### Digital Green in Africa



### **About Us**

Digital Green is a not for profit international development organization that uses an innovative digital platform for community engagement to improve lives of rural communities across South Asia and Sub-Saharan Africa. We partner with local public, private and civil society organizations to share knowledge on improved agricultural practices, livelihoods, health, and nutrition, using locally produced videos and human mediated dissemination. In a controlled evaluation, the approach was found to be 10 times more cost-effective and uptake of new practices seven times higher compared to traditional extension services.<sup>1</sup>

Till date, we have produced over 2,800 videos in more than 20 languages, reached 3,000 villages and over 330,000 farmers. We currently implement projects in seven states in India and in select areas in Ethiopia, Ghana, Mozambique and Tanzania in Africa in partnership with over 20 partners.

### **Our Approach**

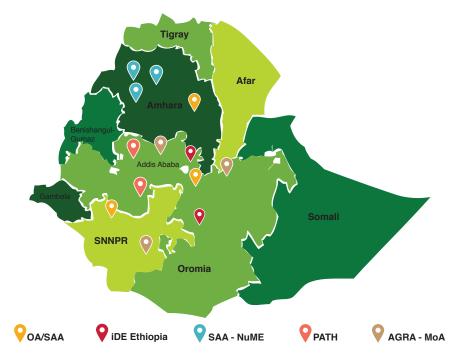
We engage with and empower rural communities to produce participatory localized videos, leveraging pre-existing group structures to disseminate these videos through human mediation. These videos are of the community, by the community and for the community. The approach includes: (1) a participatory process for video production on improved livelihood practices, (2) a human-mediated learning model for video dissemination and training, (3) a hardware and software technology platform for data management customized to limited or intermittent Internet and electrical grid connectivity, and (4) an iterative model to progressively address the needs and interests of the community with analytical tools.

Our data management software called Connect Online | Connect Offline (COCO) and Analytics dashboard suite customized to low resource settings are used to collect and analyse near real-time data on dissemination, adoption, and community interest.

<sup>&</sup>lt;sup>1</sup> Gandhi, R., R. Veeraraghavan, K. Toyama and V. Ramprasad (2009). "Digital Green: Participatory Video for Agricultural Extension", Information Technologies for International Development, MIT Press. http://itidjournal.org/itid/article/view/322/145

### **Our Projects in Africa**

To effectively test the feasibility of our approach in multiple geographies, we initiated work in the sub-Saharan nations of Ethiopia and Ghana. By working with government and non-profit extension systems, we aim to improve livelihood opportunities and the food security of rural poor households. Till date, we have reached 6,400 households through our agriculture-focused partnerships and programs in Africa and aim to reach another 14,000 households in 2014 through agriculture and health-focused projects. We aim to reach a 60% adoption rate across each of the projects in the 2014 and show cost-effectiveness gains in implementing extension.



### **ETHIOPIA**

In Ethiopia, our pilot project with the Ministry of Agriculture (MoA) has successfully demonstrated the efficacy of our approach, paving the way for a countrywide scale-up of the project for two years within a pre-scale phase (2014-2015) and a scaled phase for the following five years. Our participatory video-based approach will be used to strengthen agriculture extension services in Ethiopia across multiple domains – livelihoods, multiple agricultural value chains, health practices as well as nutrition and nutrition-agriculture convergence topics.

## Ministry of Agriculture, Oxfam America, Sasakawa Africa Association







Geography: 1,400 households in 36 villages in three districts, Arsi Negele, Gumer and Debre Libanos, in two regions - Oromia and Southern Nations, Nationalities, and People's Region (SNNPR)

We collaborated with Oxfam America (OA) and Sasakawa Africa Association (SAA), along with the Ministry of Agriculture (MoA), to amplify the effectiveness of government extension systems for agriculture by building the capacity of Development Agents (DAs), Ethiopia's cadre of agricultural extension officers working in every kebele (clustered village), as well as Governmentsupported Farmer Training Centers (FTCs), also set up in each kebele. By training these DAs in video production and dissemination techniques, and by providing technical operational support of low-cost mediated, instructional video as a method of extension services, we aim to ensure the sustainability of the project. The key behaviors disseminated through the videos relate to locally relevant agronomic practices on topics such as land management, pest and weed management, harvesting, post-harvest care and market linkages to help farmers increase productivity and save costs. Existing farmer groups, each consisting of approximately 20 farmers, attend disseminations conducted by trained DAs. The project has reached out to 400 more households than the initial target of 1,000 households within a year. During this pilot phase, within the Arsi Nagele district in Oromia region, 88% of the engaged

farmers have adopted one practice.

# International Development Enterprises (iDE) Ethiopia Enabling Rural Prosperity

Geography: 105 villages, 3,300 households in seven districts of Oromia region

We partnered with International Development Enterprises (iDE) in 2012 to test our approach in two districts of the Rift Valley. The project elicited strong interest and support from the engaged households participating in the pilot. This encouraged the scaling up and expansion of this approach to seven districts to disseminate videos related to low-cost irrigation technologies and locally relevant farming practices. Local community marketing agents (CMAs) are engaged in ensuring easy access to these technologies as well as to spread awareness about its benefits and use. To support the CMAs' efforts, approximately 30 instructional videos on topics such as benefits of rope and washer pump have been produced and screened to existing farmer groups. To help farmers build their own awareness, videos have also been produced on best agronomic practices. To overcome the lack of homogeneity in farmer groups, we are building iDE's capacity to re-organize groups to best leverage community social networks for behavior change.

