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Participatory Rural Video Centre - An Approach to Support Learning and Farmers' Innovation in Bangladesh

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Introduction

Farmers' innovation has long been recognized as an essential means to endure the livelihoods of resource-poor households in developing regions (Reij and Waters-Bayer, 2001). Even though, agricultural extension services are immensely important for poverty alleviation they often miss the opportunity to reinforce farmers' innovation in developing regions like Bangladesh (PRSP, 2005); (Cunguara and Moder, 2011). Over the last decade, agricultural extension services have undergone recurrent institutional reform initiatives. The rational is to enhance capacity of service delivery to work out the challenges and complexity of agricultural development in relation to fragmented landscape of service delivery in reaching-out substantial number of resource-poor rural men and women farmers who operate in a fragile farming environment (Chowdhury, 2010). A major transformation is turning away from individual advice to collective and interactive approaches of capacity building. However, there is limited success for application of this new professionalism. In Bangladesh women have less influence in decision-making about farming issues and men usually take over the economically viable farming activities (Al-amin et al., 2004). Staffs of agricultural extension services are mainly men, and agricultural development interventions are often male biased (Van den Ban and Samanta, 2006). As a consequence, networks of women are very weak and they have limited access to information, technologies, services, and markets.

More so, this is on account of overleaping creative and innovative ways to sustain farmer-to-farmer learning. Apart from institutional factors (Islam et al., 2011), there is restricted attention on bringing out innovation in application of communication media. For instance, national agricultural policy has long been recognizing use of video in the mass media (e.g. TV) and in classroom training material (DAE, 1999). In many cases, extension agents fail to use appropriate audio-visuals and induce interactive and collegial learning ambience while conducting farmers' training (Chowdhury, 2010). In what follows, research and development initiatives on communication media are needed in order to strengthen agricultural extension services in Bangladesh.

Local, national and international partners and farmer communities contributed to develop an approach for participatory use of videos in stimulating farmer-to-farmer learning. Of late, it has been substantiated that locally developed video is a potent means to underpin farmer-to-farmer

learning and capacity building process in Bangladesh (Van Mele *et al*, 2007). However, debates are mounted around the elements of 'participatory video (PV)' in relation to the form of content generation (script and without script) and technical intricacies (e.g. handling camera) of video development. Research shows that scripted PV - directed by the researchers or facilitators (for technical intricacies and script) and developed through collaboration of the clients - is impelling to support farmer-to-farmer learning beyond the scope of pilot scale (Chowdhury *et al*., 2010). Scriptless PV - directed by the farmers or clients adopting a flexible structure (i.e. without script) - catalyzes the process of involving local actors in an innovation process.

The Centre for Development Research (CDR), in collaboration with local partnership managed by the Bangladesh Agricultural University realized a project to further expatiate the findings. Within the project, we intend to establish a platform (i.e. a participatory rural video centre) that acts upon fostering rural women's capacity for agricultural innovation in the north-west and north-east region of Bangladesh. In this paper, we will elaborate principles of establishing the centre, and some evidences on Farmers' Participatory Research (FPR) in the community.

Participatory Rural Video Centre: Organizational Structure and Modalities

In a previous work in Bangladesh, farmers collaborated with the video team made up of the staffs of the project partners who mastered technical details of the video development (Van Mele et al., 2005). In this project, we intend a pioneering step to involve farmers in the technical intricacies (Figure 1) of the video development. Ostensibly, a farmer video team is ephemeral and might dissolve after the project ends. There are growing critiques on PV that its influence on peoples empowerment might be short-lived when applied as one-off intervention and rural community do not have access to equipment (Plush, 2009). Therefore, we explored how to ensure an exit point for the PV team early in the project cycle.

There are several possibilities, such as establish or integrate the team within an existing farmers' organization or develop a new platform. We are not convinced that developing video capacities of an existing farmers' organization is a good option. Since the video is entirely for educational purpose and its recognition as a tool for farmers' learning is yet in infancy among farmers' communities, it might contradict multifaceted (to some extent ambiguous) nature of available farmers' organization in the project location. On the basis of early consultation and earlier experience of PV activities in the community (Peloschek and Chowdhury, 2010), we propose to develop a model of participatory rural video centre (Figure 1) with following organizational structures and modalities:

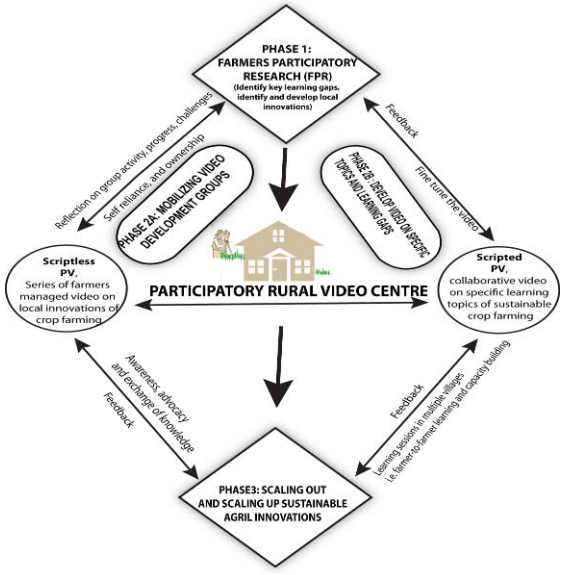

Figure 1. Working model of the participatory rural video centre (Illustration: *Chowdhury*)

We started working with a participatory rural video centre since March, 2010 in Kamarpara village of Bogra, a north-western district of Bangladesh. The PV team is to be comprised of at least six members. There are following categories of member of the centre.

PV team: This is the core team who runs the activities of the centre. The team comprises members of the rural community with half of them being women. The members are selected based on their interest in innovation and creativity, close relation and extended network with

farmer communities, passion for learning and voluntary works. The team is to be comprised of from seven to ten members. The structure of the team who manages the centre is as follows:

1. *Coordinator:* Coordinates overall activities of the centre, including video, and farmers' participatory research.
2. *Assistant coordinator:* Assists coordinator for performing his/her functions.
3. *Secretary:* Maintains documentation of the activities of the centre, day-to-day book-keeping, and serves communication between the project team and rural community, especially women.
4. *Research manager:* Oversees participatory research activities, assists office secretary to perform his/her functions.
5. *Member:* Helps organizing different activities of the centre and performs responsibilities as assigned.

PV community: This is a standing group of people who support outreach and sustainability of the centre. The members are local leaders, innovative farmers and change agents who have a stake in the activities of the centre. They are associates of the centre.

The project team and video professionals work in close collaboration with the PV team and exchange experience/feedback with the PV community.

Modalities and functions of the PV centre

The goal of the PV centre is to have a long-term action plan for the video-mediated women farmers' empowerment process in the community. After discussion with the PV team, the project identifies following modalities and specific functions of the centre:

Modalities

- The centre functions as a 'social space' where local innovation actors (farmers, local leaders, input dealers etc) are to be engaged to enhance learning within and beyond the community
- Farmers' participatory research is an entry point of the approach - the objective of which is to experiment new ideas and tweak farmers' innovation. In this step, key learning gaps are to be identified to include in the video.
- The approach recognizes complementary benefits of scripted and scriptless styles of PV. The PV team is to be trained to organize and operate video development activities. While they collaborate with the project team to develop scripted video they also develop their own video following scriptless style. Developed on specific topics scripted video will be used to spread innovative experience of the members of PV centre beyond the pilot scale. Scriptless video supports team cohesion and integrity through enhancing awareness, knowledge exchange, ownership, self-reliance and innovation attitude of the members of the PV centre (Figure 2).
- Through embedding both styles of video we believe that it is possible to develop the PV centre as a farmer organization committed to support video-mediated learning and innovation process in Bangladesh. In this project, the centre provides an exit for continuation of the video-mediated women farmers' empowerment process.

Figure 2. A practical session of camcorder operation skills (left), handing over camera (right) influences development of keen eye, ear and attitude necessary for local innovation (Photo: *Chowdhury)*

Functions

- Meeting weekly to discuss progress of activities and share experiences;
- Assist in collection of innovation and farmers' innovative ideas, stories, and experiences;
- Development of proposals for farmers' participatory research, implementation and evaluation of participatory research;

- Collaborate in planning, implementation and validation of learning video managed by the project research team;
- Use of video for fostering women empowerment in rural areas (Implementation of farmers' managed PV, document innovative ideas, or broadcast events through video that may have an impact on women empowerment process at micro level)
- Work as platform for facilitating communication between the community, the project team, and any other potential actors that would stimulate agricultural innovation process.

Achievements to Induce Farmers' Participatory Research

The process of the capacity building is aligned with FPR principles. We follow a farmers' managed FPR, where the PV team interacts with fellow farmers (PV community) to understand local innovations and conduct relevant research. The researchers only intervene to facilitate and understand principles of local innovations. In this project we selected three major topics for FPR:

1. Organic manure preparation through vermin-composting
2. Processing and post-harvest of vegetables seed in homestead
3. Pest management through botanical pesticide

The members of the centre selected three crops: eggplant and two leafy vegetables (red amaranth and Indian spinach) for crop and seed production in the homestead, a food production unit within women's domain of work. Then the members of PV centre have decided to produce organic manure using vermi-composting. The method of composting has been introduced to Bangladeshi farmers recently by several Non Governmental Organization (NGOs). The process involves composting of cow dung, kitchen waste, and farm litter using various species of worms, usually red wrigglers, white worms, and earthworms to produce heterogeneous mixture of manure. The project continues to support this activity and started FPR on composting since its inception in 2010 (Figure 3).

