



Enhancing rural learning, linkages and institutions: the rice videos in Africa

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Abstract

Africa Rice Center (WARDA) facilitated the development and translation of eleven rice videos. From 2005 to 2009, WARDA partners translated them into 30 African languages. Open air video shows enhanced learning, experimentation, confidence, trust and group cohesion among rural people. The videos strengthened capacities of over 500 organisations and hundreds of thousands of farmers. WARDA's integrated rural learning approach also helped women access new markets and credit. Learning videos: (1) allow for unsupervised learning; (2) unleash local creativity and experimentation; (3) facilitate institutional innovations; and (4) improve social inclusion of the poor, youth and women.

KEY WORDS: Methods; Gender & diversity; Labour & livelihoods; Technology; Africa

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Introduction

The role of media in rural development has long been recognised, but opinions as to the appropriateness of the various media differ. While most international agencies are turning their aspirations to new information, communication and technologies (ICTs), old media like press, radio and video seem to be, by and large, ignored. A heavy emphasis on ICTs without giving proper attention to power relations and marginalized groups is risky and may not be conducive to rural development (Gurumurthy 2006).

In the 1970s, when the Food and Agriculture Organization of the United Nations (FAO) started to use video as a tool to recover, preserve and reproduce farmers' knowledge, the organisation was criticised for using an over-sophisticated medium for a rural setting (Ramírez 1998). As it turned out, the project paved the way for the use of video as a cost-effective tool to support group training and rural development (Coldevin and FAO 2001). Rather puzzling is that those promoting ICTs, often portray video to be inappropriate for use in Africa.

Since the 1990s, as the Farmer First movement started to impact on the way research is conducted (Pretty and Chambers 1994), communication for development became more decentralised and gained ground on the agenda of international agencies. This resulted in an explosion in the number of radio stations across. Recent projects emphasise closer interactions with farmers and strengthening research-extension-radio linkages (Odame *et al.* 2002; Chapman *et al.* 2003). Although numerous efforts tried to wean researchers and extension staff away from the linear technology transfer mindset, most radio broadcasters have not been exposed to participatory approaches.

Across the board, the potential role of radio and video in strengthening agricultural innovation systems has not been fully explored. In this paper, we present on-going work by Africa Rice Center (WARDA) and partners. Special attention is paid to how video complements rural radio in enhancing learning, linkages and institutions: the three pillars of an innovation system (see also <http://www.warda.org/warda/p3-rurallearning.asp>). We conclude by addressing some social exclusion issues arising with the use of media and present potential ways to overcome these.

Video development

Stimulated through video-mediated learning, rural Bangladeshi women created their own solutions to improve the quality of farm-saved seed (Van Mele *et al.* 2007). The impact of the videos made a women's NGO and various women groups decide to establish their own rice seed enterprises (AKM Zakaria, personal communication).

Inspired by a values-based research and development project (PETRRA) in Bangladesh (Van Mele *et al.* 2005a; Salahuddin *et al.* 2008), the senior author joined WARDA in 2005 where he leads a program that focuses on facilitating and analysing processes that strengthen learning, linkages and institutions within the rice sector. The introduction of the Bangladeshi rice seed videos in Africa encountered mainly institutional bottlenecks that were only gradually overcome (Van Mele *et al.* 2009). Triggered by the enthusiastic feedback from rural African women who had watched these videos, WARDA decided more of them were needed.

In collaboration with Countrywise Communication, a private company specialising in video and multimedia training for agriculture and rural development, a video team

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3 was trained in Benin during a two-week session in 2005. Intricacies of producing
4 videos with rural communities were described earlier by Van Mele *et al.* (2005b).

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6 To ensure technologies were appropriate and to break down communication
7 barriers with the end-users, WARDA and partners involved rural women and men in
8 developing and validating both the technologies and the video scripts. Discovery
9 learning principles were applied to introduce scientific concepts, such as solubility of
10 mineral fertiliser. Although the video team adhered to adult learning principles,
11 neither the filming nor the editing was handed over to the community as in
12 participatory video projects.

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14 By 2009, eleven rice videos were available on seed sorting, flotation, drying and
15 storage (made in Bangladesh), on rice quality and parboiling (made in Benin), on land
16 preparation (made in Burkina Faso), and on seedbed preparation, transplanting, weed
17 and soil fertility management (made in Mali).

