SITES & SERVICES PROJECT VIJAY NAGAR GHAZIABAD, U.P.



MAP-3

PLOT INDEX

BLOCK	PLOT'S SIZE					TOTAL PLOTS	TOTAL HOUSE
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
A	117	64	—	—	—	201	304
B	—	—	—	—	—	333	—
C	115	118	—	—	342	329	160
D	33	—	—	—	—	146	120
E	50	128	64	90	—	102	216
F	133	174	—	—	—	309	304
TOTAL	440	499	64	90	342	1410	1277
GR. TOTAL						1410	1277

AREA INDEX

1. TOTAL AREA OF THE SCHEME — 19.0278
2. AREA UNDER PARKS & OPEN SPACE — 4.6498 — 24.34
3. AREA UNDER MASTER PLAN ROADS, SECTOR ROADS & INTERNAL ROADS — 5.0429 — 26.50
4. AREA UNDER COMMUNITY FACILITIES SUCH AS COMMUNITY CENTRES, SCHOOLS, HEALTH CLINICS, SHOPPING CENTRES, BANKS, POST OFFICES, HIGH SUB-DIVISION ETC — 1.6846 — 8.70
5. AREA UNDER EXISTING GROUP HOUSING — 0.3410 — 1.79
6. AREA UNDER PROPOSED HOUSES — 1.6200 — 8.56
7. AREA UNDER PLOTS FOR SITES & SERVICES — 2.8499 — 14.98

TOTAL — 4.5690 — 24.02

SCALE - 1" = 100' S—N

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In the context of a rapidly deterioriating low-income housing situation the Ghaziabad Development Authority (GDA) has undertaken a 'Sites and Services' scheme with the objective of improving the shelter conditions of the urban poor.

IDENTIFICATION OF PROJECTS SELECTED

Projects selected in Kota and Ghaziabad are financed by HUDCO and implemented by development agencies : Urban Improvement Trust (UIT) and Ghaziabad Development Authority (GDA) respectively. The salient features relating to the shape and nature of these projects are shown in Table 2.3.

Table - 2.3

Identification of Projects Selected

City/Project/Scheme	Kota (Keshopura S/S)					Ghaziabad (Vijai Nagar S/S)		
Specification	VI EWS	VII EWS	LIG	SN. 2752	SN. 2753	SN. 2751	SN. 2767	SN. 2750
Commencement	May 1981	May 1981	May 1981	Oct. 1983	Oct. 1983	Jan. 1984	July 1984	Oct. 1984
Completion Period	One Year	One Year	One Year	One Year	One Year	Six Months	Six Months	Six Months
Plot options (sq.m.)	38.50	38.50	60.50	36.42	36.42	23.41	25.64	36.42
No. of plots	380	93	917	75	125	556	306	297

In Kota, the selected schemes were Keshopura - VI and VII, while in Ghaziabad the selected projects' site includes the sites and services components from five different residential housing schemes.

These schemes offered 1390 plots in Kota and 1359 plots in Ghaziabad. (Table - 2.3).

Keshopura - VI in Kota has been taken up under the Royal Technical Assistance - United Kingdom (RTA) scheme in collaboration with Overseas Development Agency (UK) and HUDCO. S/S components from different schemes in Ghaziabad have been taken up as part of a demonstration project for IYHS (1987) especially on one project site, namely, Vijai Nagar S/S (Map 3). These schemes included a variety of options whose specifications have been given in Table 2.4.

Table 2.4

Ghaziabad Project : Specifications of Options Offered

Phase No./* Scheme No.	Block	Plot Option				Total Plots
		14'x30'	14'x28'	12'x21'	12'x25'	12'x23'
I (2752)	A	47	28	-	-	- 75
II (2753)		69	56	-	-	- 125
III (2751	B+C	113	118	325	-	- 556
IV (2767)	D+E	80	102	-	34	90 306
V (2750)	F	159	138	-	-	- 297
Grand Total	-	468	442	325	34	90 1359

* Scheme numbers given within brackets indicate the sanction of project approved by HUDCO.

The Ghaziabad project basically includes the concepts of sites and services, resettlement and slum reconstruction. This is a project intended to resettle squatters and reconstruct one of the existing shanty settlements. More than forty per cent of the allottees on this

site belong to the squatter settlement located on the same public land earmarked for this project

Evaluation

Each of the projects selected in Kota has a separate official and physical identity, while in Ghaziabad the sites and services components from five different schemes have been clubbed together. This clubbing together provided a mixed identity to the S/S components of different housing schemes in practical and physical terms. This identity has a long term effect on the accessibility to the target group as, unlike the composite housing scheme, it minimises the attraction for higher income groups, and provides a positive environment for the establishment of a low income neighbourhood.

LOCATION

Both projects selected in Kota are adjacent to each other and are located in the south-western periphery of the town nearly three kilometres away from the industrial area. This site was proposed on agricultural land which was subsequently acquired by UIT. From the point of view of security this site does not appear ideal because it is surrounded either by open fields or by land being developed for Rajasthan Housing Board (RHB) colonies.

The Ghaziabad S/S project is located in the south-central periphery of the town. This site adjoins the core-city area and is within walking distance of it. The site falls in sectors XI and XII of the Ghaziabad Metropolitan Plan, and was proposed on public land that was partly encroached upon by unauthorised squatters. All the

original squatters have been accommodated at the same site, either in S/S plots or EWS finished housing.

Evaluation

Kota project seems to have a negative relationship between work place and residence. More often low income groups do not have regular sources of employment. It is therefore imperative for them to line themselves as close as possible to the centre of economic activity, so as to ensure at least minimum daily wages. In Kota, these pools of economic activity, as in other cities, are located in the core-city areas. Commuting to the core-city areas and the industrial belt is very difficult for the lowest income participants of the project. This is that strata of society where not only males but females and children also contribute their efforts to ensure socio-economic survival.

The work place-residence relationship in Ghaziabad seems to be positive. The settlement was developed on public land that earlier housed a squatter colony. About 80 per cent of the participants in the project belong either to it or to the nearby low income areas, thus, confirming the unaffected accessibilty to the work place for a vast majority of allottees.

As mentioned earlier some doubts were expressed about security at the Kota site. In Ghaziabad, however, there was a strong security support because a majority of the allottees immediately started living in the colony.

CHAPTER III

EFFICIENCY OF PROJECT OPERATIONS - PLANNING AND DESIGNING ASPECTS

INITIATION AND PREPARATION

Sites and Services projects selected in both the cities have been initiated by the local development agencies, UIT, Kota and GDA, Ghaziabad. All these projects have been financed by HUDCO. In Kota, the S/S projects under review in this study are the initial projects with HUDCO funding, while in Ghaziabad the projects came up after fifteen different housing projects had already been undertaken by GDA with HUDCO funding.

UIT (Kota) and GDA (Ghaziabad) are the principal implementing of agencies of the projects selected under this study. These agencies in fact translated HUDCO guidelines and preparatory formats/ checklists into an action plan that was subsequently approved by HUDCO prior to sanctioning the loan. In the case of the EWS, HUDCO funding is 100 per cent, while in other cases it varies from 60-85 per cent. HUDCO funds are released on a guarantee from the respective State Governments about surety of repayment by the client. State Governments are supposed to get guarantee charges from the development agency concerned at the rate of 25 per cent of loan amount per annum. The institutional framework for project realisation in both the cities has been indicated in Table 3.1.

Table 3.1

Institutional Framework : Roles and Responsibilities

	Role	Responsible agency	
		Kota	Ghaziabad
i.	Principal implementing agency	UIT, Kota	GDA, Ghaziabad
ii.	Preparation and initiation	- do -	- do -
iii.	Planning and designing	- do -	- do -
iv.	Financing	HUDCO, UIT	HUDCO, GDA
v.	Implementation		
	a. Water on/off site	PHED, (Rajasthan Government)	Jal Nigam (UP Govt.)
	b. Sewer/septic tank/drainage	UIT	GDA
	c. Roads	UIT	GDA
	d. Electricity/street lighting	RSEB (Rajasthan Government)	UPSEB (UP Govt.)
	e. Core construction for on-plot provisions	UIT	GDA
vi.	Monitoring	UIT	GDA
vii.	Selection of participants	UIT	GDA
viii.	Distribution/allotment of plots	UIT	GDA
ix.	Cost recovery from allottees	UIT	GDA

Evaluation

No proper demand survey was carried out in any of the cities to identify effective demand and actual priorities through proper user consultation. In Ghaziabad, however, the S/S project included a slum reconstruction component. In addition, on-the-spot registrations and

verification through official visits to the low-income settlements made it possible to identify the effective demand in terms of location, neighbourhood, income and employment variables.

In both cases the implementation of S/S projects in similar contexts had not been properly evaluated. Had this been done at the preparatory stage the operational difficulties that hampered the realisation of these projects would not have surfaced, and precautions could have been taken sufficiently in advance to ensure the success of the ventures.

The institutional framework as conceived in both cases is quite complex. There is no evidence of any consultation with participating agencies about resource availability and capability. Pre-conceived roles and responsibilities were assumed in both the cities that led to cost and time overruns in the projects.

PLANNING AND DESIGING STANDARDS

Distribution of Land Use

All the projects under study have a balanced land use pattern. The share of land used for residential housing varies from 40 per cent to 51 per cent of the total project area. In Ghaziabad there is a substantially higher proportion of land that is open. This is attributed to additional provisions for green verges, farmland and graveyard. The higher proportion of land for community/social facilities in Ghaziabad is because of the provision of a District Centre which will cater not only to current needs of the present sites but also other sites proposed for development in the near future in surrounding areas.

The break-up of land subdivision with specific land use in the selected projects is provided in Table 3.2.

Table 3.2

Proposed Land Use Pattern in Selected Projects

	Type of use	Kota (Keshopura S/S scheme)		Ghaziabad (Vijai Nagar S/S scheme)
		VI	VII	
a.	Total area (ha)	4.73	13.139	19.0275
b.	Residential S/S plots (% of a)	35.53	44.95	24.02
c.	Circulation (% of a.)	34.46	31.80	26.50
d.	Open spaces (% of a.)	13.53	18.09	24.54
e.	Community/social facilities (% of a.)	3.80	4.16	10.49
f.	Flatted development: residential (% of a.)	-	-	14.45
g.	*Others (specify) (% of a.)	12.68	-	-

* Reserved residential land to be auctioned for MIG and LIG.

