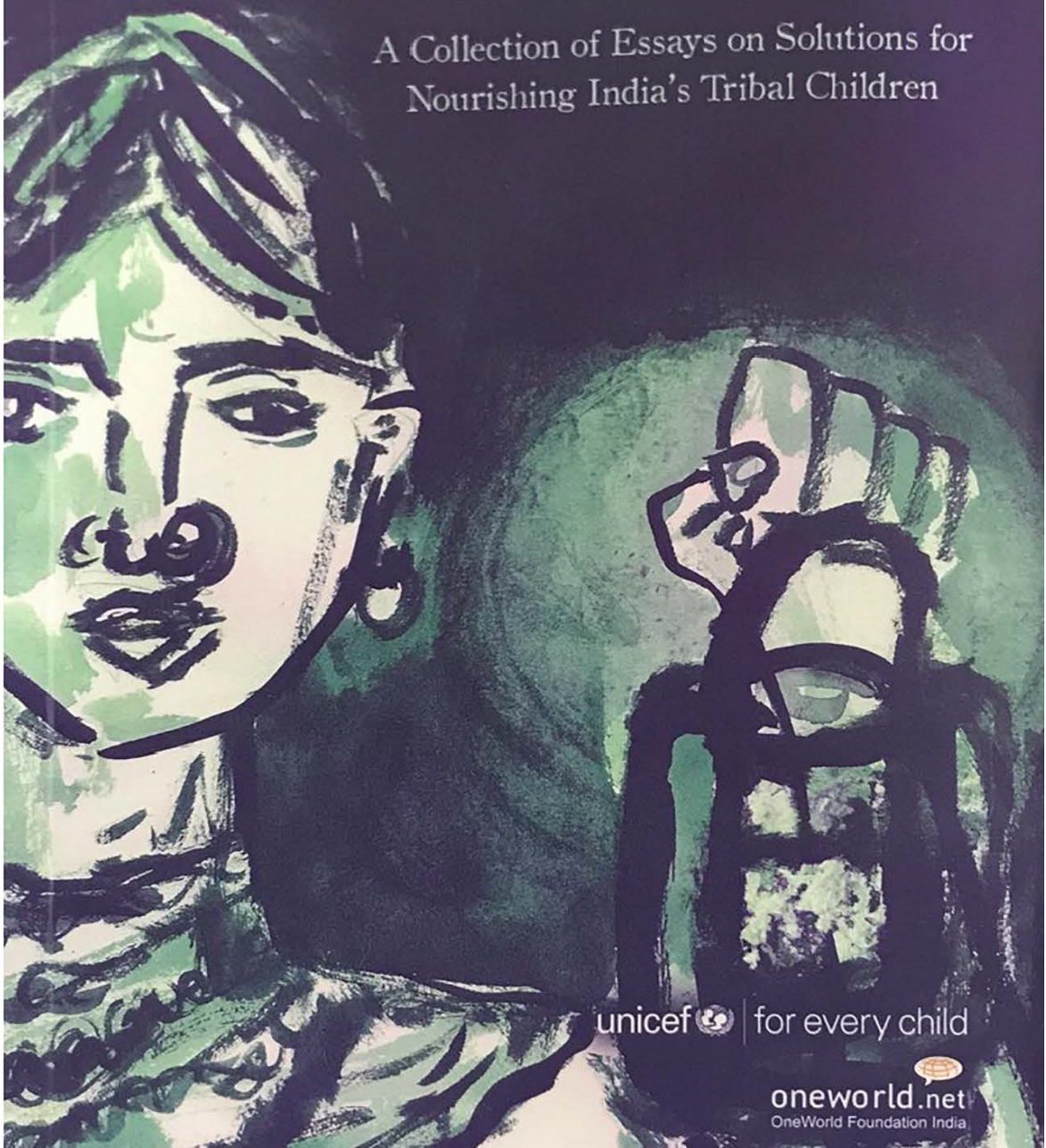


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Forest Lanterns

A Collection of Essays on Solutions for
Nourishing India's Tribal Children



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Multiple states

Interactive Communities, Screening Solutions

*Tech-enabled participatory engagement enables
exchange of good practices.*

Vinay Kumar



Agricultural extension systems in developing countries are usually costly, slow and ineffective. The extension workers visit villages erratically; they often lack knowledge of local context and the information rarely reaches those who need it the most. The community is not sufficiently motivated to adopt the good practices that are promoted.

To address this gap in agriculture extension, Digital Green was started as a project at Microsoft Research in 2006. The research developed an approach that uses community videos produced by the farmers themselves on locally relevant practices featuring local farmers to promote good agricultural practices. These videos are screened by a local intermediary from the village using a handheld battery-operated pico projector to groups of fifteen to twenty farmers. This approach was found to be ten times cheaper and uptake of practices seven times higher compared to traditional approach. In 2008, Digital Green was set up as a non-profit to scale this approach.



Digital Green partners with public, private and civil society organizations to empower the rural communities to generate and share knowledge on good practices through community videos and other complementary platforms such as mobile, interactive voice response system and radio.

According to Pinky Devi, thirty, mother of three, from Nalanda district, Bihar, the videos helped her communicate good practices to her community in a more effective manner. ‘Around fifty farmers in my village adopted the Systematic Rice Intensification method (SRI), and thirty-five farmers started their own kitchen gardens after attending the sessions. This increased their farm output, ensured food security and nutritious food for their families.’ Pinky Devi has been part of a Self-Help Group (SHG) since 2009, organized by JEEViKA, State-Level Rural Livelihoods Mission - Bihar.

