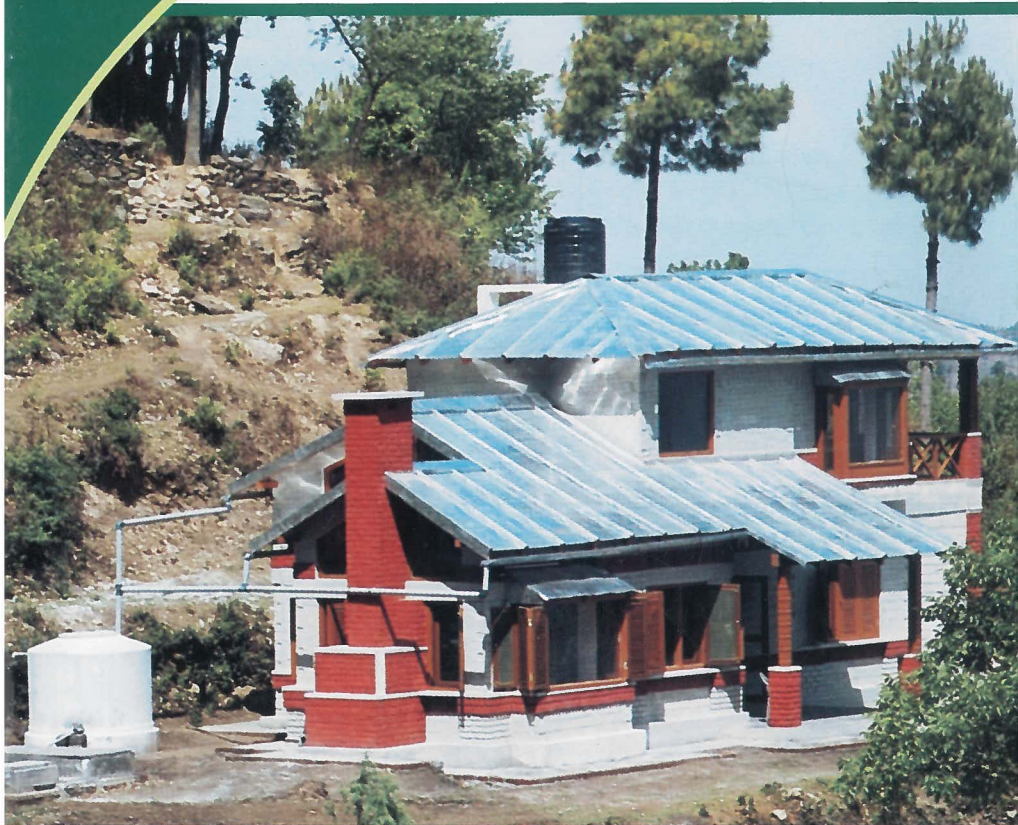


Aam Aadmi Series - 2

HOUSE BUILDING DIGEST

(Roles of Different Players)



bmtpc

Creating Enabling Environment for Affordable Housing for All

This is an attempt by BMTPC to provide useful but often ignored information about multifarious activities involved in house construction and other technical and non-technical matters associated with building materials and construction technologies. The series is being brought out with a specific rationale to reach out to common people of our nation and make them acquainted about building construction. Every individual has a dream of owning a house and through this series which is aptly named Aam Adami Series, we will slowly unravel myths and misconceptions about building construction. The language used here is lucid and simple to comprehend. The complicated technicalities are explained in a parlance which can be understood by one and all.



1. House Building Activity

House construction is a multi-disciplinary activity which involves a large number of professionals and non professionals in the field of construction, besides the owner. At one end of the scale is the qualified and experienced professionals like the Architect, Engineer, Planner etc, whereas on the other end are the unskilled workers at site.

Housing and Development Agencies like State Housing Boards, local Development Authorities and Municipal Bodies have a major role to play, who are authorized to permit house construction in a planned manner.

The manufacturers of building materials like cement, steel, bricks, paints, pipes, electrical fittings and equipments, sanitary and water supply pipes etc contribute immensely towards having a good end product i.e. the 'House'.



Equally important is the role of the contractor who carries out the construction of the house in an appropriate manner. He has to mobilize all his resources to ensure that the end product (i.e. the house) is of desired quality and is completed on time.

Similarly the role of the skilled worker like the mason, carpenter, plumber, electrician etc cannot be underestimated who are responsible for construction at the grass-root level with the help of semi skilled/unskilled workers.

It would be of interest to know that professionals with legal background are also involved in the process from the formulation of Acts and Bye-laws to the searching of Titles for the land/plot of the owner.





The list can be unending, however for the benefit of the house builder, roles of major players involved are explained in this digest.

Major Players Involved

Major players involved in the construction of a house by an individual are as under:-

- a. **Owner**
- b. **Authority**
- c. **Architect**
- d. **Structural Engineer**
- e. **Contractor**
- f. **Others**

Role of the Players

Each of the player mentioned above has a major role to play so that the house is constructed as per the Building Bye-laws, as per the stipulated specifications and has good workmanship features.

a. **Owner**

The owner of the proposed house is the key person involved as it is in his/her interest that the house has a legal standing, and the same is constructed in a proper manner and is safe to live in, over a period of time. He/she has to co-ordinate with all other professionals and people involved right from the planning/pre-construction stage with a view to obtain a proper Building Permit and various certificates on completion of the house and its occupancy.