Evaluation

Land use distribution seems to be aiming at high standards. The scale of provisions for circulation, open spaces, community and social facilities is likely to attract the higher income groups and in the process throw the target groups out from the area as soon as these facilities are provided. As a result of accelerated urbanisation and consequent pressure on land, rents and land prices in these areas may

increase rapidly, thus making the project financially nonviable for low income housing.

Density Estimates

Density in terms of dwelling units per hectare (DU/Ha) and persons per hectare (PP/Ha) in the respective projects and project sites area as a whole including the selected S/S projects which are adjacent to each other can be seen in Table 3.3.

Table 3.3

Density Pattern as Proposed in Selected Projects

Density	Kota (Keshopura			Ghaziabad (Vijai Nagar S/S*					
	VI	VII	Combined	2750 I	2751 II	2752 III	2753 IV	2767 V	Combined
Dwelling Unit per hectare DU/Ha	80	77	78	161	161	161	161	161	138***
Persons per hectare PP/Ha**	400	385	390	805	805	805	805	805	690

* Including S/S and EWS flatted development - (finished housing).

** On the assumption of a household size of 5 persons.

*** This includes the actual site consisting of circulation, open spaces, utility infrastructure and facilities.

As stated earlier the Ghaziabad project includes the EWS and S/S components from five different composite/mixed housing schemes. Density in Ghaziabad is therefore much higher than in Kota.

Evaluation

Despite a larger proportion earmarked for open spaces and facilities at the Ghaziabad sites, the density in terms of DU/Ha and PP/Ha is much higher than at the Kota sites.

Infrastructural Standards

Utility Infrastructure

Circulation Network Standards

Circulation standards seems to be higher at Kota as compared to Ghaziabad. Table 3.4 indicates the various waywidths of the circulation pattern in selected projects.

Table 3.4

Circulation Pattern in Reviewed Projects

(In Metres)

Type of road	Kota (Keshopura S/S)		Ghaziabad (Vijai Nagar S/S)
	VI	VII	Composite site
Major	31	30 & 25	45* : 30 & 24
Secondary/Sector	18	18	18 : 12 & 9
Tertiary/Internal	6	12 & 6	8 : 6 : 5 & 4

* Master Plan road touching the periphery of site. Both the sites in Kota offer excessively high standards for circulation network (also refer to map 1 & 2).

As is evident from the proportion of land used for circulation (refer to Table 3.2), the Ghaziabad site has substantially less share of road networks. This site also offers a variety of width options.

Such options vary subject to the plot sizes provided in a systematic way. (Refer to Map 3).

Evaluation

Low standards for circulation in Ghaziabad in contrast to Kota have made it possible for economy in land use for residential housing. This is an indication of the fairly low standards adopted in the Ghaziabad Projects which will constitute a positive factor towards the development of a low-income neighbourhood.

Water Supply

The options offered for water supply are almost similar in both the cities as evident in the break up given in Table 3.5.

Table 3.5

Water Supply Options

Type of system	Kota (KeshopuraS/S)		Ghaziabad (Vijai Nagar S/S)
	VI	VII	
Type	IC	IC	IC
Source	CM	CM	CM

IC - Individual Connection

CM - City Mains (off site)

Evaluation

Little attention was given in either of the cities to look into the possibility of a low cost option for water supply through proper user consultation. The provision of public standposts/handpumps with suitable cost recovery mechanisms to ensure maintenance would have ensured economy not only to the sponsors but also the users.

Waste Disposal

i. Liquid Waste

Liquid waste disposal as conceived in selected projects is based on the septic tank system according to the specifications given in Table 3.6.

Table 3.6

Liquid Waste Disposal System

City	Project	Sewerage		Drainage system
		System	User access	
Kota	i. Keshopura VI	Septic tanks	Individual households	Open
	ii. Keshopura VII	-do-	-do-	-do-
Ghaziabad	Vijai Nagar S/S	-do-	-do-	-do-

ii. Solid Waste

Solid waste collection as proposed on the selected sites is shown in Table 3.7.

Table - 3.7

Proposed Solid Waste Collection

City	Project	Solid waste collection	
		Household level	Neighbourhood level
Kota	Keshopura VI	Private collection	Public collection
	Keshopura VII	-do-	-do-
Ghaziabad	Vijai Nagar S/S	-do-	-do-

Collection at the household level is traditionally done by a particular group in the society. Public collection is proposed on a daily basis.

Evaluation

The waste collection systems proposed seem to be workable provided the operational deficiency, particularly in regard to public collection are tackled. Due to administrative procedures, as a rule developed sites are handed over to the city government, much too late for maintenance to be really effective. It is suggested that the city government be involved from the initital stage rather than when the site is fully developed.

There were no consultations with the city government, in either case to identify how to maintain and absorb the proposed systems into the existing ones.

Electricity/Street Lighting

The designs of the S/S projects selected in both cities provide an electricity network, and also individual household connections for the allottees.

Street lighting was also proposed at all the sites with a spacing ranging from 30 to 50 metres.

Evaluation

The proposed electricity and street lighting provisions seem to be well in order. The hurdle in this regard is the inadequate supply of power which is available on an average for about 12 hours a day in both the cities.

Social Infrastructure

There was a good deal of variation in the provision of social infrastructure at the selected sites as can be seen in Table 3.8.

Table 3.8

Social Infrastructure Proposals

Item	Kota		Ghaziabad Vijai Nagar S/S
	Keshopura VI	Keshopura VII	
Project area (ha)	4.73	13.139	19.0275
No. of S/S plots	380	1010	1359
Proportionate land use	3.80	4.16	10.49
Primary school	1	1	2
Secondary education	-	-	1
Medical clinics	-	-	2
Shopping centre/shops*	1(8)	1(20)	6(42)
Kiosks	-	-	5(20)
Community centre	-	-	2
Dairy	-	-	2
Bank	-	-	1

* Figures in the brackets indicate the number of shops.

At the Kota site there is provision for only one primary school and one shopping centre. In comparison the Ghaziabad projects offer better levels of amenities and facilities.

Evaluation

The social infrastructure, particularly in regard to the provision of schooling (secondary education), medical/health facilities and community centres is not adequate in the plan of operation in Kota. As has been argued, the S/S projects should not be seen in isolation to the adjoining areas vis-a-vis the provision of social amenities and facilities. However the most important

ingredient is affordability for the users. As shown in the key map (Map No.2) the S/S project site is located quite close to middle/high income group localities, excepting one low income housing option namely, the Keshopura village. Although facilities for schooling, medical and health care have been proposed in these localities, they may not always be affordable to the implied target group as envisaged by the sponsors. This will be one negative factor in trying to attract the allottees to the sites.

It would perhaps have been better to intoduce some low cost affordable option at the Kota sites, as for example, the provision of Government Schools, a Primary Health Centre, a Government Dispensary and so forth. The Kota sites also lack provision of a community centre.

As compared to Kota, the Ghaziabad project offers better levels of amenities and facilities. The social infrastructure proposed here include among others schooling, medical/health, shopping & community centres. Unlike Kota, the shopping centres proposed in Ghaziabad are scattered all over the site, to make them accessible to as large a number of users as possible. Kiosks at five different places were also proposed. The proposal for a dairy, bank and community centre was another important feature in Ghaziabad.

With such a level and variety of social infrastructure as in Ghaziabad one can expect low-income occupancy to become a reality.

Open Spaces and Greenery

Open spaces as proposed by the respective S/S projects include a variety of components given in the break-up in Table 3.9.

Table - 3.9

Provision of Open Spaces and Greenery

	Component	Kota S/S		Ghaziabad (Vijai Nagar S/S Project)
		Keshopura VI	Keshopura VII	
a.	Total Area (ha)	4.73	13.139	19.0275
b.	Proportionate area under open spaces	13.50	12.72	24.54
c.	Open space per thousand persons (ha)*	.32	.31	0.34
d.	No. of parks	4	7	29
e.	Playground	-	-	1
f.	Green verge	-	-	3 sides + 1 side military farmland

* This is calculated on the basis of a household size drawn as per the field survey. In the case of Ghaziabad the density thus worked out includes the flatted development meant for EWS housing.

Evaluation

Although the proportion of open spaces as per land use distribution in Ghaziabad was much higher than in Kota, the available land for open spaces per thousand persons is almost the same. This situation confirms earlier findings that the standards adopted in the Kota projects were fairly high as compared to those in Ghaziabad.

Unlike in Kota, Ghaziabad offers a variety of options with a much better designed framework. The proposed parks are scattered all over the site within walking distance of users' residences.

The Kota projects have not taken care of the environmental issues relating to social forestry and greenery. The Ghaziabad project proposed green verges on three sides with the military farmlands that already exist on the fourth side.

On-Plot Provisions

On-plot provisions made in S/S projects, are most important components that help allottees to improve their shelter conditions over a period of time. Since both the cities offer the selected projects with HUDCO financing and guidelines, the on-plot provisions do not vary much. The type of provisions proposed on the plot in the selected projects are indicated in Table 3.10.

Table 3.10

Compositions of On-Plot Provisions

Component	Kota S/S		Ghaziabad
	Keshopura VI	Keshopura VII	Vijay Nagar S/S
Foundation up to plinth	Yes	Yes	Yes
One W.C.	Yes	Yes	Yes
One metre high enclosure of walls for W.C. over plinth	Yes	Yes	No
Water taps (one each)			
a. W.C.	Yes	Yes	Yes
b. Kitchen	Yes	Yes	Yes

The foundation up to the plinth was proposed in all types of plots offered by the projects. The type of design in both cities provides for a growing house with a capacity for the development of one/two (depending upon the plot size) full rooms, a bath and W.C., cooking space and a courtyard.

