Equator Initiative Case Studies
Local sustainable development solutions for people, nature, and resilient communities

THE SMALLHOLDERS FOUNDATION
Nigeria

Equator Prize Winner
Local and indigenous communities across the world are advancing innovative sustainable development solutions that work for people and for nature. Few publications or case studies tell the full story of how such initiatives evolve, the breadth of their impacts, or how they change over time. Fewer still have undertaken to tell these stories with community practitioners themselves guiding the narrative.

To mark its 10-year anniversary, the Equator Initiative aims to fill this gap. The following case study is one in a growing series that details the work of Equator Prize winners – vetted and peer-reviewed best practices in community-based environmental conservation and sustainable livelihoods. These cases are intended to inspire the policy dialogue needed to take local success to scale, to improve the global knowledge base on local environment and development solutions, and to serve as models for replication. Case studies are best viewed and understood with reference to *The Power of Local Action: Lessons from 10 Years of the Equator Initiative*, a compendium of lessons learned and policy guidance that draws from the case material.
PROJECT SUMMARY

The Smallholders Foundation promotes sustainable agriculture and environmental conservation through educational radio programmes. Smallholder Farmers Rural Radio broadcasts daily programs on agricultural management, environmental conservation, and market access, which reach over 250,000 smallholder farmers. Broadcasts are done in the local Igbo language, and reach listeners in three local government catchments in Imo State, Nigeria.

Information shared on broadcasts help farmers improve their farming practices and broaden their access to markets, thereby increasing their incomes. The Foundation also broadcasts information on environmentally responsible farming techniques as well as on household hygiene, sanitation, and nutrition.

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Nigeria’s biological wealth is located in rural areas, where the local population is dependent on natural resources for their livelihoods, subsistence needs, health and wellbeing. Over 70 percent of Nigeria’s population of 150 million live and work in rural areas. The vast majority of the rural population depends on agriculture for their incomes. Due to an underdeveloped communication infrastructure in Nigeria, few farmers, however, have access to high quality, current information on natural resource management. Energy and power supplies are inconsistent and unreliable, with many rural communities living off the grid. Internet access too is sparse, and often does not reach rural, marginalized farmer communities. Similarly, agricultural and forestry extension services which normally deliver valuable natural resource management information to rural farmers have collapsed in recent years.

This has resulted in an information gap between emerging knowledge, lessons learned and guidance on sustainable farming and natural resource management and rural farmers. Small farmers lack access to information on sustainable environmental management techniques and farming methods to ensure steady supplies to the market. The result has been environmental degradation, a deepening of poverty, and accelerated food insecurity. Cut off from crucial information systems, small farmers are unable to boost their agricultural yields or their incomes.

**Overcoming the information gap**

Established in 2003 in Imo State, Nigeria, The Smallholders Foundation is a non-governmental organization which assists approximately 3.5 million rural small-hold farmers. Targeting farmers that in most cases work no more than an acre of land, the Smallholders Foundation uses radio programming to promote agricultural productivity, livelihoods diversification, and environmental conservation. Smallholders Farmers Rural Radio broadcasts programming ten hours a day on agricultural management, environmental conservation, and market supply-chain information to over 250,000 small-hold farmers. Broadcasts are aired in the local Igbo language. The programs enable economically marginalized farmers to acquire modern agricultural and environmental management techniques, receive up-to-date (and often daily) market information, and provided a platform on which to advertise their products. Broadcast programming covers techniques in crop production, livestock rearing, biodiversity conservation, soil management, soil erosion control, farm management, food security and safety, nutrition, HIV/AIDS, malaria, fertilizer and pesticide use, rainwater harvesting, small-scale irrigation, accessing hybrid seeds, market access, micro-credit access, and a question and answer service. Programs also include capacity building and business skills development, including market research, cost-benefit analysis, banking and accounts management, bookkeeping, store records, and business planning.

**Organizational structure and membership process**

Administration of the Smallholders Foundation is managed by two groups: the Board of Trustees and the members. The Board of Trustees is made up of six individuals, who are directly elected by the members. The Board of Trustees retains responsibility for ensuring that the goals and vision of the organization are carried out, and for providing strategic direction. The board is overseen by a Chairman, who is also elected by the members. Members of the organization are community farmers, as well as nongovernmental organizations. Members are responsible for appointing the Board of Trustees and the Chairman every two years. In order to become a member, interested individuals or organizations send in a request form, which is reviewed by the Board of Trustees. Key performance indicators of the organization are verified through the number and duration of programs broadcast; letters, text messages, and phone calls to the radio stations; and structured field questionnaires.
The primary objective of the Smallholders Foundation is to empower rural farmers in south-eastern Nigeria with the information needed to overcome poverty and protect the environment. At the same time, the organization aims to provide a platform for rural farmers to have a voice and to solve common problems in managing biodiversity and adopting contemporary agricultural and environmental management techniques. Towards this end, Smallholders Foundation carries out four key activities.