To begin with the role of the owner is to ensure that he/she has the legal right over the plot of land on which the house is to be constructed. At the time of submission of the documents to the 'Authority', the veracity of the applicant's ownership of the plot has to be certified. This could be done with the help of an advocate.

One of the major role of the owner is to ensure that the house is constructed as per sanction

The next important role pertains to the identification of an authorized architect for the purpose of preparation of plans, specifications and estimates etc. The owner has the joint responsibility, along with the Architect, to ensure that the procedural requirements for submission of the documents to the Authority adhere to the Building Bye-laws.

The owner has to select a structural engineer also for certifying the structural adequacy of the house. The responsibility of the owner also lies in the selection of the contractor, supervisor and such other personnel.

During the construction stage, the owner has to erect a notice on the plot displaying key information pertaining to the house under construction. Similarly all the documents pertaining to the house should be made available at the plot site.

During the process of construction, owner should ensure safety and shall not cause inconvenience to others. Information with regard to the progress of work has to be intimated to the Authority from time to time. Care has to be taken that the Authority is also informed about the commencement and completion of works.

b. Authority

Central and State Governments normally set up bodies like Housing Boards, Development Authorities, Municipal Bodies etc through a





Central/State Act with multi-pronged objectives. The objectives inter-alia includes ensuring of planned development of the region, preparation of Master/Zonal Plans, Building Bye-laws etc.

These bodies are normally the designated Authorities for purpose of overseeing that planned development is undertaken in the area under their jurisdiction and accordingly the powers for sanction of building permits as per the Building Bye-laws and the related issues also rest with them.



It is evident that the Authority has a major role to play as far as the construction of a house within their jurisdiction is concerned. It approves / grants / permits for the construction of the house and also administer that the construction is within the framework of the Bye-laws. It may also make inspections from time to time to see the progress of work and may give directions if the work is not proceeding as per the approved permit.

**Local
Authority is
competent to give
building sanctions/
permits**

The plans of the house and other documents, as specified, are to be submitted to the Authority for obtaining the permit. Fees for the purpose are also to be submitted to the Authority.

The application along with plans, specifications, estimates and other documents pertaining to the construction of the house, as may be prescribed by the Authority, are to be submitted to the Authority along with the requisite fee. The application is scrutinized and the decision regarding grant of the permit is communicated. Authorities normally define the time frame for communication of the decision.





The details of the documents and forms to be submitted are normally prescribed in the Building Bye-laws.

The Authority has a role to carry out inspections at various stages of work, from commencement to completion.

The Authority also lists the architects, structural engineers, advocates and construction engineers etc. who are eligible to facilitate the construction process or sign the application and other documents along with the owner. It is also authorized to impose penalties on persons who fail to discharge their responsibilities.

c. Architect

An Architect can broadly be defined as a person who plans buildings and often supervises their construction. He/She has a multiple roles to play, which includes making of plans and sections of the houses as per the size of the plot, as per the requirements of the owner, within the framework of the Building Bye-laws of the Authority.

**Architect
should have full
knowledge of the
Building Bye-laws**

Architects are expected to be acquainted with the Building Bye-laws of the authorities as well as the process of getting the required permits for the house. They are also to be well versed with the local specifications of construction, choice of building materials, preparation of estimates etc.

The application and other documents for submission to the Authority are to be jointly signed by the Architect and the owner. The Architect has a role to ensure compliance with all procedural requirements specified by the Authority.





If the owner so desires the Architect can also watchover the progress of work and inform the same to the Authority as and when desired.

d. Structural Engineer

A Structural Engineer is a Civil Engineer who carries out the Structural Design of the house. It may be clarified that the Structural Design (SD) is different from the Architectural Design (AD) in the sense that AD brings out the actual form and shape of the house (Plans, sections, elevations etc) whereas the SD brings out the sizes of footings, beams, columns, slabs along with the number of steel bars to be used etc which are the structural members to support the house, thereby making it strong, stable and safe.

Structural Engineer Certifies the Engineering Design and Ensure Structural Stability/Safety

Authorities have emphasized that the structural safety of the house has to be authenticated by a structural engineer. The owner should therefore select a qualified 'structural engineer', some of whom have their own websites.



The Structural Engineer has the role to scrutinize and verify the structural design and specifications of the house.

He is also to certify that the structural design and specification of the proposed building comply with Building Bye-laws. He has also a role to certify that the construction is structurally safe.

e. Contractor

A contractor is someone who has a wide range of roles, duties and responsibilities when it comes to construction of houses. This individual has a job that entails thorough knowledge of the processes involved and co-ordination of activities which accompany the building of structures.





The building contractor is the individual who manages the construction and ensures that all necessary measures are taken which result in the completed finished product.