Evaluation

On-plot provisions proposed by these projects are by and large similar. The Kota project even proposes an enclosure of walls over the plinth for W.C. In contrast the Ghaziabad projects could not offer this because of the general inflation that had taken place during the four years since the commencement of the Kota project although the HUDCO limits for costing the plots remained static.

Design - Structure

Plot Subdivision

Care has been taken at all the sites selected to make the plot subdivision economic, not only for sponsors but also for users, as may be seen from the break-up of the Plot Area Ratio (PAR) shown in Table 3.11.

Table 3.11

Plot Area Ratio - As Proposed

Kota S/S		Ghaziabad Vijai Nagar S/S
Keshopura VI	Keshopura VII	
1:3.14	1:3.14	1:2.5
	1:2	1:2
		1:1.75
		1:2.08
		1:2.33

GROUPING

As is evident from the plot subdivision, the physical pattern aims at cost efficiency in terms of infrastructural network and circulation. However, the standards for the various infrastructural components are higher in Kota and more reasonable in Ghaziabad, for the low income neighbourhood.

Lay - Out

Layout plans (Map 1,2 & 3) as proposed by the respective projects intended to provide effective cluster formations. Layout plan for the Ghaziabad site seemed better because it integrates the inter-cluster relationship, thus forming a positive structure for a low income neighbourhood. Social-infrastructure and open spaces as proposed here introduce a strong and effective cluster formation.

As mentioned earlier, the Kota lay-outs provided for an inter-cluster relationship that was not convenient for the implied target groups.

Evaluation

Plot-subdivision patterns seem to be well in order at all the sites selected. But the infrastructural standards as noticed in Kota, lead the projects away from the effective formation of intercluster relationship congenial to low cost housing.

USER CONSULTATION AND PARTICIPATION

S/S projects under review are utterly lacking in design for user participation. As discussed earlier the various stages keep user

consultation isolated from the 'project designing operations'. The position in regard to the provision of some key components of user participation is seen in Table 3.12.

Table 3.12

Designing for User-Interaction

	City project/ component	Kota Keshopura S/S VI & VII	Ghaziabad Vijai Nagar S/S
1.	User-consultation (Pre-designing stage)	No	No
2.	Technical assistance	No	No
3.	Incentives for self-help mutual-help	No	No
4.	House building loan		
	a. Cash loan	No	No
	b. Material loan	No	No
5.	Enforcement of regulations and norms	Rigid	Flexible

Evaluation

None of the implementing agencies take care of user-consultation aspects essential for identifying actual priorities. This attitude on the part of the implementing agencies kept them uninformed about real life needs eventually leading them to providing supports not affordable by the target group. In the absence of catering to actual needs, projects become unaffordable for the target groups.

None of the projects designed incorporates proposals for any type of technical assistance, encouragement of self/mutual help, for

example, through information regarding availability of building/construction material, formation of cooperatives and other matters.

There is no provision for any type of house building loan either in cash or in kind. This is urgently needed for the low-income allottees who are not financially well-equipped to take care of even their daily needs.

The Kota project rigidly enforces building regulations and norms. The Ghaziabad project on the other hand, was fairly flexible in its approach to the allottees, who were allowed to put up any type of shelter, irrespective of building bye-laws and regulations.

Application, Approval and Allotment Procedures

Application and Approval Procedure

As mentioned earlier, the S/S projects selected in both the cities are financed by HUDCO, in accordance with standard financing criteria. The respective State Governments undertook to stand guarantee for borrowing agencies. Some important criteria enforced by HUDCO in this regard are listed below:

i. There is a ready demand for the plots.

ii. The application must be accompanied by a bank draft of Rs.5000. (In case the applying agency withdraws from the scheme after paying this amount, it will be forfeited.)

iii. The scheme forms an integral part of approved city development/Master Plan.

iv. In the case of the EWS component, the financing will be 100 per cent.

v. The S/S unit must contain a sanitary core.

vi. The loan will be provided for a period of 20 years at 4.25 and 7.25 per cent interest rates for EWS and LIG components respectively.

vii. If there is prompt repayment, the borrowing agency will get a rebate at 4.25 per cent per annum on the interest to be paid. Thus the effective rate of interest works out to 4 per cent and 7 per cent for respective components.

Evaluation

No proper demand surveys were conducted by either of the two borrowing agencies. At this stage it would have been better if the financer (HUDCO) had enquired about how priorities were to be identified and fixed so that the project could have been designed better. However, in Ghaziabad, the GDA had registered all the dwellers residing in squatter settlements located on public land. Allotments were made only to such persons. Procedures for approval require the State Government to guarantee repayment of the loan. But, the State Governments are in no way involved in the follow up of the approval. It is very essential however to involve the State Government from the start to ensure interagency cooperation and communication.

SELECTION/ALLOTMENT PROCEDURES

Selection and allotment procedures adopted by the sponsors in both cities vary significantly. Key ingredients are given in Table 3.13.

Table 3.13

Selection & Application Procedures

Component	Type/Nature	
	Kota S/s : Keshopura VI & VII	Ghaziabad: Vijai Nagar S/S
Announcement	Advertisements, posters and local community leaders	Advertisements, posters and local community leaders
Application period	One month	One month
Deposit needed	Rs.100/-	Rs.50/-
Eligibility criteria	Income: EWS Rs.300/- p.m. LIG Rs.600/-p.m.	Income: EWS Rs.300/- p.m. LIG Rs.600/-p.m.
Registration	Application on prescribed proforma	A visit to squatters & slum areas by GDA team
Verification	Personal visits, ration card and voter list	Personal visits, ration card & voter list.
Selection through	Lottery	Lottery
Tenure	Leasehold	Lease hold

Evaluation

The registration of applicants through official visits to low income settlements, by the GDA has made it possible for a fair selection of the implied target group.

Income criteria alone do not ensure fair selection. Quite often applicants submit fake affidavits in regard to their income and possession of real estate. At this stage on-the-spot registration leaves little doubt about the fulfillment of the prescribed criteria.

The amount of deposit needed in Ghaziabad seems fairly reasonable. Low income households may not always be able to spare Rs.100 to pay for a deposit, as required in Kota. This therefore means that fewer applicants from the target group will come forward for this project.

CHAPTER IV

EFFICIENCY OF PROJECT OPERATIONS - ACHIEVEMENT OF OBJECTIVES AND TARGETS

ACHIEVEMENT OF PHYSICAL OBJECTIVES

Land Development & Infrastructure Provision

The levels of land development and infrastructure provisions at different stages in selected projects are given in Table 4.1.

Table 4.1

Development of Land and Proposed Infrastructure

Action stage component	Development status					
	Kota				Ghaziabad (cumul.)	
	Keshopura VI		Keshopura VII		Vijai Nagar S/S	
	As in* My'82	As in* Jl'86*	As in* My'82	As in* Jl'86*	As in* Ja'85	As in * Oct'86*
I Land acquisition	C	C	C	C	C	C
II Land development						
a. Water internal	C	C	NA	NA	C	C
trunk	C	C	NA	NA	C	C
b. Liquid waste disposal (Sewage/Drainage)						
Internal	IC	IC	IC	IC	C	C
Trunk	IC	IC	IC	IC	C	C
c. Circulation	C	C	C	C	C	C
d. Street lighting	IC	IC	IC	IC	C	C
e. Green provisions	NA	NA	NA	NA	C	C
f. Social infrastructure						
1. Health	NA	NA	NA	NA	UP	UP
2. Education	NA	NA	NA	NA	UP	UP
3. Community facilities	NA	NA	NA	NA	UP	UP

Note: * This month includes the date of completion of the project.
** This month includes the dates of letest visit to respective projects by NIUA's evaluation mission.

C=Completed; NA=No Appointments; IC=Incomplete; UP=Under Process.

(IC: 50% of the total quantum yet to be completed.)

Water supply work at one of the Kota sites is incomplete. Plantation work is also not visible at any of the Kota sites, though the funds allocated for green verges have been spent already.

Evaluation

The Ghaziabad project seems better concieved than those in Kota. Even after five years the Kota project does not give the appearance of human habitation.

Water supply work has still not been undertaken at one of the Kota sites, although land development has been largely completed. The main hurdle was the coordination and communication gap between the principal executing agency (UIT, Kota) and the responsible agency for water supply network (PHED, Rajasthan Government). Despite several reminders from the UIT, the PHED failed to put up even the estimates for works, before the completion period expired. These hurdles were mainly attributed to the following reasons:

i. UIT and PHED belong to two different State Government departments namely, the Urban Development and the Public Health & Engineering Departments respectively.

ii. UIT headquarters are located in Kota while PHED is in Jaipur.

iii. There is a lack of sufficient monitoring powers with the principle implementing agency i.e., UIT Kota.

iv. The administrative head of UIT is the District Collector, Kota who also looks after UIT activities.

Unlike in Kota, the institutional framework in Ghaziabad is completely different as may be noticed below:

i. GDA and Jal Nigam (responsible agency for water network) belong to the same State Government department.

ii. GDA has a full-time administrative head belonging to the Indian Administrative Services.

Several other components at the Kota sites such as liquid waste disposal, street lighting, green verge provision and social infrastructure were not even touched or were only partly touched by the respective implementation processes. This was because of a lack of pressure from the community which was meant to occupy the sites. Since there were almost no effective users there was nobody who took up the users' cause.

Not surprisingly, the Ghaziabad project has achieved development status with the components either completed or presently under process of completion. Achievement of this status is attributed to well conceived planning and designing strategies, together with a more effective institutional framework.

Development of On-Plot Provisions

Level of achievement in regard to on-plot provisions likely to be made during project implementation can be seen in Table 4.2.

Table 4.2

Development of on-plot Provisions

On-plot provisions	Development status					
	Kota				Ghaziabad	
	Keshopura VI		Keshopura VII		Vijai Nagar S/S	
	As in* My'82	As in* Jl'86*	As in* My'82	As in* Jl'86*	As in* Ja'85	As in * Oct'86*
1. Foundation up to plinth	C	C/PC	C	C/PC	C	C
2. One W.C.	C	C/PC	C	C/PC	C	C
3. One metre high enclosure of walls for W.C. over plinth	C	C/PC	C	C/PC	NP	NP
4. Water taps (one each for W.C. and kitchen)	C	C/PC	C	C/PC	C	C
5. Land filling (whereever required).	IC	IC	IC	IC	IC	IC

Note: * This month includes the date of completion of the project.
** This month includes the dates of latest visit respective sites by NIUA's evaluation mission.

