

BUILDING PLAN APPROVAL SYSTEM IN URBAN AREAS: A STUDY OF PUBLIC PERCEPTION

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Abstract

Developing countries including India continue to witness swift urban expansion and augmentation of construction activities. The rapid intensification of construction activities necessitates the local bodies to impose more legal controls to assure systematic development. Building plan approval is a statutory permission from the concerned authorities to make sure the development is followed by building rules and standards. Every building is expected to submit an application in required format and obtain approval before the commencement of construction. Urban local bodies are authorized to issue building plan approvals in urban areas and these bodies are trying to improve their performance by using modern technology such as ICT. The contemporary study has been taken up to appraise the public perception on the building plan approval system of the Greater Visakhapatnam Municipal Corporation in India.

Key words: Building Plan Approval System (BPAS), Chief City Planner (CCP), Information and Communication Technology (ICT).

Introduction

Building is a structure constructed with materials whether used for human habitation or not except tents and tarpaulin shelters. Building permit is a certificate of permission issued by concerned authorities to construct, enlarge or modify a building. Any person willing to undertake a construction activity it may be new or modifications to the existing building need to obtain permission from the urban local body or urban development authority. The building plan approval system ensures that the minimum standards like building height, size, ventilation etc. are enforced to live a healthy life in the build environment.

Online Building Permission Management System: Most of local bodies are implementing online building permission management system for enhancing their performance. Online building permission management system means integration of Information and Communication Technology where permission can be issued online. The local bodies can issue online building plan approvals in the place of manual system. After issue of building permission through online the concerned authorities shall examine the compliance of the provisions of the land uses as per the master plans, relevant rules and regulations. In addition, with the support of ICT provisional proper tax can be generated for all types of buildings. The study has attempted to investigate the efforts made by the municipal corporation in relation to building plan approval system.

Review of literature

Okey and Robert (2020) in their study, "Examination of the Challenges and Impact of Building Plan Approval Procedure on Real Estate Development in Uyo, Nigeria" have attempted to reveal the building plan approval procedure and its influence on property development. The authors have ascertained that it took more than required time for plan approval and suggested for total reforms.

Marlyana et al. (2019) in their expository paper "The Effectiveness Of Building Plan Approval. Case Study: Subang Jaya Municipal Council, Selangor" have explored that the high growth of construction related activities have led to implement for more controls to make sure the development is systematic. The authors have conducted this study to evaluate the building plan approval system and revealed that the time for approval is taking more than the required. They have suggested for a time bound framework to be introduced.

Rao (2020) has observed that India is second most populous country in the world and the urban population is growing due to migration and high growth of population. The growing population put pressure on the local governments for civic amenities and irregular settlements are likely to emerge where ever the space is available.

Noriss et al. (2015) have explored that the planning approvals in Ghana are not delivered in timely manner. The authors in their study “Streamlining of building permit approval processing of town and country planning department in Ghana” have recommended for an inter-organizational inter-dependency, teamwork and collaboration between various planning organizations for the success in delivering timely and quality approvals.

Yaakup et al. (2015) have examined the process of planning permission grant. The authors have mentioned that local authorities play a significant role in the development process and suggested for a shift from conventional procedures to computerized processes. They have ascertained the support of digital system could enhance the planning and decision making process.

Shamika et al. (2016) in their research study have mentioned that the rapid urban expansion experience of India continues and leaders at all levels are looking to better manage the growing population. They have ascertained that the smart cities mission of India promises to improve the built environment and infrastructure in fast expanding cities of India.

Prithviraj et al. (2019) in his research study have focused on the government approvals required for any construction project. This study has suggested for a single window platform for approval purpose. The author has recommended to cut down all unnecessary repetitive and time spending procedures with regard to government approval.

Yusup et al. (2018) in their research paper have established that building plan permission is a prerequisite for controlling development process and an effective factor that decide the quality built environment. This study focuses on the short-term / temporary approval that is mentioned for temporary use of land or buildings. This study has made an attempt to explore the role of permission process in controlling the development of land and building on temporary basis.

Objectives of the study

- 1) To explore the municipal corporation’s efforts with regard to building plan approval system.
- 2) To appraise the inhabitants opinion on the building plan approval system of GVMC
- 3) To find the performance gaps and recommend steps for succession.

