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A study on impact of 8-way highway contract with special reference from Salem to Chennai

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ABSTRACT

Highway construction has accelerated urban growth and induced direct and indirect changes to land use. Although many studies have analyzed the relationship between highway construction and local development, relatively less attention has been paid to clarifying the various impacts of highways associated with farmland loss. This paper integrates GIS spatial analysis, remote sensing, buffer analysis and landscape metrics to analyze the landscape pattern change induced by direct and indirect highway impacts. This paper explores the interaction between the impact of highways and farmland loss.

INTRODUCTION

Quality is a key function in all infrastructure development environments like cost and time. In highway construction industry, quality is a major factor in determining how well a pavement will perform under traffic loading and when subjected to environmental influences. Furthermore, it provides a tool to the owner and contractor to ensure that the desired results are obtained to produce high-quality and long-life pavements. In highway construction projects, the ultimate aim of an owner is to build a pavement that will have good serviceability under the local conditions of climate and traffic that the pavement will be exposed to during its anticipated life and result in minimum overall costs [1].

STATEMENT OF THE PROBLEM

8 Way project is considered to be more devastating to the landlords because of the less compensation given to them. It may be advantage in one side but it affects the life of many marginal

farmers. To explore their problems this study will be more useful.

OBJECTIVE OF THE STUDY

- To identify the demographic profile of the respondents.
- To identify the people / group which are affected by highway projects?

SCOPE OF THE STUDY

- ✓ This study helps to know about the factors influencing of highway contracts.
- ✓ This study helps to forecast the benefits of transportation.
- ✓ This study shows the hazards in agriculture lands.

LIMITATIONS OF THE STUDY

The main purpose of the study to examine the impact of 8-way highway contract.

LITERATURE REVIEW

1. **Ahmed Ebrahim Abu El-Maaty(2016)** The purpose of this report is to provide guidance for the analysis of ecological impacts from highway development activities and the evaluation of related ecosystem mitigation measures.
2. **Ahmed Yousry Akal, and Saad El-Hamrawy(2016)** The results of the study showed that errors or omissions in construction work is found to be the highest ranking followed by inexperienced or newly qualified consultants, political focus on reduced project costs or time.
3. **Qiming Zhou, Zhilin Li and Wolfgang Kainz(2016)** Many of the degrading activities and accompanying ecological impacts associated with highway development are also relevant to other construction-based projects such as power generation and industrial or residential development.

RESEARCH METHODOLOGY

Research Design

A Master plan that specifies the method and procedures for collecting and analyzing needed information.

Sample Design

Sampling is the process of selecting a sufficient number of elements from the population. A Sample Design is a definite plan for obtaining a sample from the sampling frame. It refers to the technique or the procedure the researcher would adopt in selecting some sampling units from which inferences about the population is drawn [2].

FORMULA

<p>Percentage analysis = (No. of respondents / Total no. of respondents) * 100</p>

Non Probability Sampling

Non-Probability Sampling is a sampling technique where the samples are gathered in a process that does not give all the individuals in the population equal chances of being selected.

Cluster Sampling

A cluster sampling refers to a type of sampling method. With cluster sampling, the researcher divides the population into separate groups, called cluster.

Size of the Sample

The Sample Size is 100.

DATA COLLECTION METHOD

Primary Data

These are data which are collected for the first time directly by the Researcher for the Specific study undertaken by him. In this research primary data are collected directly from the Respondent by using Questionnaire.

Secondary Data

These are data which are already collected and used by someone preciously. In this research review of Literature, Details of the industry are collected from the Internet.

STATISTICAL TOOLS USED

To analyze and interpret collected data the following simple percentage and ranking were used.

Henry Garrett Ranking

Garrett's ranking technique to find out the most significant factor which influences the respondent; Garrett's ranking technique was used. As per this method, respondents have been asked to assign the rank for all factors and the outcomes of such ranking have been converted into score value with the help of the following formula: Percent position = $100 (R_{ij} - 0.5) / N_j$ Where R_{ij} = Rank given for the

i^{th} variable by j^{th} respondents N_j = Number of variable ranked by j^{th} respondents.

