



Bringing Science to Life

Video development for women-to-women extension

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SUMMARY

Over 18 months, the Women-to-Women Seed Health Video sub-project built capacity in national organisations, developed quality videos, and assessed their effectiveness. We formed two video teams based on organisational and individuals' comparative strengths and motivation. To break down communication and adoption barriers, we researched local knowledge, and involved rural women in developing and validating both the technologies and the video scripts. Video proved successful to catalyse local experimentation on a large scale. We ensured widespread dissemination of the videos by stimulating stakeholder ownership and pride in the project. In March 2004, the project received an award for effective communication from the prestigious International Visual Communication Association in London. The intricacies of the video development process are described in this chapter, whereas its impact, as compared to farmer-to-farmer extension, is presented in Chapter 7 called 'Watch and Learn'.

ACTORS AND NETWORKS

An overview of the actors is given in Table 5.1. CABI Bioscience is the scientific division of CAB International (CABI) with Centres across the world, implementing more than 100 projects on sustainable agriculture. CABI helped in merging local and scientific knowledge and in ensuring participatory processes.

Countrywise Communication, a UK-based private company specialising in video and multimedia training for agriculture and rural development, trained a local team in digital video production during two two-week sessions in January and March 2003. The Rural Development Academy (RDA) at Bogra has a mandate for training and action research. They coordinated the project locally, including the video production and impact study.

TMSS, a national non-government organisation (NGO) with headquarters in Bogra, works with and for women in rural development. It addresses income-generating activities, agriculture, credit, agroforestry, fisheries and livestock among a number of other programmes.

Apart from CABI Bioscience having worked with RDA since 2000 in the Seed Health Improvement sub-project (SHIP), none of the other partners had previously worked with one another. Trained by CABI Bioscience, RDA project staff had already acquired a solid understanding of participatory technology development.

Both SHIP and this project are sub-projects of the DFID-funded Poverty Elimination Through Rice Research Assistance (PETRRA) project. When the

Table 5.1 Process variables of the Women-to-Women Seed Health Video sub-project

PROCESS VARIABLES	CABI BIOSCIENCE	RDA	TMSS	COUNTRYWISE COMMUNICATION
Type of organisation	Inter-governmental	Governmental	Non-governmental	Private sector
Expertise	Agricultural knowledge and information systems	Rural development	Women in development	Communication in agriculture and rural development
Input in project	Access funds; project coordination; participatory methods, script research and impact assessment	Audio-visual expertise; relationship with villagers with whom film was produced; local coordination, field research and video production	Gender expertise; interview skills; field research, video production and Bangla voice-over	Capacity building on digital video production; English voice-over
Motivation to get involved in project	To improve rural women's access to information; to diversify examples on how scientific and local knowledge can be integrated	To strengthen audio-visual unit as resource centre; to learn by doing through video production	To learn about the potential of video to reach rural women	To get involved in a project that measures the efficiency and impact of video as a communication tool

project leader (Paul Van Mele) first discussed the project with the executive director of TMSS, Dr. Hosne-Ara Begum, she immediately expressed her interest, despite the very small budget. Soon she appointed two senior staff members to work on the project. Equally, the director-general of RDA, Mr. S. M. Jahrul Islam, stressed the importance of the project during various staff meetings and public events, boosting the morale of the project. The method and training were highly relevant to both TMSS and RDA's ongoing programmes. All these factors contributed to each of the partners having strong feelings of ownership and accountability.

EVOLUTION OF THE METHOD

The communication gap between research, extension and farmers has been under serious scrutiny over the past decades, resulting in a range of alternative approaches based on community participation in both research and extension, such as farmer field schools and local agricultural research committees (Braun et al., 2000). However, scaling up face-to-face extension is costly and the number of people reached is often limited, calling for a closer look at mass media (Snapp and Heong, 2003).

Changing farmers' behaviour in rice pest management was possible in Vietnam through radio dramas, although the message was limited to one simple rule-of-thumb: do not spray insecticides for leaf folder control in the first 40 days after sowing (Heong et al., 1998). Video has been used extensively in rural development (Norrish, 1998; Coldevin, 2000; Bessette, 2001), even including topics such as soil fertility (Protz, 1998). But it is still under-explored as a means of merging scientific with local knowledge to get plant health messages across to the rural community. Based on discussions held over the past years with K. L. Heong from the International Rice Research Institute (IRRI) and Jeffery Bentley, an agricultural anthropologist and CABI associate, the senior author explored the idea of incorporating discovery learning

