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Effect of Location on Construction Projects

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Abstract — *In this document attempt has been made to study various types of construction projects and the location of these projects in different areas. A comparison has been made by the analysis of effect of location on the construction projects.*

Keywords— *Human Resource (HR), Human Resource Management (HRM), Skilled labour, Real Estate, Infrastructural, Industrial, Urban, Sub-urban, Rural.*

I. INTRODUCTION

In India, construction industry is second largest industry after agricultural industry. The development of physical infrastructure, consequently the construction sector has been focusing from last decade. It was given more importance to infrastructure development from the tenth five year plan (2002–2007). It was observe that infrastructure development such as industrial, mining infrastructure, roads and highways, railways, ports, airports, power projects, irrigation and agricultural systems (irrigation systems), telecommunication systems, hospitals, institutions, townships, urban infrastructure including water supply, sewerage, drainage, rural infrastructure contributes in improving economy directly and indirectly by increasing the economy of other sectors. Construction requires more no. of employees per unit production as compared to the other sectors. Construction industry provides the greater employment to the many of human in different grades as professionals, supervisors, skilled, semi-skilled, unskilled labour directly or indirectly.

II. REVIEW OF LITERATURE

Human Resource and Human Resource Management replace the term personal management as a description of process involved in managing the people. Human resource management is defined as a strategic and coherent approach to the management of an organization's most valued assets – the people working there who individually and collectively contribute to the achievement of its objectives.

A. *Anjan Ghosh et al*

Stated that construction industry is primarily driven by Government of India (GOI) investments on core infrastructure projects and creation of urban infrastructure, industrial capital expenditure (CAPEX) by corporate sector and development activities of real estate/housing sector. The sector plays a pivotal role in developing the country's infrastructure, a pre-requisite for high levels of economic growth and an area of focus for the GOI (Government Of India). Construction sector accounts for nearly 45% of the total investment in infrastructure and is expected to be the prime beneficiary of the surge in infrastructure investment in the near to medium term.

B. *Carl Haas and Richard Tucker In study named "Multi Skilling in Construction"*

Specified that, labour productivity, craft training, and the declining number of trade entrants into construction present challenges for our industry today. More flexible labour strategies may meet these challenges, improving project performance in both union and non-union environments, by providing more stable employment and by better utilizing the current pool of skilled workers. A potential solution, already being used, is multi skilling. Multi skilling is a labour utilization strategy where workers possess a range of skills appropriate for more than one work process and are used flexibly on a project or within an organization.

C. *Carl Haas et al in a study title "Construction Workforce Studies"*

Stated that, inefficiencies exist in the way the construction industry manages its workforce. Attracting and maintaining skilled labour is difficult. Historical barriers retard the effective utilization of skilled labour in many ways, and market disincentives prevent economical and socially optimal investments in the human capital of construction.

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III. LOCATION OF THE STUDY

This study gives information about different types of construction projects and their type of location areas in some parts of India. Those contain Chandigarh and some parts of Punjab, some parts of Haryana.

IV. ANALYSIS OF DATA

The analysis of the data collected through structured interviews & questionnaire was done. The total of 48 replies was received from professionals in industry, so only 48 responses were considered for the analysis. Under this the main emphasis was given on nature and type of project and the project location.

V. NATURE OF THE PROJECT

The responses to the questionnaire have made an overview over all the sectors and are not just restrained to a single sector (like infrastructure or real estate). The responses which were received consists 56.3% of infrastructure projects, 33.3% of real estate projects, 6.3% of industrial projects and 4.1% of others which are tabulated below in TABLE 1.

TABLE 1 Frequencies of the Type of Projects

| Type of Project | Frequency | Percent (%) |
|-----------------|-----------|-------------|
| Real Estate | 16 | 33.3 |
| Infrastructure | 27 | 56.3 |
| Industrial | 3 | 6.3 |
| Others | 2 | 4.1 |
| Total | 48 | 100 |

VI. LOCATION OF THE PROJECT

The location of the project plays a vital role in enhancing its market value and also the easy availability of building materials to the site location of project enables the smooth running of the project. The responses for the questionnaire were not just restricted to urban or sub urban areas, to know the depth in the industry for Human Resource Management data from rural locations were also collected. The responses according to location are tabulated in Table 2. Location of projects were 47.9% in urban areas, 31.3% in sub-urban areas, and 20.8% in rural areas.

