

Rural Road Links and Rural Marketing : A Study

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Abstract: Development is a continuous long term process and it requires all round progress of rural economy. Still agriculture is the prime occupation. In India nearly 700 million people live in above six lakh villages. Even though the continues efforts made by our governments through five year plans and special programmes, considerable number of villages have not been accessed basic amenities like transport, communication, marketing, housing, health and education centers, and so forth. About 35 to 40 per cent of rural road network in India is still remaining katcha and it is impossible to use them during the rainy season. Because of lack of all-weather roads and high cost, carrying of agricultural produce to market places is hard task in rural regions. Marketing denotes a series of activities involved in movement of goods from production point to the consumption point. Communication system is often extremely poor which restricts markets or mandis hindering cheap and rapid movement of agricultural produce. In this context, adequate rural transport system has been playing a crucial role in farmers' daily life by enabling rural products to find better markets outside.

In this paper, attempt will be made at an analysis of current status of road network, importance of road transport and problems of rural marketing in general. Further, primary data collected from field survey will comparatively analyse the rural households' practice and preference of means and modes of transport in the districts of Mysore and Gulbarga. The study is relied on both primary and secondary data for its analysis.

Key Words: Rural Marketing, Rural Road Network, Middleman, Inputs and Outputs.

1. INTRODUCTION:

The objective of faster inclusive growth was projected in the 12th five year plan, with the average GDP growth rate of 10 per cent per year, but during the period, an average of 6.90 per cent of annual growth rate was registered which was more than 3 per cent lesser than targeted GDP. Above said 10 per cent or more percent of GDP could be achieved only by facilitating adequate infrastructure and investment in rural regions (registered 7.1% GDP as on November 2018). Rural India will be shine only when qualitative infrastructure development efforts taking the place in the fields of health, education, sanitation, connectivity (transport), communication, marketing, banking and so forth. Rural Roads and Marketing Centers are the two limbs of a single economic activity. Adequate accessibility of transportation is a significant factor in the growth of market centers. Rural goods transport services facilitate the easy flow of the rural produce to consumption points and agricultural inputs to rural areas and ensures better price to the producers and also cut down the wastage in perishable goods. As the economy develops the need for transport becomes vital. In rural economy transportation promotes: division of labour, specialization, extension of the market and optimization of production units.

2. METHODOLOGY:

The study is relied on both primary and secondary data for its analysis. This primary level study has been geographically restricted to Karnataka State, focusing to one district each in the Northern and Southern parts of the State. For a comparative analysis of the users' view about Rural road network, one backward district viz., Gulbarga in the northern part and one relatively developed district viz., Mysore in the southern part of Karnataka state have been chosen for the study¹. Further, attention was also given in choosing two taluks in each of the above said districts. The taluks of Jewargi and Chittapur in Gulbarga district and H.D. Kote and Nanjangud taluks in Mysore district have been chosen for the study². The sample taluks of Gulbarga and Mysore districts have been clustered as 1000+, 500 to 999,

¹ The rationale behind choosing Gulbarga, as backward, district for study in north Karnataka has been the indicators of roads accessibility in terms of proportion of villages, in the above mentioned district, accessed by All Weather Roads. The same analogy holds well in the selection of Mysore district, as a relatively developed district, in south Karnataka for the present study

² The proportion of All Weather Roads in Jewargi and Chittapur taluks of Gulbarga district after neutralizing (considering the state average of 60.09 per cent of villages accessed with all weather roads as equivalent to 1) respectively stood at 0.84 and 0.62 on the one hand and on the other hand in Mysore district, the taluks of H.D. Kote and Nanjangudu, under survey, stood proportion-wise with respect to accessed with all weather roads, respectively at 0.67 and 1.63.

and below 500 population villages. As per the above, in each cluster about 15 per cent of the villages have been chosen for the study. All the three categories accounting of 12 and 14 villages have been chosen in the sample taluks Jewargi and Chittapur in Gulbarga for the study (15% of total). Likewise, 15 and 13 villages have been chosen respectively in the sample taluks of H.D. Kote and Nanjangudu in Mysore district for the present study.

