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Lessons Learned from Locally Produced Videos – the Approach of Digital Green in India -

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Digital Green: An Introduction

The mission of Digital Green is to increase the productivity of smallholder farmers by making agricultural extension services more effective. To do this, the organization partners with NGO and government extension agencies to provide training, data management and support services. The approach centers on supporting the production and dissemination of locally produced videos about low-cost and high-productivity farming methods. In collaboration with partners and local communities, farming needs are assessed and farmers trained in producing videos that address the identified needs through sharing best practices. The development of the videos involves multiple levels of review and refinement.

Currently, Digital Green works with nine partners in seven states throughout India, with project locations in Ethiopia and Ghana as well. To date, local partners have produced over 2,600 videos, reaching over 150,000 farming households in about 2,300 villages. A recent study -- undertaken in the states of Karnataka, Madhya Pradesh, and Orissa -- estimated that an average farmer who adopted the new practices for rice cultivation and livestock described in the training videos would see an annual income gain of $294.Typically, 44% of the farmers who receive video training will adopt at least one of the farming practices they learn as opposed to just 11% of farmers who are exposed to conventional extension methods (Gandhi, 2009).

Initiating Partnerships

Digital Green builds partnerships with organizations that have important agricultural experience and strong community ties, including with farmers, markets, financial

services and government support programs. All partners receive in-depth training on video production and dissemination.

Identifying Content and Producing Videos

The topics for videos are based on the knowledge of partners and the communities they serve. In each case, a video production team drafts a detailed outline for the video, which is vetted by subject specialists before production begins. The videos, each about ten minutes long, feature local farmers demonstrating and explaining particular farming practices. They are typically filmed in a farmer's field by a team of community members who have been trained in video production. The raw footage is then edited, either by the community team or by a local partner.

Video Screening and Data Management

Community mediators, who are paid by partner organizations and trained by Digital Green, work closely with extension services. The mediators screen the videos for groups of about fifteen farmers – typically but not always women's self-help groups – with each group viewing a new video about every two weeks. Each mediator works with about six groups.

Screenings are done using a pico projector, a battery operated projector slightly larger than a pack of playing cards. The mediator facilitates the viewing process, asking the farmers questions about what they've seen to ensure that they understand the video, re-showing portions of the video as requested and answering and recording questions. The mediator is also responsible for collecting data on farmers' interest in or adoption of practices described in the videos. These data, which are available online, are presented in different formats for different audiences. An analytics dashboard provides an overview of progress on video production, number of video screenings, attendance rate and the extent to which farmers are adopting the featured practices. Farmerbook – a social network akin to Facebook – enables farmers to share their experiences, practices and questions. The Farmerbook platform also helps in tracking how effective the videos have been. A video page has information on the performance or popularity of specific content or video types. Each of these online tools allow users to disaggregate data by partner, location, content type, screening regularity, language and the gender of participants in order to permit a multi-perspective view of the contribution of the videos to improving farmers' productivity. The monitoring data is supplemented by a research team, which studies adoption processes, information dissemination, cost effectiveness and the livelihood impacts of our work. In addition to these rigorous internal examinations, external audits are commissioned to ensure that, even during periods of rapid growth, Digital Green and its partners continue to maintain high quality standards.

For example, the organization is currently collaborating with the Abdul Latif Jameel Poverty Action Lab (J-PAL) in the Indian state of Bihar to collect evidence on the livelihood benefits of its work using a large-scale randomized control trial. In addition, Digital Green recently hired a consulting team to carry out an independent audit of the video screening practices of its largest partners and an in-field verification of reported agricultural practice adoptions.

Learning Approach

In late 2012, with the support of MEAS, Digital Green held a series of workshops for farmers, mediators and partners. The goal was to enrich monitoring data on production, dissemination and technology adoption with stakeholder perceptions about Digital Green's approach in order to improve organizational performance and strengthen partnerships.

The workshops took place in four Indian states -- Jharkhand, Karnataka, Madhya Pradesh, and Orissa -- with NGO partners PRADAN, BAIF, Action for Social Research (ASA) and VARRAT.[1]

[1] PRADAN is a large rural development NGO with a national presence maintained through highly autonomous local project offices. BAIF works

Because the partners represented a variety of different organizations and organizational cultures, the workshops allowed an assessment in the differences in how the approach has been internalized and operationalized across multiple linguistic, caste, social and agricultural contexts.

Three 3-day workshops took place in the four Indian states, each separately targeting farmers, mediators and partners. The workshops drew on methods of participatory action research as advocated by Fals-Borda and Rahman (1991) and associated writings, such as Freire's (1970) *Pedagogy of the Oppressed*.

Observations

The workshop process captured a number of key lessons that are relevant to the organization's work and the work of its partners.

Social distance is important

The approach to agricultural intervention used by Digital Green is based on the assumption that social distance is a major constraint in classical agricultural extension. Extension agents tend to be drawn from socio-economic strata above those of the farmers they serve. They typically are men and are well-educated. They may come from ethnic or caste backgrounds that are different from the farmers with whom they work. The experiential gaps between farmers and extension agents may make effective communication and the establishment of trust problematic.

Eighty percent of in the videos used in Digital Green's projects were produced in the district in which they are screened. Special efforts are made to recruit female actors and video mediators, as the majority of farmers who attend the screenings are women. Poor farmers are often risk averse and reluctant to adopt new methods of farming, since crop failure could potentially lead to extreme hardship (Yesuf and Bluffstone 2008). The thesis is that reducing the social distance between video mediators, actors and farmers will give the latter greater confidence in the utility of new farming methods.