by A. K. M. Zakaria

Under another PETRRA sub-project, Paul from CABI and myself initiated participatory technology development activities in Maria village, Bogra. For me it was a new experience, and processes that build on local knowledge were gradually attracting me. Every day I was experiencing new avenues of farmers' empowerment and I felt changes within me. I could clearly see the right way to work with farmers. One day, while we were holding a village exhibition of locally-made drying tables for mid term evaluation, I wondered how a few activities could have had such an extremely valuable impact on women and stimulated their empowerment. Later that afternoon, we took the exhibition material to the crossroads of the village to look at the reaction of passers-by. At one moment, I told Paul that we should do something for sustaining and disseminating the idea. Paul smiled. There were a few boys with bicycles and all of a sudden Paul took one of the bicycles from a boy and challenged them for a race. Zooming away, he called out: "My friend, let's do it..." I now understand that this was the call for our video project journey.

Box 5.1
To the
Crossroads

principles into mass media (TV) or small media (video).

The opportunity to test this arose when PETRRA launched a new call for sub-projects in 2002. Concept notes had to focus on women and uptake of post-harvest innovations. As CABI and RDA had good experiences working under SHIP, this provided an ideal opportunity to test the effectiveness of video as a communication tool to reach rural women (see Box 5.1).

As we developed our concept note for a women-to-women extension project, we realised that the team had only one woman. The project needed women colleagues e.g. for preparing village women for video shots, attaching the microphone to saris, interviewing etc. Mr. Zakaria suggested collaborating with the national women's NGO, TMSS. In August 2002, the proposal was further discussed with Countrywise Communication and submitted to PETRRA, who approved it by November 2002.

PARTICIPATORY VIDEO PRODUCTION METHOD

Develop a video team with complementary skills

We selected team members with complementary skills: familiarity of working with women in the village, interview skills, listening and talking skills, having a photographer's eye, subject knowledge, computer skills, among others. Two video teams were trained to stimulate competitiveness between teams. Each consisted of two men and two women which added to the diversity, richness and hence quality of the videos.

The teams received training in video production techniques from Josephine Rodgers during two, two-week sessions. Each team member received training in all aspects of video production, so they were soon all familiar with the technical tasks and terms. At the house of Rina, one of the team members, her husband was complaining: "Whenever she watches TV, spontaneously she utters 'Mid-shot, long-shot, close-up, zooming in...'. Watching TV nowadays is just not the same anymore."

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By the end of the training each had found their niche, or preferred role. Kamrul, the RDA computer expert became a skilled editor: "Before I was blind, now I see with new eyes. Our thinking power has increased a lot."

Conduct script research

Assessing what people know and their attitudes toward certain practices is a first step in developing an adult learning programme. CABI Bioscience trained staff in the development of knowledge, attitude and practice (KAP) statements about seed health and post-harvest innovations. We agreed to produce four short training videos on seed

Josephine Rogers from Countrywise Communication watches RDA's Kamrul edit a video. "Training people to use the video editing software requires tact, patience and practice," says Josephine.



spots and sorting, seed flotation, drying and storage technologies (Table 5.2). Each would be a stand-alone video that could be used like a module in a training course.

All statements were refined several times for relevance and clarity with about 25 women in 3 different locations in Bogra. Basanti from TMSS got back from a field visit one day saying: "I had a very difficult time trying to explain to women in the village about seed moisture content. We need to adjust that statement as women talk in terms of seed dryness, not seed moisture." Some statements dealing with seed pathogens or unknown technologies such as manual seed sorting were supported by live samples and short demonstrations.

Once the KAP statements were completed, a benchmark survey in one village with one hundred female smallholders helped us determine the issues to address in the videos. By improving women's understanding of underlying principles (the life of pathogens and storage insects like rice moths, evaporation and ventilation during seed drying, air tightness of storage containers), we anticipated that women would be motivated to innovate and develop their own solutions, thus catalysing local experimentation based on global principles. Impact on learning is presented in Chapter 7.

All team members experienced the importance of identifying and involving both local innovators and technical experts in the early stages of script writing to ensure relevance, appropriateness and scientific soundness of the topics addressed. "We improved our skills of problem identification with farmers, both men and women, much better as we now have to pay more attention to details," said Parvin, who had already worked for three years in the Seed Health Improvement sub-project. Mojaherul Haque (Babu) added: "We can learn so many things from village women. They have many good ideas."



Interviewing people requires specific skills, and having an eye for detail. Finding out what people know is a first step in developing a training programme.