**Contractors
have a key role
in house
construction**

Major roles and responsibilities of a contractor include the planning and carrying out any and all the activities relating to the construction of a dwelling, building or other structure. The building contractor carries out his/her duties by supervising employees, planning how the construction will be carried out and completing the house commensurate with all the laws, rules and regulations which may be in existence and as may be stipulated in the Building Bye-laws.

Amongst its many roles, an important role relates to the planning and scheduling of construction. By doing so the requirements of construction materials at different stages, requirement of labour, tools and plants, water and power requirements can be ascertained



from time to time. As would be evident, purchase of large quantities of materials at any stage would not only block funds but would also require large space for storage. Accordingly, the contractor should be resourceful enough to acquire the required building material at the right time and costs. The same applies to the hiring of skilled labour like masons, carpenters, bar-bender, painter etc. Equipments like concrete mixer, welding machine, strainers etc as also the centering and shuttering required for casting of the slabs, beams etc are to be hired by the contractor for a fixed period.

In addition, contractor must also keep a full record of the skilled and unskilled workers being employed at site as also their teaming and deployment. If the work is being done through a labour contract only, the owner should also keep a track of the same.





The contractor has the role of ensuring safety of labour during the construction process. They are also expected to provide temporary accommodation to the labour engaged at site.

Lastly, building contractors are individuals who can resolve issues in a quick and speedy fashion, since a delay in one portion of the construction project can hold up the entire process. It is important that the building contractor knows how to resolve issues which may arise during the construction process.

The contractor should also be experienced enough to deal with exigencies at site which may come up during the construction. The contractor should also keep the owner informed about the progress of work, shortcomings and requirements.

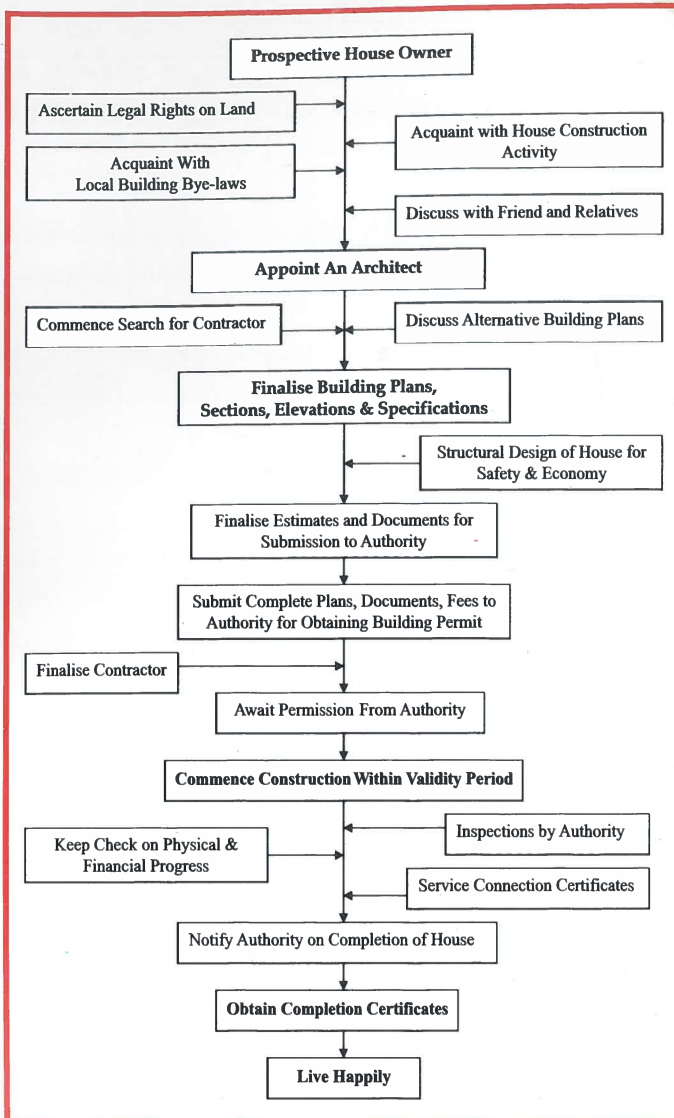
f. Others

Besides the above there are many others who are relevant to the owner as far as the construction of the house is concerned. These include the professionals related to electrical engineering, plumbing and sanitary who would make estimates and also supervise the works.

2. In Conclusion

It is evident from the above that a large number of players are involved in the construction of a house and each has a specific role to play, although some players have overlapping roles. The owner however has to co-ordinate effectively in order to achieve maximum returns of the money spent.





Typical Activity Flow Chart For House Construction

This is second of BMTPC 'House Building Digest Series' for creating awareness about construction of a house.



BMTPC

The Building Materials & Technology Promotion Council (BMTPC) was setup in 1990 as an inter ministerial organisation under the Ministry of Housing and Urban Poverty Alleviation to bridge the gap between the laboratory research and field level application.

VISION

BMTPC to be world class knowledge and demonstration hub for providing solutions to all with special focus on common man in the area of sustainable building materials, appropriate construction technologies & systems including disaster resistant construction.

MISSION

To work towards a comprehensive and integrated approach for promotion and transfer of potential, cost effective, environment-friendly, disaster resistant building materials and technologies including locally available building materials from lab to land for sustainable development of housing.

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