The workshops strongly reinforced the notion that farmers are more receptive to making changes when they are proposed by familiar and trusted sources. The farmers frequently noted how the mediators, who are typically farmers living in the villages where the videos are screened, were just like them. Additionally, participants often recognized their friends and neighbors in the videos, giving them increased confidence in the relevance of the information being shared.

Data must be useful for all

Effective program implementation demands timely and clean data on the status of the intervention. This is the rationale behind the multiple data analysis tools that the organization maintains and shares. By tracking near real-time adoption, screening, and production statistics for each video, partner and dissemination group, it is possible to rapidly diagnose and address any problems in program implementation.

across India on rural livelihood issues related primarily to livestock and agroforestry issues. ASA is a medium-sized NGO working in two Indian states, and VARRAT is a small NGO that focuses on rural livelihood promotion in the state of Orissa.

The data management and monitoring system was designed to meet Digital Green's needs and those of its partners. Observations from the workshop process, however, suggested that the data captured by partners and maintained by the organization is not being fully. Indeed, partners in each of the workshop locations expressed frustration with the data collection process, seeing it as an unnecessary burden on already overextended field staff. The partners were collecting information, not because they regarded it as intrinsically valuable, but because it was a mandatory component of the partnership with Digital Green.

In an effort to make information more relevant and useful to the partners, Digital Green is in the process of updating the data entry tool and rethinking to share information with our partners, including the video mediators, to allow them to track the results of their efforts. In addition, the organization is making a greater effort to raise awareness among partners of the full range of information and data tools that are available to them.

It pays to listen

Monitoring data to track project performance can only take one so far. The perceptions and observations shared by the partners during the workshops enable a richer, more holistic view. Are farmers happy with the videos? Do the mediators feel sufficiently equipped to do their job? Are the partners comfortable in their interactions with Digital Green? Monitoring data may raise a flag when something is broken, but continuing in-depth discussions with stakeholders will allow the organization to foresee and mitigate problems before they get out of hand. In addition, the workshops served to reinforce relationships with the partners by demonstrating the commitment to them. Though the lesson may appear obvious, it's all too often forgotten: partnerships work better when partners listen to one another.

Lessons Learned

- ***Stay flexible, stay relevant***

Soil quality, water access, crop types, languages and farmer capacities can vary widely, even in relatively small geographical areas. An effective extension program has the flexibility to adapt its messaging to meet the needs of farmers operating in different contexts. Video can be useful for tailoring agricultural practices to specific circumstances. Extension agents, no matter how expert, may not have sufficient location-specific knowledge about all of the diverse agricultural contexts they serve. Video-led extension allows for the low-cost creation of videos that are tailored to local conditions. An analysis of our adoption data supports this belief: videos screened in the village in which they were produced enjoy higher adoption rates than other videos.

- ***High quality local partnerships matter***

Local partners who are familiar with the target farmers and their social and agricultural contexts are essential. No amount of research can replace the years of trust and learning about the social and agricultural dynamics of a site that local extension organizations can provide.

However, in order to take full advantage of these partnerships, it's important to ensure that all partners feel included and consulted. The workshops indicated that Digital Green might not be working hard enough to ensure that the concerns of all stakeholders are incorporated into project planning. Some partners also expressed dissatisfaction with the way that reporting norms had been changed with limited consultation. The organization recognizes that partnerships are most effective when no one feels shortchanged and, for this reason, it intends to continue to hold such workshops in future to ensure that the partners feel that they share a seat at the decision-making table.

- ***It's not just what you're saying, it's also who says it***

Even in the context of a highly localized intervention, the messenger matters. Divisions of caste, class, tribe, religion, gender or language can prevent an otherwise appropriate message from hitting home if the farmers don't think it applies to them. *Homophily* -- the tendency of individuals to relate and bond with individuals that are similar to themselves -- is an important element of the organizational approach. This concept, popularized by Everett Rogers in his *Diffusion of Innovations* (1983), suggests that the more characteristics the farmers share with the messenger, the more likely they are to trust the message.

Programs that encourage farmer-to-farmer learning help to reduce the social distance between the messenger and the recipient. This lesson was learned through formative research in which agricultural practices were shared with farmers by individuals of varying degrees of homophily (Gandhi *et al.*, 2009). Based on higher rates of adoption of practices delivered by fellow farmers, Digital Green developed its current approach to agricultural intervention.

- ***More information helps make better decisions***

By lowering the costs of collecting data and improving its reliability, new information and communications technologies have reduced many impediments to monitoring the agricultural practices of farmers. This data can be used to validate project impacts and to inform future program design: highly granular data makes it easier to track intervention outputs and make tailored changes.

Digital Green is currently working with researchers from the London School of Economics and the London Business School to analyze the relationship between adoption rates and video attributes, such as the distance between the place where a

video was produced and where it was screened, or the type of content, such as information dealing with agriculture or livestock. Another area of research is looking at patterns in adoption data to identify farmers who are influential in their communities. Both of these efforts will allow the organization to more effectively target video content to the farmers who are most likely to adopt and spread innovative practices.

- ***Technology isn't a silver bullet***

Video is a powerful tool that can help amplify the effectiveness of extension programs by facilitating communication with farmers. But it should be viewed as just that – a tool – and not a replacement for the hard work of knowing the people being served and delivering high quality, accurate content. Moreover, technology can also hinder programmatic effectiveness if it is not tailored to the social and organizational contexts in which it is used. Digital Green has observed that when data management tools proved unwieldy due to limited internet access, partners were much less prompt in their data uploading activities. This hampered the ability to monitor programs and caused tensions with partners. New tools, based on partner feedback about what has and has not worked for them, have been developed to address these concerns.

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Photos: Digital Green, 2012-2013

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