Table 5.2 Post-harvest Interventions addressed in videos

	SEED SORTING	SEED FLOTATION	DRYING	STORAGE
Brief description of technology	Manually remove diseased seed	Add salt or urea to a bucket of water until an egg floats; drop rice seed in the water and remove the bad ones that will float to the surface	Make a bamboo table or bench for drying rice; it can be quickly moved indoors in case of rain	Paint an earthen pot; fill it with rice seed and do not leave a dead air space; add leaves of neem or bishkatali and seal the pot. Store pot above the ground
Origin of knowledge and technology	Scientific principles; technology introduced by outsiders	Small modification of existing practice	Tables made through participatory technology development	Scientific and local knowledge and practice

Source: Adapted from Van Mele et al. (Chapter 7).

Interview innovators and respected individuals

We identified women innovators who had good presentation skills. As some male farmers are selling cleaned seed and this was perceived as an important incentive to adopt seed health practices, we also interviewed a few men.

Preparing the women for being interviewed such as briefing, positioning for interview, attaching the microphone is best done by a woman. Besides, having women rather than men interview village women makes them feel more relaxed.

We also learnt that women in the village attribute higher credibility to the video when a scientist is also interviewed side by side with the local innovators.

Illustrate improved household decision-making

As male farmers have been equally involved in some of the post-harvest training sessions, we paid equal attention to showing activities where the whole household is engaged, such as manual seed sorting or developing seed drying tables. When the videos are shown in the village it is hard to keep men from participating. The video is more acceptable to the whole community if men and women appear on camera.

Make clear and gender-sensitive voice-overs

The men on the video teams realised the importance of having a woman in their team do the interviews and the voice-overs, to reduce the communication gap with the target audience.

"Women feel much more at ease when they are interviewed by other women," says Parvin while she clips the microphone on Parul's sari.



Validate and refine rough edits

Five women from Magurgary village, who previously had not been exposed to any training, were invited for reviewing a first rough edit of the videos. We learnt that major improvements could be made to the script. The women first politely said they would immediately try out these new techniques. However, when we asked them how the videos could be improved, they spontaneously made a major contribution: a scene had to be included whereby one woman buys clean seed from another one while explaining how this improves her yield. From now on, the team would consider including role-plays in their future scripts.

The women also mentioned that the messages were convincing, because they could see that other village women had also tried these new techniques and achieved good results. Besides, one of them said the techniques could easily be tested for their validity and that she

would get this message easily across to her husband. The women of Magurgary gave more credibility to things on video than to hearing people talk in real life.

During the refreshers' training course and before the videos were finished, we displayed two of the videos for about 300 people in Nagar Tarun during Independence Day on March 26th, 2003 (see photo). The evening before, the video show had been announced by 'miking', where a rickshaw driver cycles through the village and announces messages over a microphone and amplifier. The local youth club organised the whole event.

Show and discuss videos with village women

Women said that the best time for showing videos in the village was at about 15.00 hours, after they had fed their families. They also said that it was important to see all the different aspects of seed health combined, not just as individual topics and that the videos should refer to one another. This advice was followed, so that each video addresses a specific topic in relation to the other post-harvest interventions.

Each training video lasts only about 6-8 minutes. Making each one separately allows each programme to be shown at relevant times in the season, based on local needs. An entire show and group discussion can easily be held in an hour. In some cases, women asked to see the videos a second time. After each topic, our female project staff led a group discussion.

Bangladeshi villages typically consist of four to six paras or hamlets (see Appendix). Within each para, we invited small groups of 20-25 poor women to attend the video group learning sessions, held in the courtyard of one of the women. Since men and other interested women also showed up, we decided that in future the target group should get seats close to the screen.

For research purposes, we rented a video player, TV and generator so that the team could easily show the programmes in all paras. How the videos will be used in future is discussed next.

Assess impact and revisit communication strategy

Each of the videos had a different response from the community. The seed drying and storage programmes were especially popular. The impact survey is discussed in Chapter 7. Based on women's feedback during the shows, we think that seed sorting needs supplementary training alongside the video.



Video shows can be held for small or large audiences.

Nowadays, nearly all villages have video players and TVs available for rental. NGOs such as CARE are using the videos in their training programmes.

The government extension service (DAE) under the Ministry of Agriculture has well equipped audiovisual units at the district level, whereas eleven agricultural information offices across the country make use of mobile cinema vans to get messages across. Both could be used to further disseminate the videos.

KEYS FOR SUCCESS

- Teamwork and a shared feeling of ownership and pride in the project. All partners are motivated to promote the videos even after the life of the project.
- PETRRA, through a national communication fair and other forums, helped to announce the videos at the national level.
- Creative thinking and interaction with rural women.
- Experiences and innovations of resource-poor women fully incorporated to present an honest account. Both benefits and drawbacks of each technology are presented.
- New insights triggered by discovery and adult learning.
- At the end of every story, women are challenged to try out the new technology.

