



Integrated Urban Housing Development



An Evaluation Of A Public Sector Low Income Housing Project in Alwar: India

WORKING PAPER 6
STUTI LALL
SOCIETY FOR DEVELOPMENT STUDIES

March 2002

This document is an output from the project funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of the DFID.

TABLE OF CONTENT

PREFACE	IV
I. INTRODUCTION AND OBJECTIVES	1
I.1. PERSPECTIVES.....	1
I.2. OBJECTIVES.....	2
II. METHODOLOGY OF THE STUDY	3
II.1. SELECTION OF LOCATION	3
II.2. SELECTION OF SAMPLE HOUSEHOLDS.....	3
II.3. IDENTIFICATION OF POOR HOUSEHOLDS.....	4
II.4. DETERMINATION OF INCOME LEVEL AT THE ENTRY STAGE.....	4
III. SHIVAJI PARK HOUSING COMPLEX: DETAILS.....	5
III.1. BRIEF HISTORY OF THE HOUSING PROJECT.....	5
III.2. LOCATION: SHIVAJI PARK	5
III.3. PROJECT SIZE	6
III.4. PLOT SIZE	6
III.5. PROJECT LAYOUT	6
III.6. COMMON CONSTRAINTS TO HOUSING THE POOR.....	6
IV. SOCIO-ECONOMIC BACKGROUND OF THE PROJECT CLIENTS	7
IV.1. OCCUPATIONAL CHARACTERISTICS	7
IV.2. AGE STRUCTURE AND EDUCATIONAL LEVELS.....	8
IV.3. INCOME STATUS OF THE HOUSEHOLDS	8
IV.4. SOCIAL COHESION	9
IV.5. SHELTER CUM WORK PLACE	9
<i>a. Overall Performance Evaluation.....</i>	<i>10</i>
V. HOUSING CHARACTERISTICS AND AFFORDABILITY	10
V.1. QUALITY OF DWELLINGS.....	10
V.2. COST AND REPAYMENT STRUCTURES	11
V.3. AFFORDABILITY AND HOUSE PRICE	11
VI. REASONS FOR ENHANCED AFFORDABILITY	12
VI.1. ADVANTAGEOUS LOCATION	12
VI.2. EASY FLOW OF MARKET INTELLIGENCE	12
VI.3. REDUCED DEPENDENCY SYNDROME.....	13
VI.4. WIDER MARKET FOR WOMEN	13
VI.5. SECURE TENURE	13
VII. LESSONS LEARNT	13
VII.1. EMPLOYMENT, AN ESSENTIAL COMPONENT	14
VII.2. CHOICE OF RIGHT LOCATION : PRINCIPAL KEY FACTOR IN THE PROJECT SUCCESS	14
VII.3. AFFORDABILITY ASSESSMENT: SECOND KEY FACTOR IN THE PROJECT SUCCESS.....	14
VII.4. A FLEXIBLE APPROACH TO PROJECT MANAGEMENT	15
VII.5. SUSTAINABILITY COMPONENT IN PROJECT PLANNING	15

Tables

TABLE NO.1. -SOCIO-ECONOMIC PROFILE OF THE SHIVAJI PARK RESIDENTS	9
TABLE NO. 2:AFFORDABILITY INDICATORS OF THE HOUSEHOLD IN SHIVAJI PARK	11

PREFACE

The study makes part of action research on urban poverty alleviation programme in India and Kenya, undertaken jointly by the Society for Development Studies (SDS) and the Intermediate Technology Development Group (ITDG) in the UK. The research aims to test the feasibility of establishing sustainable livelihoods for the urban poor through interventions in income and housing in an integrated fashion, a hypothesis, which was being propagated by housing experts in different parts of the world for the last two decades and subsequently recognized by UN-Habitat in the early 90s.

The present study was taken up with a view to examine in depth the impact of a sectoral project of the poor that ignored the complementary components of poverty. This is a case study of a housing support project that increased the capacity of poor households to hold on to the shelter through the housing investment multiplier. The project was undertaken by a local development agency in a secondary town, Alwar, in Rajasthan state in the North of India. It highlights the impact of a sectoral housing programme that stimulated income generation avenues by default, outside the housing sector and established the imperatives of adopting an integrated approach that enhances the hold-on capacity among the participants of the programmes to attain a sustainable livelihood. The study clearly points out the crucial linkages between housing and income generation by highlighting the fact that possession of a shelter, considered as a major plank for poverty reduction, cannot by itself achieve the goal without the regular flow of income, arising either from the use of shelter as an income generating asset or from other income generating capacity that helps enhancing the hold on capacity to the shelter, in terms of regular servicing and maintaining the asset. An important finding is that complementary aspects of an anti-poverty programme need to be consciously designed to accommodate the supporting factors, in order to achieve sustainable results.

