

Sharing ideas between cultures with videos

Jeffery Bentley^{1*} and Paul Van Mele²

¹ Agricultural Anthropologist, CABI Associate, Casilla 2695, Cochabamba, Bolivia

² Agro-Insight, 9000 Gent, Belgium

Civil servants, agricultural researchers, extension people and media experts often think that videos for farmers need to be filmed locally, so that the audience identifies with the actors. But this is not so. Farmers in southwestern and northern Nigeria reacted to videos on rice seed health (made in Bangladesh), on parboiling (filmed in Benin) and rice cultivation (from Mali). The farmers criticized the videos freely, but their remarks were about the technical pros and cons of the technologies presented in the videos. The farmers had no preference for watching videos featuring West African or Bangladeshi actors. The farmers only cared about the technical content of the film. This is an important, practical conclusion, because it is much easier and cheaper to dub a film into a second language than to film it over again.

Keywords: cross-cultural diffusion; culture; Nigeria; technology; videos

Introduction

Farmers need appropriate new technology: ideas about better ways of farming and some basic background information explaining why the idea will work. Since 2002, Van Mele and colleagues have been making farmer-friendly videos, by interacting with farmers who then speak to their peers through the camera (Van Mele, 2006). The videos can be aired on TV, or extensionists can take them to villages, show them and discuss them with people.

This paper focuses on three suites of technology, seed health, parboiling and rice cultivation, in Bangladesh and West Africa. We compare the reaction of Nigerian farmers to rice videos made in Bangladesh and in West Africa.

Seed health

In 2001, when Van Mele was working in Bangladesh, a government training institute, Rural Development Academy (RDA), was carrying out research with farmers to develop simple techniques for processing healthy rice seed at home. RDA learned that farmers did not quite understand that humid air caused well-dried seed in bags or earthen pots to quickly become

moist again, or that discoloured seeds were often diseased. So RDA helped farmers learn to choose their seed before storing it (rather than simply taking it out of a sack of grain before planting). Farmers learned to put seed in water to float out the bad ones, and to sort through the seed with their fingers, picking out diseased and damaged seed. They stored seed in painted pots to keep the seed clean and dry.

In 2002, Countrywise Communication trained a local team of RDA and Thengamara Mohila Sabuj Sangha (TMSS) (an NGO) to produce farmer training videos. They filmed the villagers, who narrated their discoveries with rice seed, in four videos. In 2005 when Van Mele joined the Africa Rice Center (AfricaRice, then called WARDA) in Benin, he was pressed to come up with a product for African farmers, and he suggested translating the Bangladeshi seed health videos into African languages. Some colleagues thought he was joking. 'Africans won't relate to videos from South Asia. We need something made in Africa, under our own conditions.' Perhaps, but there was simply no time; hence Van Mele started supporting national partners in the Gambia and Mali to go ahead with the translations. After all, rice is rice, on any continent.

*Corresponding author. Email: jefferywbentley@hotmail.com

Parboiling

Colleagues at AfricaRice were concerned that African rice was selling for about half the price of imported rice, which was attractively packed, clean and free of stones. Simple technologies were available for processing quality rice. One of these was parboiling, steaming rice in the husk over a pot of boiling water. Many African consumers like parboiled rice and are willing to pay more for it; hence in 2005, AfricaRice made a video on rice quality and another one on improved parboiling (over a wood fire, in a village in Benin).

Rice cultivation

From 2005 to 2008, an AfricaRice project in Ghana, the Gambia, Guinea and Mali used a practical approach based on farmer field schools to allow researchers and farmers to get together to thrash out ideas in the rice field, for a whole season (Bentley *et al.*, 2010, Van Mele *et al.*, 2010a). Van Mele headed the project and Bentley led its final evaluation. In their weekly sessions in the rice field, farmers had learned that they could grow more rice by transplanting, by using less seed, by levelling the land, by applying organic and mineral fertilizers and by proper weeding. Farmers on the project had validated the techniques, perfected them and invented new things on their own. So in 2008 Van Mele and Marcella Vrolijk went back to Mali and made four rice cultivation videos, with farmers speaking confidently into the camera about their innovations (see also Bentley, 2009). Countrywise made a related video in Burkina Faso.

