

The Story of a Video on Mechanical Seeders in Bangladesh

“If we are convinced, we will buy it”

Jeffery Bentley and Paul Van Mele (Agro-Insight)
and Harun-ar-Rashid (Agricultural Advisory Society, Bangladesh)

MEAS Case Study # 6, November 2013

Introduction

Videos for sharing ideas with farmers are becoming more common. Yet the video makers often receive little or no feedback from viewers. In a previous study for MEAS in Uganda, the authors found that farmers learned a lot from videos that were left in their communities, where people could watch them over and over (Bentley et al 2013). Here we report on an experience in Bangladesh where there was a great effort to leave farmer learning videos in the hands of volunteer video hosts, including tea stall owners and machine dealers. In a short time over 100,000 farmers got to see the videos.

The video in question is called “Save more, grow more, earn more” (see www.accessagriculture.org/node/949/en). It is an unusual type of extension video because it was designed as a promotional rather than a training video. It was supposed to promote a new technology and create demand for it, not to show the audience how to use the innovations: strip tillage and bed planting with machine (see Appendix 1). Both of these planting styles conserve precious soil and water and save labor, which matters because wages are on the rise. The only problem is that the strip tillers are made in China and the bed planters are made in Bangladesh, but in small quantities. Eventually, both machines can be mass produced in Bangladesh. But for the time being, they are only available in limited numbers.

One solution is a project to create demand for the machines while encouraging dealers to import them. The promotional video was thus created to show the machines to farmers, especially those who owned two-wheeled tractors, to which the machines can be attached (see Appendix 1). From October to December 2012, Tim Krupnik of CIMMYT hired Harun-ar-Rashid and his staff at Agricultural Advisory Society, AAS, to show the video in villages to farmers. They reached more than 85,000 farmers (Harun-ar-Rashid, 2013).



Some of the villages also saw demo plots of the tillage innovations. The “Save more, ...” video was included on a DVD with four other videos on rice seed health, which had been made in with IRRI in Bangladesh in 2003. Those who received the DVD were asked specifically to show the “Save More” video, while the rice videos were not mentioned.

AAS screened the machinery video in 332 communities in 11 districts. Seventy-eight percent of the audience was male. Wherever AAS showed “Save more, ...” it left a copy of the DVD for the folks to watch again. They could also watch the rice seed videos if they noticed them on the menu and were interested. AAS left DVDs with tea stalls, NGOs, CBOs and many others. AAS gave out 1,258 DVDs and helped establish 27 strip tillage demo plots.

This is a case study of 12 groups of people and organizations (volunteer video hosts) that accepted copies of the DVD and six leaflets on the subject. The study asks several quantitative and qualitative questions.

Quantitative

- How many times did the host show the video?
- How many people saw it?
- How many women were in the audience?

Qualitative

- What did the viewers learn by watching?
- Did the host show the four rice seed videos or only the feature video on tillage?
- What did viewers do with this new information?
- Why did the host screen the video (motivation)?
- What did the host do with the leaflets?

In June and July 2013 CIMMYT and AAS surveyed 227 video hosts by phone. The hosts were grouped by:

Private sector

1. Machine dealers, manufacturers and repairers
2. Tea stalls owners
3. Grocery store and other village shop owners
4. Agro input dealers
5. Power tiller operators
6. Cable TV operators

Public sector

7. Government extension services

Civil society

8. Union Information Service Center (UISC)
9. Non-Governmental Organizations (NGOs)
10. Demo farmers
11. Community Based Organizations (CBOs)

The interview results for each of these ten groups are described further below. In Summary: though, most people found the videos worth watching -- 157 (69%) showed at least some of the videos to others (Table 1).

Table 1: Replies to: “What did you do with the DVD?”

8 out of 227	4%	Did nothing with the video
0 out of 227	0%	Sold the video
1 out of 227	0%	Lost the video
17 out of 227	7%	Gave the DVD away
157 out of 227	69%	Showed the video

The people who did show the video screened it between one and 25 times, with an average of four.

The hosts were about evenly split between those who showed only the machine video (“Save More, Grow More”) and those who also showed the videos on rice seed (Table 2).

Table 2: Replies to: “Which videos on the DVD did you watch?” (Respondents could choose more than one)

65 out of 227	29%	Watched none of the videos
60 out of 227	26%	Watched “Save More, Grow More”
49 out of 227	22%	Watched “Seed Sorting”
34 out of 227	15%	Watched “Seed Flotation”
46 out of 227	20%	Watched “Seed Drying”
45 out of 227	20%	Watched “Seed Storage”
132 out of 227	58%	Watched some of the videos but do not remember which ones

The video hosts shared the videos with family members, neighbors and clients at the office or shop (Table 3).

Table 3: Replies to: “Who watched the videos and where?” (Respondents could answer more than once)

38 out of 227	17%	I showed them to my family
3 out of 227	1%	... to friends at my house
61 out of 227	27%	... to others in my village
131 out of 227	58%	... in the office or shop
3 out of 227	1%	Other

Group 1 – Machine Dealers, Manufacturers, and Repairers

We supposed that these businesspeople would be keen to show the videos as free advertising.



Host Md. Halim Bepari
Place Mallikpur Bazar, Krishnanagar upazila, Faridpur
Type Agro equipment dealer
Showed the video Gave DVD to a tea stall, which showed it 3 times
Leaflet Gave 6 sets to 2WT operators & farmers

Home from school. University student Halim Bepari (who was minding his father’s machine-and-parts store) didn’t know exactly what his father had done with the DVD, except that he had given it to a nearby tea stall (see first case in Group 2).

Oli can make anything. Oli Hujur started by repairing pump engines and now has a workshop, Janata Engineering, that makes and repairs all kinds of machinery. Oli Hujur is now making the bed planters and strip tillers in his shop. He has also shown the video to about 50 farmers during 15 screenings in his shop. He stays and watches it with them and is convinced that some of these farmers will come in and buy a machine, though he said no one has come into the shop citing the video.

Host Oli Hujur, owner, Janata Engineering
Place Shorojganj, Sadar, Chuadanga
Type Machine manufacturer and dealer
Showed the video 15 times
Total audience 50
Women 0
Viewer response He expects some of them to buy the strip tillage machine.



Oli Hujur shows us the blades beneath the seed box of the seeder or strip tillage machine. To use this machine for strip tillage, some of the blades have to be removed, leaving unplowed strips between the plant lines.

Summary: Machine Dealers, Manufacturers and Repairers.

Although these dealers are directly linked to farmers and have a vested interest in selling the machine, only one of the three showed the video. The other two gave the DVD away. Still, two of the dealers are confident that farmers are buying or will buy the machinery.

Type Agro equipment dealer
Number 3
Showed the video One of the three showed it himself 15 times. Overall, the videos were shown 25 times (counting both of the tea stalls that had received the DVD from the dealers).
Audience 100
Women in audience none

Group 2 – Tea Stalls

At first, AAS planned to base its DVD distribution almost entirely on tea stalls. Most have room inside the small shop where customers can sit and drink their tea. They may have two cups and sit through two or three hours of TV. Tea stalls can be in a village or (more likely) in a bazaar, a cluster of small shops squeezed onto a street or two, often at a crossroads. Village tea stalls are more likely to cater to farmers; tea stalls in a bazaar are a place for shopkeepers,

artisans, travelers and others to mingle, with only the occasional farmer present.

One tea stall was pretty quiet. After we left Md. Halim Bepari minding his father’s machine shop, we went to the tea stall where the elder Mr. Bepali had left the DVD. When we visited, the owner was away (he also sells well water, and he farms). His small sons were minding the store, but because it was Ramadan, there were no customers for tea. The boys showed us that they had a DVD player and lots of DVDs to play. Later we met the boys’ father at home, and he said he didn’t know where the “Save More” DVD came from. He left his shop for a while and when he came back it was just there. Even though the DVD just appeared, he did show it a few times, which does suggest that the video is appealing.

Farmers asked to show video several times. Md. Khalil Sheikh is the tea stall owner in the village center. He said the farmers were asking him to show the video because they were all interested in the strip tiller, which they had started using for onions but also now use for jute, rice and wheat. They like it because it is good in clayey soil.



Host
Md. Khalil Sheikh

Place
Holudbaria village,
Kanaipur union, Sadar,
Faridpur

Type
Tea stall

Showed the video
6 times

Innovations after watching video One farmer, Kalom Chakladar, bought a strip tiller after seeing the video in this tea stall

Notes We cut the interview short because it was late afternoon and we wanted to meet Kalom Chakladar

At last, a live audience. In the village of Hudapara in Chitla, all of the customers present said they had watched the video at the tea stall. Five of them had also seen it at the biscope (public screening). They remembered a lot about it. One white-haired elder recalled planting wheat. Everyone remembered something:

“A machine dropping seed one by one.”

“Plowing and bed preparation at the same time. They apply the maize seed in a line.”

This was funny, because in tea stalls people usually remember next to nothing about what they saw in the video,

and here they remembered key details. It is probably because this is a village tea stall, not one in a bazaar. In the village, most tea stalls stand alone and cater to the neighbors who have known each other for years. They are farmers, not market people. Even though it is in the village, women don't come to evening films. “Women won't come at night,” one matronly woman scolded us for asking.

Thoughtful villagers. In Maserdir, a group of farmers in a village tea stall had seen the biscope and watched the video. As often happens, a younger person, a teenage boy, could remember the particular details better than the mature men.



