digitalGREEN

Digital Green in Ethiopia

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.[1]

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

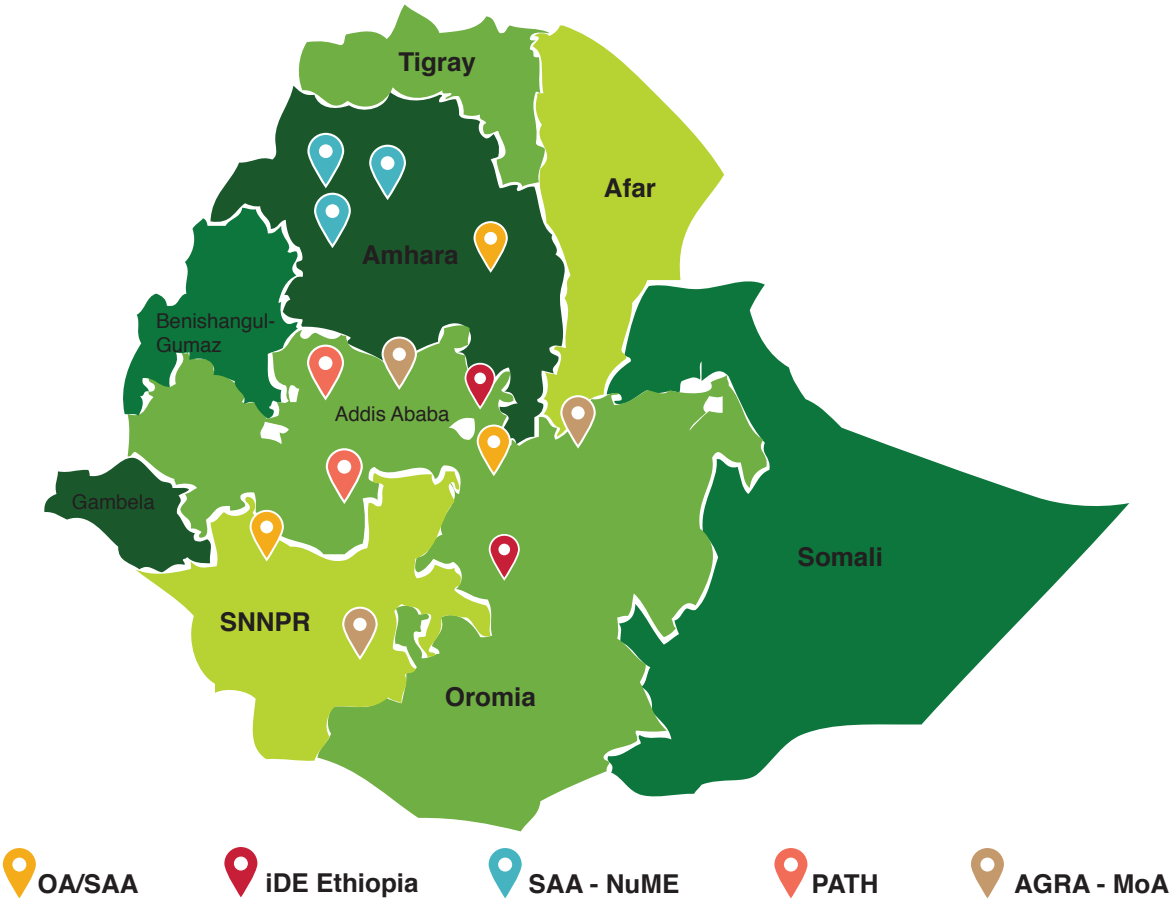
We engage with and empower rural communities to produce participatory localized videos, leveraging pre-existing group structures to disseminate these videos through human mediation. These videos are of the community, by the community and for the community. The approach includes: (1) a participatory process 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.

[1] 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 Ethiopia

To test the effectiveness of our approach in new geographies within Sub-Saharan Africa, we began working in East Africa in Ethiopia in 2012. By working with government and non-profit agriculture and health-focused extension systems, we aim to improve livelihood opportunities, food security, and the nutrition and health status of rural poor households. Till date, we have reached 5,500 households through our agriculture-focused partnerships. This reach supports the Government of Ethiopia's target of achieving an estimated 8.1% annual growth rate by increasing the productivity of key crops by 50%. By 2015, we aim to scale up our interventions in agriculture by strengthening the government extension system to reach an additional 150,000 households and initiate health-focused projects to diversify the application of the Digital Green approach.



STRENGTHENING ETHIOPIA'S GOVERNMENT EXTENSION SYSTEM

Partners: Ministry of Agriculture and Agricultural Transformation Agency
Initial Pilot: Oxfam America and Sasakawa Africa Association

In collaboration with Oxfam America (OA) and Sasakawa Africa Association (SAA), along with the Ministry of Agriculture (MoA), we implemented a pilot project to promote key agricultural behaviors among rural community members. This pilot reaching approximately 1,000 farmer households in three districts (Arsi Negele, Gumer and D. Libanos) in Oromia and Southern Nations, Nationalities, and Peoples' Region (SNNPR) helped amplify the effectiveness of government extension systems for agriculture by building the capacity of Development Agents (DAs), Ethiopia's cadre of MoA agricultural extension officers working in every *kebele* (clustered village). We aimed at ensuring the sustainability of the project by training DAs in our video production and dissemination techniques as well as by providing technical operational support of low-cost mediated, instructional video as a method of extension services.

