

- Research suggests that farmer-to-farmer learning can be up to six times more effective in spreading knowledge of CSA practices than in areas where it is not carried out.
- **Understanding the wider context and requirements for social learning is key.**
- Peer learning is an effective way to disseminate CSA knowledge based on trust, relying on social networks, with learning and social multiplier effects. Together with collective action, it can lead to effective adoption of CSA practices.
- >>> Such farmer-to-farmer learning can usefully reinforce and be reinforced by extension and other change agents.
- For it to work, farmer-to-farmer learning requires performance incentives and rewards.



















### Outcome

Involving farmers as active learners and disseminators will increase the adoption of CSA at scale.

# What?

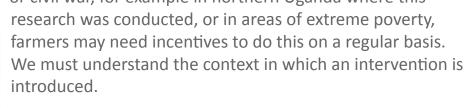
Farmer-to-farmer learning is a promising approach to disseminating knowledge about CSA technologies. Our research shows that providing small performance-based rewards such as for example social recognition of peers through positive story-telling in meetings, or enhanced income through community cooperative activities - will motivate peers to share knowledge about CSA technologies and convince peers to experiment with technologies. Specifically, farmer-to-farmer learning is enhanced when a material reward or appreciation in public is provided.

# Why?

Farmer-to-farmer learning is a powerful way to scale up successful CSA farm practices and spread the word about positive interventions that farmers can adopt.

However, in communities where trust might have been eroded, perhaps due to conflict

or civil war, for example in northern Uganda where this research was conducted, or in areas of extreme poverty, farmers may need incentives to do this on a regular basis. introduced.



- In some contexts, peer-to-peer training requires time and limited resources with which to train neighbors or others about successful practices. These communities need to receive support in order for the community to benefit.
- When implemented in a holistic way, peer-to-peer learning can provide farmers with much needed technology and information to implement CSA, while spreading the benefits to a wider group of people.
- This requires trust building, together with an understanding of the type of rewards expected within a given community.



### How?

Researchers conducted interviews with farmers in the Acholi sub-region of northern Uganda carefully selected representatives of the target population and were randomly assigned into three groups. Each peer farmer attended a three-day training course on drought-tolerant crop varieties and conservation farming. In the first group, peer farmers did not receive any reward for their effort in making positive changes. In the second group, peer farmers privately each received a weighing scales as a reward for implementing the techniques. In the third group, a meeting was held in the village

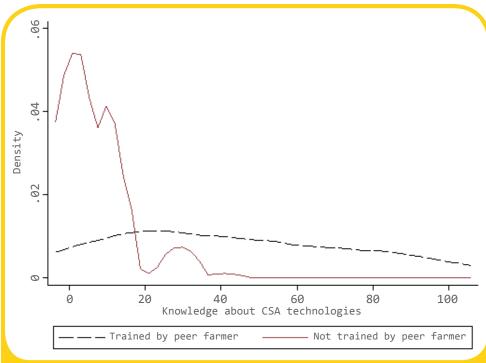
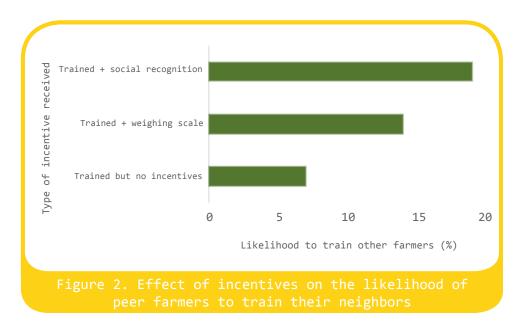


Figure 1. A comparison of CSA knowledge for farmers who were trained and those who were not trained by peer farmers

to praise the 'good' performance of the farmers implementing positive changes, and the whole village received a weighing scales.

A year after the experiment, the number of farmers who had gained knowledge about drought-tolerant varieties and conservation farming had increased six fold because of peer learning (Figure 1). Much of this knowledge increase was a result of incentivized training of peer farmers. Specifically, trained but un-incentivized peer farmers were only 7% likely to train others whereas those who received weighing



scales were twice as likely as un-incentivized peer farmers to offer training, while those who received social recognition were 19% more likely to spread knowledge (Figure 2).

## Peer-to-peer learning: Lessons for incentivizing farmers

- ▶ Understanding the requirements for social learning within a wider social context is key to incentivizing adoption.
- When implemented in a holistic way, peer-to-peer learning can provide farmers with much needed technology and information to implement CSA, while spreading the benefits to a wider group of people.
- This process requires trust building, together with an understanding of the type of rewards expected or valued within a given community.
- The community will only adopt the technologies if they trust the teacher.

## More information

- Shikuku KM; Pieters J; Bulte E; Läderach P. In press. Incentives and the diffusion of agricultural knowledge: Experimental evidence from northern Uganda.
- Shikuku KM; Winowiecki L; Twyman J; Eitzinger A; Perez JG; Mwongera C; Läderach P. 2017. Smallholder farmers' attitudes and determinants of adaptation to climate risks in East Africa. Climate Risk Management 16:234–245
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## **Supporting Materials**



#### CSA Lesson Brief 5:

Know what drives the adoption of climate-smart agriculture across different scales



#### CSA Lesson Brief 6:

Target the pathways to scale out climate-smart agricultural technologies to farming communities

Shikuku, K., Mwongera, C Läderach, P., Acosta, M., Ampaire, E., Eitzinger, A., Lamanna, C., Mwungu, C., Twyman, J., Winowiecki, L. 2017.

Support farmer-to-farmer and community-wide social learning International Center for Tropical Agriculture (CIAT). Cali.



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