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## Factors to be considered for location selection for affordable housing

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### ABSTRACT

*Due to the rise in population in metro cities, there has been a substantial rise in the demand for houses. This demand, however, is more from the service-going employees which majorly falls under lower and medium income group. To fulfil this increasing demand and meet these uprising challenges, affordable housing has more or less become the necessity of our developing country. Affordable housing is a challenge that many countries are currently dealing with. "Affordable housing refers to any housing that meets some form of affordability criterion, which could be income level of the family, size of the dwelling unit or affordability in terms of EMI size or a ratio of house price to annual income." Along with constructing the right number of houses, constructing it within the right budget is also equally necessary. With an increase in the rate of land parcels in and around the metro cities, selection of appropriate land parcel plays an important role in keeping the project within the desired budget. Budget is the most crucial constraint of the project and not much buffer is available for the same. Undertaking an affordable housing project should be such that the profitability of the developer company is achieved as well as the financial needs of the consumer are complimented. It should be a win-win situation for both parties. To execute such a project, the location for the project should be well planned. This is especially important for targeting the pricing sensitivity to locational advantage. Selecting the appropriate location will solemnly solve the budgetary restriction for the developer and the tenements. In this research paper, we will discuss the factors to be considered while selecting an appropriate location to execute a successful affordable housing project.*

**Keyword**— Affordable housing, Right budget, appropriate land parcel, Profitability of the developer.

### 1. INTRODUCTION

For project success, it is important to see affordable housing projects through the lens of design thinkers— an objective lens that provides visibility and meets the expectations of both the developers' and the end users' needs.

By 2022, India could overtake the US to become the second-largest middle-class population in the world with over 380

million Indians, as per the Brookings 2017 report. With the growing number of middle-class Indians comes to the increasing demand and need for home ownership. There are robust discussions on the supply shortage of affordable housing. However, discussions on the shortage of quality are not as focused or as robust, although these aspects are critical for project success.

Middle-class Indians referred to as 'aspirational middle-class', need a housing solution that satisfies their aspirational goals and is scalable to accommodate increasing demand. We believe that achieving aspirational affordable housing across tight budgets requires expert design thinking and solutions.

It is important to find the balance between a product that is selling well in terms of quality and a product that is selling fast in terms of quantity. The win-win situation is when a well-designed product is selling well and fast and exceed the users' needs.

One should believe that he should share this and similar learnings to all his clients as there is a significant impact on the end user's well-being, home and built environment as well as better scalability of the project.

We will discuss 4 key considerations for site selection for affordable housing projects.

**(a) Social infrastructure and everyday needs within 2-5kms radius:** Given the inelasticity of monthly expenditure, it is important to select a site where there is adequate social infrastructure (such as schools, workplaces, hospitals, shopping, etc.) within 2 to 5 Kms radius. In addition to meeting everyday conveniences, a well-located site also reduces commute times for families, thereby saving time and transport costs.

**(b) Affordable amenities within and outside a community:** Growing families have evolving needs in terms of amenities. It is important to identify a site where there are affordable amenities in the immediate neighbourhood such as public and private educational, healthcare and activity centres.

**(c) Livelihood opportunities in the neighbourhood:** Working families in this sector thrive well when there are substantial

livelihood opportunities for both genders as well as adult members of the family. Selecting a site close to or with easy public transport access to large centres of employment will also ensure an accelerated rate of sale of the units.

**(d) Availability of well-connected public transportation:** Another critical point during site selection is the availability of well-connected public transportation as well as proximity to large transport nodes. This has a significant impact in improving commute flexibility for end users as well as growth in capital value of the property over time for end users.

For residential projects to be affordable for low-income as well as middle-class families, it is important that the land component of the sale price is kept to an optimal minimum. Typically, sale price includes land purchase cost, land acquisition costs, consultancy costs, construction costs (incl. contingencies and escalations), project administration costs, marketing costs, sales commissions, finance costs, and profit component.