The key behaviors disseminated through the videos relate to locally-relevant agronomic practices to help farmers increase productivity and save costs. Videos are produced by local intermediaries in each of district, who are trained on topics such as land management, pest and weed management, harvesting, post-harvest care and market linkages. Existing farmer groups, each consisting of approximately 25 farmers, attend disseminations conducted by trained DAs. During this pilot phase, within the Arsi Nagele district in Oromia region, we have seen 88% of the engaged farmers adopting one practice.

Scaling-up

Given the success of the initial pilot projects, the MoA and the Agricultural Transformation Agency (ATA), a technical support agency established by the Government of Ethiopia, invited us to use our approach to amplify the effectiveness of their extension efforts and sustainably improve the livelihoods of 150,000 farmers across four regions in the next two years.

Working in collaboration with MoA, we will roll out country-wide operations to saturate nine *woredas* (districts) within these four regions through further engagement with OA and SAA. We will work in high agriculture-potential *woredas* to strengthen value chain interventions within ATA-identified crops such as tef, wheat, maize, barley, pulses and chickpeas. This location-specific basket of technologies and practices was developed through a series of coordinated efforts between the Agricultural Transformation Council led by Ethiopia's Prime Minister and the MoA. We will also seek synergies in our nutrition and health related efforts with local partners and the Ministry of Health.

PROMOTING AGRONOMIC AND IRRIGATION TECHNOLOGIES

Partner: International Development Enterprises

We partnered with International Development Enterprises (iDE) in 2012 to leverage our approach in two districts of the Rift Valley area to communicate good agricultural practices and technologies in the Ethiopian context. The project elicited strong interest and support from the 335 households in 19 villages participating in the pilot, encouraging expansion. At present, the project is operational in seven districts reaching 3,150 households in 105 villages in Oromia, where we provided training and supportive supervision to iDE staff and community intermediaries in video production and dissemination, quality assurance as well as monitoring and evaluation.

The key behaviors disseminated through videos relate to low-cost irrigation technologies and locally relevant farming practices to help farmers increase productivities and save costs. In Ethiopia, many small-plot farmers cannot afford to irrigate their land, and therefore, rely on rain-fed cereal crops. iDE developed low-cost irrigation technologies such as rope and washer pump and suction-only treadle pumps to support farmers in the process of irrigating their land. iDE employs local community marketing agents (CMAs) in ensuring easy access to these technologies as well as to spread awareness about its benefits and use.

To support the CMAs in their extension efforts, around 30 instructional videos on topics such as benefits of rope and washer pump were produced. Existing farmer groups, each comprising 20-25 farmers, attend CMA-delivered, human mediated screenings. Since our approach is based on strong social networks, emphasis is laid on group strengthening trainings, wherein iDE staff is taught the basics of group norm setting and facilitating collectivization. In total, 1,500 adoptions have been recorded through regular adoption verification visits to assess behavior change.

PARTNERING WITH ALLIANCE FOR A GREEN REVOLUTION IN AFRICA

We 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, Mozambique and Tanzania – 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 engages with 15 different villages, engaging approximately 2,500 farmers.

In Ethiopia, our trainers conducted video production and group facilitation trainings for MoA DAs. Video production hubs have been established in Wolmera in Oromia, Merab Azernet in SNNPR and Gozamen in Amhara. Videos on integrated soil fertility management will be disseminated in five *kebeles* in each district in farmer groups to increase farmer productivity and incomes.

PARTNERING WITH SASAKAWA AFRICA ASSOCIATION ON 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 are building the capacities of health extension workers (HEWs) as well as DAs to produce and showcase the videos to farmer groups as well as health development armies (HDAs) in three *woredas* in the region.

QPM consumption recipes, nutritional components of the maize crop itself, cultural practices affecting nutritional child-feeding, and best QPM-related agronomic practices are some of the topics of the videos shared with households to promote healthy diets through the consumption of QPM. We are integrating agriculture and nutrition-centric messages into the videos that are to be produced for this pilot project. Each of the three engaged woredas serve as video production hubs, where videos are produced by a mixed team of technical health and agriculture experts, leveraging the strengths of HEWs, HDAs, DAs, and farmer groups.

DIGITAL PUBLIC HEALTH PROJECT

Despite progress in the areas of maternal and newborn health, Ethiopia still has a high maternal mortality ratio - 676 per 100,000 (2011) and high neonatal mortality rate, 37 per 1,000 live births. To improve the health status of rural households by strengthening the community outreach and awareness efforts and complementing existing behavior change communication, we have collaborated with PATH to reach approximately 4,000 households in two districts of Oromia region – Wuchalle and Dodata.

By leveraging the existing health extension systems in the country, we aim to increase the awareness and uptake of maternal, newborn and child health practices. Pregnant and lactating mothers will be targeted through the Ethiopian HDA structures, as well as through pregnant women's conferences located in each *kebele.*