**A radio station for farmers, by farmers**

The first activity is the Smallholder Farmers Rural Radio Project, which was established in 2007 with the support of the United Nations Educational, Scientific and Cultural Organization (UNESCO). The project designs and broadcasts programming on agricultural management, environmental conservation, and rural markets. The objective is the uptake of best practices in agricultural productivity, which increase farm yields, improve local incomes, and protect the environment. The programs allow farmers to acquire modern agricultural and environmental management techniques, receive prompt market information, and advertise produce from their farms. Programming covers a broad range of issues, including livestock, soil management, farm management, food security, infectious disease control and public health, water management, micro-credit access and business skills training. To amplify the effectiveness of the broadcasts, rural radio station staff embark on field extension services where they provide hands-on demonstrations of practical farming techniques in sustainable agricultural management. Additionally, the deployment of interactive radio mobile devices to ‘listener clubs’ allows farmers to provide direct feedback on the programs. Voice inputs made into the mobile devices are forwarded to the radio station via a network antenna installed in the radio station. The device incurs no cost to the users and offers a mechanism for asking practical questions.

**Further outreach through public radio stations**

A second key activity is the Radio Broadcast Script Project. This initiative uses songs (or jingles), radio scripts, and drama performances to provide educational information and contemporary farming practices to rural farmers. The content is oriented largely around topics such as slash-and-burn agriculture, small farm development, farm safety, storage facilities, female empowerment, youth in agriculture, public health issues, land tenure and land access, micro-credit, market access, soil management, water and sanitation, wetlands management, and environmental conservation. The jingles, radio scripts and drama performances are developed with community input and broadcast through public radio stations with reach to rural communities.

**Empowering youth in farm management**

A third activity is the School Gardens Project, which targets local schools and provides youth with agricultural skills and training. Gardens are established where youth can learn how to harvest and market produce, to manage costs and revenues, and to rear livestock. The project provides exposure to the full range of responsibilities of managing a farm, and extends learning beyond the classroom. Gardens are operated and managed by students outside of the school hours, where there is interest, providing experience in the agri-business sector.

**Hands-on agricultural extension**

The fourth key activity of the organization is a demonstration and education project for rural farmers, which aims to help increase their crop yields and proliferate good farming practices. The project focus is on teaching farmers to cultivate their crops and livestock, to create hygienic farming conditions, to manage low-cost irrigation systems,
to harness sustainable energy, and to conserve the environment. These skills are taught through demonstration sessions. This has been a particularly valuable platform for educating local farmers on ecosystems and integrated natural resource management across rainforests, wetlands, and mangroves. Topics have also included alternatives to slash-and-burn agriculture, preventing soil erosion and flooding, watershed management, enforcing laws to protect community streams and rivers through the use of drought-resistant plants, restoring degraded rainforests, community afforestation, fish harvesting technologies, multi-use trees, agroforestry, water bird management, wildlife management, and ecotourism.

An innovative use of a widespread technology

Smallholders Foundation uses a locally available technology to not only fill an existing communications gap on modern agricultural and environmental management techniques, but also to transform small-hold farmers from mere recipients of information into active participants in an ongoing dialogue on best practices. The model is of two-way communication, and is successful precisely because of the active participation of communities in the planning and production activities of the radio broadcasts. It is the expression of the community rather than a channel for the community. It promotes the exchange of views, brings people closer together, stimulates information exchange, and enhances the value of local knowledge.

Radio is an essential communication tool for information dissemination to rural communities. Despite technological advances in the communication field, radio remains the most pervasive, accessible, affordable, and flexible mass medium available. In rural areas, it is often the only medium that can rapidly disseminate to large and remote audiences. Smallholders Foundation has taken a technology which had previously been used primarily for commercial and advertising interests and transformed it into a tool of local community empowerment and engagement.

“Climate change is our new challenge. An opportunity exists, however, to use media like radio to inform, educate, and improve the climate change mitigation and adaptation strategies of smallholder farmers.”