By using of lottery method, four taluks comprised of 54 villages have been chosen for the present study. In each cluster of villages about 05 per cent of the households have been chosen by using Tippets Random Table and used for primary survey. Exactly 212 and 236 household have been randomly selected, respectively, from the sample taluks of Gulbarga and Mysore Districts. Totally, in the sample taluks of Gulbarga and Mysore together 448 household respondents had been interviewed, selected at random, with well structured interview schedules. Simple Statistical tools like average, percentage and Weight Point Score Methods used while analysing data gathered from field survey.

3. RURAL ROAD NETWORK :

Roads are regarded as the prime element for balanced development of any region. As on 2015-16, the total road network in India was stood at 4.7 million kilometers. Road network has been categorized as NHs, SHs, MDRs and RRs. Among the four major categories of road networks, MDRs and RRs have predominantly served in rural areas. Since the Minimum Need Programme (MNP) to Pradhan Mantri Gram Sadkh Yojana (PMGSY, 25th December 2000) efforts have been honestly made for developing the road network in rural areas. Foot mark of the development of road network in India can be seen in following table.

Table -01 Growth of Road Network in India 1951-2015-16

Road Network	1950-51	2015-16	(CAGR) (per cent)
National Highways (in Km)	21440	101011	371.13
State highways(in Km)	60000	176166	193.61
Major district Roads(in Km)	71000	561940	691.46
Rural Rods (in Km)	318000	3935337	1137.53
Source: India in Figures-2018, government of India, Ministry of Statics and Programme Implementation, Central Statistic Office, (social Statistic Division),			

In above table, it can be viewed that over the period 1950-51 and 2015-16, all the categories of road network has shown really notable improvement in India. Further, data also revealed that the District road and Rural Road network has registered 691.46 (6.9 times) and 1137.53(11.37 times) per cent of growth over the above said period. Prominently MDR's and RR's have catering rural marketing, notable improvement in the road network of such two categories of road network in India has been definitely boosting the rural marketing. Due implementation of PMGSY at National level and special Rural road network development programmes across the states, connectivity between the harvesting region to marketing region has smoothened the journey which directly benefiting to the farmers by the way of getting remunerative price for their commodities.

Karnataka's population of 6.20 crore is spread over an area of 1, 92,000 square kilometers which lives in 27,575 inhabited villages and 270 towns. These villages and towns are connected by about 2.61 lakh kilometers of roads. The Table below shows the road length in Karnataka.

Table -02: Road length in Karnataka (2003)

Types of Road	Road Length in Karnataka		
	2000-01	2010-11	2016-17
National Highways	3728	4490 (20.43)	6572 (31.67)
State Highways	9829	20528 (108.85)	19578 (-4.62)
Major District Roads	28247	50436 (78.55)	49909 (-1.04)
VRs and ODRs	104034	147212 (41.50)	177542 (20.60)
Municipal Roads	8366	8366 (0.0)	8366 (0.0)
Total	154204	231032 (49.82)	261967 (13.38)
Note: Figures in Brackets are the percent of growth over previous period			
Source: Economic Survey of Karnataka-2016-17, Planning, Programmed Monitoring and Statistics Department, Government of Karnataka			

It is revealed, in Table 02, that in the State of Karnataka, VRs and ODRs share is about 68 per cent and registered about 41.50 and 20.60 per cent of growth has registered over 2000-01 to 2010-11 and 2010-11 to 2016-17 respectively. The table is self explanatory.

4. IMPACT OF ROAD NETWORK ON RURAL ECONOMY :

Rural economy is influenced by road connectivity in several ways. The empirical analysis of Knon (2000) states that the 1 per cent increase in road sector investment is associated with a 0.3 per cent drop in poverty incidence and adequate road networks impact favorably on poverty reduction which is 0.33 per cent. Following impacts of roads in rural economy are noteworthy.

1. Better access to market towns enable farmers to cut out middlemen (agents) and fetch a better price for their products (like agricultural products, hand made products, handicraft items etc.).
2. Farmers also get incentives to diversify into higher value cash crops and increase the intensity of activation in different ways.
3. Easier access to input use such as seeds, pesticides and fertilizers.
4. Lesser travel period and lower transportation costs minimize the spoilage of perishable product (like milk and other milk products).
5. As agricultural earning rise, wage rates increase and rural labour finds more work in development of infrastructure under various schemes run by the government.
6. Easier connectivity encourages rural people to seek work in nearby towns during the offseason in farming.
7. Newly connected villages have assured access to better social and economic infrastructures like schools, banks, post office, hospitals, veterinary hospitals, bus stops and local markets and so forth.

