

EXECUTIVE SUMMARY

The main objective of the Karnataka Housing Board (KHB) is to take up measures to meet the needs of housing in the state. The objective of the present evaluation is to determine the success, gaps and reservations in the scheme envisaged by KHB.

KHB does contribute a lot towards affordable housing but no study on evaluating the success, failures, weak points and strong points has been done. If the weaknesses in the schemes executed are known, precaution can be taken to avoid such weaknesses in the succeeding schemes.

A study on findings from previous studies has revealed that human attributes on housing performance are more often than not neglected. Post Occupancy Evaluation (POE) as a process for evaluating building performance was sighted by Shen, Shen and Sur (2012). The term POE seems to have originated from occupancy permission given to certify that a property is fit for occupation by Riley, Kakkarinen and Pitt in 2010.

The evaluation of building's post occupation is still in the nascent stage in India. Both pre-construction evaluation and post-construction evaluation is needed. The former to assess the best quality construction and latter to a comfortable quality of apartment life.

The scope and objectives of the study is to assess:

- 1) Achievement of objectives of KHB with the implementation of this housing project;
- 2) Process of allotment, perception and satisfaction of occupants on the services provided and;
- 3) Violations of the agreements signed with KHB by the occupants of houses.

The data required for evaluation was collected through secondary and primary sources. Secondary data was collected from official stake holders like KHB, BUDA and BCC. Primary data was collected through actual inspection of building, resident stake holders and through discussion and questionnaire with the stake holders.

The Evaluation Methodology addresses all the aspects pertaining to the study as outlined in the TOR. The study sample includes inspection of all apartments occupied, Interviews with all allottees living in the apartment and 50% of tenants living in the apartment complex.

A reconnaissance survey was undertaken to assess reality situation. Discussions were held with KHB, BCC and BUDA. The required data was later collected *in situ* through personal interaction and interviews with all stake holders as per Schedule. The data collected through interview schedules, allottees, questionnaires, inspection checklist and FGD schedules were collated and collected.

KHB confirmed that a local demand survey was made to ensure that the housing project would be a success. The local demand survey had indicated that there was a demand. The land in Sy. No. 219 (P) admeasuring 2 Acres – 10 Guntas was handed over by the Revenue Department under the directions of the DC, Belagavi at the rate of Rs. 180/- per Sq. Ft for construction of its own residential quarters for its staff in Belagavi and elsewhere in lieu of the cost of land.

The analysis reveals that 40% are natives of the City while 27% are from other parts of the district. 19% are from different parts of the State. The analysis also reveals that 86% are happy with apartment culture. Generally, the residents prefer apartment for security, safety and social interaction.

As far as the quality of construction is concerned 86% were satisfied and about 14% were not totally satisfied due to poor finishing and poor quality furnishings. Generally, the residents are not satisfied with the sewage disposal system.

The residents are satisfied with the location as it is in proximity to civic amenities like shops, health clinics, bus stand, Railway station, community halls. The residents are not satisfied with the usage of certain materials in the construction such as CI pipes. Property tax payment is a source of worry to the residents as they have not obtained OC yet.

REFLECTIONS:

The allotment done according to norms and pricing is also fair, as the KHB is a no-profit – no – loss agency. Some of the apartments have not yet been allotted / auctioned. It would be better if allotments / auctions are done within a specified period after completion. As far as technical compliance is concerned, the physical and structural characteristics of the building shows that they are designed and constructed based on Government approved specifications and are structurally safe.

CONCLUSIONS:

The main conclusions of the study are indicated below:

Techno Related

- ✓ Instead of entrusting the work on Lump Sum (LS) contract, works could be entrusted on item rate contract since there will not be any ambiguity and no party will be benefited. In case of LS projects there is even likely-hood of benefit either for the department or the contractor.
- ✓ Proper planning is needed in obtaining necessary permissions from the external Department such as BCC, BUDA, KSPCB & HESCOM, in order to not only avoid delay in completion of project and to ensure that beneficiaries are not trouble in the issue of OCs.
- ✓ All external sewage lines and cables must be provided in vertical ducts instead of providing on external walls of building which is not aesthetically pleasant.
- ✓ The make and brand of fixtures etc., shall have to be mentioned in the specification to maintain and long durability
- ✓ All working drawings have to be finalized before calling tender and based on working drawings the quantities have to be calculated in order to avoid variations/benefit.

