

Relationship between the socio-economic characteristics and adherence to residential building bye-laws in Ludhiana city

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ARTICLE INFO :

Received : 12.07.2017
Revised : 09.10.2017
Accepted : 24.10.2017

KEY WORDS :

Building bye-laws, Housing, Adherence

HOW TO CITE THIS ARTICLE :

Batra, Sakshi, Gill, J.K. and Gupta, Ritu (2017). Relationship between the socio-economic characteristics and adherence to residential building bye-laws in Ludhiana city. *Adv. Res. J. Soc. Sci.*, 8 (2) : 229-232, DOI: 10.15740/HAS/ARJSS/8.2/229-232.

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ABSTRACT

A sample of 120 respondents was selected randomly from areas under Improvement Trust Ludhiana (sample-I) and Municipal Corporation Ludhiana (sample-II). An interview schedule was prepared to collect data from the respondents. The list of existing residential building bye-laws was obtained from Improvement Trust Ludhiana and Municipal Corporation Ludhiana. The findings of the study revealed that there was positive correlation of education of head of the family and year of construction of house with the adherence to residential building bye-laws in sample-I *i.e.* localities under Improvement Trust Ludhiana. Whereas, in sample-II *i.e.* localities under Municipal Corporation Ludhiana the education of head family, family income and year of construction was positively correlated with the adherence to residential building bye-laws. The level of adherence to residential building bye-laws was high in sample-I because majority houses were planned by architect and in sample-II the level of adherence was medium because around half of the houses were constructed before purchase.

INTRODUCTION

House is a place where economic, physical, social, psychological and safety needs of the family are met. Basically, house is a building that functions as a home. In a study it was found that majority of the people spent enormous amount of money in acquiring house ownership (Ogale, 1982). In India, the building industry both influences and is influenced by the local standards and bye-laws. The building bye-laws are the local regulations which govern the type of material to be used in construction, the relation of the material to design,

sanitary facilities, the provision of light, ventilation, check any unauthorized construction and provide open space and green belts. These building bye-laws are different for different areas. These building bye-laws also control the height of the building, coverage area, architectural design and constructional aspect of buildings so as to achieve orderly development of an area. These building bye-laws ensure the structural safety, public health and hygiene. Building bye-laws allow disciplined and systematic growth of buildings and towns. Municipal Corporation is the authentic authority which

prepares the building plan of land usage and it takes care of the implementation of the building plan, controls the expansion and manages the growth of the city. The Municipal Corporation's main aim is to reduce congestion and crowd, ensure plan progress, stimulating healthy urban environment, check and prevent development of conflicting land use and destruction of building bye-laws during construction to ensure a sustainable development of a town. The government officials, architects, consultants, builders, designers, geographers and environmentalists usually agree that certain form of control is required to guide the growth in order to ensure satisfactory public services and to protect public health and safety (Joseph, 2005). The problem arise when the standard rules and regulations made for guiding the growth of towns, to ensure adequate public services, health and safety measures are being violated at large scale. The study on violation of building bye-laws and development control rule shows that violation of setback was above 80.00 per cent upto 150 square meter plot area and it gradually decreased upto 60.00 per cent as plot size increases (Boob and Rao, 2012). It was also reported that most of the Indian cities had around 20.00 to 30.00 per cent of unauthorized colonization in which all the buildings were constructed with complete violation of the laws (Rao, 2016). In a study it was suggested that National Building Code should be prepared to unify the building regulations throughout the country for use by government department, municipal bodies and other contribution agencies (Chandira, 2010). To guard this problem NBC (National Building Code) is now a national instrument which controls the construction activity. It contains all the important aspects which are appropriate for safety and orderly development of a building. The building that does not comply with these building codes which violate NBC or building bye-laws will be penalized or approval will be cancelled or building will be demolished. It was reported that LIT (Ludhiana Improvement Trust) encroachment from green belts and vacant land in locality block A of Bhai Randhir Singh Nagar Ludhiana. An illegal boundary wall was pulled down. Few residents were using the part of green belt and vacant land for their kitchen garden, storage of generator and household articles. Not only this, but the residents had also constructed boundary wall to encroach on 102 square yard of trust and make his property (Anonymous, 2017). People need to recognize these

building bye-laws, infringements and disregard of city's town planning and building control regulations often lead to depletion of limited resources to provide basic services to the residential areas. Any construction which takes place without town planning process will have a negative impact on provision of sewerage, water and electricity supply to residence in neighbouring areas.