5. RURAL MARKETING :

The Agriculture sector necessarily requires markets to promote growth, employment and economic prosperity in rural areas. In recent days rural area has not been directly impacted by the global financial crisis but indirectly the effect can be seen. About 12.2 per cent of world's consumers live in India and also, almost half of them national income in India is generated by rural economy. The rural markets dominate the Indian marketing scene and hence this needs special attention for the expansion of marketing activities and also for providing better life to attain welfare of the rural people.

The concept of "**Rural Marketing**" denotes services of activities involved in moving the point of production to the point of consumption. Rural marketing is a two-way marketing process, it is the link between farm and non-farm sectors. Rural marketing in India can be classified under two broad categories as below.

1. The market for consumer goods that comprises of both durable and non-durable goods,
2. The market for agricultural inputs that include fertilizers, pesticides, seeds and so forth.

The transaction can be made following three designs; first, Rural to Rural Marketing and second, Rural to Urban Marketing and finally Urban to Rural Marketing. Marketing function has started much earlier in the civilization period. In the olden days Barter System was in practice. Now money is being practiced as a medium of exchange. The market may be a street or a small town/metropolitan city. Development of infrastructure of transport and communication facilities has increased the scope of the rural market.

5.1 Types of rural marketing

In India, different types of marketing systems are playing crucial role on rural economy. Mainly following five types are focused on rural marketing system.

Haats/Shandies: Most of the rural products are marketed through temporary weekly markets in rural haats. They will meet daily needs of the villagers along with boosting the socio-economic development of the area.

Mandis: The Mandis serve as entrepreneur markets i.e., collection and distribution centers for agricultural produce marketed by the farmers in the hinterland.

Commodity Specialized Markets: In this market transaction will be made on one or two goods, for example Nasik for Onions and Grapes market, Nagpur for Orange market, Delhi for Apples market, Salem for Mangos, Assam for Tea market and so forth.

Regulated Markets: These markets are meant for the farmers to take their produce for sale and facilitate farmer's immediate cash payments. More than 5000 primary and secondary agricultural producers assemble in such markets which are regulated under the State Agricultural Produce Marketing (Regulation) Act, generally known as APMC Act.

Co-operative Marketing: Another major improvement for rural producers is the promotion of co-operative societies. It helped to increase the incomes of the farmers and avoid exploitation of the middlemen. In India about five lakh co-operatives are working but very few co-operative Societies in selected areas like, dairy, sugar, oilseeds, mahagrapain Maharashtra, tomato growers in Punjab etc. do well.

5.2 Problems of Rural Marketing

Having discussed the various aspects of rural market, it would be appropriate at this stage to highlight certain basic problems of rural markets. The problems of Rural Marketing in Karnataka and general are Inadequate Physical Connectivity, Presence of large number of middleman, improper warehouses, Inadequate Market Information, Inadequate credit facilities and so forth. Among those, the root problems of rural marketing are inadequate physical connectivity and presence of large number of middleman.

Inadequate Physical Connectivity,

Road Transportation is a basic need of the rural markets in India. Our governments have somewhat failed to plan, construct and estimate of rural travel needs.

Planning for rural Transport: A comprehensive rural transport planning is a pre-requisite to achieve desired goal. The typical scene in a rural economy like ours with geographically scattered population is limited transport facilities. Population densities in rural areas do not justify provision of conventional fixed road services. Also, even the existing roads are not properly planned with the result that most of them are very circuitous and cause in high transportation costs.

Construction of Rural Roads: In the India villages 60 per cent of the village roads are katcha in nature and they are highly impossible to use during the rainy season. Marketing of agriculture product in the hilly regions is a difficult task because of land scape (terrain) and lack of All Weather Roads.

Failure to estimate Rural Travel Needs: Of course, it is difficult to estimate the magnitude of rural public transportation needs. There is no scientific method of estimating the rural travel needs. The distinction between rural transportation needs and rural travel demand is most crucial to the eventual development and implementation of transport services unlike need. Demand is based on the economic ‘willingness’ to pay’ or ‘capacity to pay’ concept which is measured by quantity of the travel relative to a precise set of environment circumstances.