Stuti Lall

New Delhi
March, 2002

I. INTRODUCTION AND OBJECTIVES

I.1. Perspectives

The common approach to the upliftment of the poor and marginalized groups in India in the late seventies, was to address the gap areas in terms of certain basic entitlements, a kind of slot filling. The majority of poverty interventions, therefore, has been highly activity/ sector-specific. Most probably, the assumptions were that different aspects of poverty needed different treatment and that they were neutral to the impact of other poverty aspects. The issue of sustainable livelihoods as a solution to poverty did not surface in policy and planning in India till the mid-eighties, as the recognition of the concern of poverty was of recent origin and therefore it was not seen as a long-term phenomenon by Indian planners. In the majority of programmes, the performance charts in terms of numerical achievements have been impressive as the criterion of performance was the number of interventions made and not their post programme status.

The two broad avenues to meet the challenges of uplifting the urban marginalised groups relate to income generation and the provision of livable shelter. In the case of shelter programmes, one of the negative outcomes of this approach was reflected in the high transfer rate of ownership from the original tenants to the non-targeted, with the result that there was no visible impact of housing provision on the number of shelter less. In the case of income poverty programmes also, the participants, achieved the status of above the poverty line (APL) during the programme period and then fell back to the original status of the poor.

One can trace the introduction of a sustainable poverty reduction strategy with the introduction of the sites and services approach, which was expected to provide on the one hand, normative employment to a large section of the urban unemployed and underemployed and solve their shelter problems with the construction by them, on the other. At a later stage, this approach had many twists, depending upon the availability of land and financial resources at the disposal of the government and the affordability to subsidized programme outputs by the community. For the programme architects, the results were not satisfactory from either standpoint. The programme did not create employment as assumed by them for the simple reason that the poor cannot afford to depend on normative income from the construction of houses of their own and that it did not solve their housing problems as the houses with secure tenure became highly valuable assets for the poor to be used as a consumption item. There was always a high demand for this type of property in the context of the limited supply of houses with secure tenure for the poor. The shelter thus possessed had a lucrative asset value to fall back on in times of stress and the rights to occupancy were sold. It was in this context that the earlier observation on the high rate of transfer of ownership was made. Furthermore, in India as elsewhere, the sites and services projects were invariably located outside the areas of work of the poor and as such, the hold on- capacity to the shelter of the poor was generally low.

The Society for Development Studies (SDS), an autonomous research and training organization in India spelt out for the first time in the mid-eighties a clear-cut strategy for the reduction of poverty on a sustainable basis through an integrated approach to housing and income generation. It talked about standard houses for the poor that can be used as collateral for income augmentation and enhanced affordability. A large number of financial measures to suit the poor were put forward. It showed that these measures did not hurt the interests of the

financial institutions but required an attitudinal change towards poor clients. In a large number of housing policies that it framed on behalf of State governments, SDS advocated for an acceptable housing standard suitable to the needs of the poor, and their economic activities and a suitable loan repayment system.

This approach was based on the field experiences that indicate income and housing as complementary assets for a sustainable solution to poverty for the basic reason that the hold on capacity to housing in terms of repayment of loans or servicing is possible only when there are adequate resources for that. It is a common experience in developing countries where housing projects for low income groups have failed due to the unimaginative approach of the planners. More importantly, the regular flow of income can act as a buffer against the temptation of the poor to sell he housing assets for meeting the demand for liquidity.

This concept of poverty reduction have been propagated by SDS in different forays in India and abroad. SDS experimented with this approach on behalf of the Government of Indonesia in the early eighties for meeting the challenges of housing poverty. The model developed has later on received a best practice award from UNCHS.

I.2. Objectives

The basic objective of this Study was to identify the inherent deficiencies of sectoral approaches to poverty alleviation, with the support of an evaluation of a public sector housing project that was designed to address the housing needs alone of the low income households in a medium size town in northern India. The town known as Alwar is situated to the South of the capital city of India –Delhi. The general view about a single sector poverty programme is that it ignores the multi- faceted dimensions of the poverty and assumes their impact neutrality. The experiences all over the world support the fact that the benefits of these projects ultimately reach non-targeted sections of society, who ultimately enjoy the non-intended full benefits of subsidy.

The second objective is to take a cue from the findings of the single sector study and come out with a sustainable housing delivery strategy that would be possible to be emulated by the national government for urban development. The prime focus of the action research on Integrated Housing Development for the Poor, of which the present study is part, aims to develop a strategy of housing delivery, incorporating the major aspects of poverty in an integrated manner.

An evaluation of the project performance, one and half decade after its completion, shows a high level of sustainability in attaining its objective of housing the poor, an achievement that has been not been so evident in housing projects for the poor in other parts in India. Most of these projects were found to be non-sustainable, as soon as project interventions were withdrawn. An important indicator of the success of the present project is the high retention rate of houses by original owners, about 70 per cent. The other indicator is housing upgrading by 80 per cent of the original project clients residing in the complex. The evaluation brings out the contribution of external factors that made up for the internal deficiencies in the Project design.