Research hypotheses

HO1: The community is not happy with the building plan approval system of the municipal corporation.

HO2: Considerable divergence exist in the inhabitants opinion (among various geographic zones) on the building plan approval system.

Methodology

A structured questionnaire has been prepared and executed for primary data collection. Data has been collected from a sample of 480 respondents by using stratified random sampling method. Secondary data has been gathered from the records, research articles, reports and GVMC website. For statistical analysis SPSS software has been used as needed.

Profile of the study area

Visakhapatnam is a swiftly developing city on the southeast coast of India and is often called as “The Jewel of the East Coast.” It is sometimes called as Waltair and also known as Vizag. The history of the Visakhapatnam city can be traced back to Kalinga empire when it was a fishing village. The city has expanded and major industrial units have been established around the city. Vizag port is one among the busiest ports on Asia and handles the maximum cargo in the nation. The city has witnessed a swift development and attracts the population from nearby districts and states for tourism, education, employment and health related activities. The population of the city is about 2 million and it is governed by the Greater Visakhapatnam municipal corporation.

Building plan approval system in GVMC

The city planning department headed by the Chief City Planner (CCP) administers the work of City Planning Wing of all zones under the jurisdiction of the municipal corporation. The activities of city planning section of GVMC include formulation of building rules, master plan rules and zonal regulation, implementation of master plans, road widening programs, public spaces, roads and junction improvement, issuance of permission for buildings and layouts, regularization and demolition of unauthorized constructions and removal of encroachments.

To obtain approval for the building / layout plan from the competent authority every person who intends to erect, re-erect or make alteration in any place in building or demolish any building shall submit an application for building permission in writing or through online in the prescribed format. The application for building plan approval has to be submitted along with the initial fee of Rs 3000/- for a plot area of up to 200 sq. meters and Rs 10,000/- for a plot area of above 200 sq. meters. The balance building permit fees together with other fee shall be paid before the issue of permission. City level infrastructure impact fees shall be levied in case of large buildings of more than five floors. The building permission is valid for 3 years in case of non-high rise buildings and 6 years in case of high-rise buildings from the date of sanction.

Table 1.1: Building Plan Applications

Year	No. of Building Applications Applied	No. of Building Applications Approved	Total Built up area in sq. mts	Total No. of Housing Units
2008	3191	2320	9,90,900.262	9909
2009	4242	2766	10,76,582.338	10765
2010	4432	2656	11,62,205.884	11622
2011	5677	3349	11,95,377.213	11953
2012	6066	2440	12,38,346.231	12383
2013	6352	2270	12,81,449.913	12814
2014	5510	2461	10,97,337.078	10974
2015	5046	2381	12,99,336.060	12994
2016	2759	1263	926151.50	NA
2017	3546	3536	1034062.88	NA

Source: Office of Chief City Planner, GVMC

Table 1.1 describes the details of building applications made and building applications approved by GVMC. In the year 2016 GVMC has introduced online building application management system and building applications approved are 1263 out of 2759 building applications made.

Public perception on the building plan approval system of GVMC

The study has evaluated the community perception on the effectiveness of building plan approval system of the municipal corporation. This study has appraised the opinion on the factors such as “No discrimination prevails with regard to plan approval system”, “The time take for approval of plan is more than the required”, “Rules framed by the municipal corporation is for qualitative living”, “Employees dealing with plan approval are motivated”, “Physical verification of the site is done by the concerned”, “the licensed surveyor system is supportive in developing good plans”, “Rules framed by the municipal corporation is strictly followed”, “Employees dealing with plan approval have required skills, “Complaints related to plan approval are solved efficiently”, and “The building plan approval process is complex”.

Table 1.2 illustrates the community opinion on the building plan approval system of the municipal corporation. The Cronbach’s Alpha of the recognized ten factors is .970 which is highly dependable.