Presence of large number of Middleman

The chain of middlemen in the rural marketing is so large that the share of farmers is reduced substantially. For instance, a study of D.D Sidhan () reveled that farmers obtain only about 53 per cent of the price of commodities, 31 per cent being the share of middlemen’s (the remaining 16 per cent being the marketing cost) in India. Some of the intermediaries in the rural marketing system are village traders, kutchra arthytiyas, pucca arhatiyos, brokers, wholesalers, retailers, money lenders and so forth. This group takes advantage of the ignorance and illiteracy of the farmers, who also use unfair means to cheat the farmers.

6. RESEARCH RESULTS DISCUSSION :

Primary data gathered from field survey regarding purpose of traveling, distance of travel and means of transport are discussed as follows.

Means of Transport

Modes of transport and means of transport are the interdependent ones in transport sector in any region for that matter. Development of roads receives the increasing volume of traffic and also provides for smooth operation of vehicles. The HGVs and LGVs are the major means of Goods transport and play dominant role in the countryside. Keeping this in mind, the data gathered as regards the accessibility of means of Goods road transport used in the study region are provided in Section-A of Table-03.

Table-03: Means of Transport and Distance Travelled (Average km.)

Means of Transport Used	Section-A: Means of Transport			Section-A: Distance Travelled for accessing Services		
	Gulbarga Total	Mysore Total	Grand Total	Services	Gulbarga Total	Mysore Total
(01)	(02)	(03)	(04)	(05)	(06)	(07)
HGVs	21 (9.90)	68 (28.81)	89 (19.86)	PUC	9.11	8.07
Only LGVs	104 (49.08)	91 (38.57)	203 (43.54)	UG	19.03	17.96
HGVs & LGVs	61 (28.77)	62 (26.27)	123 (27.45)	Taluk office & Hospital	34.87	24.43
Bullock carts	26 (12.26)	15 (6.35)	41 (9.15)	Agri-Marketing Canters	30.50	22.04

Total	212 (100.00)	236 (100.00)	448 (100)	For Agri- Inputs	16.76	17.85
<i>Note: Figures in bracket are percentage to total.</i>						
<i>Source: Data gathered through Primary Investigation,</i>						

Based on the field survey data, it can be inferred that the huge number respondents in the sample taluks of Gulbarga and Mysore districts were depend on LGVs (Goods Auto rickshaws, Jeeps etc.) for moving agri.-produce to market points. It is also found in the study that the farmers in the taluks of Gulbarga district (about 11%) were meagerly dependent only on LGVs as compared to Mysore district.³ It is a fact that even today about 12.26 per cent of farmers have used the bullock carts to carry their produce to marketing centers in Gulbarga district; it was only 6.35 per cent in Mysore district. From the point of view of benefit accruing to the transport users, the role of LGVs is justified; but the cost of such means of transport, being relatively higher, pinches the users, particularly the lower income group in the study region. From the above, it can be strongly argued that the department concerned should pay attention towards providing means of transport services at low cost to farmers to shift their produce to marketing centers or consumer points in both the districts more particularly Gulbarga district.

Distance of Travel

People are found to move out from their origin to get the services of different kinds in their region. In many instances, rural people are unlucky compared to the urban ones as they are to travel away for meeting their demands such as health, education, marketing and others. Here, providing statistical information as regards to the distance travelled by the respondents to meet their requirements in the study region is thought desirable; data are provided in Section-B of Table-03.

It is observed in the field that the respondents are made to cover an average distance of 30.50 and 22.04 km to get accessibility for Agriculture marketing centers from their locality in Gulbarga and Mysore districts respectively. Further, it is also found that they have to perform a journey of 16.76 and 17.85 kms (thought not in all cases) to reach agriculture inputs marketing points in Gulbarga and Mysore districts respectively. However, the researcher observed the provision for primary education for which the children walk one to two kms. Therefore, it can be argued that there is necessary for providing efficient and dependable passenger and goods transport in the rural areas of Karnataka, with more emphasis on the northern part of the state.