II. METHODOLOGY OF THE STUDY

The study has used a stratified random sampling method for selecting households for an evaluation of the impact of the project on the housing solution of 2800 low income households in Alwar. In selecting the site, one of the main considerations was to undertake a study of a low income housing project that had an advantageous location from the standpoint of the low income households, an understudied area of research, which had positive factors that would help in improving their socio- economic situation.

II.1. Selection of Location

The major reason for the selection of Shivaji Park as a project site was the logistic convenience. It is located very near to the city center. From the point of view of the project objectives, the main criterion was to choose a typical public sector housing project for low income groups that would add to the body of knowledge. SDS chose the project for its continuity over one and half decade and its added maturity. It was hoped that few positive aspects for the poor would have emerged that helped in improving their socio-economic situation. This was also the first and the oldest housing project of the UIT and therefore it was expected to provide a good testing ground for an objective evaluation of the project impact on the households in the complex. The second important reason was that there are no such projects in the city center of Alwar. The reason for selecting Shivaji Park as the project site by the UIT is not known. The UIT official could not throw any light on this issue.

A lot of empirical studies on the habitats of the poor located in the city periphery are generally available; they point out the negative results emanating from the location factors. Shivaji Park project offered an unique opportunity to test the hypothesis that the poor should be located in proximity to centers of work. The project was designed to accommodate 3000 houses and 156 shops. 95 per cent of the dwellings were earmarked for the poorer sections of society.

II.2. Selection of Sample Households

Like all public sector housing projects, this one also suffers from the usual selection problems of the target tenants. A major reason may be the subsidy element, invariably associated with public housing. The discussion with the UIT officials confirms the presence of inappropriate selection problems but according to them, the rate was not high. The reason they gave to defend their opinion was that in the early 80s, the in-migration in Alwar was not as much as in recent years, not because there was no strong push factor operating in the hinterland of the city but because Alwar did not have a very bright prospect of earnings to offer to the new migrants. As such, the scarcity of houses for the poor, manifested in squatter settlements and slums as in major metro or mega-polis cities in India, was not acute. The income certification of the economically weaker sections (EWS) households was easier.

For SDS, the problem of selecting appropriate households from the mixed income groups of households was of a different nature as the objective was to identify, as far as possible, the original occupants who were chosen on the basis of the low income criterion and to trace their housing and income history during the last one and a half decades.

In the first stage, the settlement was demarcated on the basis of rows of houses belonging to different income groups and only those houses allotted to Economically Weaker Section (EWS) and Low Income Group (LIG), were selected for the study. The sample size was decided to be 400 households, to be selected at random from the EWS and LIG households.

In the second stage, the name of the heads of households / the name of the buyers of the houses/plots were checked with the UIT and terms of loans and other details of the scheme were noted. This was a difficult process as the project records were no longer readily available and no officer is attached to the project at present.

In the third stage, the details of the tenants were cross checked with the statements made by the occupants during the preliminary household survey stage. Only those households having matching information with the records were short listed. However, the result of this exercise was interesting. It revealed that 120 of these households were non-original owners and that gave an idea about the transfer rate of the houses which was 30 per cent.

II.3. Identification of Poor Households

The crucial issue was to identify the households for an evaluation of the impact of the project on the original owners in the EWS and LIG blocks.

It was a difficult task to establish the original tenants, since one and a half decade had passed since the time the majority of the households had occupied their houses. In some cases, the original head of the households was not available. Therefore, a few proxy indicators were used to eliminate the non-poor households. One such indicator was the purchase of more than one plot in the name of different family members by a household or the acquisition of more than one house on consecutive plots within two years of occupying the first house. The second indicator was the existence of large extensions, e.g., households who had spent over Rs. 100,000 and erected a first floor (Sterling 6500 approximately in 2001). These households were discounted from further research on the ground of being non-poor. According to these criteria only one-tenth of the sample households from the original EWS and LIG categories were non-poor.

With this elimination process, the total sample number that has been analyzed in detail is 252 households.

II.4. Determination of Income Level at the entry stage.

This task appeared difficult in the face of a clear fear amongst the family members about the genuineness of SDS identification. They suspected that SDS team was from the Income Tax Departments, in spite of the presence of our local colleagues at the site. The data were generated through three rounds of PRA with the community members which could bridge the communication barrier between the community and the SDS team.

III. SHIVAJI PARK HOUSING COMPLEX: DETAILS

III.1. Brief History of the Housing Project

This is a case study of a housing project for the low income groups and economically weaker sections (EWS) in Alwar, a medium sized town in Rajasthan, located in the northern part of India. The project was initiated by the Urban Improvement Trust (UIT), the sole public sector organization in charge of infrastructure development and housing in the District of Alwar. The population in Alwar district was 2,50,000. According to a recent estimate, the poverty level in the urban area was 34 per cent.