Figure 3. A woman is working in her vermin-compost pit (Photo- *Sarker*)

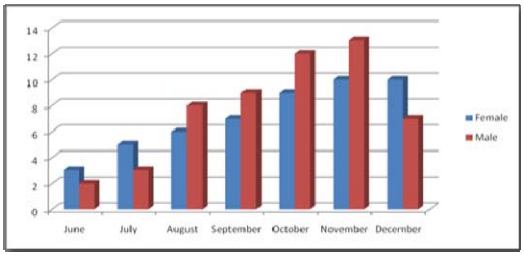

Figure 4. Number of farmer who visited the centre for information on vermin-composting (Source: *Sarker et al 2011*)

The centre also creates opportunities to exchange of experience between members of the PV-centre and community members on vermi-composting (Figure 4). The members started experimenting botanical pesticide made from locally available plant materials (Figure 5). PV members usually use this botanical pesticide to protect their crops (especially vegetables) from insect and disease pests. After producing additional amounts of botanical pesticide they exchange with other community members. PV members of Kamarapara produced 180 liters of botanical pesticide in 2010. After use in their own crop fields they have exchanged about 98 liters of pesticide with other community members

Figure 5. Activities of FPR on botanical pesticide in the PV centre (Photo: *Sarker*)

Conclusions and Outlook

This is a pioneering initiative to trickle down local video development capacities to farmers' community in Bangladesh. The lessons of the project will be useful for information and communication technology (ICT)-enabled capacity development initiatives in Bangladesh. Farmers' managed scriptless videos builds awareness and advocacy for and within the PV community and catalyzes creativities. As the learning gaps are identified and key solutions are known through FPR we will follow a scripted style to develop the video for enabling farmers' learning beyond the pilot village i.e. where the PV-centre is located. In the next step, we will use the scripted video to organise informal learning session with 24 resource-poor women farmer groups in the north-east and north-west region of Bangladesh. In this way, scripted PV will form the basis of farmer-to-farmer learning. We will explore whether the approach contributes to women farmers' innovation capacity for homestead vegetable cultivation and household food-security. Nevertheless, the sustainability of the approach depends on networking and partnerships with the rural video professionals, community organizations and how the rural video team engages it within the landscape of local innovation actors in rural Bangladesh.

References

Al-amin, S., Miah, M.M., Chowhdury, A.H., 2004. Role of women in the improvement of livelihoods of resource poor household. Bangladesh journal of extension education 16, 25-33.

Sarker, A., Momen Miah, A., Chowdhury, A.H., Peloschek, F.A., 2011.FWVV Annual Progress Report.

Chowdhury, A.H., 2010. Having a System does not Make a Home of It… A Case Study on the Institutions Building Process of an Agricultural Development Project in Bangladesh. Verlag Dr. Müller, Saarbrücken, Germany.

Cunguara, B., Moder, K., 2011. Is Agricultural Extension Helping the Poor? Evidence from Rural Mozambique. Journal of African Economies doi:10.1093/jae/ejr015.

DAE, 1999. Agricultural Extension Manual. Department of Agricultural Extension, Ministry of Agriculture, Government of the People's Republic of Bangladesh, Farmgate, Dhaka.

Islam, M.M., Gray, D.I., Reid, J.I., Kelly, T.C., Kemp, P.D., 2011. Beyond Recurrent Costs: An Institutional Analysis of the Unsustainability of Donor-Supported Reforms in Agricultural Extension Journal of International Agricultural Extension Education 18.

Peloschek, F.A., Chowdhury, A.H., 2010. FWVV Field Trip Report on the Inaugural and Field Workshop.

Plush, T., 2009. Video and voice: How participatory video can support marginalized groups in their efforts to adapt to a changing climate. Institute of Development Studies, Brighton.

PRSP, 2005. Unlocking the Potential. National Strategy for Accelerated Poverty Reduction. *Poverty Reduction Strategy Paper (PRSP).* Planning Commission, Government of People's Republic of Bangladesh, Dhaka.

Reij, C., Waters-Bayer, A., 2001. Farmer innovation in Africa: a source of inspiration for agricultural development. Earthscan, London.

Van den Ban, A.W., Samanta, R.K., 2006. Changing roles of agricultural extension in Asian nations. B.R. Publishing Corporation, New Delhi.

Van Mele, P., Salahuddin, A., Magor, N.P., 2005. Innovations in Rural Extension: Case studies from Bangladesh. CABI Publishing, Oxfordshire, UK.