TABLE 2 Frequencies of project location

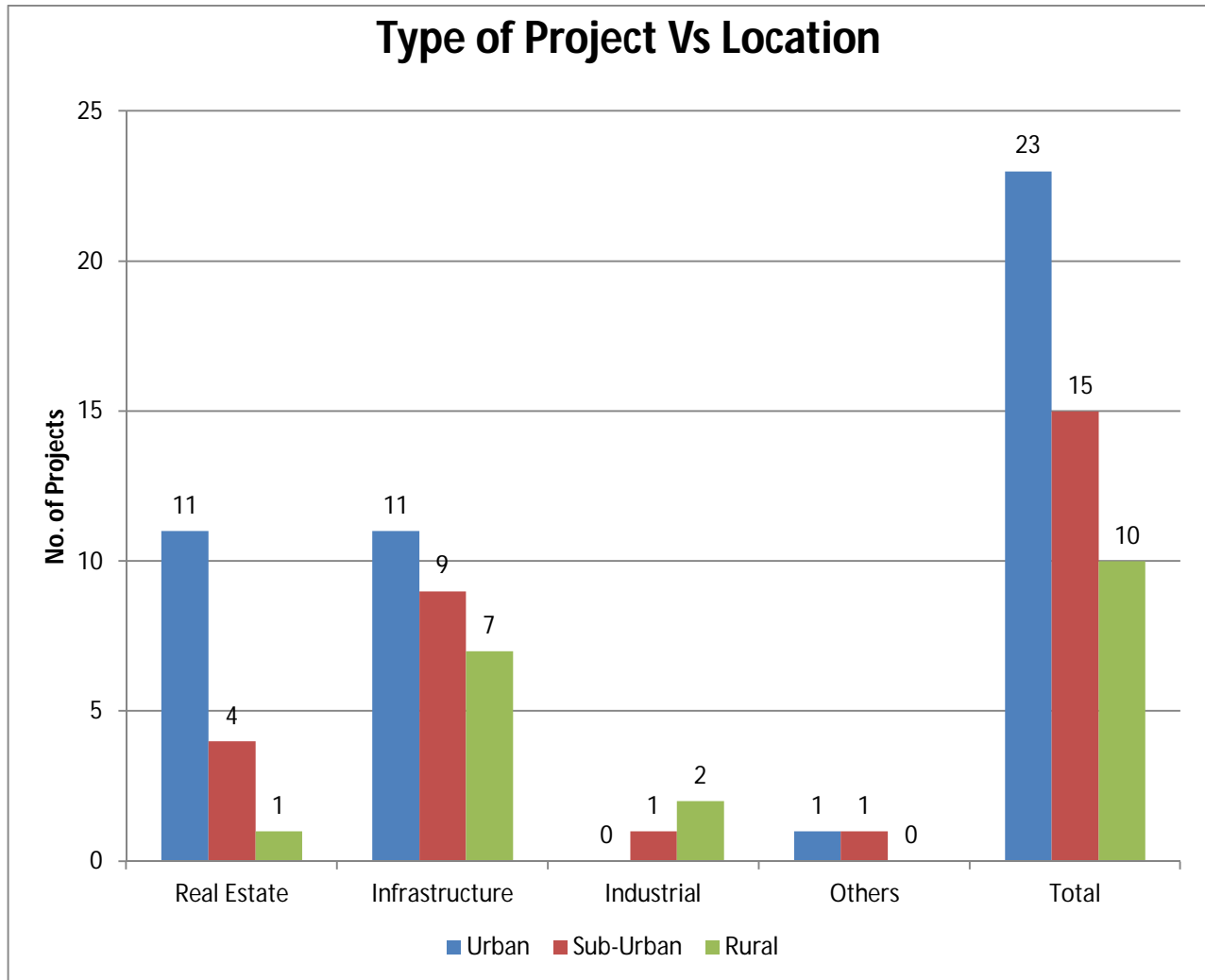
| Location of Project | Frequency | Percent |
|---------------------|-----------|---------|
| Urban | 23 | 47.9 |
| Sub Urban | 15 | 31.3 |
| Rural | 10 | 20.8 |
| Total | 48 | 100 |

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VII. INTERRELATIONSHIP BETWEEN TYPE OF PROJECT AND LOCATION OF THE PROJECT

A Perfect planning of the project is the key to the success of the project. For this it is very essential to understand the type of projects which is going on and also to understand the location of these different types of project. For a perfect planning it is essential to draw a relation between different types of project and location of the project which is depicted in Figure 1.

FIGURE 1 Type of project vs location of the project.



From the Figure 1 it is clear that Real Estate and Infrastructural projects are mostly located in urban area. Infrastructural projects are also having sub urban locations which are not that common in case of Real Estate and Industrial projects. While industrial projects are mostly based in rural areas. Mostly Infrastructural projects are going on. Out of 27 Infrastructural projects, the location of 11 infrastructural projects are in urban areas, 9 are located in sub-urban areas and only 2 projects have rural origin.

VIII. CONCLUSIONS

- Most of the projects are planned based on availability of manpower.
- The study shows the distribution of projects in various sectors. 56.3% from infrastructure sector, 33.3% from real estate, 6.3% from industrial sector and remaining 4.1% from others such as maintenance projects.
- Out of 16 numbers of real estate projects 11 projects are having urban location, 4 are based in sub-urban areas while only 1

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- Real Estate project is located in rural area.
- D. Mostly Infrastructural projects are going on. Out of 27 Infrastructural projects, the location of 11 projects is in urban areas, 9 are located in sub-urban areas and only 2 projects have rural origin.
 - E. Industrial projects are mostly located in rural areas.
 - F. Other projects such as maintenance projects are going on in urban and sub-urban areas.

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