Environment Sustainability

- ✓ The site is on a tank bed with a nala flowing adjacent. Any tank bed will attract certain amount of flooding, even when care is taken, during heavy rains. The floods may last for a few hours but is harmful.
- ✓ In close proximity to the site a railway line passes. Such sites should be chosen after great examining for housing.
- ✓ The location of the site should be free from air, noise and water pollution. As there is no STP at present there is air pollution as drains clog and emanate smell. In addition the adjacent nala to which the basic treated sewage flows emanates smell. It is a breeding place for mosquitoes and there is danger of diseases like dengue, malaria and typhoid.
- ✓ As the housing complex is not supplied with treated municipal water and depends on the bore wells, the quality of water has to be checked frequently. Though there is every possibility to provide treated drinking water, the proposal has been held back due to technical and administrative reasons.

Socio- Economic Related

- ✓ Socio - related issues, in the present context, mean the comfort / recreation related issues for which the residents are concerned. They aspire for proper allotted parking lots, proper play space, library, community hall etc.
- ✓ Parking lots should be equal to at least the number of apartments to avoid a crowding situation. Hence, at the planning stage itself this issue should be tackled.
- ✓ In a public housing system, the no. of apartments ought to be the criteria even if it means cutting down the number of apartment's space wise, to provide more convenience to the residents. A better planning exercise could help in making housing complexes more comfortable.

LIMITATIONS

- ✓ The analysis is based on the sample approved by KEA.
- ✓ The findings of the study cannot be taken as a replication for other Highrise buildings as conditions may differ there.

RECOMMENDATIONS

➤ **Short Term**

1. The land use from P/PG/OS should be got changed to residential use by KHB from the UDD.
2. The Other unsettled aspects should be settled with the concerned departments to smoothen the process of their OCs.
3. The plan violates the then prevailing ZR. It has to be examined and regularized at the earliest to ease the anxiety of the residents.
4. The NOC or declaration by the Railway Authorities to the effect that there is No Objection for the existing complex has to be obtained to avoid future complications.
5. STP should be constructed and CFO should be obtained from KSPCB.
6. Steps may be initiated to sell the remaining flats by the KHB.

➤ **Long Term**

1. While planning for housing, in urban areas especially where masterplans are approved by the govt. under KT&CP act, lands earmarked for residential use should be identified to avoid complications. In other areas, KHB should have details on:
 - i. Location of land
 - ii. Land use as per MP.

- iii. If not, under LPA or local authority, full details with surroundings.
2. Approach road with width and classification of road.
3. Kharab land details and surrounding land use including tanks and nalas.
4. ZR applicable before finally selecting the land for development.
5. Inspection of land jointly by the LA section, engineering section and Town planning section should be made before notifying the land for acquisition.
6. A constant coordination between KHB and the concerned local authorities should be there to avoid delay/refusal in obtaining the OCs.
7. No construction must be taken up without proper NOCs and permissions from concerned authorities.
8. In group housing, apartment should be planned to provide for EWS and LIG also, on the prescribed % rules and norms.

➤ **Policy Related**

1. Coordination between various Govt. agencies connected to public housing/ offices/ colleges/ commercial and multiplexes should be a priority by KHB before taking up the scheme.
2. Any lapse for any issues connected with land, accountability may be fixed.
3. The KHB should function as a local authority till the OC is issued to the buyers and then handed over to the concerned local body. This is provided for in the act itself. If there is any dispute for taking over the completed scheme from the concerned local body for any technical/ administration reasons, accountability may be fixed.