MATERIAL AND METHODS

The present study was conducted in Ludhiana city. From the four zones of Ludhiana city, two zones B and D were selected randomly. From each zone two localities, one locality under Improvement Trust Ludhiana and other locality under Municipal Corporation Ludhiana were selected. From zone B, two localities one under Improvement Trust Ludhiana that was Sector-32 Chandigarh road and other under Municipal Corporation Ludhiana that was Mohar Singh Nagar were selected. From zone D, two localities one under Improvement Trust Ludhiana that was Rishi Nagar and other under Municipal Corporation Ludhiana that was Dream Lane Haibowal were selected. From each locality 30 households having plot size upto 500 square yards were purposively selected. The head of the family, who had taken active part in the construction or the purchase of the house, was selected as respondents for study. Finally a sample of 120 respondents that was 30 respondents from each selected locality was randomly selected from Ludhiana city. The list of all the building bye-laws enforced by Improvement Trust Ludhiana and Municipal Corporation Ludhiana regarding the house construction were obtained for the investigation. Data were collected on self-structured and pre-tested interview schedule. Localities which were under Improvement Trust Ludhiana were categorized as sample-I and localities which were under Municipal Corporation Ludhiana were categorized as sample-II.

OBSERVATIONS AND ANALYSIS

The findings obtained from the present study have been discussed in following heads:

Socio-economic characteristics of respondents and adherence to residential building bye-laws:

The socio-economic characteristics were taken as the independent variable whereas adherence of the respondents to existing residential building bye-laws was

taken as dependent variable. It is known fact that the independent variables or predictor variables presume change in the dependent variables. The relationship between these two variables was calculated and placed in Table 1. The results showed that in sample-I, age of head of the family was negatively correlated (-0.241) with the adherence to residential building bye-laws at 5% level of significance, which indicates that as the age was increasing their adherence was decreasing. As far education is concern, the education of head of family was positively correlated (0.262) to dependent variable adherence to residential building bye-laws, which confirms that as the education level was increasing their adherence was also increasing. This was followed by family income which had positive but non-significant correlation (0.003) which showed that as their income was increasing but their adherence was not increasing. Further, it was also found that the year of construction had positive correlation (0.207) with adherence to residential building bye-laws, which confirmed that as the year of construction was recent their adherence was also increasing.

Table 1 : Correlation between socio-economic characteristics of respondents and adherence to residential building bye-laws of sample-I (n=60)

Sr. No.	Socio-economic characteristics of respondents	r value
1.	Age of head of family	-0.241*
2.	Education of head of family	0.262*
3.	Family income/month	0.003
4.	Year of construction	0.207*

* indicates significance of value at P=0.05

It was found from Table 2 that in sample-II, age of head of the family was negatively correlated (-0.209) with the adherence to residential building bye-laws at 5% level of significance, which confirms that as the age was increasing their adherence was decreasing. The education of head of family was positively correlated (0.242) to dependent variable adherence to residential building bye-laws, which indicates that as the education level was increasing their adherence was also increasing. Although, family income had significant correlation (0.200) which showed that as their income was increasing their adherence was also increasing. Further, it was also observed that the year of construction had positive correlation (0.177) with adherence to residential building bye-laws, which confirmed that as the year of construction was recent their adherence was also

increasing.

It can be concluded that respondents from sample-II had positive correlation of income with their adherence to residential building bye-laws, which shows that their income affects their acceptance to residential building bye-laws.

Table 2 : Correlation between socio-economic characteristics of respondents and adherence to residential building bye-laws of sample-II (n=60)

Sr. No.	Socio-economic characteristics of respondents	r value
1.	Age of head of family	-0.209*
2.	Education of head of family	0.242*
3.	Family income/month	0.200*
4.	Year of construction	0.177*

