

USING LOW-HANGING FRUIT TO INCREASE CSA ADOPTION

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Many international institutions call for additional funds to finance Climate Smart Agriculture (CSA) adoption for smallholders. Although finance is crucial in achieving significant benefits resulting from CSA adoption, there are other ways to increase CSA uptake, not least by integrating its principles in other initiatives and programs.

Benefits of CSA are not always apparent to farmers. Some technologies show only marginal benefits (e.g. adjusting crop or animal varieties), and many CSA technologies need time to build healthy productive systems (e.g. using crop residues, or building soil-water conservation structures) and the benefits of many CSA measures are only apparent when a weather shock appears (e.g. the use of drought resilient seeds). The common denominator is that all CSA measures need adjustments by farmers that may negatively affect them in the short run in exchange for a promise of higher pay-offs in the future i.e. smallholder farmers need to find new markets, they need to learn new things, and they need to make short-term sacrifices while they are food insecure. By adding information on CSA and possibilities for support for CSA in agricultural development, substantial improvements can be made without the need for significant increases in international finance.

The lack of immediate benefits and the perception of risks associated with new methods or new technologies stops farmers from diverging from what they perceive as “normal”. Therefore, it is important to reduce farmers’ risks to food insecurity, as this is one of the important barrier to CSA adoption. For that it is critical to develop a holistic view on policy support and programme design, which integrates support for CSA with other mechanisms designed to address food security faced by farmers.

Social protection programs may be a potential channel to promote CSA adoption, as they reduce consumption risks and easier access to additional financial resources. Most social protection programmes, including cash transfers, food aid, and public works programmes, show some positive effects on adoption of CSA, despite being designed to primarily increase food security of the poorest. For example, households in Ethiopia and Malawi that receive food aid are 6 to 7 percent more likely to invest in soil conservation structures than similar non-beneficiary households (Ignaciuk et al., forthcoming). In Tanzania, those receiving food transfers are more likely to adopt legume intercropping, and in Malawi receiving such transfers increases the probability of adopting organic fertilizer. Also programmes focused on providing cash for public works have a positive effect on adoption of CSA. For instance, in Malawi the beneficiaries of the Malawi Social Action Fund (MASAF) adopt soil-water conservation structures, legume intercropping, and organic fertilizer (Scognamillo and Sitko, forthcoming).

Despite the fact that those programs were not designed to increase sustainable production, they reduce farmers’ risks of food insecurity and at the same time provide them with important resources to invest in new ways of farming. The higher the food or cash transfers are, the higher the probability that farmers will use the additional resources to invest in CSA. These positive outcomes without a clear CSA focus suggest that a more targeted approach that puts CSA central can provide substantially higher rewards.

To yield the highest co-benefits of social protection systems, these need to be conditioned on the application of CSA. Information provision and technical assistance accompanying the programs may potentially contribute to much higher and sustainable benefits if CSA objectives are fully incorporated. Therefore, given scarce public resources, governments and donors may integrate existing social protection programmes with CSA-centered agricultural extension advice.

Beyond the clear benefits in terms of productivity and adaptation, CSA technology often contributes to GHG emissions reduction. As those may be substantial, conditioning agricultural development mechanisms on improving sustainable farming may provide low-hanging fruit to address the important policy challenges of climate change mitigation and climate smart agriculture without significantly increasing the need for international finance.

GACSA invites like-minded institutions and partners to share best practices with us at: GACSA-Facilitation-Unit@fao.org

Facilitation Unit
The Global Alliance for Climate Smart Agriculture

Ignaciuk, A., Malevoli, G., Scognamillo, A. & Sitko, N. forthcoming. Can food aid relax farmers' constraints to adopting climate-adaptive agricultural practices? Evidence from East Africa. FAO Agricultural Development Economics Working Paper Rome, FAO.

Scognamillo, A. & Sitko, N. forthcoming Multi-sectoral approaches to reducing smallholder climate vulnerability: Evidence on interactions between social protection and climate smart agriculture in Malawi. World Development.