Nigeria

All the videos mentioned above were translated into dozens of African languages, including the three major languages of Nigeria (Yoruba, Hausa and Igbo) (Van Mele *et al.*, 2010a). The following sections describe an evaluation of the technologies shown in the videos (in Nigeria in 2010). In group meetings in Nigeria, villagers could recall the videos well, but they often chose an articulate person who had watched them several times to explain them to us. More important than recalling is how the audience has engaged with the technologies: how people's work has changed as a result, or their analysis of the new ideas.

Seed health

Pots

When pressed, a few people in Ekiti State in southwest Nigeria said that they could not store the seed in pots,

as shown in the Bangladeshi videos, because their pots were too small and they had too much seed. Nigeria has a pronounced dry season, and farmers said that the seed stays dry and well ventilated in sacks. They had not adopted the technology but had considered it, and had a technical reason for rejecting it.

Floating rice, but without urea

One of the seed health videos from Bangladesh shows people how to mix salt or urea in water until a raw egg floats in the water. This means that the water is at the right density to separate good rice seed from bad, by stirring the seed in the water and letting bad rice float to the top. The good seed stays at the bottom. In the town of Aisegba, Ekiti State, we asked about the egg technique, and farmers explained it perfectly.

One man added, 'But we don't do that, because we don't have much urea. We can't waste it like that. We just use water and the empty rice floats to the top.' They had engaged with the idea and adapted it, making it more affordable.

The farmer groups we met in Ekiti had learned to sort through the seed, and to float it, although they did not add salt or urea to the water. We saw one group drying some seed they had just floated. They clearly understood the principles of getting the seed dry and clean and keeping it that way. 'We dry the seed on slabs to avoid goat dung and things that can spoil the seed.'

The videos helped another man in Ekiti State come up with a solution to rat damage. He had piled his rice in a room, turning it with his hands every two weeks until he found that rats had been in his rice. So he cleaned out the rat filth, and then floated and dried the rice to clean it. The technique on the video was for cleaning rice seed, but he had creatively adapted it to clean rice grain; he had clearly engaged with the idea.

Stone-free

In Ikoro, Oyawole Aborisade and three other farmers took us to see the rice they were winnowing in order to keep it clean. They kept the rice on tarps, which they brought in the market (6ft × 12ft) for 800 naira (\$5.33). That is expensive. They have used tarps for years, but after seeing the videos they used them more carefully. Previously, if some rice got off the tarp, it did not matter. Some people would thresh on the tarp and others off it, and all the rice would get mixed. Now, as a result of the videos they do all the threshing on the tarp to keep the rice stone-free.

No complaints

In Ekiti State, no farmers complained that the seed videos were made in Bangladesh. In general, they liked the seed videos.

Parboiling

People in southwest Nigeria ferment their rice before they parboil it, leaving the rice in water for three or even six days. Nerica (New Rice for Africa) is a set of several new high-yielding varieties, bred at AfricaRice. The Nericas have partially descended from native African rice. But Nerica is not designed to be parboiled, and southwest Nigerians say that fermented Nerica tastes bad. Nigeria is now going through a rice revolution, led by Nerica and supported by the federal government. Many farmers have only a few years' experience with rice and are growing tons more than ever before.

If people parboil their Nerica as described in the video, soaking it for just one day instead of the current practice of a three- or even six-day soak, Nerica tastes just fine. In the town of Aisegba, Ekiti State, one man said that he had made a parboiler with a false bottom (perforated to let the steam through) using a metal drum. He placed a burlap bag over the bottom of the top half. He and his wife had used it four times, and were happy with the results.

At Ikole, Ekiti State, David Aladetuyi said that he was not just a farmer, but also a miller, and that he had parboiled as in the video, soaking it for only one day, not three. Then he took it to his own mill and it turned out perfect.

At the mill we met a young man with a bag of poorly parboiled rice. He said that he had soaked it in water for three days and then boiled it right in the water.

He had not seen the video. The message about improved parboiling was not getting across to everyone, but those who had seen the video were learning how to parboil successfully.

The video paradox

If extensionists organize villagers to view videos, and then discuss them and answer people's questions, the audience learns a lot from the videos. That is what the RDA did in Bangladesh. Everyone enjoyed the experience, but it added to the cost.

In Aisegba, Ekiti, not everyone saw the videos, because the Nerica Dissemination Project distributed five or six DVDs per group, instead of showing

them to all the groups. Some people did not have DVD players and the groups did not organize themselves to watch the videos. In the other groups we saw a similar pattern: many people had not watched the videos, but those who had seen them had grasped the ideas.