Nnaemeka Ikegwuonu, Executive Director, The Smallholders Foundation
Impacts

BIODIVERSITY IMPACTS

Smallholder Foundation programs have had a range of positive environmental and biodiversity impacts by way of improved eco-agriculture techniques, positive behavior change, increased awareness of environmental challenges and their corresponding solutions, and in serving as the catalyst for community mobilization and collective action.

Catalyzing community-led conservation

Communities are enacting and enforcing laws for the management of wetlands and rainforest ecosystems. As one example of many, Smallholder Foundation project activities have led to the enforcement of two community laws which will conserve the Sclater’s guenon (t.) monkey, also known as the ‘green world monkey’. This community effort came about following a three-month radio drama on monkey conservation. The organization also leads ‘listener club discussions’ on wildlife-related topics in order to spread a conservation ethic. The clubs meet weekly or monthly to listen to specific radio programs, discuss the topic and then provide feedback to the radio station.

Also as a result of radio programming and demonstrations, farmers are building better product storage facilities to save genetic resources. The volume of agricultural outputs per acre is reported to have increased dramatically. Programs and extension service projects are said to have led to the conservation of over 23,000 hectares of rainforest. Through the School Gardens Project, five schools have established ‘green clubs’; where students are taking the lead on an extensive tree-planting program and the planting of vetiver grass on steep and sloping landscapes, which helps to manage soil erosion.

Biodiversity impacts are measured through weekly and monthly surveys. Key environmental performance indicators include: the number of smallholders adopting agricultural best practices, trees planted by communities, community biodiversity laws enacted, daily agricultural and environmental ‘lead broadcasts’, and crop output per acre of land.

Adapting to climate change

One example of an environmental program developed by Smallholders Foundation is a 20-episode radio serial drama on climate change management, designed to help smallholders address the challenges of changing weather patterns. Each episode covers a specific climate risk management topic that is linked to sustainable livelihoods in Nigeria. Examples of individual scripts and episodes include: planting and using multi-purpose trees, pest and disease control in arable crops during climate change, water and soil management in the face of climate change, restoring degraded forests, new fish-farming techniques in climate change, value-added fish-farming products, reducing livestock density, mixing browsers and grazers (livestock that eat primarily leaves and grass respectively), coastal areas management, coping with extreme weather events, using renewable energy, cultivating cassava with uncertain rain, crop diversification, heat and salt tolerant crops, leading community responses and preparedness, and lobbying for government action.
SOCIOECONOMIC IMPACTS

The programs and projects organized by Smallholders Foundation reach approximately 250,000 people in the rural communities of Imo State. Through impact assessments, the organization has found that 65% of listeners have reported improved livelihoods and increased household incomes. Farmers have reported a 50% increase in output per acre of maize, cassava, cocoyam, yam and vegetables. The increase is attributed to the uptake of more productive and effective agricultural practices. Household incomes are reported to have improved from USD 1 dollar/day to USD 1.50 per day.

The secondary benefits have also been substantial. More households are enrolling their children in school, as parents can afford basic school supplies and fees. Standard hygiene, sanitation and nutrition have been enhanced. Through increased crop yields and diversified agriculture outputs, local food security has improved.

Through the radio programs, farmers now have access to daily commodity prices, which enable them to make more informed decisions on which market to target and trends in supply and demand. Smallholders Foundation has also supported market supply-chain development, linking local producers with larger markets.

The radio programming has been a platform for community empowerment, and has resulted in greater collective action and community mobilization around conservation and livelihoods issues. Community-based organizations have formed in response to radio programming to address identified needs, including school renovations, community water projects, and more. More directly, revenue from the radio station is used to support the establishment of modern school gardens in community secondary schools and to help students gain practical agricultural skills and experience for gainful employment.

POLICY IMPACTS

The Smallholders Foundation has been able to create a policy space for rural farmers – a forum to literally air their concerns and the challenges of local-level development and conservation. The eight small-hold farmers recruited from the local communities and trained in broadcasting serve as information conduits and as moderators of an ongoing policy dialogue. The broadcasters are fluent in the local Igbo language as well as English. In addition, ten rural radio management committee members were selected from listening communities to take charge of production, editorial responsibilities, advertising (selling airtime to advertisers), and ensuring a high standard of programming that is responsive to local needs and concerns.