DIFFICULTIES, RISKS AND ASSUMPTIONS

Camera sensitivity was one of the difficulties in taking shots and interviews. "Nearly all the women and men interviewed speak very well, but whenever they face a camera, they give opposite statements," says Basanti. To solve this problem, 'Practice makes perfect' was followed. Some trial shooting was made without tape and by cheering them up, the problem dissolved. Likewise, some women started talking in an artificial lingua in front of the camera. To avoid this, topics were discussed in their own words to make them free and to convince them that natural is better.

Generally, women did not want to appear in front of the camera without applying makeup, putting on their best cloths etc., which sometimes took a long time. As the filming had to be as natural as possible, they needed to be convinced to wear their work clothes.

Some of those not involved in the process tried to disturb the filming. They told the village women that showing their faces in a video programme would be reason for an unforgivable sin; that it is not allowed in our religion etc. These people were taken aside and reassured that they would also be in the film. Accordingly, in one afternoon the camera crew filmed them. They looked very happy; little did they know that most of the shots were taken without film.

Sometimes a huge crowd, especially children, made so much noise that recording interviews became impossible. 'Chocolate therapy', handing out sweets to keep them quiet, was a good solution.

Although women were previously informed about the timing of the shooting, they could not always stick to the schedule, because of their high workload. In those cases, the filming had to be cancelled and gear packed up. Often other women could be interviewed or new shots taken so that the visit to the village was never in vain.

The selection and arrangement of the location for shooting was not always an easy task. Sometimes, waiting for the right season to film was not an option. "Creating artificial rain on a sunny day, by sprinkling water from a bucket on the rooftop, remains a memorable event for film crew and village participants," says Babu, one of the video team members from RDA.

Filming the different steps involved in a technology like seed flotation is relatively straightforward. It gets more difficult when showing how spotted (diseased) seed develop in poor seedlings, how the process of evaporation works, or how air humidity can 'migrate' through an earthen pot in other ways than via the lid.

Traditionally, women in Bogra dry their seed on the floor, even during the rainy season. Visualising moisture absorption by seed that are being dried on the earthen floor was difficult, but creative thinking by the video team made the breakthrough. Now, a farmer who would agree to give away a comic shot had to be found. Showing his wet longi after having sat on the moist ground would give a powerful and funny message that people would talk about and remember. As the team knew the people in the village, one of the first potential candidates, Hatem, was approached. He immediately agreed to volunteer: "If I can contribute to the project in any way, it doesn't matter whether people will laugh with me".

The risk of any video project is that the video programmes, once produced, remain on the shelf after the project has finished. With the strong feeling of ownership by all partners, it is anticipated that in this case the reverse will happen. Signs are already apparent that both the videos and acquired skills are being marketed extensively. This will be discussed in Part III on learning with rural communities.

SCALING UP

Increasing demand

During a communication fair, organised in



Although we wanted women to wear their work clothes when being filmed, they often showed up in their best clothes.

Dhaka by PETRRA in September 2003, more than 300 copies of the videos were distributed. "The demand was extremely high and most people even wanted to pay money for it. As it was an output of the project we didn't want to charge anybody, but it filled us with pride," says Zakaria.

CARE Bangladesh requested RDA for at least five more videos to play in their project areas of Gaibandha, Naogoan and Dinajpur, mentioning: "We are regularly making use of these videos in our stakeholder workshops and in the meantime we got huge response from the villagers and local leaders." Helen Keller International is using the videos in their programme in Nepal. "Although our programme is based on vegetable production, it is of good use as the principles for post-harvest of rice and vegetable seeds are more or less the same," said Mr. Zaman, their country director.

By May 2004, about 700 copies (both in Bangla and English) had been distributed.

Developing own initiatives

Apart from the four videos developed by the project, the team is now working on a fifth video about roqueing, which is a pre-harvest practice to improve seed health. Also a video was made from a 50-minute traditional song that was specifically written around seed health issues (see also Chapter 10).

Promoting video expertise

The training and feedback during different events boosted the team's confidence and video communication expertise is now offered to various projects and organisations working in the region.

Addressing the nation

Based on feedback from women in the village (see Box 5.2), one of the authors (Zakaria) took courage to approach a national cable TV station. One month later, the programmes started being broadcasted by Channel-i throughout the country. In May 2004, the programmes featured on ATN Bangla, another national cable TV station. However, cable TV is not available in rural areas.