<i>Host</i>	Md. Abdul Rashid Unani
<i>Place</i>	Maserdir, Mominpur, Sadar, Chuadanga
<i>Type</i>	Tea stall (village)
<i>Showed the video</i>	Once
<i>Total audience</i>	40
<i>Women</i>	0
<i>Viewer response</i>	They saw technical problems in the field, but the video interested them in the technology as such.
<i>Demo</i>	Yes
<i>Leaflet</i>	Pinned it up in the tea stall
<i>Seed health videos</i>	Watched them
<i>Viewer response</i>	They say they already dry their rice seed well and store it in earthen pots.

On the road to Chuadanga town in the winter of 2012-13, CSISA (a USAID-funded tillage project) had planted a large demo plot. Without being invited or having the demo explained to them, the men from this village had stopped on their way to town, gotten off their bicycles or motorcycles and studied the plots. They had observed technical problems -- e.g., the maize beds are difficult to weed, and the ground becomes hard. Yet, because of the video, they had seen the promise of the technology, intangibles which are not apparent in a field of maize when no extensionist or other person is available to explain the trial (e.g., that the land preparation costs are lower), so these farmers are interested

in bed planting perhaps for other crops but are not totally convinced. They want to find more information about it—and if they are satisfied, they will adopt.

The skeptics of Digri. In this village tea stall, people said that they had seen the demo plot and that the yield of maize is higher and less fertilizer is needed, but spading (heaping the earth around the maize plants) is more difficult on machine-made beds. In the demo of maize planted in beds there were gaps between the seeds. The farmers had some ideas for improving machine planting of maize. First they would like a machine that could plant maize on flat land, not in beds. (The strip till machine can do that, so more interaction between researchers and farmers could be productive.) If they have to make beds, they want a narrow one, with a single line of seed, not a double one. They were keenly interested in the idea of mechanical planting -- it just had to be improved.

These farmers are thinking seriously about the technology, and it's only because they had the video and were able to see it several times that they appreciate bed planting. The demonstration shows them technical problems that will have to be worked out. In this case, as the other farmers have been saying all along, they need to be able to see a demo plot, too. The video sums up the researchers' argument in a convincing way. Farmers wisely know that a video does not tell the whole story and that, when they see a demo plot as well, even without facilitation, they get a full enough view of the technology to keep learning about it and possibly modify it on their own.

Played it 90 times. In Gora Daho Bazar, AAS gave the DVD to Md. Siddique Mollah, an input dealer, but he didn't have a DVD player, so he gave the DVD to a tea stall owner, Md. Shahid Mollah, who said he played it every day for three months.

<i>Host</i>	Md. Shahid Mollah
<i>Place</i>	Ghoradaho Bazar, Koijhuri Union, Sadar, Faridpur
<i>Type</i>	Tea stall
<i>Showed the video</i>	90 times
<i>Total audience</i>	200
<i>Women in audience</i>	4
<i>Innovations after watching video</i>	40 or 50 people adopted bed planting. A farmer experiment (see text)
<i>Demo</i>	A project did several demo plots of bed planting in the community but not of strip tillage.
<i>Leaflets</i>	They received some sets.
<i>Seed health videos</i>	Showed all 4
<i>Audience response</i>	Not sure

That seemed hard to believe, but the tea stall owner said:

“Everyone wanted to see it.”

Md. Abdul Gofur Sheikh (a power tiller owner) added, “I found some difficulties in using the bed planter. I wanted to try to see the video again to try to understand it.”

One farmer chimed in, “We wanted to see the video!”



Anwar Hossain, field coordinator, AAS (left), and audience member Md. Abdul Gofur Sheikh, who watched the video many times to understand the innovation.

It turns out that there was a project in the village doing demos of bed planting, setting up commercial-sized demo plots of bed-planted maize, providing the machinery and everything. The men couldn’t remember the name of the project, but it sparked enough interest that the farmers watched the video over and over to learn more about the innovation. They put the video on once a day from October through December before watching their evening movie.

Gofur Sheikh, power tiller owner and farmer, wasn’t on the list of people to get a demo plot, but he had seen the video in the tea stall and visited the project staff and insisted on having a demo plot, and they quickly agreed. Gofur Sheikh was so keen on bed planting that after planting 22 decimals (one decimal = 1/100 acre or 40 square metres) with maize, per the project recommendations, he experimented on his own with 13 decimals of bed-planted wheat and 26 of sunflower. The results for wheat were good -- an extra *mond* (almost 40 kg), six instead of five. Mr. Sheikh also modified the technology -- he broadcast the fertilizer on the beds before the final planting, instead of using the tubes in the planter. It may be an extra task, but “I get a better dose of fertilizer by hand” (i.e., more uniform, mixed with the soil more evenly).

Summary: Tea stalls. The results from other tea stalls are captured in Appendix 2. Many of the tea stall owners said that they were too busy making tea to watch the videos themselves and just turned them on for their customers. The tea stalls do show the videos, probably until all the regular customers have seen them. Hardly any women go to tea stalls.

Most of the tea stall owners said that the farmers liked the videos, and are interested in the content but don’t act on it. Farmers would like to try the strip tillage machines but don’t know where to get them. Hardly anyone read the leaflets. Only one tea stall owner pinned up his set of leaflets in the

tea stall. Most forgot about the leaflets; others gave them to farmers.



A tough act to follow. In the tea stalls, farmer learning videos have to compete with the best of Bollywood

People who go to the tea stall are those who do not like to stay at home in the evenings or who are too poor to own a TV. They mainly go to watch Indian films. Wealthier and successful farmers rarely go. Village tea stalls reach more farmers than do tea stalls in bazaars.

Because people have the DVD in their hands, some watch it several times to study it. The video shows the advantages of the technology, but the farmers don’t buy into the idea until they see a demo plot, where the disadvantages become clear. As a promotional video, “Save More” was right on target -- it built interest in the innovations. A real training video should also show the disadvantages and how some farmers innovated to overcome them. That is why a good training video can’t be made before the technology is fully tested with farmers.

Type	Tea stalls
Number	29
Showed the video	27 of the 29
Average number of screenings (for those who could estimate)	9
Average audience size (for those who could estimate audience)	50
Women in audience	Negligible

Group 3 – Grocery Stores and Other Village Shops

Grocery stores are like tea stalls, but with even less incentive to show learning videos -- the audience comes for groceries, not to sit down and watch a video.

How to get out of the grocery business. Rashid owns a little store, but it may not be the most exciting job in the world, so after seeing demo plots in another village, he got the idea of becoming a custom machine operator. His son-in-law has a power tiller that Rashid could borrow. The only problem is that Rashid doesn’t have a strip tillage machine. So he took his DVD over to his father-in-law’s house and played the “More” video on the father-in-law’s DVD player. The father-in-law found the video so convincing that he agreed to buy a

strip tiller and loan it to Rashid, who wants to do custom strip tillage. “How will you get the training to use the tiller?” we asked. That fazed Rashid -- until then he hadn’t thought he would need any training at all.



Host Md. Rashid Khan
Place Ramkantopur, Ramkantopur, Sadar, Rajbari
Type Grocery and fertilizer shop
Showed the video Once
Total audience Unknown
Women Unknown
Viewer response They agreed to buy a strip tillage machine.
Demo Yes

knows, none of the viewers sought more information about the machinery.

Buying from farmers. Mr. Islam from Grameen enterprises (no relation to Grameen Phone) buys commodities from farmers. He showed the video in his home village about three times to about 40 men and four women, not at his place of business.

Summary: Shops. The shops have little promise for showing videos in the future, but because the shop owners have the well-being of the community at heart, they may be well-suited to help *distribute* DVDs with agricultural videos. The results from the four shops sampled are wildly variable, mostly because of the higher response from the one electronics shop.

Type	Village shops
Number	4
Showed the video	3 of the 4
Average number of screenings (for those who could estimate)	5
Average audience size (for those who could estimate audience)	100
Average number of women in audience	5

Group 4 – Agro Input Dealers for Seed, Fertilizer, Oil, and Fuel

Because these stores are based on agriculture, we thought they would have more of an incentive to show learning videos than the grocery stores, but they usually don’t.

A bazaar crowd. Nazrul Islam showed the video to about 50 people, of whom five were women, but when we asked the crowd out front, none of them could remember it. They said that the people who were interested in the machinery weren’t there -- they were working. It makes sense that a hard-working farmer is in the field, not hanging out at the bazaar.

Some women clients. Mostafa Kamal has an attractive, well-stocked agro inputs shop in Chuadanga. He showed the videos 10 times to groups of outgrowers, smallholders who grow vegetable seed for him. He played all five videos for the groups. The farmers especially liked the bed planter for maize. Mr. Kamal likes it too, but he said that the bed planter works only when the soil moisture is just right. If it gets too wet, the clayey soil clings to the blades and brings the machine to a halt. If the soil is too dry, the blades can’t penetrate it properly. But the farmers liked the videos and saw that irrigation is easier, germination is uniform, and yields go up while costs come down. In some of the cases shown above, the men showed little interest in the seed videos, but rice seed is a women’s issue, and (according to Mr. Kamal) the women farmers said the rice seed technology



Host Md. Rafiqul Islam
Place Haroakandi Bazar, Aliahash, Alamdanga, Chuadanga
Type Grocery store
Did not show the video

No DVD player, no video. Rafiqul Islam has a miniature grocery store but no DVD player, so he gave his DVD to a local leader, a council member of the union parishad, and doesn’t know what happened next. This shows that grocery shop owners keep community members in mind and do not simply disregard agricultural information (e.g., in videos) that could be of use to others.

Electronics. Selim owns an “electronics shop” in the middle of the countryside. Selim had played the video 12 times in his shop. He played it so much because he doesn’t have cable TV and he has few DVDs. He thinks at least 250 people saw the video, including about 10 women. People liked it and said, “What you are showing is good. It’s good looking because there is crop information, pastures, scenery.” But as far as he

is easy and locally available. They have started storing seed in earthen pots, as shown in those videos.