C=Completed; IC=Incomplete;
NP=Not proposed; PC=Poor condition.

Evaluation

By and large on-plot provisions have been made as proposed by all the selected projects. But the provisions offered in Kota are presently in a very poor condition. This is in fact due to the delay in constructing shelters on the allotted plots. One of the consequences has been that circumstances did not favour the formation of a pressure group to interact with the implementing agencies for such provisions.

All project sites, (roughly five per cent of plot options), required land filling and levelling. This aspect was completely neglected by the respective sponsors. It was left to the users to make the necessary investment for filling and levelling land, which is absolutely essential for shelter consolidation. The quantum of investment required for this operation is not high. But for the low income group even such an amount is extremely difficult to spare.

SELECTION OF ALLOTTEES

The selection of allottees, for selected S/S projects, is done according to norms prescribed by HUDCO. Table 4.3 gives the break-up of applications received, as also the eligible applications.

Table 4.3

Selection of Allottees

City/Item		Kota* (Keshopura VI & VII)	Ghaziabad** (Vijai Nagar S/S)
I	Applications received	2420	2500**
II	Applications rejected		
a.	Incomplete	71	NIL
b.	Ineligible	148	NIL
III	Total eligible applications	2191	2500
IV	Allotment targeted	1390	1359
V	Distributed at the time		
	- of allotment	1390	651
	- Evaluation	1193	1255

Note: * Number indicated here includes applications received for all projects selected under present study.

** This is the number of low income households registered for the purpose of allotment of S/S plots through on-the-spot visit.

Evaluation

Allotment of plots at the targeted time of project completion seems to have taken place at Kota. By the time the evaluation mission made its last visit in July 1986, the Kota sponsors had already cancelled the allotments of the 197 allottees who had not paid even one single instalment in the four-year period. Thus the effective number of allottees at the time of evaluation was 1193.

On the other hand, the development of the Ghaziabad project was gradual. Despite time overruns, the GDA had allotted 1255 plots out of a targeted 1354 at the time of evaluation in October 1986.

The most important feature noticed in Ghaziabad was the 100 per cent physical occupancy of the plots allotted. In Kota, however, only two out of 1390 plots were under physical occupation.

The effective occupation of plots (by those who put up shelters) in the Ghaziabad project can be attributed to the 'specific allotment procedure' that involved registration through proper inspection and verification. This ensured the proper determination of effective demand.

Unlike Ghaziabad, the Kota projects could not identify effective demand nor could they identify the allottees. There were many cases where applicants had submitted false documents in order to become eligible. The example may be cited of an allottee who happened to be the son of a former chairman of the city municipality and a sitting member of the state legislature. There are several instances of this kind where allottees were found to be the residents of posh colonies

in nearby areas who had somehow managed to acquire allotments in this low income project.

PROJECT FINANCING, PRICING AND COST RECOVERY

Financing

As mentioned earlier, the selected projects are financed by HUDCO as per its terms and conditions approved by the Government of India. The total project cost and the proportion of the loan component is shown in Table 4.4.

Table 4.4

Composition of Project Financing

(Rs.in lakhs)

Financing Type	Kota (S/S)		Ghaziabad (S/S)*				
	Keshopura VI	Keshopura VII	2750	2751	2752	2753	2767
Total cost	10.21	41.65	13.92	21.84	3.48	5.79	13.39
Loan amount	9.83 (96.27)	33.90 (81.39)	13.63 (97.91)	21.42 (98.07)	3.41 (97.98)	5.66 (97.75)	13.13 (98.05)
Self** financing	0.38 (3.73)	7.75 (18.61)	0.29 (2.09)	0.42 (1.93)	0.07 (2.02)	0.13 (2.25)	0.26 (1.95)

Note: * Figures given here belong to S/S component of respective schemes.

** Self-financing stands for the financing arranged by the sponsors through their own resources.

( ) Figures within brackets indicate the proportionate share of financing type to the total cost.

HUDCO provides 100 per cent financing to the S/S projects, excluding land cost. The loan proportion is significantly less in the case of Keshopura VII (Kota) as compared to other projects, because this project includes 917 (91%) LIG plots and 93 EWS plots. The HUDCO

funding for LIG is 85 per cent of the total cost, while in the case of HIG, this goes up to 60 per cent. Unlike Kota, the Ghaziabad S/S projects form part of five different composite housing schemes.

Options offered under S/S schemes are two fold for EWS plots and LIG plots. The EWS plots have a total area of not more than 40 sq.m. as against 60 sq.m. for LIG. The Kota project includes both options, while the Ghaziabad project offers only EWS S/S plots. Table 4.5 indicates the financing of all the housing options offered by the selected projects in both the cities.

Table 4.5
Composition of Project Financing as per Respective Options
(Rs. in lakh)

Option Type		Kota		Ghaziabad				
		Keshopura VI	Keshopura VII	2750	2751	2752	2753	2767
EWS (Plots) S/S	A	10.21 (100)	2.49 (6)	13.92 (15)	21.84 (25)	3.46 (7)	5.79 (17)	13.39 (16)
	B	380 (100)	93 (9)	297 (43)	556 (69)	75 (21)	125 (48)	306 (47)
EWS (finished housing)	A	-	-	43.15 (47)	25.90 (30)	31.66 (60)	14.39 (42)	37.41 (45)
	B	-	-	360 (52)	216 (26)	264 (74)	120 (46)	312 (48)
LIG (Plots) S/S	A	-	39.16 (94)	-	-	-	-	-
	B	-	916 (91)	-	-	-	-	-
HIG	A	-	-	34.61 (38)	40.03 (45)	17.64 (33)	14.08 (41)	32.78 (39)
	B	-	-	38 (5)	44 (5)	20 (5)	16 (6)	36 (5)
Total	A	10.21 (100)	41.65	91.68	87.77	52.75	34.26	33.58
	B	380 (100)	1010	695	816	359	261	654

Note: A = Financing B = Number of units
( ) Figures within brackets indicate the percentage to total.

It is further interesting to note the break-up of proportionate loans for different schemes in Ghaziabad, as unlike Kota, these are for composite housing schemes, including a mixture of options. The break-up of financing by HUDCO in the Ghaziabad schemes is shown in Table 4.6.

Table 4.6

Composition of Option-wise Loans at Ghaziabad

(Rs. in lakh)

Scheme No.		S/S Plots	EWS Finished housing	HIG	Total
2750	A	13.63	34.18	21.10	68.91
		(20)	(50)	(30)	
	B	297	360	38	695
		(43)	(52)	(5)	
2751	A	21.42	20.51	24.41	66.34
		(32)	(31)	(37)	
	B	556	216	44	816
		(69)	(26)	(5)	
2752	A	3.41	25.07	10.70	39.78
		(4)	(63)	(27)	
	B	75	264	20	359
		(21)	(74)	(5)	
2753	A	5.66	11.38	8.64	25.68
		(22)	(44)	(34)	
	B	125	120	16	261
		(48)	(46)	(6)	
2767	A	13.13	29.62	19.99	62.74
		(21)	(47)	(32)	
	B	306	312	36	654
		(47)	(48)	(5)	

Note: A = Loans B = No. of units
( ) Figures within brackets indicate percentage to total.

Instalments released by HUDCO for S/S projects selected vis-a-vis targeted schedules are detailed in Table 4.7.

Table 4.7

Scheduling and Timing of Loan Disbursement

Instalment No.		Kota		Ghaziabad (Vijai Nagar S/S)				
		Keshopura VI	Keshopura VII	2750	2751	2752	2753	2767
I	T	Jl'81	Jl'81	Oc'84	Ja'84	Oc'83	Oc'83	Se'84
	D	"	"	"	"	Nv'83	"	"
II	T	Oc'81	Oc'81	Ja'85	Ap'84	Ja'84	Ja'84	De'84
	D	"	"	"	"	"	Fe'84	"
III	T	Ja'82	Ja'82	-	-	My'84	My'84	-
	D	"	"	-	-	"	"	-
IV	T	Ap'82	Ap'82	-	-	Ag'84	Ag'84	-
	D	"	NYR	-	-	"	Se'84	-
Total no. of instalments	T	4	4	2	2	4	4	2
	D	4	3	2	2	4	4	2

Months mentioned above include the date of targeted disbursement and actual release of loan.

NYR =Not Yet Released
T = Targeted
D = Distributed

As is evident from the table the disbursement of loans for various projects has been largely as scheduled except in Keshopura (VII) Kota. According to the terms and conditions stipulated by HUDCO, repayment instalments will be reimbursed only after receiving a proper statement of accounts showing expenditure incurred against approved proposals. Technically speaking the amount incurred for various expenditures seemed in order in all cases except in Keshopura VII (Kota).

Evaluation

Self-financing by the sponsors is negligible; the amounts covered only land cost in all the cases (Table 4.4). Such a situation leaves the selection of sites to the discretion of the sponsors. As has happened in Kota most of the implementing agencies acquire land at the cheapest rates possible. The selected land, therefore, has some inherent disadvantages such as location, surfacing and levelling.

Recently HUDCO's financing pattern was revised (effective from Dec'85), and a separate scheme was started to facilitate land acquisition financing for various agencies. In this regard the rate of interest to be charged on disbursed loans, and the repayment period are too high to be affordable for low income housing. It is, thus, suggested that the land acquisition component of low income housing should be included in S/S financing, together with a cost recovery mechanism comprising heavy cross-subsidisation.

The Kota projects are based upon plot options solely intended for low income housing. Unlike in Kota, the Ghaziabad site includes the S/S components from five different composite housing schemes. In terms of number of units provided by these schemes, the S/S components form almost 50 per cent of the total options offered, with a much less proportionate share of overall costs. On the other hand the HIG component, forming a mere five per cent of the options offered, includes a substantial share of funding, which was 33 to 45 percent of the total project cost (table 4.5 & 4.6). Such large scale costing for very few options does not seem proper. Sponsors could have offered much wider options at the same costs if the HIG components had

been reduced to accommodate more MIG and LIG options. This would have not only added more to the existing housing stock but also reduced pressure and the attraction of higher income groups to options meant for low income housing.