The initiative was not initially designed to be a policy platform or to facilitate inputs into policymaking processes. The programming has, however, granted communities a voice to air their issues, concerns, and challenges. The radio broadcasting provides a platform for communities to solve their own problems, and to exchange information peer-to-peer, and also channels local policy guidance regarding on-the-ground successes and challenges in biodiversity conservation and sustainable use, farming, and income-generating activities to reduce poverty. The Smallholders Foundation has established an interactive, two-way medium for the rural poor – many of whom are illiterate – to be heard, to keep informed, and to become more decisive and knowledgeable agents in their own development.

The initiative has been a vehicle of community empowerment, giving rural farmers confidence in the value of their knowledge, and their capacity to problem-solve and be the leaders of positive change in their communities. The spill-over effects of local empowerment can be seen in the upsurge of community-based organizations being mobilized to address a range of environment and development challenges – including rainforest management programs, which together have led to the conservation of over 23,000 hectares of threatened rainforest – as well as community enacted and enforced laws for the management of watersheds, wetlands, mangroves and wildlife.
SUSTAINABILITY

The initiative has achieved a high level of institutional sustainability, owing in larger measure to its resonance with and ownership by the local community. Rural farmers have experienced the direct and indirect benefits of the radio broadcasting and the initiative’s broader work, giving the Smallholders Foundation a good deal of local legitimacy and social capital.

Daily programs are broadcast through sources such as the Nigerian Export and Investment Promotion Councils, Farm Radio International, the Food and Agriculture Organization, CTA, UNESCO, LEISA, the International Trade Centre, local and national ministries of commerce, agriculture and chambers of commerce. The revenues which make the initiative fiscally viable are generated through the sale of advertisements to willing buyers – individuals, large-scale farmers, agri-business, small and medium sized enterprises, local non-governmental organizations, government, and the communities of smallholders themselves. Airtime is also sold for public service announcements, personal greeting requests, production agreements, listener subscription and program sales, and the production and sale of agricultural instruction manuals that are adapted from the radio broadcasts.

REPLICATION

The Smallholders Foundation has been active in sharing with other communities and relevant stakeholders lessons learned on the establishment of the organization, the challenges and successes it has navigated, and the environment and development impacts that are possible through participatory approaches. Knowledge exchange and information sharing has gone beyond Imo State to ensure other rural communities in Nigeria benefit from what has proved a successful model.

Each year, the organization compiles its lessons learned into a final report which outlines the basic ideas and principles of its projects and programming, the methodology of impact assessments, and key outcomes. The report is shared extensively with civil society organizations with an interest in rural conservation and development, and those with the reach to distribute to rural communities. The report is also shared with federal, state and local governments, all stakeholders that have been enlisted to facilitate internet discussion forums, conferences, workshops and seminars.

PARTNERS

Success with sustainability, project implementation and replication are a result of a robust partnership of local, national and international stakeholders. One important function the partnership serves is to provide the Smallholders Foundation with timely, relevant and audience-specific information and materials on agricultural management, environmental conservation, sustainable development and supply-chain market access. These materials are vetted for relevance and potential usefulness to the target population, translated into Igbo and broadcast to the 250,000 daily listeners. Partners include:

- The Owerri Chamber of Commerce and Industry
- Onitsha Chamber of Commerce and Industry (as well as other chambers of commerce and industry in Lagos State, Enugu State, Kano State, and Kaduna State)
- The Nigerian Association of Chambers of Commerce, Industry, Mines and Agriculture
- The Trade Desk of Foreign Embassies and Nigerian–Foreign Countries Business Councils
- Imo State Ministry of Agriculture and Natural Resources (as well as their Commerce and Industry counterpart)
- The Federal Ministry of Commerce and Industry (as well as the Agriculture and Rural Development counterpart)
- The Nigerian Export Promotion Council
Biodiversity conservation leads to sustainable livelihoods for the rural poor. This must be made a national priority.

Nnaemeka Ikegwuonu, Executive Director, The Smallholder Foundation
FURTHER REFERENCE

- The Smallholders Foundation website http://smallholdersfoundation.org/
- The Smallholders Foundation PhotoStory (YouTube) http://www.youtube.com/watch?v=L0Ne2m-V41U

Click the thumbnails below to read more case studies like this:

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The United Nations Development Programme (UNDP) is the UN’s global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life.

The Equator Initiative brings together the United Nations, governments, civil society, businesses and grassroots organizations to recognize and advance local sustainable development solutions for people, nature and resilient communities.

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