While there is little flexibility in optimizing the smaller components of the sale price (like land acquisition costs, consultancy costs, project administration costs, marketing costs, sales commissions, finance costs), there is more flexibility to optimize costs in land purchase, construction, and profit.

However, to develop a real estate product that is highly saleable, the locational advantage is critical. Which is why any compromise on land purchase costs should be evaluated keeping in perspective the needs of long-term residents and their everyday necessities

This doesn't mean that the developer needs to pay extra for more suitable land.

This perspective could be explained by describing two scenarios. **Scenario 1:** Typical land strategy is to buy land of low cost in the suburbs of the metro. While the land cost may be low, so is the allowable FSI in those areas. This means the Land cost per Sq. FSI is still a significant component of the final sale price.

In addition, it has been noticed that many remotely located projects have low sales velocity and sales price premiums. This leads to a conservative return on investment for the developer and an affordable, but not ideally located, product for the end user.

**Scenario 2:** In the case of Developers who are identifying land for acquisition that is closer to metro areas or city limits, the land purchase price may be higher but so is the permissible FSI. What this means is that the Land cost per Sq. FSI on this larger project become a smaller component of the final sale price.

Keeping all else the same, this translates to developing a project where there is an increase in sales velocity, sales premium, and return on investment. All of which is due to the locational advantage, that is a high priority item for the end-user.

Scenario 2 demonstrates how this is a win-win situation for the developer and end-user. Finding the balance between a product that is selling well in terms of quality and a product that is selling fast in terms of quantity has become an integral part of projects under affordable housing.

Catering towards a specific user group is crucial and understanding the target persona allows us to suggest which affordable housing solution is suitable. This gives us clarity to the question "Are we designing and delivering a product that the end-user needs and will benefit from?"

Homes should be designed keeping in mind the everyday requirements of average Indian families. Given the inelasticity of budget in this segment, designing the home from the end user's perspectives, needs as well as future aspirations is the need of the hour. This inelasticity also demands that there is little or no wastage of space and materials.

Amongst many efforts, a 3-grid planning system that works well and is a good strategy for energy conservation through daylighting & ventilation principles adds on more importance to this planning.

**(a) Energy planning: reducing running costs for home-owners:** It is important to encourage responsible energy consumptions through three prongs:

- Designing solutions based on daylight and ventilation principles to optimize energy consumption,
- Selecting appropriate MEP systems so that long-term maintenance expenses can be reduced.
- Actively engaging end-users on energy conservation and its direct benefit to personal well-being through education and awareness.

**(b) Quality community spaces: improving social engagement:** Active outdoor spaces, appropriately programmed & sized community facilities and produce-generating landscaping will clearly differentiate aspirational affordable housing. It is important to provide ample opportunities for home-owners to be socially engaged through various activities such as community farming, playing, knowledge sharing and more.

**(c) Site suitability: Reducing everyday inconveniences for home-owners:** Also, strategic design insight during site selection will significantly contribute to project success. For instance, proximity to social infrastructure (such as schools, banks, healthcare facilities, etc.) helps build a stronger and more rooted community of home-owners. And by locating the project on a site that reduces commute times between home, work, and schools, we can alleviate everyday inconveniences and support end-user well-being. Additionally, we can take advantage of views & vistas through careful site planning to help improve the visual quality of the built environment.

Aspirational Affordable Housing (AAH) is the way forward for addressing the needs of the growing Indian middle-class families.

Affordable Housing doesn't mean designing a community, which are not just blocks of houses with utilities but create a community with planned spaces which facilitate amenities which aspire their social life, the facial design of the community with premium appeal – all that comes in the frugal mode. Budget-friendly for the developer and highly aspirational yet affordable for the customer.

## 2. CONCLUSION

We now know the importance of site selection for a successful affordable housing project. Implementing the above-mentioned factors during site selection will help in finalising the appropriate land for the developer and the consumer. There are other factors too, depending upon the nature of the project, but these mentioned factors are the most crucial and important ones to be considered. Eventually, implementing more affordable housing projects will certainly ensure housing for all.

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