Almost one third of HUDCO loans, in all cases of composite housing schemes (Ghaziabad) go in favour of HIG housing. In numerical terms HIG housing covers only five per cent of total options offered. As discussed earlier it would have been better to reduce the HIG options and include more for MIG. HUDCO financing, thus, should not stress merely on proportionate share of numerical options. The share of funding for various income groups should have a balanced approach in terms of total addition to the housing stock and access of low income groups to it.

HUDCO financing does not include a proper correlation to the follow-up of the scheme, both financially and physically. In the case of Keshopura-VII in Kota, the final and last instalment which was due on 1 April 1982, has not yet been released. On the request of UIT, Kota, HUDCO refused to release it vide their letter dated 13 October 1982, saying that "the total expenditure incurred so far (Rs.31.06 lakhs) is less than the amount earmarked in the approved proposal (Rs.32.42 lakhs)". The reasons for lower expenditure were however not looked at. The basic reason discussed earlier was the delay in an operational water supply network.

It is important for the financer to see how allotment is made on projects where all the instalments have not been released and a detailed completion statement has not been recieved.

Pricing

Pricing of options offered by selected S/S projects strictly follows the HUDCO criteria. Outright sale price of the plots, together with a broad break-up is shown in Table 4.8.

Table 4.8

Composition of Pricing of S/S Plots

City/Plot Size*		Kota		Ghaziabad				
		38.5	60.5	23.41	25.64	27.87	36.42	39.02
Pricing Component (Per Unit)								
I	Land cost & land development charges (% to III)	1286 (48)	2051 (48)	1496 (42)	1641 (42)	1784 (43)	2332 (51)	2498 (52)
II	Construction cost** (% to III)	1392 (52)	2219 (52)	1980 (58)	2268 (58)	2307 (57)	2218 (49)	2307 (48)
III	Outright sale price***	2678	4270	3476	3909	4091	4550	4805

Note: * Plot size as offered by respective schemes may be seen from table...

** This includes the administrative and supplementary charges and the interest charged during construction.

*** In case of hire-purchase as happened in all the cases the interest at respective rates will be further added.

Evaluation

Outright sale price charged by sponsors is below the HUDCO ceiling of Rs.5000 per unit. It is basically a game of manipulation, as in Kota (Keshopura VII). The UIT, Kota, priced land not on the basis of expenditure incurred, but on the basis of estimated pricing, as indicated in the project approval. There is, thus, a need to fix

prices on the basis of actual expenditure within prescribed affordable limits.

The cost of construction has a negative relationship with plot sizes in Ghaziabad. This was attributed to the similarity of the scale of construction in all cases irrespective of plot size.

Cost Recovery and Cross-Subsidization

Table 4.9

Cost-recovery and Repayment Mechanism for Loan Finance

Component		Rate of* Interest (%)	Repayment Period	Grace Period
I	EWS S/S	4.25	20 years	One year
II	LIG S/S**	7.25	15 years	One year
III	EWS-finished Housing ***	7.25	15 years	One year
IV	HIG***	12.75	10 years	One year

Note: * In case of prompt payment a rebate will be given @ 0.25% p.a.

** Only in case of Kota (Keshopura VII) this component is included.

*** This is included in Ghaziabad composite housing scheme only.

In regard to repayment of loans, the executing agencies have repaid the entire amount in all the cases, on time. In Kota (Keshopura VII) repayments were made in time, although the site was not developed fully and the last instalment which was due on 1 April 1982, was not yet released.

In accordance with the terms and conditions presented by HUDCO, the plots are distributed, in both the places at the terms given in Table 4.10.

Table 4.10

Mechanism of Cost Recovery from Allottees

City	Kota (Keshopura VI & VII)		Ghaziabad Vijai Nagar S/S (S/S part of all the five schemes)
	EWS	LIG	
Loaning system	Hire purchase	Hire purchase	Hire purchase
Loan period	20 years	15 years	20 years
Grace period	1 year	1 year	1 year
Rate of interest	4 1/4%	7 1/4%	4 1/4%
Mode of repayment	Quarterly	Quarterly	Daily
Loan amount (Rs.)	2678	4270	3000-5000
Amount per (Rs.) instalment	48	113	1

The loan recovery position has been very poor in Kota as compared to Ghaziabad. 197 allotments were cancelled because allottees had not paid any instalments even after four years of allotment.

It was very difficult to collect exact cost recovery levels from allottees, because the respective agencies do not maintain the project accounts under seperate heads. It was observed from an allottees' survey that only 29 per cent allottees in Kota made repayments regularly, as compared to 80 per cent in Ghaziabad.

Evaluation

Cross-subsidisation in the case of recovery from sponsors and users was done indirectly, being based upon variations in the rate of interest, repayment period and intervals.

Recovery from the executing agencies has been quite satisfactory. On the other hand, recovery from allottees was not satisfactory, particularly in Kota.

Timely repayment in both the places indicated that the agencies (UIT, Kota, and GDA Ghaziabad) had been diverting funds from other heads towards repayment. This kind of diversion may have short-term and long-term implications on the quality and coverage of responsibilities likely to be borne by the agencies.

Recovery is not the only issue that the financer is concerned about. There are other important issues such as, the release of the last instalment (Keshopura VII, Kota); the status of land development; and the sources from which the agencies were repaying the loans. This would have ensured optimum and efficient utilisation of such huge sums of public investment (roughly Rs.5 million).

A suggestion can also be made regarding the introduction of an effective accounting and budgeting system in the development agencies to ensure proper assessment and performance evaluation of projects.

Accounts personnel at the development agency level are frequently on deputation from the State accounts departments. Such personnel do not have expertise in different housing finance mechanisms, such as cash flow analysis, cost recovery tools, cross-subsidisation, the criteria of affordability and so on. Merely translating the schemes into funding agencies' proformas does not serve the real purpose. Accounts personnel should also be conversant with application procedures thoroughly and with the enforcement/application of the different tools and techniques of the components of housing project finance.

MONITORING AND FOLLOW-UP

Expenditure incurred on various development components has been largely as per budget allocations, except in the case of Keshopura-VII (Kota). The correlation between expenditure incurred and the physical progress plays a vital role in assessing follow up and coordination levels during project operations. The relationship between the money spent and status of development as achieved, can be seen in Table 4.11.

Table 4.11

Expenditure and Physical Progress

Development Component			Kota S/S				Ghaziabad: Vijainagar S/S (cumulative)	
			Keshopura VI		Keshopura VII			
			My'82	Jl'86	My'82	Jl'86	Ja-Jl'85	Oc'86
i.	Water	*	1	1	NIL	NIL	7	1
		**	1	1	NIL	NIL	7	1
ii.	Circulation	*	1	1	1	1	.8	1
		**	1	1	1	1	.8	1
iii.	Waste disposal	*	.8	1	.9	1	.9	1
		**	.8	1	.9	1	.9	1
iv.	Electricity	*	1	1	1	1	1	1
		**	1	1	1	1	1	1
v.	Green provisions	*	1.8	1.8	1	1	1	1
		**	1	1	1	1	1	1
vi.	Plinth construction	*	1	1	1	1	.6	1
		**	1	1	1	1	.6	1
vii.	Core construction	*	1	1	1	1	.6	1
		**	1	1	1	1	.6	1

Note: * Expenditure level (1=100%)
** Development status (1=100%)

The Ghaziabad site is almost fully occupied. Most occupants are original allottees. Such a high rate of occupation by the implied

target group is attributed to the well-designed planning, strategies and the subsequent implementation.

Post allotment development at the Kota has been extremely poor. Only two original allottees have biult shelters. According to the allotment letter the shelters should have been put up within two years of allotment to avoid cancellation. UIT, however, appears to have adopted a very lenient attitude: no cancellations have been made so far on this account. Even the cancellation of 197 allotments referred to earlier was delayed considerably: on 6.8.85 (47 allottees) in Keshopura-VI and on 17.8.85 (150 allottees) in Keshopura VII.

The development of health, education, commercial and recreational facilities at both the places can be seen in Table 4.12.

Table 4.12

Development of Secondary Infrastructure

Development components	Kota S/S		Ghaziabad (Vijai Nagar S/S)
	Keshopura VI	Keshopura VII	
Primary school	NA (1)	NA (1)	UO (2)
Secondary education	NP	NP	UP (1)
Medical clinics	NP	NP	UP (2)
Shopping centre	NA (1)	NA (1)	UP (6)
Kiosks	NP	NP	UC (20)
Community centre	NP	NP	UP (2)
Bank	NP	NP	UP (1)
Parks	NA (4)	NA (7)	UP (29)
Playgrounds	NP	NP	UP (1)
Green Verge	NP	NP	UC (3 sides)

Note:
NA = No Appointments
NP = No Provision as per design
UC = Under Construction
UP = Under Process (pre-execution stage)
UO = Under Operation
() Figures within brackets indicate the number of respective components.

With regard to health, education, community centres and playgrounds, the delay in both the cities is attributed to the problems related to interagency coordination. Different State Government departments and agencies are responsible for the provision and maintenance of these services. However for commercial and recreational services, the sponsors themselves are responsible. A delay in this area was because of a lack of initiative on the part of development agencies.

Evaluation

It has been difficult to assess the cost overruns in selected projects because in the absence of performance budgeting, the whole accounting exercise becomes a game of manipulation within the limits laid down. A slight diversion of funds can be easily adjusted, and unless cost overrun amounts are substantial (as in Kota S/S VII), they are not reflected in the existing account system.

Time overruns are however visible, (Table 4.12). The Ghaziabad projects, though initially lagging behind, picked up very fast. The main reason for time overruns at Ghaziabad were:

i. Shortage of building materials such as cement, steel and bricks;
ii. late finalisation of tenders; and
iii. shortage of skilled construction labour.