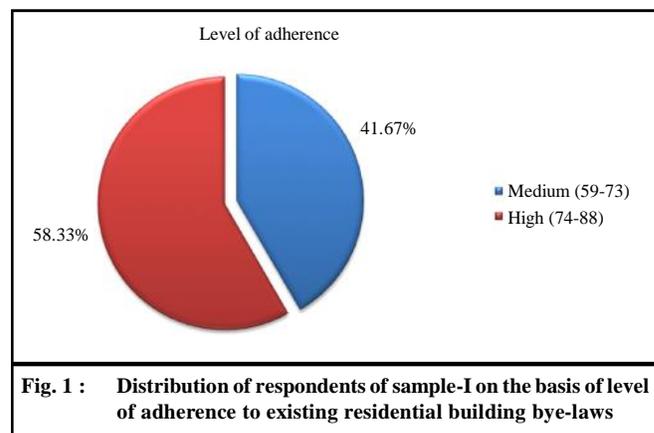
*indicate significance of value at P=0.05

Level of adherence of the respondents to existing residential building bye-laws:

Table 3 and Fig. 1 reveals that more than half (58.33%) of the respondents were having high (74-88) level of adherence to residential building bye-laws, followed by 41.67 per cent of respondents were having upto medium (59-73) level of adherence to residential building bye-law. The level of adherence to residential building bye-laws was more because the respondents of sample-I have high education and income level and moreover the respondents have designed their house from architect. The results were supported with the findings

Table 3 : Distribution of respondents of sample-I according to the level of adherence to existing residential building bye-laws (n=60)

Sr. No.	Level of adherence	f (%)
1.	Medium (59-73)	25 (41.67)
2.	High (74-88)	35 (58.33)



of Bhanot (1974).

Table 4 and Fig. 2 show that in sample-I, majority (51.67%) of the respondents were having medium (23-28) level of adherence to residential building bye-laws, followed by 51.67 per cent of the respondents had low (17-22) level of adherence very few (5.00%) of respondents were having high (29-34%) level of adherence

Table 4 : Distribution of respondents of sample-II according to the level of adherence to existing residential building bye-laws (n=60)

Sr. No.	Level of adherence	f (%)
1.	Low	26 (43.33)
2.	Medium (23-28)	31 (51.67)
3.	High (29-34)	3 (5.00)

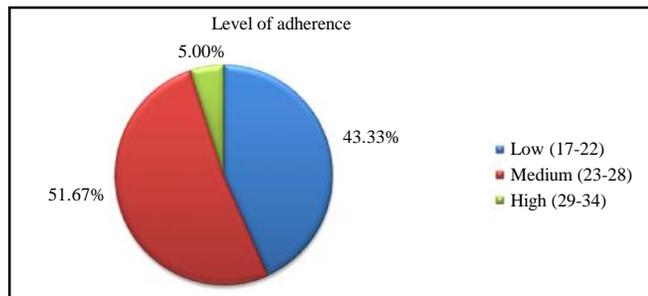


Fig. 2 : Distribution of respondents of sample-II on the basis of level of adherence to existing residential building bye-laws

Conclusion :

On the whole it can be said that in sample-I, level of adherence to residential building bye-laws was comparatively high (58.33%) owing to fact that firstly majority of the residential buildings were planned by the

architect and secondly strictness to adherence of the building bye-laws by Improvement Trust Ludhiana. Whereas, in sample-II level of adherence was upto medium level (51.67%) owing to fact that the majority of the respondents purchased constructed houses and lack of strictness to adherence to residential building bye-laws by concerned authorities.

REFERENCES

Bhanot, S. (1974). The attitude of house owners towards the selected building bye-laws enforced by the Improvement Trust Ludhiana regarding house construction. M.Sc. Thesis, Punjab Agricultural University, Ludhiana (Punjab) India

Boob, T.N. and Rao, Y.R.M. (2012). Violation of building bye-laws and development control rules: A case study. *IOSR. J Mech Civil Engine*, 2(4): 48-59.

Chandira, M.S. (2010). Development control rules and bye-laws in Tamilnadu. *J JTPI*, 4: 137-143.

Joseph, E.B. (2005). Innovating regulations in urban planning and development. *J.Urban Planning & Devlp.*, 131(4): 201.

Ogale, N. (1982). Evaluation of co-operative ownership housing in Baroda. *J. Home Sci.*, 14 : 6-10.

Rao, P.S.N. (2016). Model building byelaws: Reforms rolled out, over to states now, Published: April 2, 2016, Indian express.

WEBLIOGRAPHY

Anonymous (2017). LIT clears encroachments, The Tribune, 28 April, 2017. http://epaper.tribuneindia.com/1186925/LudhianaTribune/LT_28_April_2017#page/1/1