20 21 **Locally appropriate and regionally relevant videos**

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23 To guide other organisations who are interested in producing high quality learning
24 tools that are locally appropriate and regionally relevant WARDA developed the
25 zooming-in zooming-out (ZIZO) approach. One starts of with a topic of regional
26 relevance and subsequently ensures farmers are engaged in learning and modifying
27 technologies and adding their own creativity. Once this is done, a video is made with
28 some of those farmers. The draft videos are then again tested in other communities to
29 fine-tune them before scaling them up to regional level (Van Mele 2006).

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31 By adhering to the ZIZO approach bridging cultural barriers is made easier.
32 Irrespective of the country in which the videos were made, African farmers did pay
33 attention to the subject covered. For instance, farmers in Guinea were surprised that
34 “those foreigners (Bangladeshi farmers) are as poor as we are and they face similar
35 problems”. Seeing how farmers at the other end of the world had come up with simple
36 and practical solutions proved an important source of motivation for African farmers
37 to start experimenting themselves.

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39 The video on rice quality, made in Benin, was quickly translated into Mandinka
40 and broadcast on the Gambian national TV. Independently, Uganda and Nigeria
41 followed the same example. By January 2009, five new videos on integrated rice
42 management had been developed in Mali and Burkina Faso in collaboration with
43 farmers who had taken part in weekly sessions of participatory learning and action
44 research (PLAR). In less than 2 months, WARDA partners in 12 countries had started
45 translating them into local languages, indicating the enthusiasm created with the
46 earlier rice video programs. An overview of the languages in which the videos are
47 translated is given in Table 1.

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52 Insert Table 1 here.

53 54 55 **Enhancing learning and experimentation**

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57 As part of her MSc research, Zossou interviewed 200 women, 17 women groups and
58 staff of local NGOs in 20 villages in central Benin, where rice parboiling is a principal
59 income-generating activity for women. Where the NGOs had shown the video on rice
60 parboiling, more than half of the women started to use improved parboilers to which

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3 the NGOs had facilitated access. Nearly all who had seen the video, but did not have
4 access to the improved parboiler started to apply the principles of parboiling by steam.
5 They also paid attention to reducing the loss of steam and used local resources
6 innovatively to conserve energy. They all improved the quality of their parboiled rice,
7 e.g. by removing dirt from rice, washing rice several times and drying rice on
8 tarpaulins. Training workshops and learning from their peers proved less powerful in
9 changing behaviours and strengthening rural women' capacity to innovate (Zossou *et*
10 *al.* 2009).
11

12 Learning and experimentation took place also at the system level. Prosper Monde,
13 who coordinates the Question & Answer Service in Benin, provided copies of the
14 videos to some rural radio broadcasters and informed us that they were very receptive.
15 As a response WARDA started to look for multiple ways in which interactions
16 between radio and video could be enhanced. In March 2009, WARDA gave various
17 rural radios in rice-growing areas in Benin copies of the rice videos. Within a week,
18 three of them had called us to say that they had already organised an open air show in
19 their community.
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24 **Creating new linkages between actors**

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27 Within the quickly changing context of the rice sector in Africa, many new players
28 have entered the field. Enhancing learning and linkages among all these actors has
29 become a particularly important challenge. Although historically WARDA focused on
30 technology- and policy-oriented research, it is gradually assuming an additional role
31 as knowledge broker at the regional level.
32

33 To better understand how uptake pathways function and what spontaneous
34 linkages can emerge, WARDA distributed the rice videos to 158 organisations and
35 monitored its use. Across Africa, the rice videos strengthened capacities of over 500
36 organisations (Table 2). Development agencies were most active in multiplying the
37 video CDs, followed by projects, national research institutes and international NGOs.
38 Whereas universities, schools, networks, rural radio and TV surely contributed to
39 making the videos more widely known, so far we have no evidence of them
40 multiplying and further distributing the videos. Monitoring these flows has proven
41 very cumbersome, as many actors are no formal partners of WARDA and hence have
42 no accountability to report back.
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46 Insert Table 2 here.
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48 Responding to the positive feedback from some radio broadcasters on the rice
49 videos, in 2008 WARDA partnered with the Canada-based NGO, Farm Radio
50 International (FRI). The videos were used as a resource from which radio scripts were
51 developed. Each script ended with an announcement that on the same topic also rice
52 videos existed. FRI send out a special package with scripts devoted to rice in Africa to
53 over 300 rural radio stations. In this package, also a list of distribution points was
54 included so that radio broadcasters could announce where the rice videos could be
55 obtained. For each country one government and one non-governmental organisation
56 was given. Monitoring is on-going, but early evidence shows that actors, previously
57 unknown to each other, are getting linked up. A request for a video VCD or DVD is a
58 good way for actors to get to know each other and to explore common interests.
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3 By early 2009, 176 farmer organisations had copies of the rice videos, mostly
4 obtained from third parties. A farmers' organisation in southern Benin received a
5 copy of the rice videos when taking part in a training workshop organised by the
6 national agricultural research institute (INRAB). At their own initiative they
7 multiplied copies for their members. Farmers spontaneously started organising video
8 shows, finding the necessary equipments such as a generator and video player through
9 their own informal networks. To enhance farmers' access to the videos WARDA
10 currently explores equitable formulas of video distribution via the private sector who
11 in turn may work with rural radios as sales outlets.
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15 16 **Influencing rural institutions** 17