### Alliance for a Green Revolution in Africa



We have partnered with Alliance for a Green Revolution in Africa (AGRA) to build the capacity of existing extension personnel within four Sub-Saharan countries - Ethiopia, Ghana, Tanzania and Mozambique - to amplify the effectiveness of AGRA's Soil Health Program. The project integrates videos showcasing farmers who have begun innovating with AGRA-supported blended fertilizer and lime inputs across various staple crops. The project has rolled out in 30 different villages, engaging approximately 2,500 farmers. In Ethiopia, we are building the capacity of DAs on video production and group facilitation. In Tanzania, our trainers work with community facilitators engaged with Faida Market Link, an organization working to improve linkages between producers and market value chains.

# Sasakawa Africa Association – Nutritious Maize for Ethiopia project

In collaboration with SAA, we aim to increase the consumption of protein in 3,000 vulnerable households in the Amhara region by engaging communities with locally relevant instructional videos on quality protein maize (QPM). We help build the capacities of health extension workers (HEWs) as well as DAs within three woredas (districts) in the region to produce and screen videos to farmer groups as well as health development armies (HDAs). QPM consumption recipes, nutritional components of the maize crop itself, cultural practices affecting nutritional child-feeding, and best QPM-related agronomic practices are examples of some of the video topics that are shared with households. We aim to integrate agriculture and nutrition-centric messages into the videos produced for this pilot project. Each of the three engaged *woredas* serve as video production hubs to produce these locally relevant videos. The videos are produced by a mixed team of technical health and agriculture experts and leverage the strengths of HEWs, HDAs, DAs, and farmer groups.

### PATH - Digital Public Health in Ethiopia



Our collaboration with PATH reaches approximately 4,000 households in two districts of Oromia region – Wuchalle and Dodata. Pregnant and lactating mothers are targeted through the Ethiopian HDA structures, as well as pregnant women's conferences located in each *kebele*. By leveraging the pre-existing health extension systems in the country, we work to increase the awareness and uptake of maternal, newborn, and child health practices.



#### **GHANA**

### **World Cocoa Foundation**



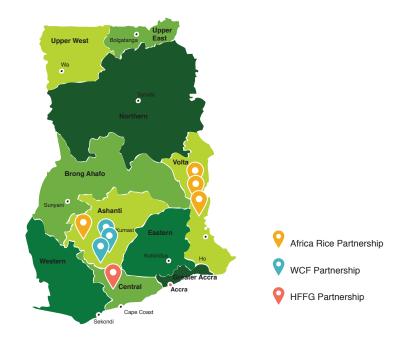
Geography: 1,800 households in 50 villages in three districts, Adansi North, Adansi South and Ahafo Ano South, in Ashanti region

We entered into a partnership with the World Cocoa Foundation (WCF) in Ghana in July 2012 to adapt the Digital Green approach to extend WCF's agricultural interventions as part of the Cocoa Livelihood Project (CLP). CLP focuses on strengthening farmer groups by providing them access to extension and credit through community-based Business Service Centers (BSCs). These BSCs are staffed by Ghanaian government cocoa community extension agents (CEAs) and district-level Cocoa Board (COCOBOD) officials whose role is to provide quality inputs and information to farmer groups. Through the partnership with WCF, we trained CEAs and selected local community facilitators (LCFs), cocoa farmers themselves, on video production and dissemination, to engage with preestablished farmer groups. The LCFs produced 18 videos showcasing various elements within the cocoa value chain such as pest and weed management, harvesting, post-harvest care and storage. Existing farmer groups, each comprising approximately 30 farmers. attend video disseminations conducted by LCFs. Given high community participation and extension agent interest, over 85% of the households engaged within the course of the year, adopted at least one practice, thereby, exceeding a 60% adoption rate. On an average, 245 adoptions are recorded per video screened. Within one area of our engagement, over 98% of farmers who viewed a video adopted a featured best practice.

### **Africa Rice**



By entering into a knowledge-based partnership, the research group



AfricaRice leverages the Digital Green approach to disseminate rice cultivation technologies to farmers in three districts of the Volta region in Ghana. The Ministry of Food and Agriculture (MoFA) extension agents trained on video production and dissemination will engage approximately 1,000 farmers with community-based videos. The project works with farmer groups whose capacities were strengthened through participatory learning and action research implementation with support from Crop Research Institute. Around 20 videos have been produced and disseminated through these collaborations, which follow the cropping calendar of Ghanaian rice farmers by showcasing agronomic practices associated with better land development for inland rice farming.

### **Hope for Future Generations**



We aim to improve maternal and neonatal child health behaviors within approximately 3,500 households in two districts of Ghana by leveraging pre-existing platforms established by Hope for Future Generations (HFFG), such as mothers' groups, daddies' groups, and youth groups. HFFG has built a cadre of community mediators in collaboration with Ghana Health Services to increase the health knowledge of each of the target groups. This cadre of mediators will be trained on group facilitation and video production to amplify the efficacy of behavior change efforts amongst the community groups they work with.

With an emphasis on research, monitoring and evaluation, through these pilot projects, we are developing a foundation of learning to build and expand our work across Africa.