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RURAL LABOR MARKET ADJUSTMENT TO DIFFERENTIAL
TECHNICAL CHANGE

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ERNESTO D. BAUTISTA

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ABSTRACT

This study examined: (i) the extent to which differential technical change in the Philippine rice sector induced interregional labor market adjustment through migration; and (ii) the effectiveness of this migration in reducing interprovincial income differentials. Analyses were based on micro or farm-level data as well as on provincial-level information.

Analyses at the farm level indicate that differential technical change had significant quantitative and qualitative differential impacts on farm-level employment and on rural labor markets in general. The quantitative effects are reflected in increased labor demand, while the qualitative effects are reflected in the observed changes in the composition of labor use as reflected in the increased employment of hired labor. This effect not specifically tested in this study; is taken as exogenous.

At the village level results showed that differential technical change had induced in-migration to areas where its adoption had been most pervasive. However, the prospects for continued in-migration into these areas are unlikely as changing conditions in rural labor markets due to population pressure as well as increasing shift to the utilization of direct seeding and other labor-saving technologies lead to more competition and lesser employment possibilities for rural migrants.

At the sub-regional level, results showed that while consequent inter-provincial migration flows have induced growth in a small number of urban centers, the net effect of migration in inducing higher rates of growth of employment and in reducing interregional income disparities across provincial labor markets has been weak. This is probably because the limited number of inter-provincial migrants may not be sufficient to efficiently correct existing income disparities as they emerge. Moreover, the results need to be qualified since imperfections in the underlying data set may have significantly affected the parameter estimates.

Results of the study point to policy implications with micro-macro links. These include efforts towards the creation of more non-farm income opportunities in the rural sector, the development of more appropriate technology in the upland and less favorable areas, and the shifting of upland areas from existing cropping systems towards more high valued crops in which they have relatively more comparative advantage.

At the macro or regional level, the results point to the need for government realignment of its investment priorities towards agriculture in particular to take advantage of the direct and indirect effects that agricultural investments in infrastructure generate for the rest of the local economy. An example would be investments in irrigation which have substantial direct employment effects as well as indirect effects as evidenced by the experience of agriculture-based towns and sub-regional centers such as Gapan and Cabanatuan City as well as other Asian countries. Finally the policy implications point to the need to evolve spatial policies that will address region and sub-regional concerns at the same time exploiting the complementarities of regional and sectoral policies.