Hosts
Mostafa Kamal and Krishi Sheba

Place
Chuadanga

Type
Agro input dealer

Showed the video 10 times in communities to his groups of seed outgrowers (not in his shop)

Total audience 300

Women 50

Viewer response They like the bed planter for maize.

Demo Yes

Leaflet Did not receive

Seed health videos Played them all

Viewer response The women especially are interested.

The famous demo. Md. Titon also saw the demo plot that the farmers in Maserdir saw (see Section 2). People complained about the demo, where they saw gaps between the seeds. "Because if there is a dirt clod the seed cannot go there, so it goes to where another seed is." People from 15 km away have been talking about this demo plot. The farmers are interested, but they come to observe and study the plot and notice the problems.



Host
Md. Titon

Place
Kulchara Mor Bazar,
Pourashova, Sadar,
Chuadanga

Type Agro input dealer

Showed the video 3 times

Total audience 30

Women 0

Viewer response People complain about the demo

Demo Yes

Leaflet Received one

Seed health videos Didn't show

Summary: Agro input dealers. The findings from other agro input dealers are summarized in Appendix 3. The dealers who are most interested are those who are also farmers. As dealers, they have little vested interest in this technology because farmers will buy seed and fertilizer whether they use

the machines or not. The dealers reached more women than other private sector actors, but that is mostly because of Mr. Kamal. Dealers like him who work with seed outgrowers or other groups of farmers may be more interesting as future outlets for agricultural learning videos.

Type	Agro dealers
Number	9
Showed the video	8 of 9
Average number of screenings (for those who could estimate)	3
Average audience size (for those who could estimate audience)	75
Women in audience	Half of the dealers reached women.

Group 5 – Power Tiller Operators

These men work right in farmers' fields and would be the ones to use the new machinery. We hoped they would see the videos as a way to push a new business niche. But they are in the plowing business, not the video business.

A real entrepreneur. Power tiller operator Somar Kumar Das is also a farmer and he has a clothing shop, where he was beaming cool confidence as he sat on the platform in his shop, wearing a flowing lungi and unfolding cloth for his customers.



Host
Somar Kumar Das (left) owns a cloth shop, farms and does custom tillage.

Place
Holudbaria village,
Kanaipur union, Sadar,
Faridpur

Type	Power tiller operator
Showed the video	4 times
Total audience	150
Women audience	60
Innovations after watching video	Nothing
Leaflets	Got 5 sets and distributed 2
Seed health videos	Showed three of them
Audience response	Cannot remember them
Notes	He had not noticed the page of the leaflets on the dealers. As he looks at it he says he already knows RK Metal.

He had shown the video in his home four times, going around inviting his neighbors to watch it. We asked him if that was good for business. He laughed. "I didn't do it for business but for the respect, so my neighbors would see that

I had the video." Building respect is a crucial part of establishing and maintaining business, even though Somar may not have considered it as a direct business strategy.

One would show a video that many times only if it was appealing. Because Kumar Das had a power tiller and had seen the video at least four times, he was in a place to judge the content. He was obviously smart enough and successful enough to invest in new equipment if he thought it would be profitable, but he wasn't willing to buy the equipment. "I am not willing to buy it, but if I see the benefit of it I might. I am still not totally convinced," he said.

A serious person. A serious person with previous experience may be in the right frame of mind to get more out of a video. Azom Khan has four grown sons, more than enough to work the small farm. This frees him up to spend most of his time doing power tillage custom work. He plows his own 2 acres and 50 to 100 acres for others. He decided to buy a strip tillage machine while watching the video. And if he can, he will buy it by the next winter season, seed tubes and all. He gave one of his DVDs to a tea stall and one to a grocery store, so like most tillage operators, he's not in the business of showing videos himself but is ready to pass on information to others in the community.



Host
Azom Khan

Place
Aruakandi, Chandpur,
Boalmari, Faridpur

Type
Power tiller operator

Action taken	Got 2 DVDs, gave 1 to tea stall, 1 to a grocer
Showed the video	Tea stall played it "50 times" and the grocer played it "20 times"
Total audience	50 at the tea stall, not sure at the grocery store
Women	Not sure
Viewer response	Some called him to plow for onion. Azom decided to buy a strip tillage machine.
Leaflet	Read it and noted where to buy the machinery
Seed health videos	Not sure

Farmers rarely get to be celebrities. Shawpan Kumar Biswas (Shonaton) from Sunaikuri, Nawabpur, Baliakandi, Rajbari, has his picture on a billboard, flyers and posters, showing off the strip tiller. He did not show the video to anyone but shared the leaflets with others. He is also a farmer and a power tiller operator. He has worked with projects for years

and does a lot of machine work for other farmers, but he does many things besides strip tillage, including a small experiment with rice following sesame, using the tiller to plow and make furrows. A lot of his work is just tillage, not minimum tillage (more like maximum tillage), but it is creative (he invented a tool to plant four lines of onion at once), and he is an expert at bed planting and strip tillage. People like this are giving the strip tiller a thorough test under real-world field conditions. He has 2 acres of wheat in strip tillage. But he's not doing much to promote strip tillage. He doesn't use the videos.



Shonathan on a billboard ...



... and in real life (at right) in his rice trial

"They talked me into it." Motiur Rahman is a tillage operator who reluctantly agreed to meet with us. He was at the upazila at a training when Anwar from AAS met with him and talked him into taking a DVD. Motiur made a slight effort to watch it. He put it on at home and the power went off as he was starting. Later he took it to his cousin's house, where some folks started watching it, but Motiur slipped out the door and went back to work, plowing other people's fields with his power tiller. He's in the tillage business, not in the video business.

Summary: Power tiller operators. These men are not interested in promoting a specific technique. At least one of them decided to buy the tiller because of the video. Unlike

tea stall owners, they have no shop to show a video in and seem to feel that showing videos distracts from their work. Some of them gave the DVD away or showed it at a tea stall. Yet most of them showed the video, usually at home, and reached a fairly large audience, including some women. They may have been motivated more by their commitment to AAS than by self-interest. (Appendix 4 captures the responses from other power tillers.)

Type	Power tiller operators
Number	9
Showed the video	8 of 9
Average number of screenings (for those who could estimate)	4
Average audience size (for those who could estimate audience)	65
Women in audience (for those who could estimate)	14

Group 6 – Cable TV Operators: Dish Lines

Cable TV could gain from showing attractive videos. Women have relatively easy access to TV. Small cable TV stations are called "dish-lines" because they have satellite dishes and run cable lines to homes and businesses. They capture 40 or 50 channels, and many stations make one or two more channels themselves with DVDs. Channels include Hindi musicals, contemporary and classical Bengali films, news, Animal Planet, Discovery, National Geographic and Aljazeera. Some have just a few hundred subscribers and charge only 100 to 150 taka (\$1.35 to \$2) a month.



The dish-line is a cable TV company that captures channels with satellite dishes ...



... and then runs lines to tea stalls, shops and homes

A CBO gives to a dish-line. Naeb Ali Sheikh heads a community-based organization (CBO) and has a homeopathic medicine shop, but he has no DVD player, so he gave his DVD to the local dish-line, which showed it 15 times. This may not be an exaggeration because there were few DVDs in the station, so it may be short of alternative films to play. This dish-line is so small that it doubles as a carpentry shop, with wood shavings on the floor under the cables. We talked to the men crowding in the door of Naeb's shop. Of the 20 people, five said they saw the DVD on TV (and they remembered some of it), so dish-lines may be one way of getting information to people.

Big cable. A large cable TV station, Rajbari Cable Network (RCN), played the video twice, once at 2 p.m. and again at 8 p.m., but has no idea whether farmers watched it (Rajbari is a city). RCN has several thousand subscribers and 70 channels. This station generally charges a fee to show learning videos but made an exception in our case. For 8,000 taka (about \$100), it showed a biogas video twice a day for a month, but again it has no idea how many people watched it.

Classy channels. The Nima Satellite Cable TV station is a dark room crammed with cables in the back of a market. It has 53 channels and 600 subscribers who pay 100 to 150 taka (a dollar or two), so it's a small business. It did show the videos a couple of times. The only audience feedback was from some people who complained, "Why are you playing this instead of a movie?"



Host
Mahabubur Rahman
and Al Mahadi
Sajjad, owners of
Nima Satellite Cable

Place
Nowapara Bazar,
Nowapara union,
Modhukali, Rajbari

Type	Cable TV
Showed the video	5-7 times
Total audience	Unknown
Women	Unknown
Viewer response	"Why are you playing this instead of a movie?"
Seed health videos	Not sure

Will show videos. We met Nazmul Haque, dish-line owner, cuddling his little daughters in the shade while chatting with some local youths. He did play the videos on his dish-line at least 10 times. An input dealer (not AAS) gave him the DVD. He has about 400 subscribers and shows 52 channels. Of the 12 young men at the interview, none could remember seeing the video. It is possible that no one saw it at all. Mr. Haque is interested in receiving more learning DVDs and says he

would play them. He got a leaflet and gave it to farmers. In general, the smaller dish-line owners in the countryside are more willing than those in the city to show learning videos for free. They are more likely to know farmers, socialize with them and identify with them.

Summary: Cable TV. Subrota of AAS said that the dish-line operators sometimes asked, "What is our benefit?" They wanted money. Subrota would say, "If you can show this, it will benefit farmers." Bangladesh is not like Africa, where radio and TV stations are starved for content in the local language. Bengali is the world's seventh most widely spoken language, and in Bangladesh media outlets are overloaded with content.