The Project was basically a variant of a sites and services project, a common wave in the housing sector in the seventies and early eighties in India. This housing delivery system was considered as the most socially justifiable solution for housing the urban poor, as it intended to provide secure tenure and employment, the output of which would be crystallized in housing assets. The basic advantage of this housing delivery system is that it is not prescriptive and provides scope for extension and upgrading as per the affordability of the residents. Incidentally, this was the first project of this kind in Alwar and therefore, enthusiasm among the UIT officials in implementing this project was high.

The project was initiated in 1981 and, the construction phase was over by 1983. The EWS houses were handed out to the applicants between 1984 and 1987 on the basis of a lottery, after they were cleared by the UIT on eligibility criteria. The owners of the open plots took more time to complete the construction of buildings. A majority of the houses in the complex were built on an incremental basis.

The implementation of the Project was carried out through a tripartite partnership among UIT (provision of land and allocation of plots), HUDCO(Housing and Urban Development Corporation), the public sector housing finance company under the Government of India that provided loan finance and the private sector for construction of the houses. The overall management of the project was the responsibility of the UIT.

III.2. Location: Shivaji Park

The Housing Complex is located in Shivaji Park, only 3 km. away from the UIT and other important offices in the city. This is a very uncommon feature of the public housing projects for the poor in India and also in Alwar. Generally these projects are located in the city periphery, due to the availability of cheap land in this area. All major services and social and physical infrastructure are easily accessible from this place. The major educational institutions in the city are located within a distance of 4 - 6 km: the government hospital and city court are similarly located within a distance of 2 km. Also the retail and wholesale marketing centers are nearby. High and medium income public and private housing complexes surround the settlement and as such it does not suffer from the usual 'social exclusion' syndrome, a common feature of these projects. Immediately outside the residential complex, there is a row of shops, many of which are owned by the residents.

Shivaji Park Housing Complex is served with basic services such as a regular supply of water and electricity and waste removal services. The roads within the settlement are clean and it has are six well maintained open spaces.

III.3. Project Size

The total project area is 1.26 sq. km. The total number of population as per the estimate of the residents, was 17,350 in 2000. The total number of houses at present is 3000, excluding 156 shops that were allotted by UIT as part of the total project design. Originally, the total number of houses assigned to the Economically Weaker Sections (EWS) were 2887, and another 127 were plots were to be sold to the low/middle income groups. Ultimately, the total number of houses handed over to the selected EWS households were 2444 as 446 plots earlier earmarked for this section, were sold as open plots which fetched higher prices. This was done with a view to increase the cross subsidization capacity of the UIT for EWS housing.

III.4. Plot Size

The standard size of the residential plots was 36 sq. meter and that of the open plots varied between 72 and 100 sq. meter. The original built up plots provided one room (9.28 sq. meter) and a kitchen and a toilet connected to a sewerage line, a facility which 90 per cent of the citizens in Alwar do not enjoy. About two-thirds of the size of these plots was kept vacant with a view to provide scope for incremental housing so that the households could build structures as per the requirements and affordability of them. Out of the total EWS and other low income houses, only 20 per cent did not take advantage of this provision. It was observed that the majority of these non-extended houses were occupied by tenants. Some 5 per cent could not extend or upgrade their houses due to pecuniary difficulties. The sizes of the shops were either 9 or 14 sq. meter. The provision of the facility proved to be of mutual benefit to the residents as well as the shop owners.

The majority of the houses were extended both horizontally as well as vertically, thereby increasing the effective plot size to more than one and half times the original size.

III.5. Project Layout

The settlement is divided into six sectors, each having 500 plots. There are six parks, adjacent to each sector, providing a view from each house to the park. The houses are constructed in rows on both sides of the road and every two houses share a common open space, that has often been purchased by one of the two owners that share it and two storied houses have come up. However, the UIT was vague about the housing standard even though HUDCO had undertaken the responsibility of designing the houses and the settlement. There are reports that indicate that one block had caved in immediately after its completion in 1988. Every house is connected to a piped water supply, electricity and closed drainage.

At present 80 per cent of the EWS houses have two storied buildings, often without any open space, violating the FAR requirements. This is common for all housing groups.

III.6. Common Constraints to Housing the Poor

It is a common experience in developing countries that housing projects for the poor rarely reach the actual poor. Among many, the major factor that displaces the poor from the project benefits is the selection procedures that require certification of proofs by the authorized officials in the government. Many 'real' poor do not have access to them. The most important entry barrier to the projects is the income certificates as there is no accepted income measurement rod for the income of the poor. Often their income is seasonal, with a high range

of fluctuation and there is no document of such variations in the flow. As such, it dilutes the project objectives considerably and ultimately, the benefits of such projects are reaped by non-target groups who have much higher levels of affordability and access to concerned officials.