Previously, Bentley had favoured a more hands-off style, just showing the videos on TV or making them available to mass audiences. Nigeria has an agency that broadcasts videos in local languages on television (Ekoja, 2003). And here was a case where the extensionists had done just that, giving the DVDs to people to watch at home. But that did not work very well. Only a handful of people had watched them in each community. Facilitation may be particularly needed where groups have not yet matured, where farmers have little experience with video technology in itself, or where not everyone has a DVD player.

Project mentality

A few people, one or two in each meeting, had tried parboiling as recommended in the video, by soaking for just one day. Unlike what our colleagues saw in Benin (Zossou *et al.*, 2009), in Nigeria only a few people had made creative adaptations of the principles of parboiling (few people in Nigeria had made their own equipment). The reason could be that the Nigerian farmers we met had received several federal and international projects, and it may have become easier for them to ask for equipment than to create their own solutions.

No complaints

No one in Ekiti ever complained that the parboiling video was made in Benin, or even seemed to notice. After all, southwest Nigeria borders on Benin. They were willing to criticize. When we invited criticism, they scoffed at the small size of the pot used in the video, saying that they had a lot more rice and needed larger equipment.

Rice cultivation

There are two main types of rice in West Africa: lowland and upland. Most of West Africa is a landscape of hills and valleys, although in many places the hills are quite low, just subtle undulations. Upland rice is grown on the hills, and lowland rice is grown in the moister areas between the hills. Most of the Nericas currently grown in Nigeria are

upland varieties. The villagers we knew in Mali grew lowland rice, and so most of the shots in the video are of the lowlands, although the narration discussed upland rice too (see the videos ‘Land preparation’, ‘Seedbed’, ‘Transplanting’, ‘Soil fertility’ and ‘Weed management’ on the AfricaRice website at www.warda.org/warda/guide-video.asp).

Transplanting

In the town of Igbo-Ora, in Oyo State, southwest Nigeria, we met under a cashew tree at the comfortable block home of Ojebode Olayide, the chairman of the local chapter of RIFAN (Rice Farmers Association of Nigeria, a nationwide membership NGO).

All their rice was lowland and they planted quite a lot of it. Mr Olayide said that he had planted 11 acres of rice. They learned about transplanting from the Mali videos. Almost everyone in the group had tried transplanting and they said that transplanted rice yields more, although they did not know how much more.

A young man named Awoyeni Ojebode took us to see one of his rice fields. He had broadcast the field and birds had eaten much of the seed; hence he had gone to another field where rice was growing densely, and he thinned it and transplanted the uprooted plants to the other field.

The farmers of Igbo-Ora were not transplanting as shown in the video, which showed them how to make a seedbed and plant a field from scratch. The people of Igbo-Ora have too much rice to transplant, but they have creatively adapted the idea, transplanting rice from fields where it came up too thick to fields where the rice was too thin. The people of Igbo-Ora appropriated the idea of transplanting, changed it to fit their conditions and adopted the innovation widely.

Dibbling

Dibbling uses a stick (a ‘dibble’) or a hoe to poke a hole in the soil. Then the planter drops in some seed. Dibbling is for upland rice, and it was discussed on the videos from Mali, but most of the images in the film were of lowland rice. Perhaps it confused farmers to discuss dibbling when most of the images were of lowland rice, or perhaps dibbling could have been covered in more detail.

In Ire, Ekiti State, one man said that he had tried dibbling, but it did not work well. ‘Broadcast rice tillers better and grows faster. When it brings out its fruits, the one that is dibbled struggles. The one that is broadcast brings out its fruits better.’

Lots of complaints

Of the three groups of videos (Bangladesh, Benin and Mali) the ones from Mali were the most ambitious, reporting on research where farmers had had a freer hand in creating the technologies, and the actors, topic and even the music were all clearly West African. Yet Nigerian farmers complained about the videos from Mali, not the ones from Bangladesh.

There was not one tree in that land. Those are lowlands and we farm in the uplands.

We don’t have water like they do in that film, that they can flood their land.

And even

I have lowlands but I can’t transplant because the land is too dry. I need irrigation equipment.

When pressed, some people admitted that they had learned things from the video: the basal application of fertilizer, and later urea, ploughing to control weeds, and the importance of organic matter. But they did not find the information overly useful. First, because they got the videos in late 2009 and we visited them before they had had time to plant rice again, when they could have put the ideas to use. Second, because most of their rice was upland, not lowland. Another reason was landscape.

