ACIAR Cassava Livelihoods and Value Chain Program

Australian Government
Australian Centre for International Agricultural Research

Alliance

Bioversity International

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International Center for Tropical Agriculture
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Findings

- ***Having a wide range of sites across a regional project was vital*** for being able to draw lessons for impact pathways under strongly contrasting production systems and value chains
- ***Having the involvement of the private sector and government from the beginning of the project*** in most sites meant that the process of discussion around developing linkages between research outputs and adoption was clearer.
- In sites where there was no active linked private sector (Cambodia) or relatively new private sector (NTT) the engagement and development of pathways to adoption has been more challenging.
- Private sector incentives to invest in extending technology to smallholders are strongest where there is a natural or regulated monopsony situation, but even in these cases ***there is still a need for support and facilitation by an "honest broker"*** or by the local government if sustainable linkages to smallholders are to develop.
- ***If only government and researchers are involved in technology transfer this will not be successful***. However, ***having only private sector involvement will also not work – It needs a combination of private and public sector actors to achieve success.***

Findings

- At almost all sites across all countries, the agronomic trials were able to identify improved varieties, fertiliser or agronomic practices that led to improved yields and sustainable economic benefits for farmers under field conditions.
- Improved varieties and appropriate fertiliser applications were the technologies that had the most potential for transfer and uptake. ***Farmers across all sites showed greatest interest in adopting improved varieties***. Farmers were also interested in adopting new fertiliser formulations, but lack of household labour, non-availability of correct formulations and distorting policies meant that actual adoption was more limited. Conservation agriculture practices and intercropping gained very little interest from stakeholders.
- The potential for the transfer and adoption of technology by farmers in all sites is dependent on the characteristics of the technology but also on the characteristics of the value chain and the agro-ecological conditions that prevail. ***There is no "one size fits all" model for promoting technology adoption*.**

Summary - Indonesia

- Agronomic Practice Impact - Suitable varieties and fertiliser formulations trialed and promoted at both sites *and* ***strong farmer interest and private sector interest in varieties generated***.

- **Partnership Impacts North Sumatra** - Strong partnerships between researchers, factory, agents and government has been developed. ***Farmers are interested in adopting Malang4 variety and the factory is willing to disseminate through its agent-trader network. Four agents and their associated collectors have started disseminating improved variety planting materials after working with project.*** Will need a partnership with UB and ILETRI or other agencies to continue bringing planting material and supporting private multiplication until there is a critical mass of farmers able to supply own planting material.

- **Partnerships Impacts NTT** - Project has been partnering with new animal feed production enterprises to help them secure feedstock sources from local area. This will need ongoing support from local government and research to ensure supply of suitable varieties. ***Farmers are also very interested in getting higher yielding eating varieties for own consumption and this needs some continued support of government and research.***

- **Policy Impacts** - Key findings have been packed as stakeholder briefs and discussed with national government at workshop. ILETRI and UB will have further discussions at national level – especially in the contact of Covid19 food security. ***Key policy lobbying points include getting government at national and provincial level to place a higher priority on cassava and for local government to be more flexible in supply arrangements for subsidized fertiliser.***

Summary - Vietnam

- Varieties and fertilizer formulations that can deliver sustainable benefits to smallholder cassava farmers have gone through extensive participatory evaluation at both Son La and Dak Lak with the participation of farmers, government and factory. ***In Son La , farmers have widely adopted improved fertilizer application practices after training and participation in the project. The extension centre of the province has been equipped with collaboratively developed training materials to continue this pathway to behavior change.***
- **Partnership impacts Son La** – ***Starch Factory has started to disseminate improved varieties and has committed to continue working with researchers and government to develop and disseminate varieties*** that would enable it to process over a longer period of time and factory has committed to purchase fresh roots from farmers in the off season as long as farmers can deliver 300 tons per day.
- **Partnership impacts Dak Lak** – An increase in the number of starch factories has led to a higher level of competition, some factory closures and many factories operating at less than full capacity. However ***factories are committed to disseminate new varieties as long as there is sufficient supply to take to scale so that all factories would benefit.***
- **Policy Impacts** - Key findings have been packaged as stakeholder briefs and discussed with provincial stakeholders at two provincial workshops. ***Son La Agriculture Department and Dak Lak Agriculture Department have both committed to review the status of cassava this year and consider if it will be included as a priority crop in their provincial planning***. Further discussions on policy will take place at a national workshop in October.

Summary - Laos

- Varieties and fertilizer formulations that can deliver sustainable benefits to smallholder cassava farmers have gone through extensive participatory evaluation at both sites with the participation of farmers, government and factory.

- **Partnership Impacts Bolikhamxay-** Factory in Bolikhamxay competes with chip processors, but does face competition from other starch processors. Factory is willing to expand and work with more farmers and ***factory has agreed to work with government and researchers to support a rapid multiplication tunnel to ensure supply of higher yielding varieties.***

- **Partnership Impacts Xayabouly** – Starch factories are operating at full capacity during short season so there is no incentive for factory to support dissemination of higher yielding varieties. ***Factory agreed to continue working with researchers and government to develop and disseminate varieties*** that would enable it to process over a longer period of time.

- **Policy Impacts –** Key project findings have been discussed with government in various provincial level meetings and a national stakeholder meeting in 2019 as well as with larger development programs***. Collaboration and discussions are ongoing under the current cassava disease project and with producer associations***

Summary - Cambodia

- Farmer interest in new varieties and there has been some uptake of new practices by farmers as a result of training under the project. ***The lack of an ongoing private sector partner factory in Cambodia is a great challenge to dissemination of technologies and information.***
- **Partnership impacts with private sector** – These have been very limited. Two private factories in the local area are not yet sully operating and Vietnamese factories lack incentive to support due to high levels of competition and breaks in the value chain at the border. NGO and government support will be needed to ensure supply of clean planting material.
- **Policy Impacts -** Project has concentrated on linking with local government and various development initiatives, including those of FAO, CAVAC, IFAD and UNDP programs. A ***significant achievement has been having an input into the national cassava policy.*** Partnerships are continuing through current cassava disease project.

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