The second constraint is the sectoral approach of the housing projects. The objectives of these projects are concerned with the provision of housing and more often than not, with misconceived facilities, locations and repayment schedules, sometimes in virtuous isolation of the economic dimensions of the low income households. The public sector housing projects in India for the poor would strongly support this view. Under such circumstances, even when the houses under these schemes reach the poor, they often do not have the capacity to retain them.

The third constraint is the location of the public sector houses. These are mostly located outside or at the periphery of the cities/towns, thus taking away the edge in income of the poor households. The income loss is quite high in such cases and that opens up the process of transfer of ownership, leading to a bottom less pit situation where the poor take the lead role and remain poorly housed, as per their affordability. A concrete example of such a situation is a mixed income settlement with a thrust on houses for the poor, Surya Nagar, 6 km. away from the CBD and not well connected by public transport. It was developed 6 years ago, but seems to suffer from lack of takers of the project. About 60 per cent of the plots are vacant. The infrastructure is poorly developed and there is no adequate arrangement for water supply. The most important factor is that low income plots are all sold out but very few are occupied. According to the reports of the households in the complex these plots have been sold to the higher income groups and they are holding them for speculative purposes. In fact out of 96 plots for the low income households, only one third are occupied and only 6 per cent by original allottees. To do away with this vicious circle of poverty, the policy interventions need to be directed towards income enhancement programmes for the poor, independently of the housing related activities. If this is not possible, then at best the poor should be allowed to remain near their work centers. The present case study brings out the impact of the latter on the poor.

IV. SOCIO-ECONOMIC BACKGROUND OF THE PROJECT CLIENTS

IV.1. Occupational Characteristics

The occupation analysis of the households indicates the preponderance of self employment activities: over four-fifth of the households' main occupations were micro-enterprise and home based manufacturing (Table No.1). Small machine parts and household consumption goods are the main items of production. Micro-entrepreneurs were mainly engaged in retail sales of a wide spectrum goods and services required in the daily life of households. The facility to carry out these economic activities either within the shelter premises or in the vicinity of it, along with the nearby location of markets for buying the raw materials and selling of final outputs, have helped to increase the productivity of the households significantly, as well as providing scope for all the members to join in the production process as and when their time permits. An important offshoot of the advantageous location is the increased level of participation in the work participation by women in the family, many of whom started supplementary income avenues, mainly tailoring and other dress related activities that they work on at home and supply to the stores in the main market. It has therefore increased the effective working members in the households to a minimum of 2.5. This factor is reflected in the income progression by 6 – 8 times during a period between 1985- 2000.

While the distance to the work place in the case of micro enterprise households is 0-<1 km. distance, for home based manufacturers it is 3 km. In the latter occupation, the household members have to fetch the raw materials from the markets in the CBD area. The products of many are picked up by the buyers from the house. The maximum work place distance is 6 km. and that is commuted by about one-third of the residents. A large number of residents from these households are engaged in private organizations.

IV.2. Age structure and Educational Levels

The average age of the head of households is 48 years indicating the fact that they had purchased the house at a young age, before the age of 30 years. This finding is in line with many studies on site and services project. The main reason for this that they join the labour market very early, between 15- 17 year of age.

A most important finding is the education levels of the young members of the family, both males and females. The majority of them are secondary standard students, belonging to the 12- 17 year age group. The drop out rate at a little higher age group is common, which is in sharp contrast to the usual drop out age of 7 to 10 years in resettled colonies in Delhi, located at the edge of the city. This difference in the educational achievement behavior may be attributed to the availability of schools in the nearby settlements. In Alwar, the cultural traits do not allow the girl children to go out of the settlements for attending school.

IV.3. Income status of the households

The median income of the households in the EWS and LIG Blocks was estimated at Rs. 65,000 per annum, indicating a monthly income of Rs 5500 approximately. In 1986-87, the annual income level was Rs. 8100, a little more than 12 per cent of the present income. The increase was 7 fold over a 16 year period. The highest increase in income is found to have taken place among micro entrepreneurs, followed by home based enterprises, who seem to have reaped the benefit of location advantage most. For others, the short distances to the work place had helped them to retain the house and increased the human capital of the family members. According to the UIT, and also the household survey, a high proportion of them belonged to BPL(below the poverty line) income category at the entry stage.

Table No.1. -Socio-Economic Profile of the Shivaji Park Residents

Occupation	Number/. Percent	Median Income Per annum (RS)	Income per annum in 1984-86	Change in Income %	Distance to Work place (km)	Retention rate of ownership of Houses*
Home based Manufacturer	88 /35.0	60,000	8,000	+650.0	3	78.0
Micro enterprise	116/ 46.0	72,000	7,600	+847.4	0-1	86.0
Service	15/6.0	60,000	9,000	+566.7	5-6	55.0
Miscel- laneous	33/ 13.0	48,000	7,800	+515.4	1-5	70.0
Total	252/ 100.0	65,000	8,100	+702.5	1	70 .0

Note: * estimated from the original sample households.