In October 2012, the Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project—funded by the United States Agency for International Development (USAID)—piloted a year-long collaboration with Digital Green and VARRAT, a local NGO in thirty villages in Keonjhar district of Odisha, where the infant mortality rate is 49 per cent, well above the national average of 39 per cent.^{1,2}

The project tested if the Digital Green video approach could be leveraged to promote maternal, infant and young child nutrition (MIYCN) behaviours and care practices—child feeding, care during pregnancy and hand-washing. The study results were highly promising. Ten locally produced MIYCN-focused videos were shown in biweekly SHG meetings. Over 70 per cent of the audience comprised tribal peoples.

Demand and acceptability of these videos were high among SHG members, their families and frontline health workers. Consequently, the pilot was scaled up from thirty to 140 villages.

In terms of innovation, the organization strategically focused on strengthening the links between agriculture and nutrition. It emphasized on a varied and nutrition-rich diet, while informing rural



An Anganwadi worker explaining the vaccination schedule: A friendly approach
(Source: Digital Green)

communities about good practices related to care for pregnant or lactating women and their children. The organization linked it with agricultural good practices of multicropping, organic cultivation and livestock management.

Malati Majhi, member of Maa Sunamukhi SHG, is a case in point. A resident of Kothaghara village in Keonjhar district, Odisha, she recalls that she learnt a lot from the videos during her second pregnancy. 'I consulted the Anganwadi Worker, completed the vaccination schedule and regularly took iron tablets. After delivery, I fed the baby first milk within an hour of birth and completed vaccination of my child. I exclusively breastfed my child for six months. Now my child is nine-month-old.' Majhi's first-born had low birth weight and was not growing well as she did not know about exclusive breastfeeding and complementary food after the first six months.

Digital Green leverages videos produced by local communities to drive behaviour change among community groups. It partners

with organizations that have domain knowledge, strong community linkages and reasonable scale of operations. SHG networks of women from farming communities are engaged to share and discuss videos on good nutrition, health and hygiene. As community members star in these videos, they seem authentic. Also, it trains interested community members to shoot and edit informative videos with low-cost video cameras. Then, a community member from the village who is trained by Digital Green in facilitation skills screens them using inexpensive and portable pico projectors.

Three innovative components comprise the Digital Green approach: initiation, production, and dissemination. The first component includes group discussions with community and partner staff. Local intermediaries are identified and trained in video production, screening and data management.

The second component involves producing short videos featuring community members after consulting local community and subject matter experts. Videos are screened to SHGs comprising adolescent girls, young mothers and older women. Trained community members motivate groups to clarify doubts and adopt the demonstrated practices. Each video has an adoption checklist, listing mandatory aspects of the practice, which forms the basis of adoption verification.

This data captured on paper forms is digitized, using the innovative Connect Online, Connect Offline (COCO) data management system that lets users seamlessly toggle between offline and online modes for uninterrupted browsing in regions with intermittent Internet connectivity. This data powers a suite of online analytics dashboard to help monitor and improve programme activities on the ground. Partner organizations deploy these solutions to offer more efficient extension services.

On another front, Digital Green provides access to these videos to a wider global audience through its online video library.

Digital Green's suite of mobile solutions currently comprises responsive Web tools, mobile applications and interactive voice response systems (IVRS). It has also developed a training video course



Community members shooting a video: Creating a participatory learning environment (Source: Digital Green)

in Hindi comprising a set of videos (on how to use a pico projector) and a manual (giving pico model-specific details). An accompanying score-sheet assesses their learning. An Android training application has also been developed to help Digital Green and National Rural Livelihoods Mission (NRLM) trainers hone skills of field agents and evaluate their progress by tracking their enrolment, course completion and accreditation. Application data helps the central training team assess every participant's learning scores and field performances to identify skill gaps and accordingly provide refresher trainings. Also, it allows them to analyse the performance of trainers and pinpoint gaps.

Shifting from paper to mobile-based data collection is significant given the near real-time access it provides—resolving issues faster and maintaining historical data in a more transparent and accessible manner. The impact of the video-based approach has been significant. It has transformed the way NRLM produces and shares knowledge,

as well as how it collects and analyses evidence for its policies and programme at the national, state and local levels.

Digital Green is currently partnering with nine state rural livelihood promotion societies in India—Bihar, Rajasthan, Andhra Pradesh, Telangana, Madhya Pradesh, Odisha, Maharashtra, Jharkhand and Chhattisgarh. From 2008 to June 2016, it has reached over 1 million individuals across 13,592 villages through 4426 videos; 574,222 viewers adopted one or more of the good practices promoted through these videos. In addition, having recently partnered with Jharkhand State Nutrition Mission (JSNM), Digital Green aims to promote good nutritional practices among women, children and adolescents in a project supported by USAID.

It has collaborated with various partners to introduce locally relevant ICT-enabled platforms that include video, mobile, radio and IVRS to interact with the community and create a participatory learning environment. Digital Green's COCO will capture near real-time community data and use it to upgrade project activities. A pilot phase in Patratu block, Ramgarh district, will determine how the project will be scaled to realize the goal of an undernutrition-free Jharkhand.

This Digital Green model has demonstrated that a community-driven and technology-enabled platform can be efficient and more cost-effective than conventional development interventions.

Notes

- ¹ Kadiyala S., Roopnaraine T., Margolies A., Cyriac S. Using a Community-Led Video Approach to Promote Maternal, Infant, and Young Child Nutrition in Odisha, India: Results from a Pilot and Feasibility Study. Arlington, VA: USAID/Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project. Available at: https://www.springnutrition.org/sites/default/files/publications/reports/spring_community_led_video_miyen_india.pdf.
- ² The Census of India 2011. Available online at: http://www.censusindia.gov.in/vital_statistics/SRS_Bulletin_2014.pdf.