Purpose of Travel

It is not easy to find out as for what purpose people travel in particular in any region for that matter. Because, people do travel from one place to another for different purposes of: marketing, health services, education, official work, business, personal works and so forth. Here, the researcher used Weight Point Method to find out how users priorities their travel purposes from one place to another in the study region. The weight points are accorded to the (05 in all) priorities in descending order of 5, 4, 3, 2, and 1 and then by calculations, the travel priorities of users from one place to another are ranked in accordance with the total weight points scored by each priority among the five identified. In Table 03, the calculations made are presented.

Table- 5.20
Traveling Priority of Road Users

Respondents and Weight Points (WP)												
Purpose of Travel	No. of Rts	WP 5	No. of Rts	WP 4	No. of Rts	WP 3	No. of Rts	WP 2	No. of Rts	WP 1	TWP	Rank
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)
Health & Education	36	36X5 180	16	16X4 64	234	234X3 702	122	152X2 304	39	39X1 39	1289	III
Marketing	267	267X5 1335	103	103X4 412	34	34X3 102	17	17X2 34	27	27X1 27	1910	I
Personal	173	173X5 865	197	197X4 788	78	78 X3 234	--	--	--	--	1887	II
Office work	29	29X5 145	--	--	215	215X3 645	96	96X2 192	140	140X1 140	1122	IV

³ Some respondents said that in emergency cases (sudden health problems, unexpected calls from someone and other times), they were paying at Rs. 150 to 200 for LPVs particularly Auto Rickshaws, due less frequent bus services in the region.

Other Work*	31	31X5 155	59	59X4 236	09	09X3 27	23	23X2 46	326	326X1 326	790	V
Note : *Business and Manual Work (Factory, Mechanic Work, Labour Work, etc), Rts= Respondents, TWP= Total Weight Points Source: Data gathered through Primary Investigation,												

i) Health and Education

Health and education are the two fundamental requirements of human life. Lack of or absence of sophisticated health care and education facilities in the countryside put people in jeopardy. Based on the calculations, this, being the third priority scored 1289 points.

ii) Marketing

The marketing activity may take the forms of: first, Rural to Rural marketing and second, Rural to Urban marketing and third, Urban to Rural markets. For the purpose of selling Agri-produces and buying Agri-inputs and other necessities of human life, the people in rural area are bound to move to another destination/s. Here, on calculations a score of 1910 points is found with respect to marketing and topped the list of cause for which the users travel in the study region.

iii) Personal

India is a traditional country. The people in this country have been assigning much importance, ever, to visiting the relatives, celebrating festivals, happy occasions, temple visits and so forth. All these may be attributed to the personal reason of peoples’ travel which accrued to the second highest score of 1887 points; regarded as another priority of travel.

iv) Office Work and Other Purposes

It is found in the study that for the users in the study region travel for official work and other purposes has been the fourth and the fifth priority in order which, respectively, scored 1122 and 970 weight points. However, the respondents agreed that they do often visit to the district offices, taluk offices and other offices as well to the courts of law as the case may be.

7. FINDINGS:

1. Road network in Karnataka has been considerably increased over the period 2000-01.
2. Considerable percentage of farmers, say 12.26 per cent, have used the bullock carts to carry their produce to marketing centers in Gulbarga district; it was only 6.35 per cent in Mysore district.
3. The role of LGVs is justified; but the cost of such means of transport, being relatively higher, pinches the users, particularly the lower income group in the study region.
4. Farmers in the study region have to travel an average distance of 30 and 22 km to reach agriculture marketing centers from their locality in Gulbarga and Mysore districts respectively.
5. Among the five causes of households travel to city centers, marketing is topped the list of cause for which the users travel in the study region.

8. CONCLUSION:

Road Transport is the necessary components of agriculture marketing. Existence of inadequate means and modes of road transport system causes for arising several problems in rural areas. Problems of lack of remunerative price for agriculture commodities, poor knowledge about adoption of technology in agriculture filed, low income and investment in farm business, lack of information about agriculture marketing, communication, higher involvement of middlemen, rural Poverty, unemployment, illiteracy, and so forth are the root of existing inadequate transport system in rural regions. Further, adequate transport system may help farmers by minimizing cost of carrying of goods from one place to another place. Finally, it is concluded that providing adequate modes and means of transport certainly combat the evils in rural areas in general and particular in the study regions.

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