Yet, despite the wealth of entertainment content, all six of the cable owners showed the videos. If there was a large enough supply of attractive learning videos, a dish-line might be able to create an audience-- e.g., by broadcasting the educational programs as a regular feature at specific times.

Yet even the ones who are excited about showing more videos have no idea how many people watched the videos. Perhaps the best strategy to motivate them in future is to have CBOs or authorities from the upazila or union parishad give agricultural videos to the local cable so that the station owners feel that their clients want to watch the videos, not an outside agency is pushing them. (See Appendix 5 for a overview of results from cable operators.)

Type	Cable TV
<i>Number</i>	6
<i>Showed the video</i>	All 6
<i>Average number of screenings (for those who could estimate)</i>	6
<i>Average audience size (for those who could estimate audience)</i>	No idea
<i>Women in audience (for those who could estimate)</i>	Half?

Group 7 – Department of Agricultural Extension at District (zila) and Subdistrict (upazila) Levels

From the private sector we move on to the public extension service. Bangladesh has a national extension program. From top to bottom, national staff members may be assigned to the district, the subdistrict (upazila) and the union (the lowest level of government, consisting of wards, made up of villages).

District. The deputy director of the district DAE in Faridpur town could not really say why the DAE showed the video ("to motivate people") and said they would need someone to buy them the tillage machinery and give them a demonstration on it before they could teach farmers, but added that strip tillage was a good technology and that it could catch on.



Left to right: Vaskor Chokraborti, crop specialist, Harun, Jeff, Anwar, Subrota.

<i>Host</i>	Deputy Director of DAE/Faridpur, Mr. Vaskor Chokraborti, and colleagues
<i>Place</i>	DAE, Faridpur town
<i>Type</i>	Government extension agency
<i>Showed the video</i>	4 or 5 times
<i>Total audience</i>	150 people
<i>Women in audience</i>	15
<i>Feedback from audience</i>	They are interested in adopting. They received only "Save More", not seed health videos. They got the DVD from Dr. Uddin of CIMMYT, not from AAS.
<i>Notes</i>	

He's not at the upazila. In Damurhuda, we did not meet the upazila agricultural officer (UAO) because he's apparently never there. He is gone so much there is a motorcycle parked in his office, and the towel is still on the back of his chair. He was gone when Anwar from AAS came by to leave the DVD, so Anwar gave it to the "assistant computer specialist," who was unable to locate the UAO and instead gave it to one of the union-level staff members, who did nothing with it.



<i>Host</i>	Md. Ali Jinna
<i>Place</i>	Jibonnagor, Chuadanga
<i>Notes</i>	In the Jibonnagor upazila, the UAO is also missing. Some of his staff come out of the meeting to watch us leave.

<i>Type</i>	DAE
<i>Showed the video</i>	No
<i>Demo</i>	No
<i>Leaflet</i>	Some may have been given to farmers.

Second vanishing act. In Jibonnagor upazila, we saw a repeat performance, where the UAO was gone, the lights were out and his staff was meeting in his office, with the shutters closed, in eerie darkness before his empty chair. This UAO was odd because he had told Anwar he wanted 15 copies of the DVD. Anwar said he couldn't have that many and gave him five. After that, you would expect some action, but the man did nothing. We had a dozen staff members there, and they had never heard of the "Save More" DVD.

A new man in the upazila. Abdul Gofur is the new agricultural extension officer in the new upazila of Mujibnagor. The DAE showed the video a few times, but little came of it because the farmers don't have the tillage machines. The "Save More" video was shown five or seven times to some 750 people (about half women) during DAE training programs. The training programs are on wheat, rice, mango orchards, climate change, gender, litchi and guava, but especially rice. DAE showed the machinery video in all of the trainings. The training programs are short, however -- one day -- so it was not possible to show the seed health videos. Farmers may adopt strip tillage and bed planting because they grow winter wheat and maize here.

Government work at the upazila. Nine o'clock in the morning is time to start work at the government offices of the Sadar (central) upazila in Meherpur. People started trickling in a little before 9:30 a.m. We met Jobaidur Rahman, the AEO (agricultural extension officer) and the SAPPO (subassistant plant protection officer). They had done next to nothing. The SAPPO said he showed the video twice at home to his male neighbors. They had received a set of leaflets and kept it.

Union level, making excuses. The SAAO are the grass-roots extension agents. We met three of them in Baghat, Modhukhali, Faridpur, who hadn't played the DVD because they didn't have a player. Farmers requested a demonstration plot after watching the AAS screening in 2012, and the SAAOs said, "If we can get the strip tillage machine, we will go for a demo."

Fortunately, not all extension agents are alike. Md. Alamgir Khan is a seasoned SAAO officer in Basantopur Union. He said that the strip tillage works well and he expected it to "go like anything" (to be adopted quickly).

The CSISA project works through Mr. Khan and SAAO officers like him. He showed the video twice. He found the video so useful that, he coordinated with the upazila agricultural officer to play it at his home village at a field day for over 50 farmers, about 40 percent of whom were women. Mr. Khan showed the video again at a conference room for a group of 30 wheat farmers, including 12 women. He played all five videos.

Summary: DAE. The DAE did a mediocre job of sharing the videos, although some individuals did an excellent job, and

they have more potential to reach women than much of the private sector.

Type	DAE
<i>Number</i>	7
<i>Showed the video</i>	4 of 7
<i>Average number of screenings (for those who could estimate)</i>	3
<i>Average audience size (for those who could estimate audience)</i>	250
<i>Women in audience (for those who could estimate)</i>	85

Group 8 – Union Information Service Center, UISC

If the government could be rewarded like the private sector, it might respond better to people's needs. Bangladesh has now embarked on a remarkable experiment to privatize public services.

The uddokta is in. When we first heard of UISCs (Union Information Service Centers), we imagined a kind of ICT nook for farmers, but it was nothing like that. The UISC actually helps local people with their official paperwork. It has a room in the Union Parishad and is staffed by a person or two who are called *uddokta* -- "entrepreneur". A GoB project bought them laptops, personal computers, printers, scanners, video cameras, still cameras, web cameras, modems, multimedia projectors and photocopy machines -- a lot of stuff.



Host
Jasim Khan, the uddokta, with some of his nice office equipment. The orange paper at the lower right is the tillage leaflet.

<i>Place</i>	Kanaipur Union, Sadar, Faridipur
<i>Type</i>	UISC
<i>Showed the video</i>	About 8 times
<i>Total audience</i>	About 80
<i>Leaflets</i>	Can't remember
<i>Seed health videos</i>	Didn't notice them
<i>Notes</i>	He put the video on for other people but never watched it all the way through.

The equipment, electricity and office space are free, but here's the catch: the entrepreneurs get no salary. They get paid for each piece of paper they print or process, including marriage, birth, death and succession certificates, and visa photos -- almost anything. Some of them make wedding videos, for a fee. They scan documents for a fee, and can

help people get online to do schoolwork or get bank applications. They can charge people to use the Internet, but not to see videos. Someday, with a big enough library of quality videos of relevance to their farmers, the UISC people could organize events and ask a small fee of viewers, especially if the national leaders of the UISC encouraged them to.



Host
Ramjan Kkan

Place
Koijhuri Union, Sadar, Faridpur

Type
UISC

Showed the video
5 times

Total audience
250

Women in audience
45

Innovations after watching video The host and farmers asked DAE to set up demos in the village, which was done.

Demo Yes (as a result of seeing the video)

Audience response It is easy to manage irrigation water in the beds. The machine applies the seed and fertilizer at the same time. It is good for weed control. There is less disease and high yield. Many people would like to do it again.

Video led to a demo. Ramjan Kkan, the entrepreneur in Koijhuri Union, Sadar, Faridpur, was also a farmer. He showed the video at the conference hall of the union, and the farmers really liked the part about bed planting, so he approached the DAE officer who lives in his home village, and the DAE came out and set up six demo plots in the village, each on 33 decimals of land (a third of an acre each). The farmers liked the bed planting, but the plots had been harvested recently, and it was too soon to tell what the farmers would do the next year in November when they plant again.

It's who you know. In the Dumain union, the UISC had shown the video once to about 12 men. The local SAO officer, Shonjay Kumar, dropped in on the UISC and played the video for himself. He couldn't get the sound to work, but watched it anyway. He also saw a video about the machines on TV (probably "Save More", which was shown on national public

TV). Another time while riding a bus, he passed a demo plot. From those three fragmented experiences Mr. Kumar is interested in learning more about the technologies. This case shows the importance of informal contacts and using multiple video distribution channels.

Once in a while. Md. Azizul Mullah of the UISC in Basontopur union played the DVD occasionally in his office and for students who received computer training. He showed it because it was easy to do "and the students may share the ideas when they go back home." Perhaps 30 to 40 students saw it, about half of whom were girls and women. He showed all five videos another time at a conference for all UP staff members and some guests -- about 40 to 50 people, including 10 to 15 women.

They like the machines. Ismail Hossain had shown the DVD only once at his UISC, to 200 men. He showed all five videos, and about 25 people came back to ask about rice seed storage. The UISC usually occupies a room in the union parishad building, but most of these buildings have a large patio or courtyard that the UISC can use for events. While we were interviewing Ismail Hossain at the UISC, a farmer, Mohataf Uddin, came in and took a seat. After the interview he asked us how to get a strip tillage machine; he said he learned about it at the AAS video screening in 2012. He is a power tiller operator and received training from CIMMYT in how to use bed planting and strip tillage. He has seen demos and he is eager to buy the machinery and use it with other farmers. He knows where to buy the machine, but he may have hoped that we could help him buy it at a subsidized rate. This shows that there is local interest in these two new tillage practices. (There are some subsidy schemes which may have made some farmers reluctant to pay the full price.)