Ekiti means ‘land of hills’ in Yoruba. Prominent hills rise above the tree-filled valleys, while the videos showed the gently rolling planes of Mali. Nigerian farmers reacted to these differences in landform, while they perceptively realized that the obvious cultural differences between Bangladesh and Nigeria mattered little for growing rice. The farmers cared about the technologies shown in the videos, not about how people in the video were dressed or how they fixed their hair.

When farmers relate to new ideas

Kano State, in northern Nigeria, is different from the south. The land is drier and flatter. Kano is at about the same latitude as Mali.

In Butalawa village, Kano, we met a group of farmers who had recently watched the rice production videos. Since they had just seen it that dry season, it was impossible for them to have applied much of the knowledge yet.

But they were all lowland rice growers, and had given the new ideas a lot of thought. Over 300 people watched the videos in the centre of the village, by the mosque. They loved the technologies. They said that they got several ideas which they wanted to try. The most useful ones were the following:

Land preparation. ‘We got a new idea of incorporating residues in the soil, so it will improve the organic matter in the soil.’

Level the land flat. ‘We learned that we can also use work groups for land preparation.’ They were thinking of a social innovation, not a technical one. They were used to using work groups, but not for land preparation. Now they were considering it.

Rice seedbed. The video showed a $1 \times 10\text{m}^2$ seedbed, which is easy to work with. All the rice seedlings are within arms’ reach of the edge. ‘The seedbed shown in the video was an interesting size which is better than our own five by five meters.’

Making bunds (small earthen ridges) to control water in the rice field. ‘We liked the way of irrigating, releasing water from one strip to another. In the film it was more efficient than the way we do it here.’

Fertilizer. ‘You can minimize inorganic fertilizer by applying more farmyard manure.’

Implements. The people had studied the images of implements shown in the film.

There are three implements that interest us. One is a long-handled hoe to weed. That we don’t have. The second is the hoe, different from our own, for removing seedlings from the nursery. The iron part is wider and the handle is shorter. The third is the rotary weeder. The machinery can best be used when the rice is planted in rows. We don’t usually plant in rows, but now we are interested in using that.

The farmers had grasped images in the film that the filmmakers were not trying to highlight, like the hoe blades. Farmers notice these finer details and wonder about changing their own tools. The farmers had thought about what they had seen. Simple things mean a lot, like the long narrow seedbeds instead of the big square ones.

Reaction of extension agents

On many occasions, extension agents and agricultural scientists have told us that they would prefer the videos to be made in their own country (or culture), as ideas cannot travel cross-culturally. In northern Nigeria, we visited an extension agency that specializes in agricultural video, radio and TV for farmers in the major Nigerian languages. Their first reaction to the videos was to film them ‘in our own culture’.

In 2007 they thought of making a video of their own, patterned after the Bangladesh seed videos.

A person might look at people of a different race, and think it is not applicable. We wanted to go to Kano and right from the seed, produce it. But we couldn’t get all that information, so we translated it and dubbed the video. We would have liked to do one in our own culture and music. They (Nigerian farmers) would have assimilated it better.

This statement illustrates a common assumption that videos must show images of *local people*, or else farmers will reject the content. We have already seen that farmers do not feel this way, even though civil servants may. Second, the statement admits that filming your own video, even if someone gives you the script, may not be feasible. It is hard work to get all the necessary footage and scenes, and edit them.

The Nigerian media expert went on to discuss the rice cultivation videos from Mali. ‘That of Mali is closer to our farmers and easier for our farmers to understand. They are the same race, black farmers, and same environment. Only that we don’t use animals in the water.’ Yet we have seen that upland rice farmers were more critical of that video. In other words, the media expert assumed that Nigerian farmers would accept the Mali video more readily because it was filmed in West Africa. As we have already seen, Nigerian farmers paid more attention to the rice-growing techniques and landforms in the Mali videos and not to the physical appearance of the people on camera.

Research demands

Farmers in Nigeria were eager to discuss their problems, such as marketing; they were having trouble selling all their rice. They needed machinery, especially to mill rice and save labour. They said they had problems with grasscutters, but the birds were worse. If they could only solve their bird problem they would not worry about the grasscutters, because they could trap those.

