

MEETING THE ACCESSIBILITY NEEDS OF RURAL POOR

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1. Introduction

Poor access is one of the characteristics of poverty. However, it is not the only factor, but is a key parameter. At the macro-level, the World Bank has shown that access to safe water, electricity and the road network is associated with national per capita income. Nevertheless, access to basic services such as health, water and sanitation is not necessarily reflected in increases in income of households. It only provides the foundation for development. On the other hand, access to economic activities is important for income generation. For example, if access to markets is difficult, farmers are hardly likely to diversify their production or even grow more than subsistence requirements. To distinguish between economic and social services is important in rural development planning. Services should be planned on the basis of equity, whereas economic services should be planned on the basis of potential and ability to pay.

2. Poverty and Entitlement

In exchange economies, mere presence of goods and services in a society does not necessarily mean that they are available for consumption by anybody who needs them. Only those who have the means to acquire these goods and services are able to consume them. If a family has the means to acquire only one meal a day then one may say that the *entitlement* of the family just the one meal per day. On the other hand if another family can afford to acquire anything including car, refrigerator, TV, music system, computer etc., then the second family has *entitlement* to all these items including one meal a day. However, just because one has entitlement to all kinds of goods and services, does not necessarily imply that this person will necessarily consume each and all of these items. Poverty may be defined as lack of entitlement to the absolute minimum necessities of life. Of course what is *absolute minimum* will vary from one society to another depending upon its overall level of affluence or lack of it. Thus a poor person is one who does not possess the wherewithal to command enough goods and services necessary for reaching the basic minimum level of standard of nutrition, literacy and health compared to other members of the society.

Within the context of *exchange relations* which characterizes the market economy that determines entitlement of a person is whether s/he has something to offer in exchange for a certain object. S/he can only exchange goods and services over which s/he has *property rights*, which s/he owns or what s/he is endowed with. One can get involved in an exchange relation outside the market. For example, a farmer who has property rights to a piece of land and his or her own labour (and/or family), can involve in an exchange relation with nature to produce crops.

One may also have property rights guaranteed by the society. For example, if a society decides that all children should have access to free education, then every children in that society have a right to education whether she or her parents have the required personal endowment or not. This concept is known in literature as *extended endowment*.

An understanding of the concepts of both exchange entitlement and extended entitlement is crucial for policy makers devoted to the task of poverty alleviation. This is because of the fact that for a strategy of long term poverty alleviation to be successful, it is essential that the entitlement of the poor people be protected and enhanced on a *permanent basis*.

A society may decide to provide the endowment required for exchange entitlement through say, aid and charity. However, if the purpose of these charities go beyond the provision of a safety net for basic needs of food, shelter, literacy and health their effects in the long run can only be counter productive. A culture of dependence, once developed, traps both the recipients and the donors of charity. Thus a successful policy of poverty alleviation must be built upon a strategy of enhancing and protecting the entitlement of the poor to a level which will free from dependence on any charity, on a permanent basis.

In a market based economy the endowment the most of the people possesses is labour, both physical and intellectual. Endowment of physical labour depends upon health, ability for coordination etc. The endowment of intellectual labour is determined by a person's education and training. One way to increase entitlement of the member of a society is to provide them with the *ability* and *opportunity* to exchange their labour. With the improvement in the quality of labour their entitlement would also increase. A person can either use his/her endowment of labour to exchange it for income in either of the two ways. Either, by selling it to an employer and then use the income to command goods and services or use the endowment of labour to produce goods or services through self employment and then sell one's own produce to generate income to be exchanged for needed consumption.

3. Accessibility, Entitlement and Poverty Alleviation

The level of physical accessibility, defined as the degree of difficulties in reaching a particular service, depends on the level of *mobility* and *the sitting and quality of facilities*. Mobility is the measure of the opportunity cost of transportation of people and their goods. It is determined by the availability and quality of roads and paths, means of transportation and their level of efficiency. Sitting and quality of facilities refers to location (distance, route and travel time) of places for dwelling, economic, medical, recreational and similar other activities.