18 Male researchers from various countries indicated that they were impressed with
19 some of the local innovations shown in the videos and changed their mind about
20 working with farmers. As women feature strongly in all videos, the videos also
21 triggered them to engage with women groups. As radio broadcasters often have little
22 experience in collaborative learning, we believe the rice videos can help create a more
23 appreciative attitude towards rural people's realities and creativity.
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26 After local NGOs showed the rice parboiling and rice quality videos in Benin
27 villages where they already worked, their relationship with rural women improved.
28 The NGOs started to help women to formulate requests for training on the
29 construction of improved stoves and to look for financial assistance to buy inputs
30 (paddy, improved parboilers). NGO facilitators strengthened their own capacities and
31 improved their knowledge in order to be able to play their roles more efficiently.
32 Realising the importance of images when working with illiterate women, the local
33 NGOs increasingly used visual aids during their interactions with women.
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35 The NGOs subsequently facilitated official registrations of women organisation
36 with micro-finance institutions, easy access to credit being important to expand the
37 parboiling activity into an enterprise. To sustain these emerging enterprises, NGOs
38 also assisted women groups to purchase paddy rice on credit.
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40 Initially, Benin women had difficulties to market their parboiled rice. After the
41 video shows and resulting improvements in the quality of the rice, NGOs identified
42 traders and sellers interested in parboiled rice and facilitated their contact with
43 women's organisations. NGOs helped women to improve the packaging of parboiled
44 rice. Improved marketing increased people's awareness of the importance of local
45 rice. These women rice processors currently sell their services to different actors to
46 train others and provide their services to NGOs that promote parboiled rice in urban
47 areas.
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50 51 **Conclusion** 52

53 Adoption fuelled only by convincing extension messages may be short lived (Bentley
54 2009). While rural radio reaches a larger audience than video and is ideally suited to
55 pass on messages and inform people about who to contact for certain topics, video is
56 more powerful to enhance learning among rural communities and service providers.
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59 Most extension agents in developing countries are men, and multiple institutional
60 and organisational bottlenecks exist in training rural women (Jiggins *et al.* 1997).
Although the use of radio and video has changed in response to new approaches to

development, Norrish (1998) pointed to the danger of creating new exclusion zones, mainly affecting women and children. By giving rural women a voice through video, and disseminating these videos through grassroot organisations and rural radios, we believe these hurdles can be partly overcome.

To avoid social exclusion, the marginalised poor, women and youth not only need to be actively involved in the creation of agricultural technologies, but also in shaping the communication tools and strategies. Future research will need to indicate how the integration of various media and uptake pathways best contribute to a more inclusive development process.

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Table 1: Languages into which videos are translated (2009)

West Africa	East Africa
French, Mandinka, Susu, Guerze, Creole, Bambara, Sonrai, Twi, Ewe, Dagaari, Buli, Yoruba, Igbo, Hausa, Fon, Mina, Dendi, Bariba, More, Peulh, Wolof	Luganda, Runyakitara, Luo, Ateso, Amharec, Swahili*, Lingala*, Malagasy* and Ikinyarwanda*

* on-going

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Table 2: Organisations who received rice videos from WARDA (first level) and from those actors who in turn multiplied and distributed them (second and third level) (February 2009)

Type of organisation	First* level distribution	Second level distribution	Thirid Level distribution	Total
Development agency	18	21	0	39
International NGO	8	8	0	16
Local NGO	10	12	1	23
Research institute	32	15	1	48
Extension service	22	45	3	70
Farmer association	9	146	21	176
Project	16	31	4	51
University & school	14	7	0	21
Training center	0	3	1	4
Rural radio	27	6	4	37
TV	1	4	0	5
Network	1	8	1	10
Total	158	306	36	500

*Note that there is no causal relationship between first, second and third level distribution as the data only show who received the videos, not from whom they received them. Projects, for instance, were instrumental in multiplying and ditributing copies to extension services, farmer associations and other projects.