DATA ANALYSIS

The Respondents participated in the research are from diversified background with gender, age group, educational qualification and locality.

Table No 1: Demographic profile of the respondents

Details of the respondents		No of Respondents	Percentage
GENDER	Male	50	50
	Female	50	50
	Total	100	100
AGE	20-25Year	41	41
	25-30Years	12	12
	30-35Years	30	30
	Above 35Years	17	17
	Total	100	100
Educational Qualification	10th	15	15
	12th	18	18
	UG	38	38
	PG	29	29
	Total	100	100
Location	Town	53	53
	Village	47	47
	Total	100	100

INTERPRETATION

From this table it evident that respondents are mostly 50% of the respondents are male, 50% are female. Age of the respondents are 41% 20- 25 years, 12% of the respondents are 25-30 years, 30% Of the respondents are 30-35 years, 17% of

the respondents are above 35 years. Educational Qualification is 15% of the respondents are 10th, 18% of the respondents are 12th, 38% of the respondents are UG, 29% of respondents are PG. Localities are, 53% of the respondents are Town, and 47% of the respondents are Village.

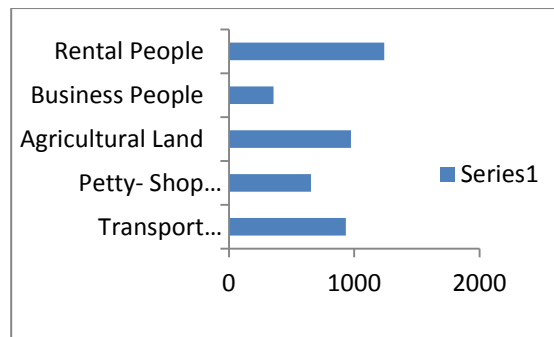
Table no 2: Rank of the problem faced by the respondents due to factors affecting by highway project

S.No	Factors	Total score	Rank
1	Transport Association	933	3
2	Petty-Shop Owners	654	4
3	Agricultural People	975	2
4	Business People	356	5
5	Rental Peoples	1240	1

INTERPRETATION

From the above table it is evident that “Rental Peoples” ranked as no 1 with total score of 1,240points, “Agricultural Peoples” ranked as no 2 with total score of 975 points, “Transport

Association” ranked as no 3 with total score of 933points, “Petty-Shop Owners” ranked as no 4 with total score of 654points, “Business People” ranked as no 5 with total score of 356points.



FINDINGS

- ✓ “Rental Peoples” ranked as no 1 with total score of 1,240points.
- ✓ “Agricultural Peoples” ranked as no 2 with total score of 975 points.
- ✓ “Transport Association” ranked as no 3 with total score of 933points.

SUGGESTIONS

- ✓ Rental people won’t suffer for their live hood when government convert from 8way to 6way.
- ✓ In developed countries without destroy agricultural land they have constructed flyover and bridges without effecting environmental.

- ✓ Toll gate cost can be reduced and so that product could be reduced.

CONCLUSION

The construction of highway projects is a complex process involving many critical phases during which factors that affect the quality of performance of the asphalt concrete pavement might be overlooked. There are various parameters that contributed to the quality of performance. It is concluded that there is a need to conduct study to identify the various factors affecting the quality of the highway projects.

REFERENCE

- [1]. Ahmed Ebrahim Abu El-Maaty, Ahmed Yousry Akal, and Saad El-Hamrawy “Management of Highway Projects in Egypt through Identifying Factors Influencing Quality Performance” Received 2016.
- [2]. Qiming Zhou, Zhilin Li and Wolfgang Kainz “Analyzing the Impact of Highways Associated with Farmland Loss under Rapid Urbanization” Received: 9 April 2016; Accepted, 2016.