Source: SDS Household Survey 2000

The findings are encouraging. The increase in income is not rare among the households in mega-city slum settlements; more important is the retention of the houses for a long period and addition to them due to the higher income flow during the residence period in Shivaji Park. A positive indicator of the improved income status is that all the sample households had invested in home improvement within the first five years of occupying the house and the minimum amount of investment was worked out as Rs. 15,000.

IV.4. Social Cohesion

The social cohesion within the individual housing Blocks was found to be very strong. One reason for this may be the long association with the neighbors on a continuous basis. But this is significantly absent at an inter block level, where in most cases there are no direct meeting facilities every day. The higher income blocks demarcated for 25 per cent of the residents seems to be a contributing factor to this non-cohesion.

IV.5. Shelter cum Work Place

The retention pattern of ownership by occupations in Table 1 strongly supports the workplace cum residence thesis that SDS has been propagating for the past one and a half decade as the sustainable solution to poverty reduction, specially in medium and small towns, where a large majority of households depends upon home based activities. In Shivaji Park, about 80 per cent of the households were found to be engaged in home based activities and the transfer rates of occupancy in these occupations are the lowest, 14- 22 per cent only. The overall transfer of ownership rate (30 per cent at the project level for the EWS and LIG households) is rarely observed in a single sector project. A high rate, around 60 to 70 per cent is common, due to a number of factors, such as lack of adequate holding capacity to shelters, absence of income generation in the neighborhood, long distance of work place and high commuting time and cost, inadequate social infrastructure, specially schools and medical clinics, which make it uneconomical for the poor to continue with the subsidized shelter. The basic objective of highlighting the occupational characteristics is to remind the implementing

officials about the need for considering occupations along with other factors for the selection of the participants. .

In India, especially in smaller towns, a majority of the low income groups rely on home based/ micro enterprises for their livelihoods. Apart from time saving in commutation in these occupations, the support of the family members is an important factor for enhancing production of the enterprises at a low cost as the majority of these members are not gainfully employed elsewhere and therefore the opportunity cost is low. In the case of employed members, additional work increases their productivity, though this has not been measured.

Secure tenure can immensely improve the productivity of these occupations as it provides a continuity in the location which also helps establishing networks. The evaluation also establishes a close relation between the home based occupations and sustainable shelter, a factor which may be given greater weight at the selection stage of the target households

a. Overall Performance Evaluation

The evaluation of the project's performance brings out a number of beneficial impacts on the households. The project was conceived well in terms of costing which was made affordable with cross subsidization from other income groups housing, even though that meant some reduction in the share of low income houses compared to that earlier planned, easy terms of repayment and close monitoring of it. The most important factor is its choice of location even if it was not a choice by design. The choice of the site near the city center acted as a catalytic factor for the success of the project objectives. It had been possible to settle a group of low income people on a sustainable basis due to the employment opportunities that the location offered to the common people and for which the local government did not have to incur extra cost or sacrifice the sleep of the officials. The project has a high emulative value for urban development policy makers.

The layout of the settlement as well as the dwellings was well conceived which created a hygienic environment both at the dwelling unit level and in the settlement. Shivaji Park does not give the impression of a claustrophobic settlement, so typical of resettlement colonies in Delhi.

V. HOUSING CHARACTERISTICS AND AFFORDABILITY

V.1. Quality of Dwellings

Originally, all the houses were one story, standard reinforced concrete buildings. More than on privacy, the design of the houses places emphasis on the open space, beneficial for self employment. The piped sewerage adds to the quality of the houses. The toilets, as mentioned earlier, were connected to a sewerage line, a facility which is rare in Alwar. The houses enjoy individual piped water facilities which, again, are not enjoyed by similar settlements in Alwar. As mentioned in earlier sections, in terms of open air, the housing design is good as it provides the facility to all houses. There has been, however, a significant deterioration in the basic services due to non-maintenance of the infrastructure assets. Drains often overflow and it seems that the sewage lines were not laid as per specifications; this frequently leads to water logging.

V.2. Cost and Repayment Structures

The original allotment cost of EWS/LIG houses was Rs. 13,500. The final cost of the house after including all other charges was estimated at Rs. 26,000. The annual interest rate was 4.5 per cent, the down payment amount Rs. 3,000, and the monthly installment was Rs. 110, spread over 156 installments over a period of 13 years. Going by the median income level of EWS households in the early eighties (Rs. 8100 per annum), it would have taken only 3.2 years of income to pay for the house. This was a very reasonable deal, according to the households.

V.3. Affordability and House Price

In effective terms, the burden of installments was reduced with time as the majority of households had steadily improved their income over the period of 15 years and affordability went up steadily.