Host
Shakila Khatoon has the leaflet pinned to the bulletin board in the UISC office.

Place
Alipur Union Parishod, Sadar, Rajbari

Type
UISC

Showed the video
3 times

Total audience
Women
Audience response
Leaflets

Seed health videos

500
30-40%
Not sure
Pinned them on the bulletin board of her office
Not sure



She made an effort. Shakila Khatoon works at the UISC in Alipur. She had arranged for three showings at night. She was the only uddokta who pinned the leaflets up on her bulletin board. She said farmers did read the leaflets, but she didn’t know where to send people for more information. For a large audience, posters are better than leaflets, which can get lost in drawers.

Too busy making money. Md. Shajahan Ali, the uddokta in Hauli Union, Damurhuda, Chuadanga, did not show the video because his projector is always being used for other things. When there is a football game, Shajahan collects the signal with the dish-line and uses the projector to show the game on the large screen, earning about 400 taka (about \$5). The religious events are much longer, sometimes all night, and so he charges 800 to 1000 taka for that. The NGOs use the projector for trainings and meetings.

The home village. Md. Ripon Ali, the UISC man in Chitla, showed the videos twice in his home village, not in the union building. He showed all videos to 13 men and seven women and said the farmers noticed the leaflet with the list of dealers. Recall that the DVD also included four short videos on rice seed. After seeing the rice seed videos, some of the farmers painted the earthen pots where they store rice, an appropriate technology shown in those videos. This suggests that putting rice seed videos in the same DVD with a machinery video does reach women as well as men with information that they find useful.

Summary: UISC. Although the uddoktas have no mandate for agricultural extension, most of them did show the videos, and more frequently than the DAE. This is probably because the UISC folks are younger and have the equipment to show videos. Some of them showed the video because AAS asked them to. Almost all of the UISC offices have projectors and could certainly show videos in the future. To make this happen, they may need to be encouraged by the union chairman or other local officials. It may also be interesting to encourage the uddoktas to experiment with ways of charging to show videos (see Appendix 6).

Type	UISC
Number	19
Showed the video	16 of 19
Average number of screenings (for those who could estimate)	3
Average audience size (for those who could estimate audience)	140
Women in audience (for those who could estimate)	20

Group 9 – Non-Governmental Organizations, NGOs

NGOs are common in Bangladesh, and many have donor support. Although they are a diverse lot, many have the

potential to reach farmers, and some of them work specifically with women.

Moving money. The signs on the front of the building said “Western Union” and “Express Money”. Peasants crowded into the foyer, and people at small desks busily thumbed big account books. It looked more like a makeshift bank than an NGO. Md. Shazadur, branch manager of the Jagorani Chakra Foundation (JCF) in Kanaipur, Faridpur, told us that he had also played the machinery video several times to about 40 people and then sent it to the six JCF branches to be played to borrowers, a potential catchment of about 2,000 people, 80 percent women. He said watching the video would help the borrowers repay their loans because the JCF doesn’t offer advisory services directly. It makes sense for the bank to show the videos because it doesn’t matter to the bank which particular farm enterprise earns more money. If the farmers earn more, they will more likely pay back their loans.

SDC, HQ. Society Development Committee (SDC) is a big Bangladeshi NGO that lends money, mostly to women. Kazi Ashraf Hassan, the director, said that SDC showed the video to 50 of the groups that do strip tillage of wheat with CSISA. Each group has 25 to 30 farmers, mostly women. So this one NGO is responsible for more screenings, especially to women, than many of the others put together. So even though the machinery video was not targeting women, one can reach women by distributing DVDs with women-focused topics on the same DVD.

SDC, Kanaipur branch. Mirza Hasan has an office in the same Western Union building as JCF in Konaipur Bazar, Konaipur, Sadar, Faridpur. He played the video for his assistants. He wants to show the video to his staff again. No farmers saw it, but the SCD in Kanaipur has three programs with a total of 3,036 farmers, over 90 percent of whom are women. SDC does not offer technical assistance but does give agricultural loans for crops, livestock fishery, and small businesses.

SDC, Pangsang branch. The manager saw the video and let staff members borrow it to watch at home, but they didn’t show it to any farmers. They work with thousands of people but only do microcredit. Organizations like this that may be unlikely to play videos to farmers may still be worth considering as DVD distributors. But then they would need hundreds of copies, not just one. The SDC people decorate their office with informational posters from other organizations, and the SDC said they would put up one on farm machinery if they had one. Posters might be a better way of advertising than leaflets.

No contact with farmers. Md. Elias Hossain is the executive director of PUS (Polli Unnayan Shongasta, a rural development organization). At PUS, only staff members viewed the video. Staff members don’t work directly with farmers but somehow try to improve the prices that farmers get for commodities. Not all NGOs are created equal. Some have money, some don’t, some work with farmers, others don’t.



<i>Host</i>	Humayun Kabir & Zurina Parven, SDC
<i>Place</i>	Pangsa upazila, Rajbari
<i>Type</i>	NGO
<i>Showed the video</i>	Loaned it out
<i>Total audience</i>	10
<i>Women</i>	3
<i>Viewer response</i>	They might show the videos at farmer meetings.
<i>Demo</i>	No
<i>Leaflets</i>	Received 4-5 sets, kept 1 in the office, gave 1 to a farmer/grocer and others to power tiller operators
<i>Seed health videos</i>	Not sure

Reswo (spelled Risho in Bengali) is a local NGO with a house in Chuadanga town, a big staff of more than 20 people and more than 50 volunteers. They work in only 12 villages (some discussed below in the section on CBOs). Reswo showed the video to one large gathering (about 250 people, including 20 women). People said the video was good, and it showed how to reduce production costs and labor demands. The NGO staff members had also seen a demo plot, where they noticed that, for maize bed planting, the soil becomes hard and it is difficult to prepare the land afterwards. “But farmers say that bed planting can save irrigation cost and be convenient.” They think one or two farmers may have already tried bed planting.

But two of the NGO staff members said that, because of the video, they started leaving the rice stubble taller on their own farms. Even though they didn’t have the strip tiller, they were going to plow the straw under to improve the soil. “Now we believe that one foot of straw will fertilize the soil.”

CIMMYT is a major international research institute and a partner of CSISA, the USAID tillage project. CIMMYT sponsored the “Save More” video. Dr. Uddin and colleagues at CIMMYT in Faridpur showed all the videos more than 10 times in various trainings to all of their 1,000 beneficiary

farmers and a few others (30 to 40 percent were women). They established 200 demo plots seen by 3,000 farmers.

Summary: NGOs. The results are highly variable. Some NGOs did little with the DVDs, but CIMMYT and SDC alone showed them to at least 2,000 farmers. In the future, NGOs could distribute DVDs to the farmer organizations they work with. Even if the NGOs do not show videos, some of them work with thousands of farmers and could distribute DVDs to groups of women, for example.

Type	NGO
<i>Number</i>	7 (counting 2 branches of SDC)
<i>Showed the video</i>	They all showed it in the office, but only 4 of the 7 showed it to farmers.
<i>Average number of screenings (for those who could estimate)</i>	13
<i>Average audience size (for the 3 that who could estimate audience, and showed the video in the field)</i>	130
<i>Women in audience (per audience in above line)</i>	80

Group 10 – Demo Farmers

Demo farmers are linked to NGOs and donor-funded projects -- their role is to showcase and adapt new technologies. We thought they would be eager to share a video with their neighbors. They are experts in strip tillage and bed planting and generally supportive of these innovations, but the demo farmers are not especially motivated to show videos.

Md. Imarat Sheikh is a demo farmer in Nikhoria, Modhukhali, Faridpur, who did demos with strip tillage and with bed planting for CSISA. He was ecstatic about his higher yields and lower costs for land preparation and weed control. CSISA provided the chemicals (including fertilizer and herbicide for the two experimental treatments). But Mr. Sheikh had to provide the inputs for the farmer control (the experimental control, managed by the farmer). He said he would try three bighas (an acre) of strip tillage again next year because there was a man in the village who does strip planting for 500 taka per bigha (about \$50 per hectare).



<i>Host</i>	Md. Imrud Sheikh
<i>Place</i>	Modhukali, Faridpur
<i>Type</i>	Demo farmer
<i>Showed the video</i>	No

As excited as Imarat Sheikh was about the innovations, he was not able to use the DVD he received. He said it was not working. It is possible that there was something wrong with his DVD player.

Group 11 – Community Based Organizations, CBOs

This is a big, diverse lot. Some CBOs are savings-and-loan groups that only move money; others are clubs sponsored by NGOs, and there are even a few IPM clubs that are keeping the school spirit alive. They often create a space where women can interact.

An SDC group. AAS gave the DVD to Ruposhi Bangla Group, which is made up mostly of women. The group was formed by SDC (the NGO, not the donor) and does micro loans and credit, including agricultural loans.

The group doesn't have a DVD player, so it gave the disk to a woman whose husband has a tea stall.

“How many of you have seen it?” we asked. Most raised their hands, but they saw it during the AAS screening in 2012, not at the tea stall. They remembered that the video showed a method of planting wheat. “Many women spoke on the video. That's exciting.”

The couple who owned the tea stall said they showed it more than 12 times to 600 men, and showed it at home to 100 people, including 80 women. The audience was very excited, but the couple got no other feedback from them.

They want a demo. In East Gangabondhi, a CBO called Surovi - Bohumukhi Shamobay Samity Ltd. has a woman president and reaches many women. The CBO showed the videos during training events “to motivate” farmers, although the staff couldn't really articulate what it was they were trying to motivate the farmers to do. They may just show the video because it is a pleasant way to fill a little time with its beautiful photography, music and interviews. The CBO also has a power tiller and could buy the strip tiller, but Rouf Miah and Shoikat Hossain said they want someone to come give them a live demonstration. They had never noticed the last page of the leaflets, with the list of dealers. They like the video enough to keep showing it.



