



HOUSEHOLD-LEVEL IMPACTS OF SYSTEM OF RICE INTENSIFICATION (SRI) IN HAITI: AN SRI INTERVENTION WITH TRAINING, INSURED CREDIT, AND COORDINATION BY IRRIGATION BLOC

Background

Haiti is one of the poorest and most food insecure countries in the world, and improvements in productivity for staple crops such as rice are crucial to improve rural income and food security. The System of Rice Intensification (SRI) is touted as a high-yielding, low external input rice cultivation method that can increase rice yields and improve household welfare, but these claims remain controversial and inconsistent with widespread disadoption in some contexts. Evidence of the impact of SRI on household income is mixed because the bundle of practices reduces easily quantified inputs such as seeds and fertilizer but demands more labor, which is difficult to value properly in field trials. Additionally, SRI demands more precise water control, which often raises classic coordination problems with shared local irrigation infrastructure. Addressing these coordination constraints may raise adoption rates and increase the benefits of SRI, but little is known about the magnitude of these constraints and their determinants.

The Feed the Future Innovation Lab for Assets and Market Access is supporting a randomized control trial of SRI to test the household-level impacts of SRI, the effect of coordinated SRI adoption on these impacts, and the mechanisms behind these coordination effects.

Project Summary

To learn more about the impacts of SRI, researchers will conduct a rigorous evaluation of a coordinated SRI intervention being launched by Oxfam America in Haiti's Arbonite Valley. Oxfam America recently formulated this ambitious coordinated intervention that targets entire irrigation blocs, or local irrigation areas. This coordinated approach aims to incentivize full SRI adoption on all the plots within selected irrigation blocs. Poorly maintained canals and drains may prevent some farmers from being able to adopt SRI on their own. Coordinating at the bloc level allows the initiative to leverage investments in repairing and maintaining this shared irrigation network. Other benefits may arise from synchronized flooding cycles and production phases, agronomic monitoring, and social learning within the bloc.

After piloting several elements in recent years, Oxfam is prepared to scale up this integrated SRI intervention, and is eager to understand its impacts on rural households. This intervention will not only test the coordination of SRI adoption, but also subsidized credit for inputs and land preparation, as well as insured credit that offers, in essence, a money-back guarantee if yields don't reach a certain minimum increase. Researchers will test different combinations of coordination, subsidies, and insured credit. In this way, the project will address multiple barriers to technology adoption - knowledge and training, coordination, public goods management, and risk.

Anticipated Impacts

The evaluation will generate insights into how and how much SRI impacts rural livelihoods in these Haitian contexts - as well as providing a basis of evidence for addressing important lingering questions about the efficacy and promise of SRI for rice farmers in other poor countries.

PROJECT OVERVIEW

Lead PI

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Partners

Université d'Etat d'Haïti, Oxfam America

Timeline

2013 - 2017

Key Innovation

training, insured credit, coordination

Funding

\$688,952

Commodity

Rice

Region

Arbonite Valley

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