On average, the medium cost of these houses in 2001 was Rs. 42,000, which included extension and upgrading cost in the existing structures. The present market value ranges from Rs. 65,000 to Rs. 140,000, depending on the location, quality and nature of extension and size. The median house price was estimated at Rs. 75,000 indicating a benefit of 79 per cent over the cost if the households had decided to sell. The premium is low, compared to Delhi and Mumbai, and it may be attributed as one of the reasons for high retention rate of the improved houses in Shivaji Park. It may also indicate a fairly balanced housing market in Alwar. Actually, the availability of agricultural land for housing, although not approved by the UIT, has increased the low cost housing supply in the market. The price of a present low income house in the public sector and that of a house on a double plot in these lands, is twice as high.

The annual income of the sample households varies from Rs. 30,000 to Rs. 72,000. The median income of households was estimated at Rs. 65,000 per annum. It indicates a 7 fold increase in the income level. This compares to a less than 2 fold increase in house price. In effect it means that the affordability of the households in this settlement has increased significantly. The house price to income ratio at present stands at 1.1 years only as compared to the original ratio of 3.2. (Table no.2).

Table No. 2: Affordability Indicators of the household in Shivaji Park

Year	Median House Price (Rs.)	Median Annual Income (Rs.)	House-Income Ratio	Additional Investment in Shelter (Rs.)
1986	26,000	8,100	3.2	
2000	75,000	65,000	1.15	16,000

Source : Household Survey, 2000

As per the UIT records, the majority of households had repaid loans within the stipulated time period, which supports the evidence of increased affordability.

Interviews with the households point out the main considerations that motivated them to be a member of the scheme and to continue with it were affordable terms of payment and the proximity of the location to the city center. The town center proximity was the most attractive feature as it offered development prospects to all members of the family. The impact is reflected in the high retention rate and income prosperity. These findings are in sharp contrast to most of the project experiences that have been documented so far in India.

VI. REASONS FOR ENHANCED AFFORDABILITY

The remarkable achievements of the Project participants in terms of income rise and housing improvements within a period of one and half decades, can be attributed to a number of factors, which are largely related to the location of the project site. The household survey also supports that view. A large body of research results on the negative impacts of the wrong siting of projects, mostly in the city periphery, without good connectivity to the city centers shows that this factor often dislocates the project objectives completely by paving the way for housing the non-target groups with higher affordability. In the following section, the reasons and impacts of the Project on enhanced affordability of the households are discussed.

VI.1. Advantageous Location

The analysis of the 252 original owner households in Shivaji Park brings out encouraging findings that are generally not found in public housing projects. The most important factors from the standpoint of the success of the housing project are the high retention rate of the original owners (70 percent), the incremental extensions to 80 per cent of the houses which were made possible by a high increase in the income levels of the households; it went up by 7 times over a 16 year period and explains the reasons for the above achievements. As per the information of the UTI and also from the households, a high proportion of them belonged to BPL (below the poverty line) income category at the entry stage. The majority of occupations, which require a nearby work place for enhancing productivity and marketing, greatly benefited of the proximity of the settlement to the CBD.

The reduced commuting distance between the work place and the shelter, which went down from the pre project average of 15 km to an average travel distance of 4 km. at present, had a definite impact on the productivity of households, not only in terms of work, because of saving in time and energy, but also in terms of disposing of many family responsibilities in lesser time than before. It has also provided opportunity to the children to join schools which are located at short distances.

VI.2. Easy Flow of Market Intelligence

A major reason (about 60.0 per cent of households claimed it) for the significant improvement in the income status is the increased flow of information on job opportunities, which has helped the households to diversify their avenues of employment and for many it has helped in fetching better prices for their products as they could experiment with new markets for their product outlets and also explore markets for cheaper raw materials. All these were possible because of the shift of shelter to the city center. In fact, none of the sample households was found to be engaged in a single occupation.

VI.3. Reduced Dependency Syndrome

A drastic change took place in the marketing system of products: 70 per cent of entrepreneur households could reduce their dependence on the middlemen, the most acknowledged marketing agents. This was specially beneficial to the home based workers who often depended on them for the disposal of their entire products. With the shift to the city centre, the household members learnt the art of negotiation with suppliers of inputs and buyers of products and saved the surplus gains so long claimed by the middle men. This development, they claimed, not only helped them saving higher amounts, but more important was that it provided a psychological boost to their dormant entrepreneurial capacity and increased efficiency.

VI.4. Wider Market for Women

Many women (40.0 per cent) who did not work earlier were reported to be gainfully employed due to an easy access to markets and an opportunity of acquiring skills. The survey brings out that the market for many women is found within the settlement itself. This was possible because of a large number of neighbors in the settlement and clients in nearby markets.