Rouf Miah shows off the conference room where groups of women meet. Notice the chairs and sewing machines.

<i>Host</i>	Rouf Miah, the VP; and Shoikat Hossain, the president's son
<i>Place</i>	East Gangabondhi, Kanaipur, Sadar, Faridpur
<i>Type</i>	CBO, savings and loan
<i>Showed the video</i>	15 or 16 times
<i>Total audience</i>	360
<i>Women in audience</i>	80%
<i>Feedback from audience</i>	They liked the video but are not using the strip tillage machine.
<i>Leaflets</i>	Got 7 sets and gave them to dealers and farmers
<i>Demo</i>	No
<i>Seed health videos</i>	Showed all four
<i>Audience response</i>	Not known

Toys in the box. The AICC (Agricultural Information and Communication Center), a donor-funded project, is naively optimistic about how much ICT hardware a peasant community can absorb. We saw one of its offices kitted out with laptops, generator, multimedia, scanning machine, printer, hand sprayer, microphone and loudspeaker, PC, camera and “equipment to talk outside of Bangladesh”, but most of it was still in the box. Hayat Ali, the head of the IPM club that received all this equipment, was so concerned about its safety that he built a brick building at his own expense just to keep the equipment safe from thieves. He said that the AICC was an activity of the IPM club. Hayat Ali himself was truly amazing. With real civic spirit, he went to the club every night to meet with members. He had helped AAS screen the video eight times in 2012.



Host
Md. Hayat Ali

Place
Dholmari IPM Club, in Dholmari, Bagoan union, Mujibnagar, Meherpur

<i>Type</i>	CBO AICC
<i>Showed the video</i>	5-6 times
<i>Total audience</i>	100
<i>Women</i>	5
<i>Viewer response</i>	Not sure
<i>Demo</i>	No
<i>Seed health videos</i>	Yes
<i>Viewer response</i>	They said “good”.

Sometimes technology can get in the way. Most of the equipment is still in the box because Hayat Ali got no training on how to use it, although he can use the laptop. He knows the content of the video well. But the IPM club could not act

on it because members don’t have access to the tillage machines. (They may be expecting subsidies.)

This is the way it was supposed to work. When the head of a CBO, Md. Faisal Azim, said he gave his DVD to a tea stall owner, we were expecting the worst, but this story is different. Faisal explained that before giving the DVD away, *he watched it eight times*, with 100 members of his CBO, which turns out to be an IPM club.



Host
Md. Faisal Azim,
IPM club (and
Md. Abdul
Kashem, tea stall)
Place
Nehalpur,
Begompur UP,
Sadar, Chuadanga

<i>Type</i>	CBO
<i>Showed the video</i>	14 times
<i>Total audience</i>	150
<i>Women</i>	20
<i>Viewer response</i>	They decided to adopt bed planting.
<i>Demo</i>	Yes
<i>Leaflets</i>	Displayed on the wall of the IPM club
<i>Seed health videos</i>	Watched them all
<i>Viewer response</i>	They are not so interested in rice but are “crazy to see maize technology”.

Eight times seems like a lot, but Faisal insisted that most of the club members watched the video at least six times because “they wanted to know exactly what they were seeing, because if they see it one time they cannot remember it.”

These farmers are desperate to lower the cost of growing their main crop, maize, and the bed planter promises to do that. So they studied the video carefully to see if they wanted to invest in the new tillage method and decided they did. They made a list of 12 local power tiller owners and went to see Oli twice but could not find him.

Only then did they give their copy of the DVD to Abdul Kashem, tea stall owner and member of the IPM club. Abdul runs a tea stall in the village, not in the market. He showed the video six times. His tea stall is almost a village information service, and some women attend. He shows informational videos every day and seems to be motivated by a mix of business sense and community service. “I showed the DVD six times to 50 people (including five women) after the IPM club gave it to me. Most people returned every night. The cinema starts late afternoon. We have regular hours. From 3 p.m. to isha [the last prayer, about 8 p.m. in the summer], we show cinema. Then we close for isha. Then

we show information videos.” In other words, they show entertainment before evening prayers and then information. They get learning videos from various NGOs on topics such as health and sanitation, pest management and arsenic mitigation.

Another IPM club member is Ziaur Rahman, an innovative power tiller operator, who now went on with the story. At the biscope, Oli’s nephew was there and committed Janatan Engineering to help the villagers. At these viewings in 2012 as many as 400 people would cluster onto a roadside or a football pitch and stand in the twilight while the video played on the big screen. There was no microphone and it was impossible to make oneself heard, so there was no intro, no question and answer session, no facilitation. But somehow Oli’s nephew did make himself heard and told the men from Nahalpur that he would help them get started with bed planting, and he left his phone number. In June, Rahman was able to take a course that Oli offered. Rahman’s description makes it sound like a machine operator’s dream. Rahman spent three hours running the bed planter in a little space between two pumpkin plots. Now he feels confident that he can use it.

The IPM club is going to buy a bed planter from Oli with the club’s money. Rahman is going to couple it to his power tiller, and the club plans to plant 200 acres in beds this coming winter out of the 1,500 acres of maize in the village. If it goes well, they are confident that bed planting will expand to other farmers and other acres.

After hearing this story, Harun sighed, “That’s the model. That’s the way it was supposed to work in every village.”

The model (leaving DVDs in villages) may have worked in Nehalpur and not everywhere else because this village had:

- A creative equipment innovator and dealer who works to extend his contacts with farmers.
- An IPM club that is organized and has experience teaching themselves new ideas.
- The village tea stall welcomes women and shows information videos.
- An innovative power tiller operator.
- Both tea stall owner and the power tiller operator are members of the IPM club.
- A real need to lower maize costs is crucial, and a conviction that the technology will do just that. Farmers are concerned about rising labor costs. As Bangladesh industrializes, fewer people are willing to work in agriculture for the low wages farmers can pay.

Compare this with the previous IPM club we saw, where the president was also inspired by the spirit of civic duty but seemed weighed down with fancy ICT equipment he couldn’t use. Both clubs showed the videos, but this one could take better advantage of them because it had better access to Janatan Engineering, a sympathetic local machine dealer.

Summary: CBOs. Appendix 7 reports the summary results from interviewing the CBOs. If a CBO has a DVD player, the members of the CBO usually watch the video -- several times, especially if they have other information or access to a demonstration plot. Some CBOs are effective at reaching women.

Type	CBO
Number	12
Showed the video	9 of 12
Average number of screenings (for those who could estimate)	7
Average audience size (for those who could estimate audience)	180
Women in audience (for those who could estimate)	50

Lessons Learned

Large-screen shows require equipment to address the audience. A video that challenges farmers to invest in mechanization raises many technical and social questions (e.g., “Where can I see a machine and discuss my concerns?”). A video in a public place in Bangladesh soon attracts hundreds of people, and the facilitators cannot answer questions and give more background unless they have a microphone and loudspeakers.

Adjust screenings to reach women. Few women in rural Bangladesh will watch videos unless they are shown in the village, preferably before nightfall. And the video content must be something that women can act upon (e.g., rice storage) or information that the women will want to share with other household members or neighbors.

NGOs could reach more women in Bangladesh because NGOs create opportunities for women to meet. NGOs also have contact with CBOs, some of which are made up mostly of women. Even if the NGOs do not show videos, NGOs could get DVDs into the hands of local organizations that would show them. NGOs could be given many copies of a DVD and encouraged to distribute them to the farmer organizations they work with. Microcredit organizations may not be able to show videos to farmers but can distribute DVDs to their members. Before distributing DVDs to NGOs, it may be helpful to identify the most promising ones and help them develop a distribution plan.

Distribute DVDs to as many local service providers as possible. Some farmer clubs, UISCs, DAE and NGOs actively showed the videos; others didn't. It may be interesting to encourage the UISCs to experiment with ways of charging to show videos. Some CBOs could give a copy to each group they work with. Reaching out to many service providers, especially grass-roots organizations, increases the likelihood of reaching women.

Let as many people as possible get their hands on a DVD.

Most of the people who received a DVD showed it. Some groups watched the video many times to study the content. Those without DVD players often gave the videos to a tea stall to be able to watch them. And, as we saw in Uganda (Bentley et al., 2013), to get a DVD into the hands of every grass-roots extension officer (especially public extension services) the agencies must receive several copies and have a thoughtful distribution plan.

Some local service providers are more suitable to reach women than others.

Tea stalls attract men. Agricultural input shops in Bangladesh are managed by men and have a male clientele. However, some of them, such as Mostafa Kamal of Krishi Sheba, do take the initiative to show the videos to groups of women.

Local cable TV operators are interested in showing quality agricultural videos.

Although a few cable TV operators hoped to get paid, they all showed the videos for free. The most successful case was where a CBO gave the DVD to the cable operator, who showed it 15 times, and various local people watched it. So the best strategy to motivate cable TV operators in the future may be to have CBOs or local authorities give the videos to the cable station. Local connections can be the key to letting cable operators feel they are contributing to the community and satisfying their subscribers.

Village tea stalls are better places to show agricultural videos than tea stalls in the bazaar.

If people watched the DVD in a tea stall in the bazaar, they learned little. If they watched it in the village several times, they captured all the major points. If an IPM club or a sympathetic machine shop owner or another person encouraged the tea stall owner to show the videos, the audience sometimes watched them more carefully.

Put many training videos on a single DVD.