In Ekiti, grasscutters were a real problem. All over southwest Nigeria, people asked us what to do about these huge rodents and in turn offered their experiments. In Ayegunle, we went inside the ample living room of the Anglican vicarage and met the Reverend Ogunniyi, a farmer himself, and former head of the Nerica Dissemination Project, now retired. The reverend said that his solution to grasscutters was to give them a cocktail of palm wine and valium in a pot, buried at the rim of the rice field.

The rodent drinks it and passes out nearby. In the morning the farmer picks it up and, cradling it in his arms, takes it home to eat. The reverend said that he did not want to poison the grasscutter because then it would not be good to eat.

We liked his idea so much that when other groups asked us what to do about grasscutters, we passed on the reverend's recipe for drugging them. But the others scoffed at the idea. They said it was not feasible on a large area. They talked about trapping grasscutters.

They also said that they surrounded their fields with a fence made of tightly woven palm fronds. But it was a lot of work with bigger fields. And rice fields are indeed getting bigger in Nigeria.

However, birds are by far the greatest problem, and people had fewer suggestions about solving this. They actually asked us for techniques to control birds, one of the clearest expressions of technology demand we have ever heard. They all said that birds were curtailing their yield and there was nothing they could do.

Realizing that bird damage is a long overdue topic, AfricaRice developed several radio scripts on humane bird control that were distributed across Africa by Farm Radio International, an NGO based in Canada. The scripts invite farmers to call in and to come forward with their innovations. Van Mele hopes to use farmers' feedback to shape the next video.

Discussion

The extension agent and media people tend to complain about videos from other countries. Of course they are in the business of nation building, and foreign films are an easy target. Yet white-collar

agriculturalists rarely comment on the technologies or landforms shown in the videos.

The farmers looked at the videos differently. They did not care about the skin colour of people in the film or how they were dressed or whether the background music was Asian or African. The farmers saw the techniques, things like the size of the pot, tarps that could be used to keep rice free of stones, and transplanting rice. They even analysed technical content that was only shown in the images but not mentioned in the narration, like the width of the hoes. Nigerian rice farmers who watched the videos from Mali noticed that the land is flatter in Mali than in Nigeria, that is, they were paying attention to geomorphology, if not to 'culture'. Nigerian lowland rice cultivators could identify with the videos from Mali. Upland rice farmers liked them less, but still learned from them.

The farmers know what really matters. The physical appearance of actors in a video is only skin deep, but farming goes clear to the bone (see also Van Mele *et al.*, 2010b).

Acknowledgements

The UK Department for International Development funded the rice seed video work in Bangladesh, the Government of Japan funded the rice parboiling video and the International Fund for Agricultural Development supported the production of the rice cultivation videos. Local language translations and dissemination of the videos in Nigeria benefited from support from USAID. We thank the people and institutions that translated these videos into African languages. Special thanks to Emmanuel Ogundele and to Olupomi Ajayi for facilitating the interviews and fieldwork in Nigeria.

References

- Bentley, J. W., 2009, 'The right message and method', *International Journal of Agricultural Sustainability* 7(2), 79–80.
- Bentley, J. W., Van Mele, P., Acheampong, G. K., 2010, 'Experimental by nature: rice farmers in Ghana', *Human Organization* 69(2), 129–137.
- Ekoja, I. I., 2003, 'Farmers' access to agricultural information in Nigeria', *Bulletin of the American Society for Information Science and Technology*, August/September, 21–23.
- Van Mele, P., 2006, 'Zooming-in, zooming-out: a novel method to scale up local innovations and sustainable technologies', *International Journal of Agricultural Sustainability* 4(2), 131–142.
- Van Mele, P., Wanvoeke, J., Zossou, E., 2010a, 'Enhancing rural learning, linkages and institutions: the rice videos in Africa', *Development in Practice* 20(3), 414–421.
- Van Mele, P., Wanvoeke, J., Akakpo, C., Maiga Dacko, R., Ceesay, M., Béavogui, L., Anyang, R., 2010b, 'Videos bridging Asia and Africa: overcoming cultural and institutional barriers in technology-mediated rural learning', *The Journal of Agricultural Education and Extension* 16(1), 75–87.
- Van Mele, P., Bentley, J. W., Maiga Dacko, R., Yattara, K., Acheampong, G. K., in press, 'Attitude counts: engaging with rice farmers in West Africa', *Development in Practice*.
- Zossou, E., Van Mele, P., Vodouhe, S. D., Wanvoeke, J., 2009, 'The power of video to trigger innovation: rice processing in central Benin', *International Journal of Agricultural Sustainability* 7(2), 119–129.