VI.5. Secure Tenure

The most important factor was the clear title to the shelter that was given to the households by the UTI at the end of the full payment. This helped some of the households in obtaining credit from informal and formal financial institutions, specially commercial banks in the city. The household members also claimed that a permanent house which they owned instilled a feeling of self-respect among the elders as well as younger members of the family. In fact, some have claimed that this status has helped them getting admission in private schools and provided better footing for negotiating the marriage of their children, specially of the daughters. Because of the permanent ownership, they could spend more for such social functions. To many, the objective of joining Shivaji Park Project was to have a regular house held in ownership, and the convenient location of the project. These were the observations of 90.0 per cent of the households interviewed. Only 10.0 per cent of these households had a regular house prior to the house in Shivaji Park. But none of them had one in Alwar town. The second motive is the future prospects of the offspring in the family.

VII. LESSONS LEARNT

At a first glance, the Project could be branded as a single sector project and hence, could be apprehended to contain high potential for failure. The Project, in tune with the sites and services project patterns elsewhere, does not provide any slot for income generation and in spite of that, it turned out to be a successful case of integrated housing after 15 years of existence, with as many as 70 percent of the original allottees under the scheme settled in Shivaji Park and 100.0 per cent of the EWS households graduating out of the poverty trap during the period.

VII.1. Employment, an essential Component

What are the reasons for this unexpected outcome of sustainability in a single component project, which ultimately assumed the characteristics of an integrated shelter-income generation project? The most critical factor is the employment opportunities and income advancement of the households that were created during the project life and contributed to the successful completion of the project. The crucial factor was income that led to retaining the houses by the original owners.

Thus, the most important lesson that should be drawn from the Shivaji Park Housing project experience is the infallibility of the provision for income opportunities in a housing project for the poor. It does not matter if the income component is not considered at the beginning of the planning stage as a part of internal planning. The objective is fulfilled if the households have access to income opportunities and that is often possible when a project is located near the city center as is the case with Shivaji Park, which created ample opportunity to the households to enjoy the housing facilities. The employment part was an offshoot of the location but vital for the success of the project.

VII.2. Choice of Right Location : Principal Key Factor in the Project Success

The location of the settlement in the close proximity to CBD created income opportunities. Actually, it created a world of opportunities which could be reached in a short span of time and no intervention was necessary. It is true that a higher value could be added with the intervention of appropriate / better technology and more focused market information and training. But it requires specific expertise in these areas, which are not available in the small towns and more often, are not available. The proxy to income generation provision has been the choice of excellent location of the project, conducive to income generation. The high percentage of houses which had undertaken improvements in terms of adding more rooms, bathrooms and sometimes whole floors, was made possible by the income improvement facilitated by location advantages. The project did not spend any resource on it, neither did it have any plans for that. The unintended benefit made the project claim to be considered as an integrated project and a successful one.

The housing literature is replete with evidence of the crucial role of location in contributing to the success or failure of a project. Shivaji Park is a clear example of the success of a housing project due to its location advantages.

VII.3. Affordability Assessment: Second Key Factor in the Project Success

A major success factor of the Project is the realistic assessment of affordability of the target groups, a rare phenomenon in housing projects. A monthly installment of Rs. 110 was reportedly not a burden on any household at any point of time. Even during the initial phase, if the income is assumed to have been as low as Rs. 8,801 per annum, the installments did not exceed 16 per cent. This is also indirectly proven by the extensions added to the majority of the houses, the minimum investment size being Rs.15,000 in the EWS group. This would not have been possible without additional income generation in these households.

Another critical aspect of this project is the timely repayment of the loan, a factor that requires professional monitoring of the households and understanding of the nature of income flows of the project participants and their timing. In India, some of the Rural Banks have been highly successful on account of such close monitoring of the participants. The record indicates 80 .0 per cent of households having paid dues in time.

VII.4. A Flexible Approach to Project Management

The fourth lesson that Shivaji Park Project provides is the imperative flexible approach to project management. One such instance was the decision to convert 25 per cent house plots for the low income groups to open plots for higher income groups as there was more demand and this could help cross-subsidization through lottery prices. Instead of constructing the proposed 2,887 houses for the EWS of the community, for which the accredited demand was not overwhelming, the UIT very wisely chose the above strategy for cross-subsidization in the cost of the EWS houses.

VII.5. Sustainability Component in Project Planning

The last important lesson is derived from the close observation of the total environment of the project . The most evident unsustainable aspect is the over flowing of the sewerage lines, arising out of the non-maintenance of the infrastructure assets. Some blocks are flooded with water due to their low base. Solid waste is not removed regularly. These factors lead us to the issue of differentiating between integrated planning and the sustainability concept. While the former can be achieved with the convergence of inputs in a coordinated fashion., sustainability can be achieved only when there is continuity in maintenance, which requires an updated data base, close monitoring and resource generation for these purposes.