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From aging farmers to rural service firms: Can tractor-based mechanisation create viable jobs in Cambodia’s rice sector?

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Abstract

Cambodia’s rice sector is undergoing a structural labour transition. Farm households increasingly depend on diversified income portfolios, while farming populations are aging and younger rural workers seek alternative livelihoods. This raises an important agrifood policy question: can private agricultural service-provider firms create viable rural jobs while supporting agricultural transformation? This paper examines the potential of mechanisation service providers in Cambodia’s rice sector as a source of employment, enterprise development, and improved service access for crop establishment. We combine household-level evidence from rice-growing areas in Takeo and Prey Veng on income diversification and off-farm livelihoods with detailed business-model data for mechanised crop-establishment services. The analysis assesses the capital requirements, cost structures, break-even thresholds, and operational conditions under which private service-provider firms can become economically viable. It then explores the types of direct and indirect rural jobs that such firms can generate, including machine operators, drivers, administrative staff, mechanics, fuel and repair services, and related local support activities. Results suggest that the case for mechanisation in Cambodia should be understood not only in terms of farm-level productivity, but also as part of a broader transition in rural labour markets. Where service firms can reach sufficient scale and utilisation, they may offer a promising pathway for creating jobs for younger rural workers who are less likely to enter farming as land-constrained producers. However, this potential depends on supportive conditions, including access to finance, technical skills, repair and input ecosystems, and policy measures that reduce coordination failures in rural service markets. The paper argues that private mechanisation service markets deserve greater attention as an instrument of inclusive agrifood transformation and rural job creation in Cambodia.

Keywords: Cambodia, mechanisation, rice