Monitoring in Ghaziabad has been much better than in Kota. Coordination and communication among various participating agencies depend on how responsibilities are fixed. No agency was charged with

the responsibility of checking the reasons why land had not been fully developed before being alloted (Keshopura VII). Neither the sponsors' (UIT), the financers' (HUDCO) nor the guarantors' (State Government) concerned themselves with this vital question.

Even after about 200 allotments were cancelled, the authorities in Kota took no step to create a conducive living environment for the target groups. This they could have achieved by re-allotting the plots to industrial units for lower grade employee housing either on rental or ownership basis.

The institutional framework as discussed earlier matters a great deal in the success of a S/S scheme. GDA has a much better institutional set-up than UIT. The Chairman, GDA also acts as the administrative head of the city municipality. Besides almost all participating agencies are under the jurisdiction of the same State Government. department. This situation is totally reversed in Kota, leading to problems of coordination and communication resulting in delays in execution and time and cost overruns.

Interaction between various agencies and selected participants was much better in Ghaziabad. Self-help efforts were encouraged. GDA allowed the allottees to build shelters in any manner they could, using new, used or scrap or any other type of material. On the other hand, UIT tried to introduce a rigid set of building regulations and standards. This enforcement together with a wrong selection of participants negated the objectives of the scheme and the basic post-allotment requisite of generation of living environment.

Interagency coordination in regard to the involvement of other public sector institutions for secondary development as in health, education and community services is utterly lacking in both the cases. Merely designing inputs likely to be provided does not serve the purpose. It is suggested that sponsors take the whole responsibility for organising these inputs from the respective participating agencies in time.

The delay in regard to the development of commercial provisions such as putting up shops, kiosks and so forth is dependent on the commercial outlook of the development agencies, which hold auctions as late as possible to maximise sale prices, while the community for whom the complex is meant bears the brunt of these manipulations.

CHAPTER V

USER INTERACTION AND THE PROJECT IMPACT

This chapter considers the two case studies of the sites and services projects in terms of their socio - economic and physical development. The situation presented here pertains to September-October, 1986 when the field surveys were conducted.

The survey will would be particularly useful in bringing out similarities and differences between the two case studies as a base to understand the impact of the sites and services scheme on the allottees.

The chapter is divided into three sections viz :

i. Users' profile;
ii. project affordability; and
iii. project impact.

Users' Profile

Demographic Characteristics of Allottees

Out of total of 280 allottees interviewed, 140 belonged to the Kota S/S project and 110 to the Ghaziabad S/S project. Of these nearly 32 per cent represent the scheduled castes and scheduled tribes. The percetage, however, is higher in Kota than in Ghaziabad. This shows that while allotting the sites, the authorities gave significant weightage to backward classes according to the prescribed government regulations.

Table - 5.1

Distribution of Households by Caste

S/S Projects	Total selected households	SC & ST	Others
1. Kota	140 (100.0)	48 (34.3)	92 (65.7)
2. Ghaziabad	110 (100.0)	31 (28.2)	79 (71.8)
All	250 (100.0)	79 (31.6)	171 (68.4)

The average household size among allottees in Kota and Ghaziabad is about 5.0 persons per household which is quite close to the city average of 5.2 in both the cases. However, more than 25 per cent of the households in Ghaziabad and 17 per cent in Kota have an average family size of five and more persons per households. Most household are composed of married men with their families living with them. The incidence of single men without families is insignificant in both the cases under review.

Table - 5.2

Distribution of Households by Family Size

No. of persons/ households	Household number			
	Kota	% to total	Ghaziabad	% to total
Less than 3	47	33.6	34	31.0
3 - 5	69	49.3	48	43.6
5 and above	24	17.1	28	25.4
All	140	100.0	110	100.0

As expected, 80 per cent of the households in Kota and 71 per cent in Ghaziabad are migrant and only 20 to 30 per cent of them were headed by persons who were native to the place.

Table - 5.3

Migrant Status

S/S projects	No. of households			% Migrants to total
	Total	Migrant	Non-migrant	
Kota	140	112	28	80.0
Ghaziabad	110	78	32	70.9

Further, more than 60 per cent of the migrant households had come more than 10 years earlier while the remaining 40 per cent had migrated to the city limits during the last decade.

Educational Levels

The incidence of illiteracy is comparatively higher in Ghaziabad, where more than 65 per cent of the respondents could not read and write. Both the study areas differed obviously in their educational levels. These differences were related to their regional backgrounds, ethnic composition and the type of economic activities dominant in both the places.

Table - 5.4

Education Levels of the Respondents

S/S Project	Illiterate	Literate	Total
Ghaziabad	72 (65.5)	38 (34.5)	110 (100.0)
Kota	80 (57.1)	60 (42.9)	140 (100.0)
Both	152 (60.8)	98 (39.2)	250 (100.0)

Occupational Structure of the Allottees

A perusal of data on the occupation of the allottees reveals that more than 40 per cent of them are unskilled daily wage earners, mainly occupied as general labour and rickshaw pullers. Another nine per cent are skilled workers, generally working as mechanics in the industrial sector.

Table - 5.5

Occupation Structure of the Allottees (House holds)

Service sector	Number of allottees				Both	
	Kota	% to total	Ghaziabad	% to total		
Unskilled dailywagers	69	49.3	46	41.8	115	46.0
Skilled dailywagers	16	11.4	6	5.4	22	8.8
Government service	16	10.7	6	5.4	21	8.4
Private service	12	8.6	20	18.2	32	12.8
Petty business	22	15.7	27	14.6	49	19.6
Household industry	6	4.3	5	4.6	11	4.4
All	140	100.0	110	100.0	250	100.0

Thus nearly 60 per cent of the allottees in Kota and 47 per cent in Ghaziabad are simply daily wage earners.

Of the allottees 19.6 per cent are occupied in small retailing and hawking many of them vegetables, and fruits, perhaps and such other eatables. However, the proportionate share of petty businessmen is higher in Ghaziabad (24.6%).

Government service personnal, primarily postmen, peons, chowkidars, drivers, sweepers and others account for 8.4 per cent. Another 12.8 per cent are in private service, working in industrial, business or transport establishments. Barely 4.4 per cent of the allottees are in household industries.

Thus allottees are predominantly in informal tertiary occupations. Only a few of them are in primary and secondary activities.

Income Patterns

In both cases Kota and Ghaziabad, a majority of the responding households belong to the economically weaker sections of society. (In the recent past, the EWS income norms were raised from Rs.300 p.m. to Rs.700 p.m.). It can be seen from the table that more than 40 per cent of the households fell in the income category of Rs.100 to Rs.300 p.m. and nearly 28 per cent under the category of Rs.300 to Rs.700 p.m. This shows that roughly 70 per cent of the allottees have an average monthly income between Rs.100 and Rs.700. However, the proportionate share of low income groups of respondents is significantly higher in the case of Ghaziabad in comparison with Kota. In Ghaziabad more than 77 per cent of the households fell under this income category, while in Kota only 64.3 per cent of the responding households belonged to the economically weaker sections.

Table - 5.6

Average Household Income of the Respondents (Allottees)

(Rs. p.m.)

Income range	Kota		Ghaziabad		Both	
	H.Hs.	% to total	H.Hs.	% to total	H.Hs.	% to total
100 - 300	56	40.0	50	45.4	106	42.4
301 - 700	34	24.3	35	31.8	69	27.6
701 - 1500	20	14.3	17	15.5	37	14.8
1501 and above	30	21.4	8	7.3	38	15.2
All	140	100.0	110	100.0	250	100.0

Table 5.6 reveals that nearly 15 per cent of households fell in the income range of Rs.701 to Rs.1500 while more than 15 per cent of the allottees have an average monthly income of Rs.1501 and above. However, the proportionate share of these better-off allottees is fairly high in Kota in comparision with Ghaziabad S/S. To conclude, though the monthly household income structure in both the S/S projects consists of a predominantly low income population earning less than, or just Rs.700, these projects contain a sizeable percentage of middle income and higher income households also.

Project Affordability

Project affordability for beneficiaries in both the S/S projects in Kota and Ghaziabad can be examined from two angles, namely,

i. Repayment clauses; and

ii. shelter construction and consolidation.

While the first one is related to the financial affordability of the users the other is largely based on the physical development of shelter at the allotted site.

Repayment

Before the allotment of plots under the S/S project, allottees have to enter into several financial arrangements in order to buy the plots. The modalities of repayment are not the same in both the S/S projects under study. While in Ghaziabad, the allottees pay Re.1/- per day to the Ghaziabad Development Authority towards the cost of the plot and services rendered, in the case of Kota, a system of quarterly instalments of Rs.48 for EWS and Rs.192 for LIG plots is levied by the implementing agency (UIT). However, the number of instalments depends on the cost of plots in both cases. As reported, the repayment of plot costs is very sound and systematic in the Ghaziabad S/S projects as compared to Kota. In Ghaziabad 80 per cent of the respondents deposit their instalments promptly in the Vijaya Bank assigned for this task. The remaining 20 per cent are said to be having some problems because of a lack of regular income and consequent indebtedness.

Table - 5.7

Repayment Situation

S/S Projects	Regular payment of instalments	Irregular payment of instalments	Total Respondents
Kota	40 (28.6)	100 (71.4)	140 (100.0)
Ghaziabad	88 (80.0)	22 (20.0)	110 (100.0)

Table 5.7 reveals that the situation is alarming in Kota, where more than 70 per cent of the allottees have not deposited their quarterly instalments.

While asking questions on reasons for delay in instalment repayment, unaffordability within the limits of the present income emerged as the prime cause for more than 60 per cent of the respondents. The lack of regular income and indebtedness are other reasons expressed by 52 per cent and 46 per cent of the respondents respectively.