Box 5.2 Thinking Big

"Both me and my husband enjoyed the video shows and we were the first to make a drying table in our village," Aklima claims. "Many women came to our house to see the table."

Aklima turns to Munni, one of the women of the video team, saying: "If you could put the video on TV, it would be very useful for the farmers all over the country." A great idea was born.

Other spin-offs

After seeing the success of this innovative project, CABI started adding video-

centred learning to its basket of farmer training methods in projects across the world. Various other results came from the project (Table 5.3).

Spreading the word internationally

In October 2003, the video project featured as the lead story in CABI Bio News, sent to over 3,000 stakeholders including donors. It was also hosted on CABI Bioscience's website (www.cabi-bioscience.org), which has around 150 visitors per day.

Table 5.3 Results of the Women-to-Women Seed Health Video sub-project

RESULTS	CABI BIOSCIENCE	RDA	TMSS	COUNTRYWISE COMMUNICATION
Enhanced interest in project outputs	Using videos as participatory training tool; videos are a good resource for CABI's Good Seed Initiative; raising awareness towards donors	Acting as video service provider; providing training on participatory video production in research and development.	Using videos as training tool in villages; using new skills and links to develop other videos	Broadening customer base; using videos for marketing purposes
Enhanced interest in working with project partners	CABI started working with RDA on a new project called the Plant Health Initiative; CABI is involving Countrywise in developing new project proposals	RDA is promoting its work with CABI to visitors; for future video productions that involve women, TMSS will be asked to partner	TMSS anticipates to produce videos with RDA on some of their own programmes (credit, agriculture, fisheries, poultry, community hospitals and others)	Countrywise is exploring new collaboration with CABI management

Countrywise Communication showed the video in the global partnerships pavilion at the Royal Agricultural Show 2003. At least 100 decision-makers from embassies, government agencies and the private sector saw them and were impressed by the work.

OneWorld TV incorporated an overview of the project with short clips of the video programmes on their website (tv.oneworld.net).

Award-winning

On 26 March 2004, exactly one year after the first village video show was organised as a try-out, the project received a prestigious award for effective communication from the International Visual Communications Association (IVCA), one of the main organisations responsible for promoting the non-broadcast video industry in the world. This award was given to us during an official ceremony in London with the following comments from the judges: "Simplicity and inclusiveness make this an efficient and relevant piece of communication. Support documentation for the project was well produced. The project showed a good understanding of simple objectives effectively portrayed."

CONCLUSION

By involving rural women in developing and validating the videos and the technologies shown on them, communication and adoption barriers are reduced (see Chapter 7). Participatory video helps to build bridges between local and scientific knowledge, and should be further explored for the presentation of other technologies.

The stakeholders were all proud of their work on the videos, which led to fast and widespread scaling up, but follow-up is needed to get the videos fully established within the system of national, regional and local service providers.

REFERENCES

- Bessette, G. (2001) Facilitating Stakeholder Participation Through Communication in Participatory Natural Resource Management Research. A Guide to Participatory Development Communication for Research Teams and Practitioners. IDRC, Ottawa.
- Braun, A. R., Thiele, G. and Fernandez, M. (2000) Farmer field schools and local agricultural research committees: complimentary platforms for integrated decision-making in sustainable agriculture. AgREN Network Paper 105.
- Coldevin, G. (2000) Participatory Communication and Adult Learning for Rural Development. FAO, Rome.
- Heong, K. L., Escalada, M. M., Huan, N. H. and Vo Mai (1998) Use of communication media in changing rice farmers' pest management in the Mekong Delta, Vietnam. *Crop Protection* 17(5), 413-425.
- Norrish, P. (1998) Radio and video for development. In: Richardson, D. and Paisley, L. (eds) *The First Mile of Connectivity*. FAO, Rome.
- Protz, M. (1998) Video, gender and participatory development. In: Guijt, I. and Shah, M. K. (eds) *The Myth of Community. Gender Issues in Participatory Development*. Intermediate Technology Publications, London, pp. 165-177.
- Quizon, J., Feder, G. and Murgai, R. (2000) A Note on the Sustainability of Farmer Field Schools to Agricultural Extension. The World Bank, Washington, DC.
- Snapp, S. and Heong, K. L. (2003) Scaling up and out. In: Pound, B., Snapp, S., McDougall, C. and Braun, A. (eds) *Managing Natural Resources for Sustainable Livelihoods: Uniting Science and Participation*. Earthscan Publications Ltd, London, pp. 67-87.