Some examples of transport problems for typical rural people in developing countries are (i) water and fuelwood collection; (ii) crop production and marketing; (iii) non-agricultural income generation; (iv) access to economic, educational, health and similar other services. The exact nature of specific transport tasks will of course be dictated by the location and circumstances of specific rural areas. Transport problem of water and fuelwood collection can be viewed as the one related to exchange relation with the nature. The opportunity costs of collecting water and fuelwood in terms of time and physical labour can of course be reduced through improved provision of transportation. This will in turn free the rural poor to use their endowment of time and physical energy for future productive and remunerative works.

In terms of exchange relationship a subsistence sector can be described as a sector where the agents (farmers) exchange their endowment of labour directly with nature to secure their means of subsistence (predominantly food grains) (see Borpujari, 1977). A subsistence farmer's exchange entitlement is determined by the farmer's endowment of land, labour and technology. As these farmers' endowment is limited, their command over bundle of consumption is also limited. It is to be pointed out here that a pure subsistence sector i.e. a sector where goods are produced at home without any reference to a market will be difficult to find in real life. A strategy of long term poverty alleviation needs to be based upon a policy of enhancement of exchange entitlement of the target population. The necessary condition for this is of course increased provision of land, technology, labour and capital. The next step is to create a condition under which the farmers begin to use their endowment to produce a surplus over and above their subsistence needs to exchange for goods and services for consumption as well as investment. Apart from lack of endowment, there are a number of reasons which inhibit and/or constrain farmers from producing a marketable surplus, the most important of which may perhaps be leveled as the uncertainty and insurance aspects of a typical subsistence rural economy.

A subsistence sector gradually transforms into a commercialized sector when the subsistence farmers acquire both the means to produce a surplus and the desire to exchange the surplus produce for the goods and services produced in the commercial sector. However, the production of surplus will depend on the farmer's ability to exchange this surplus for the other sector's product. This is where the role of market and *accessibility to market* become important. A subsistence farmer will start producing a surplus only when s/he is certain that the surplus can be sold in the market. This is where the level of *mobility* and the *sitting and quality of facilities* become relevant.

4. Traditional Method of Provision of Accessibility in Rural Areas

Until the beginning of the 1980s, it was widely accepted that proper motorized road (all weather) and rail networks would provide adequate accessibility to rural areas in developing countries. It was implicitly assumed that the public investment in the physical infrastructure for motorized vehicles would eventually create an environment in which the transport needs of all would be more or less adequately catered for.

However, over the last few years, the limitations of rural transport models which have focussed more or less exclusively on roads and motor vehicles have increasingly been recognized. A debate emerged over the impact of conventional rural roads on the economic benefits on local communities. There was also considerable doubt as to who would be the primary beneficiaries of road investments. Some researchers suggested that road investment could be unfair, by benefiting the *richer of the poor* unless the balance was redressed by simultaneous investment on other sectors. A few studies have also argued that the construction of roads has actually had ill effects such as displacing the operators of traditional, non-motorized, modes of transport; encouraging the exodus of labour from the countryside into the cities; and facilitating the flow of factory-produced goods into the rural areas, thus damaging local artisanal enterprises. Doubts were also expressed about how well motorized transport could be expected to accommodate the full range of transport needs in the rural areas where the great majority of rural dwellers continued to make little or no use of motorized vehicles. Reservations were also expressed about the ability of the motor vehicle to respond to the full range of transport needs was that, for certain transport tasks in the rural areas of developing countries, it might not be cost-effective relative to traditional forms of transport.

Till the mid-1980s, thinking on transport in developing countries was confused. There was little agreement on the role played by roads and motor vehicles or on their impacts, the cost of maintenance of the road infrastructure was recognized as being unsustainably high and large sections of the rural community were seen to be largely untouched by the benefit from the use of motorized vehicles. While recognizing the key role of highways, motor vehicles and railways; there was a growing appreciation of the fact that at the local level the conventional transport system could not fully cater the needs and demands. Thus there was a need to look for new approach for local level transportation planning.