Table - 5.8

Reasons for Irregular Payment of Instalments

S/S Projects	Defaulters	Reasons (cumulative)			
		Unaffordability	Lack of regular income	Indebtedness	No response
Kota	100 (100.0)	60 (60.0)	40 (40.0)	30 (30.0)	10 (10.0)
Ghaziabad	22 (100.0)	18 (81.8)	12 (54.4)	16 (72.7)	4 (18.2)
Both	122 (100.0)	78 (63.9)	52 (42.6)	46 (37.7)	14 (11.5)

However, cumulative percentage of indebtedness is quite high in the case of Ghaziabad when compared to Kota, where it counts as the second major cause for irregular repayment in the case of 16 out of 22 defaulters. Ten respondents in Kota and four in Ghaziabad could not offer reasons for delay in repayment.

In short, the cost recovery mechanism applied in GDA-designed projects seems to be quite effective, unlike the Kota experiment.

Shelter Construction and Consolidation

Shelter have been built on al allotted sites either partialy or fully inthe Ghaziabad S/S Project. At Kota, however, the situation is just the reverse. Barring two, none have moved to the sites.

One of the reasons why allottees of the Kota S/S project did not want to put up shelters was the location. They felt that their place of work was too far away from the allotted sites and more than 97 per cent would have to commute over 2 km. every day, if they lived at the allotted site (Table 5.9).Nearly 75 per cent of the allottees

Table - 5.9

Distance of Work Place from the Allotted Site in Kota

Distance (Kms.)	Number of respondents	% to total
Up to 1	-	-
1 - 2	4	2.9
2 - 3	15	10.7
3 and above	121	86.4
All	140	100.0

complained that the site did not have basic services and roughly 56 per cent were of the opinion that building material was too expensive for building shelters (Table 5.10).

Table - 5.10

Reasons for not Putting up the Shelter on the Allotted Site in Kota S/S Projects

Reasons	Number of Respondents (cumulative)	% to total selected respondents	Ranking
Lack of money	79	56.4	3
Distance from the work place	135	96.4	1
Lack of basic services	106	75.7	2
High price of building material	79	56.4	3
Other reasons	43	30.7	4

In Kota, while almost all allottees listed reasons for not building on their plots, as many as 63 respondents said that they did intend to do so in the future. The time frame mentioned by them, however, varied, as seen in Table 5.11.

Table - 5.11

Shelter Planning at Kota

Time period (in months)	Number of respondents	% to total
Less than 6	18	28.6
6 - 12	20	31.7
12 and above	25	39.7
All	63	100.0

Planning alone will not serve any purpose without proper institutional arrangements for finances. It was the opinion of most of the respondents that they would like to construct the shelter but could not do so because of their poor financial status. Of 63 respondents, only five could arrange for money to construct a house with either their own money or borrowed from relations, while the remaining 58 were totally dependent on public or private credit institutions such as banks and moneylenders.

Table - 5.12

Sources of Funding for House Construction

Sources	No. of respondents	% to total
Own sources + friends & relatives	5	7.9
Credit institutions (Bank, money lenders)	58	92.1
Total	63	100.0

Thus institutional backup is an important tool to support low income housing activities and implementing authorities should study this issue while formulating housing projects, specially for the low income groups.

Since in the Kota S/S project, none of the allottees built shelters on the allotted sites, the question of housing activities did not arise. An attempt is made here to analyse this phenomenon in the Ghaziabad project where shelter construction and consolidation work is in progress. Table 5.13 gives the picture relating to shelter structure.

Table - 5.13

Shelter Structure

Shelter status	Original living place	% to total respondents	Allotted place	% to total respondents
Kutcha	72	65.4	34	30.9
Semi-pucca	18	16.4	30	27.3
Pucca	20	18.2	46	41.8
All	110	100.0	110	100.0

The table reveals that more than 65 per cent of the respondents had kutcha houses at their original house sites while in the case of the allotted place more than 70 per cent of the selected repondents have either semi-pucca or pucca houses.

However, most of the respondents (90%) have only a single room dwelling unit at the allotted place while at the original living sites nearly one third of them had two rooms or more.

The structures were kutcha in most of the cases. In this sense room occupancy rate increased substantially in S/S projects. Since most of the respondents prefer semi-pucca or pucca structures, they increased the occupancy rate while reducing the cost of construction keeping it within affordable limits.

Table - 5.14

Use of Space

Use of space	Allotted place		Original living place	
	HHS.	% to total	HHS.	% to total
One room	99	90.0	74	67.3
Two rooms	1	0.9	15	13.6
More than two rooms	10	9.0	21	19.1

Despite a poor financial status a significant portion of respondents constructed separate kitchens with living rooms, which showed their positive response to housing consolidation activities (Table 5.15)

Table - 5.15

Housing Activity

Housing activity	No. of respondents constructed	% to total
Separate kitchen (permanent)	84	76.4
Separate kitchen (temporary)	26	23.6

In fact, in the Ghaziabad project, GDA has not fixed any standards or norms and beneficiaries are free to construct whatever they want within their affordable limits. This has had a great impact on the shelter consolidation process in Ghaziabad. By and large, respondents use scrap and local building material for construction because of nonavailability of building material at controlled prices on the one hand and the high cost factor on the other.

However, nearly 41 per cent of the respondents are not satisfied with the present level of accommodation because of large family sizes.

Table - 5.16

Respondents' Satisfaction with the Present Accommodation

	Satisfied	Not satisfied	Reasons	
			Large family size	Former accomo-dation size
Number of respondents	65	45	35	10
% to total	59.1	40.9	77.8	22.2

In their opinion though plot sizes are sufficient to built two rooms of a reasonable standard, finance was the major hurdle. However, in the near future, most of the respondents would like to have two rooms, one kitchen and one bathroom, apart from the flush type latrine already provided under the project. For this they required atleast Rs.5000 each, by their own estimates.

Table - 5.17

Future Plans

Housing activity	No. of respondents	% to total
Two rooms	74	67.3
Kitchen	84	76.4

Expenditure Incurred on House Construction

More than 30 per cent of the respondents had incurred less than Rs.3000 on house construction, while only 10 per cent exceeded Rs.5000.

Table - 5.18

Money Spent on House Construction

Range (Rs.)	No. of allottees	% to total
Less than 3000	34	31.0
3000 - 5000	65	59.0
Above 5000	11	10.0

However, the majority of them (59%) had spent between Rs.3000 and Rs.5000 on this account. It is interesting to note that those who spent more than Rs.5000 belonged to the group of people who constructed homes with their own savings, assisted by financial support from friends and relatives. Moreover, their average family income though not substantial was higher than that of the other respondents.

According to housing experts, the sum of at least Rs.10,000 is required for the construction of a plain house with a semi-pucca structure, consisting of one room of a reasonable size, one bathroom and one kitchen. Compared to this the cost of housing in the Ghaziabad S/S project, as projected in the household survey was quite low. Table 5.19 gives the picture for three types of houses constructed by plot holders.

Table - 5.19

Reported Cost of Construction Per Plot Option

Type of house construction	Mean value (Rs.)
Kutcha	3000
Semi-pucca	5000
Pucca (partly cemented)	10000
Pucca (plastered)	20000

Research studies in Latin America and other countries have pointed out that self help building is always cheaper than any other form of housing. The self-builder is always guided by the idea of 'resourcefulness', that is, making the most economic use of the available resources, often through unofficial networks using secondhand (scrap) building materials and family labour, whereas a big building organisation will aim at the highest possible productivity, resulting in higher prices per unit.

Thus there is a case to replicat the housing projects based on the self-building mechanism as a realistic way to increase the formal housing stock within the means of EWS. However, realising that self-help efforts are not possible unless they are supported by technical assistance and materials loan, both in cash and kind, the promotion of mutual help is further necessary to facilitate low-cost housing in the true sense.

Sources of Money for House Construction

Only 20 per cent of the allottees constructed their houses with own savings and/or with the financial support of friends and relatives. The remaining 80 per cent allottees took loans from private money-lenders and banks.

Of these 80 per cent, 66 per cent borrowed money from money-lenders paying rates of interest ranging from 20 per cent - 40 per cent per annum. Nearly 14 per cent of the allottees had access to public financial institutions.

Table - 5.20

Money Arrangements

Sources of money	No. of Allottees	% to total
Own savings + Friends & relatives	22	20.0
Moneylenders	73	66.0
Public financial instituions.	15	

Hence, taking into account the financial incapability of a large number of low income group of people for house construction activity, Government should provide soft loans to these people through public financial institutions to intensify housing consolidation work at greater levels in low-income housing projects such as Sites and Services.

V.3. Project Impact

This section discusses the impact of S/S projects on the living conditions of beneficiaries. The impact has been measured through sample surveys convering two points in time that is, before and after the implementation of S/S projects. The following indicators were selected to measure the impact :

i. Shelter tenurial status;

ii. locational analysis (workplace - residence relationship); and

iii. infrastructural support.

Kota Experience

Unlike in Ghaziabad, in Kota allottees have not built shelters on the allotted sites under the S/S project owing to several reasons. Thus the project under reference had not made any physical impact on the living conditions of the respondents. However, data pertaining to their existing conditions (original dwelling place), within the context of the indicators, was collected during the field survey, for analysis.

As seen in Table 5.21 more than 50 per cent of the respondents belong to slums and squatter settlements. These settlements are largely concentrated in inner city areas.

Table - 5.21

Original & Existing Living Places of Respondents in Kota

Type of Area	No. of respondents	% to total
Squatter settlements	30	21.4
Inner city slums	42	30.0
Public/Private Housing	68	48.6

The table reveals that a significant number of respondents reside in rented houses in posh and semi-posh areas such as Talwandi Keshopura. Rented housing includes public and private dwelling units. In the case of private housing the affordability of target

groups is questionable indicating that in Kota, allotment of plots under S/S schemes was not done strictly based on the economic background of the people.

Shelter Tenurial Status

Of the 140 respondents, cases in Kota, only 27 per cent dwellings are owner occupied while the remaining 73 per cent are live either in rented accommodation or in illegal shelters. However the percent share of renters is quite high with more than 40 per cent living in public houses. Therefore, a fairly large number of respondents in Kota do not have access to owner occupied housing, and belong to the group that forms the housing backlog irrespective of their income categories.

