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Implications of highway development and expansion on urban resident

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Abstract--This study examined the implications of highway development and expansion on urban residents in Dindigul city. Data was obtained from the administration of questionnaires to 50 residents of Dindigul city, who were randomly selected. Simple descriptive statistics and chi-square analysis were employed. The findings show that the traffic flow was found to be very smooth and free due to the wide and good condition of the highway; the residents stated that highway expansion allow increase in inflow of new residents, businesses and puts pressure on the existing houses thus there is increase in value of houses as a result of increase in demand; residents believe that the expansion of roads has opened up the area for more businesses which now causes high cost effect on rent and leases in the study area. The research suggests that all road designs, construction and rehabilitation work should be handled by competent engineers who must give guarantee on the roads for a specified period. The proper functioning of an urban area depends on an efficient transportation network; this contributes to the economy of India directly through influx of people.

Keywords--Highway Development, Road Expansion, Socio-economic, Problems.

Introduction

In an economy, an outward move in its PPC (Production Possibility Curve) represents the economic growth. It can also be defined as the rise in a country's total output or GDP (Gross Domestic Product). In simple words, it is the increase

in a country's production. The economic development of a country is generally demonstrated by the improvement in residents' quality of life which is usually measured by using the Human Development Index. This type of index is a financial model that contemplates intrinsic personal features which are not considered in the economic growth like life expectancy rates, poverty rates, and literacy rates. Transportation infrastructural development is undertaken to improve accessibility at a regional or urban level and to relieve traffic congestion in these areas. This development is evaluated by property owners and residents in the affected areas; however, the effect of new roads or highways in particular, may have both positive and negative effects on the housing. Improved accessibility may shift housing prices upwards, whereas higher traffic noise levels and increase in traffic density may reduce prices in houses that are adjacent to the new road. Physical accessibility is determined by the time and cost of travel to other locations. It depends on the presence, efficiency and effectiveness of transport modes. Investment in new transport infrastructure will alter location's relative accessibility, inducing both localised and more general changes in land values. Substantial value changes will trigger property investment and development decisions, resulting in the intensification or change in land use. Therefore, property market acts as the conduit through which the economic and social impact of changes in accessibility is transmitted to the environment. Aderamo opines that road network constitutes an important element in urban development as roads provide accessibility to the different land uses in the urban area. Thus, the proper functioning of an urban area depends on an efficient transportation network and general accessibility largely depends on transport facilities. The growth of an urban area due to influx of people in search of employment usually takes its toll on the land and the built environment. This is evident by the growth of squatter settlements, illegal occupation of government land and erection of illegal structures on any open space in the city. As a greater percentage of urban workers are unable to get white collared jobs, the informal sector of the economy grows. The informal economy contributes as much as 40% of GDP and employs up to 60% of the labour force in developing countries. It is characterized by lack of organized wage structure, paid work on a casual basis, irregular jobs and self-employment without earning pensions and without paying taxes. This sort of employment is common in the urban areas of developing countries and women accounts for 69% of the urban economy. The urbanization of poverty no doubt led to the emergence of the informal sector. The informal sector consists of those activities characterized by ease of entry into the activity concerned, reliance on indigenous resources, family ownership of enterprises, small scale of operations, labor intensive and adaptive technology and skills acquired outside the formal school system and unregulated and competitive markets. It is against this background this study is set out to ascertain how Highway development and road expansion affect the structure and general setting of an urban area of Dindigul city in Tamil Nadu.

Materials and Methods

A lot of research has been carried out on impact of road construction and expansion, Martinez and Viegas tried to temper the high expectations with the qualification that transport holds no special inherent properties capable of initiating growth. Rather they argued it should be considered a necessary but not

sufficient component of infrastructural investment, which is as unpredictable as other components in terms of its ability to generate development. The source data for this research work consists of administration of questionnaires, oral and personal observation in the study area. The questionnaires were used to gather information from resident chosen through simple random sampling from the study area. the questionnaire sought information on the socio-economic attributes, the present state of highway development, the level of road expansion, the effect of road expansion on traffic flow, the effect of road expansion of value of houses, the effect of road expansion on rents and leases and the solutions to the problems facing highway development and road expansion in the study area. A total number of 50 respondents were selected using random sampling technique. The data collated were analyzed using simple descriptive and analytical statistics.

Data analysis and interpretation

Table – 1: Socio-Demographic Profile

Variables	No.of Respondents	Percentage
Age		
Below 30yrs	06	12
31 to 40yrs	12	24
41 to 50yrs	21	42
51yrs & above	11	22
Gender		
Male	23	46
Female	27	54
Affected area		
Land	16	32
Building	34	68
Family monthly Income		
Below Rs.10000	12	24
Above Rs.10000	38	76

Source: Primary data

The above percentage analysis indicates that one third (33 per cent) of the respondents age group between 21 to 30yrs, 26 per cent were 31 to 40yrs, 24 per cent were 41yrs & above and remaining 17 per cent were below 20yrs. More than half (54 per cent) of the respondents were female and remaining 46 per cent were male. More than half (57 per cent) of the respondents were unmarried and remaining 43 per cent were married. More than half (55 per cent) of the respondents family monthly income below Rs.3000 and remaining 45 per cent were above Rs.3000.

Table – 2: Association between family monthly income of the respondents and their affected area

Monthly income	Affected area		Statistical inference
	Land (n=16)	Building (n=34)	

Below Rs.10000 (n=12)	04	08	X ² =11.274 Df=1 0.000<0.05 Significant
Above Rs.10000 (n=38)	12	26	

Research Hypothesis

There is significant association between family monthly income of the respondents and their affected area Chi-square test indicates that there is significant association between family monthly income of the respondents and their affected area. Hence, the calculated value is less than table value. The research hypothesis is accepted.

Conclusions

Highway development and road expansion has a strong relationship with value of houses; this means that when there is highway development and road expansion there will be increase in the value of houses. Good road projects clearly contribute to poverty reduction by improving the living conditions of people and by augmenting the opportunities available for trade and employment. The economic development of India has reflected the development of their transport systems. This is particularly true of the road transport system, which is by far the most widely used mode of transport in the country. Of all commodity movements to and from the sea-ports, at least two-thirds are now handled by road transport while up to 90% of all other internal movements of goods and persons take place by roads. Transport can contribute to the economy directly through addition to capital stock via increases in transport infrastructure. Transport provides the arteries through which the economic life of the people, information and raw materials as well as finished products can be moved from one place to the other. This therefore helps to build and maintain the society thereby leading to economic growth. It is essential to state that, the huge fund sunk into the construction, rehabilitation, and maintenance of roads in India in the last three decades is badly reciprocated by the poor and deplorable current state of these roads.

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