Increasing Sustainability of Rice Value Chains in Asia: A Look at Incentive Mechanisms

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Abstract

Rice value chains in Asia are rapidly transforming due to (1) urbanization, (2) diet change, (3) agrifood system transformation, (4) rural factor market transformation, and (5) intensification of farm technology. However, although rice value chains have managed to provide food security for Asian populations since the Green Revolution, their sustainability is currently jeopardized. In the Mekong Delta, for example, strategies for increased production have mainly focused on intensified rice farming systems, high-yielding varieties, and increased use of agrochemicals. The overuse of fertilizers led to high pest and disease infestations and resulted in even higher usage of pesticides. In addition, the Mekong Delta has been identified as significantly vulnerable to climate change.

We propose incentive mechanisms for the adoption of sustainable production standards throughout rice value chains by considering four possible entry points, i.e., (1) policy and regulation, (2) consumers, (3) credit markets, and (4) value chain governance and coordination. We focus on the last entry point and provide some preliminary evidence of a survey with Vietnamese rice exporters, who are increasingly coordinating with farmers through contract farming to govern rice production, quality, and value chains more effectively. We explore how contract farming can be deployed as a vehicle for the adoption of sustainable production standards. As the Vietnamese government is currently encouraging Vietnamese rice exporters to adopt contract farming, this research is timely as it identifies opportunities for internalizing sustainable production standards in rice value chains throughout Asia.