Table - 5.22

Shelter Tenurial Status of Respondents

Tenurial Status	HHs.	% to total
Owner occupied	38	27.1
Rented	84	60.0
Unauthorised possession	18	12.9
All	140	100.0

Insofar as shelter structures are concerned, 51 per cent of the respondents in Kota live in pucca houses, 27 per cent in semi-pucca and the remaining 22 per cent in kutcha housing units.

Table - 5.23

Shelter Structure

Type of structure	No. of respondents	% to total
Kutcha	72	51.4
Semi-pucca	38	27.1
Pucca	30	21.5
All	140	100.0

In more than 60 per cent of the cases respondents have two-room accommodations and only in 22 per cent cases do they have single-room dwelling units. It is surprising that nearly 11 per cent of the allottees have accommodation of three rooms or more, indicating their better economic status than that of the target group and strengthen the earlier statement that in Kota the selection of beneficiaries was not done strictly on economic classifications and a considerable proportion of the middle and higher income groups were allotted plots under S/S projectg (Table 5.24).

Tale - 5.24

No. of Rooms per Dwelling Unit

No. of rooms/ dwelling unit	No. of Respondents	% to total
One room	31	22.1
Two rooms	94	67.1
Three rooms & above	15	10.8
All	140	100.0

Locational Analysis

From the locational point of view, a significant proportion of respondents have a positive relationship between their work-place and residence as is evident from Table 5.25.

Table - 5.25

Distance of Work Place from Original and Existing Living Place in Kota

Distance (in kms.)	No. of respondents	% to total
Upto 1	56	40.0
1 - 2	28	20.0
2 - 3	35	25.0
3 and above	21	15.0
All	140	100.0

It can be seen from the table that 40 per cent of the respondents have their work place within a radius of 1 km. and only 15 per cent of them have to commute 3 km. and above daily for work. More than 49 per cent of the respondents fall under the category of unskilled workers, and they reside in the core city areas enabling them to earn their livelihood through general labour and rickshaw pulling. Therefore, the location is one of the prime factors which influences allottees from not moving on to the allotted sites.

Infrastructural Support

i. Water Supply: Approximately 29 per cent of the respondents in Kota are served by domestic connections and another 28.6 per cent by the public standposts, making a total of 57.2 per cent served by piped water supply. The remaining 42.8 per cent are dependent on other means such as wells, handpumps and so on. Table 5.26 gives the picture.

Table - 5.26

Sources of Water Supply

Sources		No. of respondents	% to total
A.	Piped water supply		
i.	Domestic connections	40	28.6
ii.	Public standposts	40	28.6
B.	Other sources		
	Wells, handpump etc.	60	42.8

Respondents using other means of water supply, such as handpumps and wells generally belong to low income settlements.

ii. Night Soil Disposal System : More that 57 per cent of the respondents have inhouse latrines in their existing dwelling units and 14.3% depend on community latrines. A significant proportion (28.6%) of the respondents do not have access to any type of night soil disposal system either in their houses or community latrines, and use the open fields for this purpose. These people largely belong to slums and squatter settlements.

Table - 5.27

Night Soil Disposal System

Type of System	No. of respondents	% to total
i. Inhouse latrines	80	57.1
ii. Community latrines	20	14.3
iii. Open fields	40	28.6

iii. Waste Water Disposal System: Almost 60 per cent are served by the public drainage system that is connected with the city network. Only in marginal cases do they use private pits inside their dwelling units for waste water disposal. However, a considerable number of respondents (28.6%) residing in slums and squatter settlements are largely dependent on private pits outside their houses (within the settlement) for waste water disposal. Table 5.28 gives the picture regarding the waste water disposal system.

Table - 5.28

Waste Water Disposa System

Type of System	No. of respondents	% to total
i. Public drainage system	85	60.7
ii. Inhouse pit	15	10.7
iii. Private/natural pit outside the unit	40	28.6

iv. Electricity: Insofar as electricity is concerned, 57 per cent of the respondents have in-house electricity connections. The remaining 43 per cent either use street light during the night or traditional sources of energy.

In short, most of the allottees residing in slums and squatter settlements are not equipped even with basic infrastructural services at their original place of dwelling. But the allottees who belong to comparatively better income groups and reside in rental accomodation have much better access to core urban services.

Ghaziabad Experience

The sites and services projects in Ghaziabad mainly attract households used to living in either squatter settlements or inner city slums. Thus the implementation is regarded as a positive contribution to the housing problem and the living environment of low income groups.

Table - 5.29

Former Places of Living

Former living settelements	No. of respondents	% to total
i. Squatter settlements	67	60.9
ii. Inner city slums	35	31.8
iii. Others	8	7.3

Shelter Tenurial Status

Out of 110 respondents, only 20 per cent had a status of owner occupied houses in there original places of residence. Table 5.30 will illustrate their situation.

Table - 5.30

Shelter Tenurial Status of Respondents

Status	Original living place		Allotted place	
	Number	% to total	Number	% to total
i. Owner occupied	22	20.0	110	100.0
ii. Rented	55	50.0	0	0.0
iii. Unauthorised	33	30.0	0	0.0

Contrary to this, at the allotted sites all the respondents, irrespective of their former shelte tenurial status, have the status of owner- occupied dwelling units. Thus the house ownership in the formal sector helps allottees to become "respected citizens". On the economic front, it may increase the owners' income, in various ways, for example, by subletting or enabling them to open a shop or involve themselves in any other form of household industry.

From a social point of view, cross-subsidy is very important. In a country with large variations between income levels, where the poor do not have the financial means to provide for basic needs it is appropriate that housing is used as a tool for shifting money from the haves to the have-nots.

Locational Analysis

As stated earlier, a considerable position of allottees (60.9%) got plots under the S/S project at the same location where they originally resided at squatter or slum settlements. Therefore, the projects did not influence their earlier living conditions from the locational point of view. However, respondents who previously resided in the inner city slums and had not changed their economic activities, were affected by the new location of their residential units allotted under the S/S project. Table 5.31 depicts the situation.

Table - 5.31

Work Place and Living place relationship

Location		Distance (km.)				
		Up to 1	1-2	2-3	3 & above	All
A.	Respondents originally belong to slums and squatters of Vijai Nagar project area					
i.	Original place	10 (9.2)	30 (27.2)	20 (18.2)	7 (6.4)	67 (60.9)
i.	Allotted place	10 (9.2)	30 (27.2)	20 (18.2)	7 (6.4)	67 (60.9)
B.	Respondents belongs to inner city slums					
i.	Original place	25 (22.7)	10 (9.1)	-	-	35 (31.8)
ii.	Allotted place	-	25 (31.8)	-	-	(31.8)
iii.	Others					
a.	Original place					
b.	Allotted place					

While at the original place of residence, the work place of more than 70 per cent of the respondents was in the inner city slums, within a range of 1 km., from the allotted places they had to commute more than 1 km. to work. However, in most of the cases, they either owned their rickshaws or bicycles thus spending 10 to 15 minutes commuting to the workplace. In fact even respondents who did not possess any mode of transport spent not more than 30 minutes walking to their workplaces.

Infranstructural Support

The survey of the status of various core services such as water supply, Night Soil Disposal System, waste water disposal system and electricity reveals that these are now available to all respondents, while before the implementation of the S/S project the availability of these services was much worse.

Water Supply

While tap water supply is available to all the responding households at the alloted places, it was only in a few cases (7%) that they had access to piped water supply on individual levels at their original residences. However, roughly 40 per cent of them had the opportunity of using public standposts. The remaining 53% were dependent on traditional sources of water supply such as handpumps, wells, and tubewells. The following table gives the picture.

Table - 5.32
Sources of Water Supply

Sources	Original living place		Alloted place	
	No.of resp.	% to total	No.of resp.	% to total
A. Piped water supply				
i. Individual connections	8	7.3	110	100.0
ii. Public standposts	44	40.0	-	-
B. Other sources				
(Wells, handpumps, etc.)	58	52.7	-	-

Night Soil Disposal System :

It can be seen from Table 5.33 that all the respondents have access to flush type latrines inside their dwelling units in the new residential area of Vijai Nagar (Allotted Site). But at their original residences more than 50 of them had to go out in the open areas for defecation. Only in 15 per cent of the cases, respondents had facilities inside their houses while the remaining depended on community latrines.

Table - 5.33

Night Soil Disposal System

Type of System	Original place		Alloted place	
	No.of resp.	% to total	No.of resp.	% to total
i. In house latrines	16	14.5	110	100.00
ii. Community latrines	35	31.8		
iii. Open fields	59	53.7		

Waste Water Disposal System :

At all points the waste water disposal system at the alloted place is through open, pucca drains connected to the city network. While at original residences only 20 per cent of the respondents had the use of the public drainage system for waste water disposal the remaining 80 per cent used improvised means of waste water disposal, like small pits inside housing units, natural/private pits outside housing units.

Table - 5.34

Waste Water Disposal System

Type of System	Original Place		Alloted place	
	No.of resp.	% to total	No.of resp.	% to total
i. Public drainage system	22	20.0	110	100.0
ii. Inhouse pit	32	29.1		
iii. Private/Natural pit outside housing unit	56	50.9		

Electricity

As in the case of other services inhouse electric connections have been provided to all respondents at their new residences in Vijai Nagar. Adequate street lighting is also provided. However, it was reported that the power supply was not adequate and there were frequent power failures and voltage fluctuations.

In their original places of residence, only 15 per cent of the respondents had in-house electric connections, specially those living in iner city areas. Street lighting was also very poor in their former residential areas and only 20 per cent of them had access to it.

Table - 5.35

Electricity

Type	Original place		Alloted place	
	No.of resp.	% to total	No.of resp.	% to total
i. In-house conections	16	14.6	110	100.0
ii. Street lights	22	20.0	110	100.0
iii. No electricity; using other means	72	65.4		

In short, the sites and services project in Ghaziabad has been quite successful in providing shelter, social facilities, improving living conditions and promoting self-help and self-ownership.

However, the project has been less successful in providing employment and in integrated housing. There was specially a lack of flexibility in service packages, financial arrangements and building material; this resulted in slow response to felt needs and household priorities. Therefore an increase in flexibility will bring the project more within the means of the urban poor. This makes the advantages of self-building and ownership more manifest.

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