

Responses to change in accessibility

Socio-economic impacts of road investment: the distributive
outcomes in two rural peripheral Philippine municipalities

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Abstract

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This study describes, evaluates and analyses how a substantial improvement of road accessibility has influenced the distributional outcomes of socio-economic development impacts in a rural peripheral area in the Philippines.

The impact population consists of 75,000 inhabitants. The outcomes regarding the 500 households and firms are explored through a before-after micro-level case study, using a double difference technique and a multicriteria impact assessment analysis. Other data were collected through key informant interviews, a traffic counting survey, road network accessibility inventories, and official documents. The data covers the years between 1990-2005. The research questions are essentially concerned with the distribution of an increased economic activity resulting from the road project. The objective is, to explore the scope of the changed conditions and outcomes primarily for the fishing sector, some other production sectors and economic activities in general, and also to investigate the changes in regional and local mobility, and household welfare.

The theoretical approach emphasizes the role of the level of accessibility within and between networks on a disaggregated geographical level taking into account different forms of *Basic Accessibility*, and the relative improvement of accessibility.

Results show that the direct road project related impacts substantially improved the study area's regional network accessibility. These direct impacts had bearing on the indirect impacts. Production, employment, trade, competition, incomes and mobility increased substantially in all major economic sectors and in new ones, and among households. In absolute terms socio-economic development and economic growth were attained within the study area after the road project. However, the improvement in accessibility differed greatly between municipalities and villages. The variations in improved accessibility severely affected the extent in which resource outtake, production, trade, and participation in activities were enabled. It also severely affected the distributional outcomes. Intravillage outcomes showed great differences. Incomes increased among all income groups in all villages, but distribution became more unequal, benefiting upper income groups. From a poverty reduction perspective, the road project was good, but not good enough. Another conclusion is that, for a road to play an enabling role, other conditions and measures must coincide. A general conclusion is that distributional outcomes at local level can be better understood by identifying disaggregated levels of intra- and inter-network accessibility and by applying different forms of *Basic Accessibility*. Another general conclusion is that we need data on household and firm level and we need to use a double difference technique.

Key words: intra- and inter-network accessibility, substantially below basic accessibility, below basic accessibility, basic accessibility, above basic accessibility, relative accessibility, road investment, Famy-Infanta road project, study area, study villages, Infanta, Nakar.

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