People who received copies of the DVD were asked to pay specific attention to the “Save More” video, but they also watched the other videos on seed health that were recorded on the same DVD. Distributing DVDs requires resources, and one gains more “bang for their buck” by putting 10 videos on one DVD rather than just one. The entertainment industry has understood this for a long time in Asia and Africa.

The video was convincing.

This was one of our first experiences with a video that was supposed to raise awareness about a technology rather than tell the audience how to use it. The tillage equipment is complex enough that this video was merely a first step that, in most cases, must be followed up with demonstrations, training events and farmer learning videos. As a promotional tool, the video was so convincing that some farmers looked for more information -- e.g., visiting demo plots on their own or visiting dealers. A few, like Rashid Khan's father-in-law, had even decided to buy a machine after watching the video.

Farmers want to see a demo plot before investing in machinery. The "Save More" video does a good job of explaining the advantages of strip tillage and bed planting. Most farmers are still not convinced until they see a demo plot. They are much more interested in seeing a plot planted by the machine than in seeing the machine itself. After seeing the demo plot, many farmers are keen to try the technologies, in spite of some of the problems they see in the field (e.g., seed spilled on the soil surface, hardened soil). Once farmers know the problems with an innovation, they can start to imagine the solutions to these problems.

Make posters, not leaflets, for raising awareness. The leaflets were often forgotten. Few people noticed that the last page was a sheet of dealers where people could find out more information. The black and white list of dealers may have been the most important leaflet in the set of five, but its effect was probably diluted because it was not announced over a microphone to the entire audience after the public video show.

References Cited

- Bentley, Jeffery, Paul Van Mele and Grace Musimami. 2013. The Mud on Their Legs – Farmer to Farmer Videos in Uganda. MEAS Case Study #3, July 2013. Available at <http://www.meas-extension.org/meas-offers/case-studies> and <http://agroinsight.com/agricultural-extension.php>.
- Harun-Ar-Rashid. 2013. Final Technical Report: Scaling up the video of "Save More, Grow More, Earn More" and additional CSISA-BD videos in Bangladesh. An AAS report submitted to CIMMYT, Dhaka.

Disclaimer

This Case Study was made possible by the generous support of the American people through the United States Agency for International Development, USAID. The contents are the responsibility of the MEAS Consortium and do not necessarily reflect the views of USAID or the United States Government.

Technical editing by Green Ink, Leslie Johnson, Brent M. Simpson, Michigan State University, MEAS Series Editor, and production by Andrea Bohn, University of Illinois at Urbana-Champaign.

Designed to be Shared



© Copyright Agro-Insight and MEAS Project.

Licensed: Creative Commons Attribution 3.0 Unported creativecommons.org/licenses/by/3.0/

Prepared by Jeffery Bentley and Paul Van Mele (Agro-Insight) and Harun ar-Rashid (AAS)

November 2013, MEAS Case Study # 6

All case studies are available at www.meas-extension.org/meas-offers/case-studies.



Acknowledgements

Subrota Kumar Ghosh and Anowar Hossain did all of the background work, tracking people down and getting permission to do these interviews. We are grateful to all of the people who gave us their time, many of whom are mentioned by name in this paper. Tim Krupnik of CIMMYT encouraged the study and commissioned the original video that was our subject. Thanks to Andrea Bohn and colleagues at MEAS for supporting the study. Andrea Bohn and Tim Krupnik graciously commented on previous drafts of this paper. M. Alam and Md. Ali Al Mamun, both of CIMMYT/ Dhaka, made the calls for the phone survey (page 5).

The “Save More, Grow More, Earn More” video was filmed in early 2012 by Marcella Vrolijk, Md. Jamal Hassain and Saidail Islam, and produced by Agro-Insight for CIMMYT and CSISA, with funding from USAID and the Bill and Melinda Gates Foundation. The large-scale distribution of DVDs with this and some other training videos to more than 300 local service providers was supported by the Feed the Future Initiative and offered a fertile research ground to understand how receptive various service providers are toward the use of video as an ICT tool.

MEAS, with support from USAID, supports the expansion of ICT use in the provision of extension services through the Sustainable Agriculture Extension Services for Smallholders Advancement (SAESSA) Project. This case study was conducted within the framework of that support mechanism. The results presented here on the distribution and use of agricultural training videos in the Feed the Future target regions contributes to Project Task 3 -- Trainings Held by Extension Agents Using ICTs, within the SAESSA framework.

Motto: Put a cart with the horse: creating supply and demand at the same time.

Acronyms and Glossary

2WT	Two-wheeled tractor, power tiller
AAS	Agricultural Advisory Society of Bangladesh
AICC	Agricultural Information and Communication Center
BARC	Bangladesh Agricultural Research Council
BARI	Bangladesh Agricultural Research Institute
Biscope	Years ago the government would show informational movies in villages. These open-air films were called “biscopes”. Even now, people call an open air video screening a biscope.
CBO	Community-based organization
CIMMYT	Centro Internacional del Mejoramiento de Maíz y Trigo
CSISA	Cereal Systems Initiative for South Asia
DAE	Department of Agricultural Extension
Decimal	One hundredth of an acre or 40 square metres
FAO	Food and Agricultural Organization
FFS	Farmer field school
ICT	Information and communication technology
IRRI	International Rice Research Institute
JCF	Jagorani Chakra Foundation
Q&A	Question and answer session
SAAO	Subassistant agricultural officer
SDC	Society Development Committee (not to be confused with the Swiss donor)
Union parishad	Union council (most local form of elected government)
Upazila	Subdistrict
UAO	Upazila agricultural officer
UISC	Union Information Service Center
USAID	United States Agency for International Development
WRC	Wheat Research Center

Appendix 1. Types of Tillage

Conventional tillage. Most farmers in Bangladesh now plow with two-wheeled tractors (2WT) instead of cattle. The operator (often hired) plows the soil. Later the farmers plant the seeds and add fertilizer. When farmers harvest rice, they often cut the straw close to the ground with sickles, leaving the stubble quite short. If they plant winter wheat, they plow the rice stubble thoroughly before planting the wheat.



Strip tillage. The operator attaches a 48-blade tiller to the back of the 2WT. Twenty-four of the blades have been removed so that some strips are not plowed. Seed and fertilizer fall from boxes on top of the machine through tubes into the soil -- the tractor plows, fertilizes and plants all at once. The technique is intended to sow winter wheat following a summer rice crop. The farmer cuts the rice straw at 30 to 40 cm above the ground level -- i.e., higher than under conventional tillage. The tall rice stubble enriches the soil for the wheat. The untilled strips between the furrows help conserve soil and moisture.



Bed planting. The operator attaches a tiller to the back of the 2WT that has a roller that looks like an empty thread spool. The roller heaps the plowed soil up into beds and plants maize or wheat seed and fertilizes the soil at the same time.

Notice that with the strip tiller and the bed planter, the operator has to walk behind them and occasionally lift the machine with his arms. This is heavy, tiring work, which also demands skill and training. With conventional tillage (top photo) the driver sits in a little seat and rides around the field -- this is easier work.



Appendix 2. Summary of results from other tea stalls

Host	Place	Showed the video	Total audience	Audience feedback	Leaflet	Saw demo plot	Rice seed videos	Feedback
Harun Sheikh	Kachardia, Krishnanagar, Sadar, Faridpur	"On a regular basis"		Farmers did nothing different. They don't know who to contact about the machinery.			Watched all four	The farmers understood them, but they didn't do anything new afterwards.
Abdul Mannan	Kachardia, Krishnanagar, Sadar, Faridpur	7 times, to 50 to 70 people	About 80	The farmers liked the video but put nothing into practice. They want to but need training and machinery.	Did not receive	No	He noticed them but did not show them	
Md. Shajahan Hossain	Hatgobindopur Bazar, Krishnanagar, Sadar, Faridpur	4 times	Perhaps 30	People talked about going to visit a machinery dealer. They said it was a beautiful video.			Showed them	Mr. Hossain liked the seed videos more because people are concerned about seed quality.
Md. Alamgir Munshi	Hatgobindopur Bazar, Krishnanagar, Sadar, Faridpur	"20 times" (probably less)	Perhaps 20					
Md. Kabir Hossain	Dumain Bazar, Dumain, Modhukhali, Faridpur	12 times	50	People like the videos and stay to watch. People said that rice stubble is good for soil fertility.				
Md. Shukur Ali Mollah	Singra Bazar, Gachi, Sadar, Rajbari	15 times	75	They recall almost nothing.			They watched them.	They remember little.
Manik Mollah	Boali Bazar, Raipur, Modhukhali, Faridpur	5 times	100	They were happy to see the video but did nothing new.			Played them all	Not sure
Md. Kabir Fakir, son of owner	Berulia Bazar, Baliakandi, Rajbari	6 times	70					
Md. Hazrat Ali, employee	Berulia Bazar, Baliakandi, Rajbari	8 times	75				Showed them but can't remember them	
Abdul Taleb	Dantpur Belgachi Bazar, Khanganj, Sadar, Rajbari	7 times	20	One remembers seeing strip tillage machine.			Showed them all	Not sure
Md. Turab Ali Mondal	Gandimari Bazar, Modhupur, Kalukhali, Rajbari	Once	25	They recall little.	No	No	Not sure	
Jasim Kazi	Amdanga Bazar, Nowapara, Modhukhali, Faridpur	5	30	They remember little.			Showed them	
Ripon Hassan	Chanpur Bazar, Chandpur, Boalmari, Faridpur	Once	30	They barely remember the video.			Showed them	

