

# Lessons learned in creating awareness of scale-appropriate machinery for strip tillage and bed planting through video in Bangladesh

Timothy J. Krupnik<sup>1\*</sup>, Farida Perveen<sup>1</sup>, Harun Ar-Rashid<sup>2</sup>, Paul Van Mele<sup>3</sup>, Jeffery Bentley<sup>3</sup>.

<sup>1</sup> Cereal Systems Initiative for South Asia (CSISA) - Mechanization and Irrigation Project. International Maize and Wheat Improvement Center – Bangladesh.

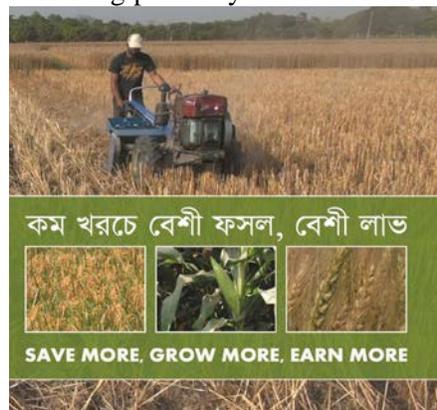
<sup>2</sup> Agricultural Advisory Society.

<sup>3</sup> Agro-insight.

\* House 10/B, Road 53, Gulshan-2, Dhaka, 1213, Bangladesh. Email: [t.krupnik@cgiar.org](mailto:t.krupnik@cgiar.org).

## Background

Southern Bangladesh is among the country's most impoverished regions, with over 3 million households subsisting primarily on cereals based agriculture (MOA and FAO, 2012). Since 2010, the CSISA project has worked in this region to encourage the uptake of resource-conserving and cost-reducing agricultural practices, with an emphasis on conservation agriculture (CA). However, the sheer number of farmers in the region presents great challenges to extension and training efforts.

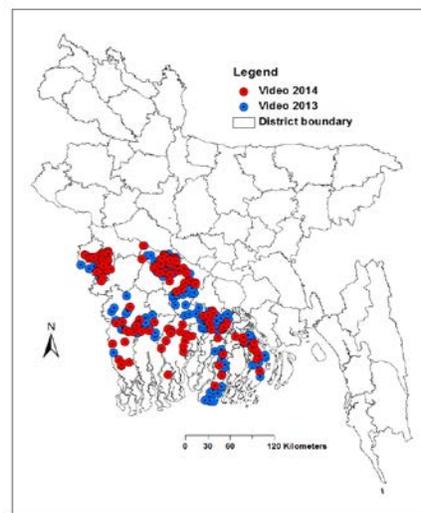


**Figure 1. DVD cover sowing an LSP preparing a field.**

Public video screenings and the distribution of DVDs can provide an alternative way to reach farmers with awareness-raising messages, and to share information. But in order to be effective vehicles for communication, videos must have local relevance and should resonate with farmers. This is best accomplished where videos are produced in a participatory fashion and where farmers themselves help to identify the information to be highlighted while filming. A clear strategy for post-production dissemination is also necessary (Van Mele, 2006).

In 2012, the International Maize and Wheat Improvement Center (CIMMYT) and Agro-Insight produced a 22-minute film, entitled “Save more, Grow More, Earn More” (Figure 1), focusing on scale-appropriate farm machinery for strip tillage and bed planting in Bangladesh. Much of the film's subject matter was identified through pre-filming focus group discussions and interviews with innovative and articulate farmers, many of whom also spoke in the video itself. We also focused attention on local service providers (LSPs), who are rural entrepreneurs familiar with CA. Most LSPs own their machinery, and sell CA land preparation and planting services to farmer-clients. Though custom plowing is generally used for full tillage, CA is increasing in Bangladesh, where there are >300,000 two-wheel hand tractors (2WTs) in use that can be made compatible with innovative direct seeding and bed planter attachments (Biggs et al., 2011). “Save more, Grow More, Earn More” focused on machinery that LSPs can attach to 2WTs to perform strip tillage and bed planting.

After filming the videos, CIMMYT worked with Agricultural Advisory Society to organize public video showings in villages throughout southwestern Bangladesh. Using both qualitative methods and a phone survey (Bentley et al. 2013), this poster reviews some of the lessons learned in our efforts to use video to boost awareness of CA machinery and practices.



**Figure 2. Locations of the 482 video shows in Bangladesh**



**Figure 3. Audience watching video in a village in Barisal, Bangladesh.**

## Results

“Save More, Grow More, Earn More” was shown to 112,029 farmers in 482 screenings between 2012-14 (Figure 2), with active viewer engagement (Figure 3). Several of the shows included demonstrations of strip-tillage and bed planting machines, with season-long demonstrations where crops were grown to maturity in 51 villages. 1,439 copies of the “Save More” DVD and 29,450 leaflets describing CA and telling farmers where they could purchase 2WT-

attachable machinery were also distributed.

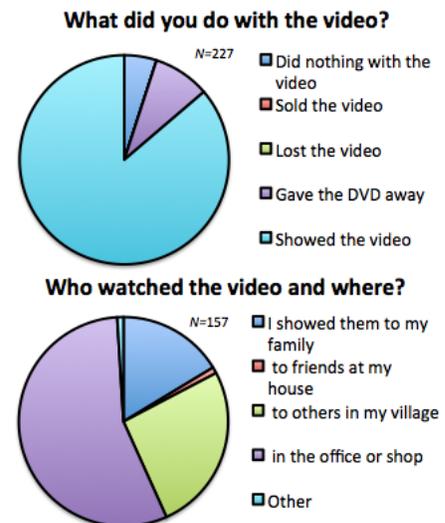
## Applications and Implications for Conservation Agriculture

The following ideas can improve the use of video to create awareness of and interest in CA:

- *Distribute copies of DVDs wherever possible.* Of 227 people surveyed who received DVDs (15% of the total), 69% showed the video. 58% were agro- dealers, extension agents, NGOs or shop owners who showed the video to clients and customers (Figure 4). Some watched the video many times to study the content. Thoughtful distribution plans can help get DVDs to as many end-users as possible.
- *Make posters, not leaflets.* The leaflets were often forgotten or lost. Few people followed up by contacting machinery dealers. Posters may be more effective because they can be left in public places in villages, with extension agents, or in community centers.
- *Videos screenings open the door for LSPs and farmers to adopt CA practices,* but farmers and LSPs will also need hands-on training and technical backstopping to experiment with CA. Video screenings can be combined with practical planting and machinery demonstrations. Farmers and LSPs are more interested in seeing the performance of a crop grown by machinery than in seeing the machinery itself.
- *Video shows are prime media for linking potential CA service providers with machinery dealers.* Private firms should be involved from the start to plan showings, rather than as an add-on after film screening schedules are set by development projects.
- *Public video shows attract hundreds of people and raise many questions.* Showings are more effective when followed by a question and answer session led by a skilled facilitator with sufficient technical knowledge, using microphones and speakers so that farmers can ask more about what they have seen.

## References

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**Figure 4. Results of mini-survey of machinery dealers, shop owners, lead-farmers, and 2WT owners who received additional DVDs.**