5. New Approach for Provision of Accessibility in Rural Areas

A new approach to rural transport analysis emerged as a result of a series of studies conducted by International Labour Organization (ILO) and other developing agencies in a number of Asian and African developing countries. The methodological approach was different from the existing ones. The central innovation was the introduction of the household as the unit of analysis. It calls for a redefinition of rural transport in its totality and to encompass the movement of rural people and their goods to meet their domestic, economic and social needs, by any means, along tracks, paths and roads. Rather than analyzing the needs of transport system from the point of view of a particular function to be performed, researches should focus on a study of the transport needs of communities and the individual households within them. The methodology is known as Integrated Rural Accessibility Planning (IRAP). It has been specifically designed with the local planners in mind, and in multisectoral in its approach, though it can also be used in planning for specific sector. The sectors generally covered in the methodology are: water, energy, health, education, markets, agricultural inputs and outputs, crop marketing and post harvest facilities.

The basic planning process in IRAP involves four phases: preparation, identification of basic needs whose level of access requires priority intervention, definition of an intervention strategy and the consolidation of proposals into plans. The local people are involved at possible stages and training is also provided to them at various phases. For identifying and prioritizing the problems faced by the community, primary and secondary data are collected, which comprises the following groups of information:

- general socio-economic characteristics of the area;
- location and quality of facilities;
- transport infrastructure and services;
- travel patterns of the community;
- community priorities.

The information collected on travel times, modes of travel and quality of service are used to quantify the accessibility to various facilities and are represented as Accessibility Indicator (AI). These yields the accessibility profile, which explains the situation existing in a given area in terms of levels of access to basic services and goods. The local level planners can use the values of AI to:

- categorize or rank communities to their level of access;
- compare the level of access to a good or to a service within and between different administrative areas and set realistic local targets;
- assess the relative significance of access to each different facility;
- relate the level of access to a set standard;
- monitor the development within or between different areas.

It becomes easy for the local level planners to identify what services are most needed and where they are most needed. With this information, the definition of an intervention strategy can begin. A list of possible interventions is as shown in Table-1. It is to be found which out of the range of solutions available will be most effective in responding to particular needs: improving access through the siting of facilities, or through improvements to people's mobility.

<p>Infrastructure</p> <p>⇒ Improvement/ development of tracks, foot paths, foot bridges ⇒ Rehabilitation, maintenance and construction of selected roads</p> <p>Transport/ Mobility</p> <p>⇒ Improvement of efficiency of existing low cost Intermediate Means of Transport (IMT) e.g. animal drawn carts, bicycles, donkeys, trailers ⇒ Development/ introduction of alternative low-cost IMT</p> <p>Enabling Environment for Mobility</p> <p>⇒ Facilitating credits to purchase IMT ⇒ Facilitating transport services by improving their operation and management systems and increasing their availability ⇒ Providing training for the production and maintenance of IMTs</p> <p>Siting of Facilities and Services</p> <p>⇒ Installing safe water supplies ⇒ Better distribution of health centres, schools, etc. ⇒ Improvement of the system of supply of agricultural inputs ⇒ Development of market facilities ⇒ Improved distribution of food processing facilities, e.g. mills</p> <p>Environment Friendly Measures</p> <p>⇒ Development of wood lots, introduction of fuel efficient cooking technologies etc. ⇒ Improved sanitation measures</p>

Fig. 1 Access and Access Related Possible Interventions

The studies carried out so far have succeeded in raising awareness about the importance of a number of issues related to transportation. These are short-haul, non-motorized local trips both in creating agricultural surplus and in meeting basic subsistence needs. The amount of time and efforts spent on different tasks The relative importance of motorized and non-motorized form of transport and their limitations; and of the degree to which lack of transport constituted an impediment to enhanced health, welfare, income and total production.

6. Conclusion

A policy of long term poverty alleviation in a market based economy must be based upon a strategy of enhancing the exchange entitlement of the poor. Also, there is a need to provide them with access to the basic facilities such as education, health care, water and firewood. Thus a multisectoral planning approach for enhancing overall accessibility will be most appropriate for developing rural areas and alleviating rural poverty. The traditional method of road network development must be substantiated by the provision of accessibility to basic facilities at the local level. Integrated Rural Accessibility Planning (IRAP) developed by the International Labour Organization (ILO) is a multisectoral rural development technique for local level planning. There is a need to apply the methodology under different environments to make it more robust and effective.

7. Bibliography

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