<i>Host</i>	<i>Place</i>	<i>Showed the video</i>	<i>Total audience</i>	<i>Audience feedback</i>	<i>Leaflet</i>	<i>Saw demo plot</i>	<i>Rice seed videos</i>	<i>Feedback</i>
Md. Ariful Islam	Dosta Bazar, Begumpur, Sadar, Chuadanga	No						
Md. Yunus	Dosta Bazar, Begumpur, Sadar, Chuadanga	Twice	25	People said "good".		No	Did not show them	
Md. Saidur Rahman, Md. Thandu Rahman	Ruthanpur Bazar, Chitla, Alamdanga, Chuadanga	12 (once or twice a week for 2 months)	25	Two or three want to buy the machine but are worried about the cost.	Pinned it up in the metal shop next door. 30 people read it.	No	Played them all	Cannot remember them
Minarul Islam	Kulpala Uttar Para, Chitla, Alamdanga, Chuadanga	8 times	25	If they have the strip tillage machine, they might adopt it.	They got a leaflet.	No	They watched them.	They don't remember them.
Mahbul Islam	Sirirampur, Kalidaspur, Alamdanga, Chuadanga	10 times	10	They think the soil here is too wet for those machines.	Received one	Yes		
Md. Raja	Kathuli Bazar, Mominpur, Sadar, Chuadanga	3 times	10	They only remember seeing the biscope, not the video.	Did not get one	No	Probably not	
Md. Korban Sheikh	Akoein Club Bazar, Kojhuri, Sadar, Faridpur	6 times	40	When the videos played, nobody left the tea stall. Somebody said the videos were better than Indian movies. They liked seeing the farmers.	Did have one set but forgot about it	No	Played them all	Not sure
Md. Jalal Uddin	Boro Madhobpur, Krishnanagar, Sadar, Faridpur	About 6 times	Got 7 DVDs, kept one and gave the rest to power tiller owners	They said, "If we had those machines, we could use them." But they didn't contact a dealer.	Received 4 sets and gave them to farmers and power tiller owners	No	Showed them all	People showed interest, but Mr Jalaladin does not know if they used any of the ideas.

Women in audience. None had any women in the audience except for Manik Mollah (2) and Jasim Kazi (3).

Appendix 3. Summary of results from other agro input dealers

<i>Host</i>	<i>Place</i>	<i>Showed the video</i>	<i>Total audience</i>	<i>Women</i>	<i>Audience feedback</i>	<i>Leaflet</i>	<i>Saw demo plot</i>	<i>Rice seed videos</i>	<i>Feedback</i>
Azad Matabbor	Tambul Khan Bazar, Koijhuri Union, Sadar, Faridpur	Twice, at home	12	5	It was a beautiful video. Did not seek more information	Received some, misplaced them		Did not watch	
Md. Shukur Ali	Singra Bazar, Gachi, Sadar, Rajbari	Twice, at a grocery store and a tea stall	80	0	He talked to 2 power tiller operators, but they were not interested in the machinery.	Did not distribute	No	Watched them	Cannot remember
Babul Joardar	Baliakandi, Padmabila, Sadar, Chuadanga	Twice, at home and at a tea stall	Small		Farmers will start to do bed tillage on their own next year, and strip tillage.	Received some and distributed them to farmers	Yes		
Md. Aynal Haque	Singhati Bazar, Pirojpur, Sadar, Meherpur	3 times, at a tea stall	50	0	They said it was good.	Got 3 sets, gave them to power tiller operators and a big farmer	No	Not sure	
Syngenta	Dosto Bazar, Begompur, Sadar, Chuadanga	Probably not							
Md. Jahar Ali	Putimari Bazar, Jahala, Alamdanga, Chuadanga	Once (to his family)	5	2	Wants to see a demo, and if the results are good, he will buy a strip tillage machine	Received one	No		

Appendix 4. Summary of results from other power tiller operators

Host	Place	Showed the video	Total audience	Women in audience	Audience feedback	Leaflet	Saw demo plot	Rice seed videos	Feedback
Deb Das	Goriadah, Arpara, Sadar, Faridpur	12 times (5 times at his own house and 7 times at a neighbor's)	300	15-20	There was no demand from the farmers.		No?	Played them all	None
Robindra Nath Das	Monohordi, Jahapur, Modhukali, Faridpur	5 times, just to his family	25	15	He is slightly interested in strip tillage. “The machine is good and less work. We might try it if the machine is available.”			Showed them all	
Ershad Khan	Maskandi, Raipur, Sadar, Faridpur	3 times, with his family	5	3	He wants to buy a strip tillage machine to plant onions.	Forgot he had it		Watched them	Does not remember them
Md. Milon	Post Office Para, Jibonnagor, Chuadanga	Twice, at home, to customers	20	0	They are interested in the machines.			Showed them	Not sure
Md. Ishaque	Sirirampur, Kalidaspur, Alamdanga, Chuadanga	Once (at his house)	6	2	They think the soil is too wet here for those machines.	He got some leaflets but didn't read them.	Yes		

Appendix 5. Summary of results from other cable operators

Host	Place	Showed the video	Total audience	Women in audience	Audience feedback	Leaflet	Saw demo plot	Rice seed videos	Feedback
Md. Zulfiqar Haider (Juel)	Dumain Bazar, Domain, Modhukhali, Faridpur	3 times	Unknown, shown morning, 2 p.m., evening	Unknown	None (Owner is willing to play more learning videos.)				
Mahabubur Rahman & Al Mahadi Sajjad, owners of Nima Satellite Cable	Nowapara Bazar, Nowapara union, Modhukali, Rajbari	5-7 times	Unknown	Unknown	Some people complained, “Why are you playing this instead of a movie?”			Not sure	
Md. Amir Ali	Dosta Bazar, Begumpur, Sadar, Chuadanga	Once, at 10 a.m.	Not sure	Unknown	Not sure (Owner wants money to show more.)			Played them	Not sure

Appendix 6. Summary of results from other UISCs

Host	Place	Showed the video	Total audience	Women in audience	Audience feedback	Leaflet	Saw demo plot	Rice seed videos	Feedback
Md. Omar Faruq	Krishnanagar, Sadar, Faridpur	Once	30	4	Put the video on and left if for people to watch when he had to leave the office	Got 2 sets and kept them		Not sure	
Azizur Rahman (Sujon)	Baghat, Modhukhali, Faridpur	5 times	170	8	Not sure		No	Played them all	Not sure
Lovely Khatoon & Hamidul Haque	Modhukali, Modhukali, Faridpur	No							
Mominul Islam	Nowapara, Modhukali, Faridpur	No	30 (seed health only)	0				Showed first 2 and the lights went out	They liked flotation more than hand sorting.
Jahangir Alam	Padmabila, Sadar, Chuadanga	Once	70	20	Not sure	Received them		Thinks they showed them	
Md. Rezaul Haque	Bagoan, Mujibnagar, Meherpur	3 times (and occasionally in the office)	40-50, plus 6	0	They asked how they could get the machine.	Received one, remembers list of dealers	No	Cannot remember	
Salim Reza	Amjhupi, Sadar, Meherpur	Once, in the bazaar	50-60	0	None	Cannot remember		Did not show	
Md. Liton Ali	Pirojpur, Sadar, Meherpur	Once	60	0	They said if they could get the machine it could be used.	Got 2, gave them away	No	Showed them	
Hira Khatoon	Karpasdanga, Damurhuda, Chuadanga	Occasionally	15-20	5	They said it was good.	Got one set, read it and shared it with neighbors		Not sure	
Md. Akramul Islam	Utholi, Jibonnagar, Chuadanga	7 times	200	10	They said "good".	Got one set and kept it	no	Showed them	They said "good".
Md. Rokumuzzaman (Rokon)	Jehala, Alamdanga, Chuadanga	Twice	500	50					

Appendix 7. Summary of results from other CBOs

Host	Place	Showed the video	Total audience	Women in audience	Audience feedback	Leaflet	Saw demo plot	Rice seed videos	Feedback
Md. Rokon Gazi (a savings-&-loan CBO)	Mirigi Bazar, Kanaipur, Sadar, Faridpur	5 times (at a tea stall)	60	0	Showed the video at a tea stall, not to his members				
Rokshana Aktar & Shahid Akta, facilitators at a World Vision-funded savings-and-loan CBO called Nilshono, with 412 members, mostly women	Akoein, Kojihuri, Sadar, Faridpur	They gave the DVD to Md. Korban Sheikh, for his tea stall							
Sabbir Hassan	Baliakandi, Pabmabila, Sadar, Chuadanga	3 times	100	30	Some may try bed planting next time, but their soil is not suitable for maize or wheat. When irrigated, the land is suited for rice.		Yes		
Shamsul Haque	Utholi, Jibonnagar, Chuadanga	0	0	0	The bed planter left gaps between seeds, spilled some seed on the ground and sometimes put 2 maize seeds where only one should go.		Yes		
Md. Mostaq Ahmed, Reswo farmers' club	Bolesorpur, Aliahash, Alamdanga, Chuadanga	No (says it wouldn't play)	0	0	Some remember seeing the 2012 AAS event and recall a maize-planting machine, bed planting and fertilizer. Most will do bed planting if they get support.		They saw Oli's demo.		
Monirul Islam, farmers' group called Dorgapara Krishok Samity	Dorgapara, Bagwan, Mubijnagar, Meherpur	Twice (at a tea stall and at home)	48	4	They remember the video. People would try the machine if it were available.	Received one and forgot about it		Not sure	
Md. Daud Ali, IPM club	Chitla, Chitla, Alamdanga, Chuadanga	Twice	20	7	If they could see a demo, they might buy the machinery.	Read and shared with sons and neighbors	No	Did not watch	
Md. Shahjahan	Kulpala Uttar Para, Chitla, Alamdanga, Chuadanga	4 times	100	30	They are interested in bed planting. Some of the members would like to buy a machine.				