

## A STUDY ON APPLICATION OF ANCIENT SCIENCE FOR HOUSE DESIGN IN JORHAT CITY OF ASSAM, INDIA

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(Received 24 August, 2023; Accepted 14 October, 2023)

### ABSTRACT

An ancient science which is known as vastu shastra is a science which deals with the management of cosmic energy in building and structures. The present study was carried out to study application of ancient science for house design in Jorhat city of Assam. A multistage purposive cum random sampling method was adopted for the study. From the Jorhat municipality area 120 numbers of household were selected from 5 wards by applying probability proportional to size (PPS) method. Questionnaire was used as a tool and both interview and observation methods were used to elicit the information. From the study it was found that 56 per cent of the respondents had poor application of ancient science for their house design. Application index (27.14%) of the respondents was maximum in kitchen area.

**KEY WORDS :** Ancient science, Vastu Shastra, Application, Index

### INTRODUCTION

Vastu shastra is an ancient science for house design or traditional Hindu system of architecture which literally translates to “science of architecture”. It deals with the managing of outer space energy in construction. It is the systematic study of directions which aims at utilizing the natural energies can extracts the positive energy from the natural elements of the universe - the panchbhootas namely, earth, water, air, sun and sky. Proper placement of five elements of earth, water, wind, fire and ether (the air) at proper place in building would create an environment for health living with nature. It has good and positive effect on human’s life to make the life prosperous, healthy and wealthy (Agrawal *et al.*, 2016). Vastu considered the relationship of diverse forces of nature connecting the five elements and strives to keep up symmetry as these elements control, direct and transform the living styles of every living being on earth. At present about 30 per cent of modern buildings are suffering from sick building syndrome (Krishnarav and Chennai, 2008; Kshirsagar *et al.*, 2019; Surnarayanan *et al.*, 2016).

Keeping this in mind the investigator is interested to undertake a study on application of ancient science for house design in Jorhat city of Assam

### Methodology

A multistage purposive cum random sampling method was adopted for the study. From the Jorhat municipality area 120 numbers of household were selected from 5 wards by applying probability proportional to size (PPS) method. People who constructed their own home were the respondents for the present research study. Questionnaire was used as a tool and both interview and observation methods were used to elicit the information. These statements were assigned scores and based on these scores mean and standard deviation was computed for finding out application of ancient science in house design.

Then, Mean  $\pm$  Standard deviation was calculated and interpreted as follows

Good application - The score above Mean+ SD  
Average application - The score between Mean+ SD and Mean- SD  
Poor application - The score below Mean- SD

The following formula was used for calculating application index (Halakatti, 1996).

$$\bar{X} = \frac{\text{Score obtained}}{\text{Obtainable score}} \times 100$$

Where,  $\bar{X}$  = Mean of application index.

## RESULTS AND DISCUSSION

The application of ancient sciences for house design and orientation of different rooms in the house is important to maintain a good balance between dwelling or structure and elements of universe for happiness, comfort and pollution free environment.

### *Ancient science or vastu shastra for house design*

From the assessment, it was revealed that 56 per cent had poor followed by 36 per cent had average and only 8 per cent had good application of ancient science for house design (Fig. 1). The present study is similar with the study conducted on extent of satisfaction experienced by home owners on application of Vastu shastra at Nashik city who found that majority of the respondents faced problems at high extent before making the changes according to Vastu shastra in the house (Patel and Talwelkar, 2015).

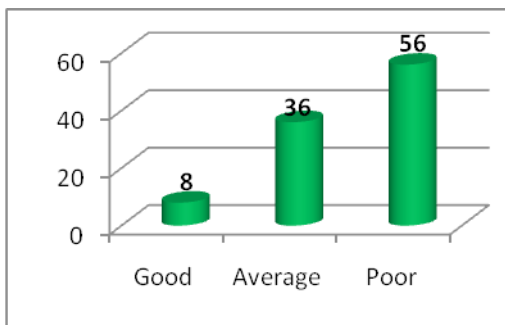


Fig. 1. Application of ancient science for house design

Further it was observed that the kitchen located at the South-East side of the house that means people had applied Vastu rules particularly in the kitchen. This may be due to the facts that respondents believed that kitchen is a place of God *Lakshmi* and given more emphasis on location of kitchen in house design as compared to other rooms. The present study is in disagreement with study conducted on identifying level of faith in Vastu principles by the home dwellers where it was found that the application for location of pooja room,

kitchen and bed room in houses were very high (Divya and Shashi, 2015). In the Hindu Culture, a place is allocating for prayer at home is called as pooja ghar. The pooja or prayer room is a sacred space in Indian homes. Pooja rooms are special areas within the house that are dedicated to meditation and spiritual worship to God. It is said that the pooja room should always be in the North-East corner of the house to enhance the positive energies (Ahirrao, 2017; Divya and Shashi, 2015; Kulkarni and Kalkarni, 2009; Saran and Shirodkar, 2017). This is very disappointing to note that half of the respondents had aware of Vastu shastra principles for location of kitchen in the house design. Remaining fifty percent respondents in study area are not aware regarding kitchen principles for house design. This may be due to the reason that respondents are less interested to know about the importance of ancient science for house design. It is a tradition among Assamese people that kitchen should be located in North East side of the house which is a place for Pooja room according to ancient science.

### **Application index on orientation of room's in house design**

It was prominent from the Fig. 2 that application index was 27.14 per cent on kitchen area which was followed by 19.50 per cent on bedroom, 13.54 per cent on dining room, 11.25 per cent on living room. Application index was found to be very less for bathroom area (5.8%) and pooja room (4.86%).

It was apparent that application of ancient science or vastu shastra for house design is not satisfactory. This may be due to the fact that incorporating ancient science of house design in their existing house is not a easy task. They are not able to reconstruct or renovate of their existing house. Financial problem may be one of the major reasons

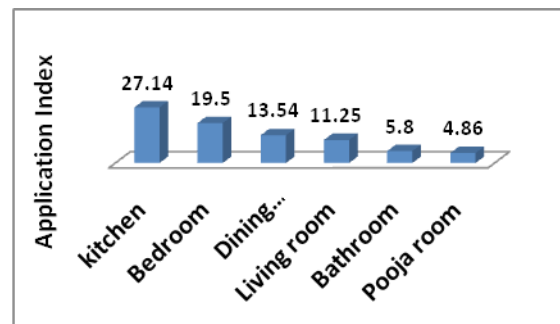


Fig. 2. Application index on orientation of room in house design

for renovating their house.

### CONCLUSION

There is a strong need to create awareness regarding importance of ancient science of house design among the dwellers of the study area for reduction of environmental pollution and increase of comfort level for health and wellbeing of the dwellers.

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