

Rural transport infrastructure investments support development in Indonesia

There is growing interest in the role of rural infrastructure investments in developing countries as a contributor to economic growth, employment generation, livelihood diversification and poverty reduction. However, studies that analyse the impact of infrastructure investments on employment and local economic development have been limited in Indonesia. The available research suggests that investments in transport infrastructure can have a positive impact on the household income of all farmers and substantially reduce poverty of smallholder farmers, due to high dependency of farmers on land transport for crop distribution¹⁾. The quality of road infrastructure also affects both employment and income of non-agricultural enterprises²⁾.

Recent research from Yamauchi et al.³⁾ found that when rural road quality improves, income growth also improves, especially for households that have higher educational attainment. Similarly, in villages that experience a deterioration of road quality (largely due to lack of maintenance or poor quality new infrastructure), the negative impact on income growth appears greater among educated households. The study also found that investment in infrastructure that connects remote villages to a sub-district can promote labor transition to non-agricultural sectors and support increases in household income. The gains to households from improvements in local connectivity (measured by average road quality) depend on village remoteness and initial household level socio-economic indicators. It is therefore recommended that agricultural development initiatives be coupled with development of rural transport infrastructure networks, in order to reinforce development outcomes in targeted areas.

In Indonesia local public infrastructure investment depends on local resources and research suggest that the move towards decentralization has improved the matching of public infrastructure provision with local preferences⁴⁾. Gains are derived from improving the quality of existing infrastructure and not just from building new infrastructure to improve access.

Recent research from the Coordinating Ministry for Economic Affairs and the ILO⁵⁾ that disaggregates the constructor sector by 4 activities – labour investment roads, capital intensive roads, irrigation and the rest of construction (including housing) - finds that labour intensive road construction has the highest labour multiplier, mainly due to its high integration with production and distribution, as reflected by intra-transfer effects. Partial multiplier estimates for construction activities confirm that labour-intensive road construction has the highest activity multiplier. This study therefore indicates that if the main policy objective is to generate employment for low and unskilled workers, promoting labour intensive road construction will generate twice the number of jobs compared to capital-intensive road construction and irrigation.

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2) Gibson, J. and Olivia, S. (2008) The effect of infrastructure quality on non-farm enterprises in rural Indonesia, working Paper in Economic 17/08, Department of Economics, University of Waikato, New Zealand

3) Yamauchi, F., Muto, M., Chodhury, S., Dewina, R. and Sumaryanto, S. (2009) Spatial networks, labour supply and income dynamics – Evidence from Indonesian villages, IFPRI Discussion Paper 00897, International Food Policy Research Institute, Washington D.C.

4) Chowdhury, S., Yamauchi, F. and Dewina, R. (2009) Governance decentralization and local infrastructure provision in Indonesia, IFPRI Discussion Paper 00902, International Food Policy Research Institute, Washington D.C.

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