Municipal corporations should follow a transparent system and building plans should be approved without any discrimination. The total mean score (3.23) of the factor “there is no discrimination in plan approval system” clearly indicate that more respondents are agreed that there is no discrimination in approval of building plans. Respondents from Zone 2 area with a

Table 1.2: Residents Opinion on the Building Plan Approval System of GVMC

Variables	Mean Value							F
	Zone-1	Zone-2	Zone-3	Zone-4	Zone-5	Zone-6	Average	
There is no discrimination in plan approval system	3.68	4.05	4.09	3.78	2.56	2.97	3.23	13.902**
Time taken for plan approval is longer than required	2.64	2.83	2.43	2.44	2.32	3.03	2.59	3.349**
Rules framed to qualitative living	3.64	3.75	4.14	4.00	2.70	3.22	3.33	11.738**
Employees are motivated	3.68	4.00	4.07	3.89	2.66	3.09	3.30	16.271**
Physical verification carried by concerned authorities	3.64	4.00	3.98	3.96	2.64	3.19	3.30	14.416**
Licensed surveyor system is helpful to develop good plans	3.62	4.02	4.14	3.83	2.58	3.16	3.28	15.135**
Rules framed are strictly followed	3.68	4.00	4.14	3.78	2.64	3.16	3.30	13.299**
Employees have required skills	3.68	4.02	4.05	3.89	2.68	3.03	3.29	17.033**
Complaints are addressed effectively by concerned	3.55	3.98	4.01	3.77	2.56	3.19	3.24	15.870**
Process for plan approval is complex	2.64	3.42	2.29	2.44	2.24	2.69	2.52	4.659**

Source: Primary Data

mean score of 4.09 on a 5 point scale are more contended and inhabitants of Zone 5 area with a mean score of 2.56 are less contended among the different zones of the municipal corporation.

A one-way analysis of variance among the different groups is performed to evaluate the opinion of the community of different zones on the municipal corporation in approval of building plans. There is statistically significant difference at the $p < .000$ level in scores of approval of building plans for six zone groups at F (13.902). Despite reaching statistical significance, the actual difference in mean scores between groups is insignificant. There is no statistically significant difference in mean scores between GVMC Zones.

Municipal corporations need to fix a time frame for building plan approval. The total mean score (2.59) clearly indicate that more respondents are agreed that the time taken for building plan approval is longer than desired. Respondents from Zone 6 (mean score 3.03) are more agreed that the time taken for building plan approval is longer than desired and respondents from Zone 5 (mean score 2.32) are less agreed than the other zones.

The variable “licensed surveyor system is helpful in developing good housing plans” has a total mean score (3.28) on a 5 point scale that clearly indicate more respondents are agreed that the licensed surveyor system is helpful to develop good housing plans. Respondents from Zone 3 are more satisfied (mean score 4.14) than the other zones and respondents from Zone 5 (mean score 2.58) are less satisfied with the licensed surveyor system to develop good housing plans.

Public complaints need to be addressed effectively and the mean score (3.24) of this factor shows that the community have positive attitude towards municipal corporation in solving the public complaints. Respondents from Zone 2 and 3 (mean score 4.00) are more agreed that the municipal corporation address the complaints on building plans effectively and respondents from Zone 5 (mean score 2.54) are less agreed than the other zones.

The procedure of building plan approval by municipal corporation should be simple. The total mean score (2.52) indicates that more respondents are agreed that the process of building plan approval is complex. Respondents from Zone 2 are more dissatisfied (mean score 4.07) than the other zones and respondents from Zone 4 are less dissatisfied (mean score 2.56) with the process of building plan approval. The outcome of the study decisively rejects the null hypothesis that there is a considerable diversity in the public perception on building plan approval system of GVMC.

Conclusion and Recommendations

This study has evaluated the opinion of the community on the building plan approval system of GVMC. The average mean score of the ten variables is 2.80 on a 5 point scale exemplify that the inhabitants have positive opinion on building plan approval system of the municipal corporation. The mean score of variables indicate that the public has positive opinion, but they are not fully satisfied with the building plan approval system. In addition, the mean scores of variables “the building approval system is complex” and “time to get approval take more than the required” are 2.52 and 2.59 respectively; indicate that more people are not contended. In this regard the municipal corporation is advised to initiate measures.

The urban local bodies are suggested to recruit and train the employees regularly to enhance the performance. Incentives or rewards for performing staff may be implemented to encourage the employees. The local bodies are advised to study and follow the best practices across the globe. A time bound framework need to be developed to issue building permissions in time. Action need to be initiated on the employees responsible for delay. Feedback can help to identify the performance gaps and local bodies are recommended to take the feedback periodically from the stakeholders. Radical changes cannot be expected without an integrated approach. The urban local bodies are advised to involve the public in the process of decision making and to implement reforms in the present system.

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