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

ITOH COMMUNITY GRAZIERS COMMON INITIATIVE GROUP
Cameroon

Empowered lives. Resilient nations.
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 Prize*, a compendium of lessons learned and policy guidance that draws from the case material.

Editors
*Editor-in-Chief:* Joseph Corcoran
*Managing Editor:* Oliver Hughes
*Contributing Editors:* Dearbhla Keegan, Matthew Konsa, Erin Lewis, Whitney Wilding

Contributing Writers
Edayatu Abieodun Lamptey, Erin Atwell, Toni Blackman, Jonathan Clay, Joseph Corcoran, Larissa Currado, Sarah Gordon, Oliver Hughes, Wen-Juan Jiang, Sonal Kanabar, Dearbhla Keegan, Matthew Konsa, Rachael Lader, Patrick Lee, Erin Lewis, Jona Liebl, Mengning Ma, Mary McGraw, Gabriele Orlandi, Juliana Quaresma, Peter Schecter, Martin Sommerschuh, Whitney Wilding, Luna Wu

Design
Oliver Hughes, Dearbhla Keegan, Matthew Konsa, Kimberly Koserowski, Erin Lewis

Acknowledgements
The Equator Initiative acknowledges with gratitude the guidance and inputs of Itoh Community Graziers Common Initiative Group. All photo credits courtesy of Itoh Community Graziers Common Initiative Group. Maps courtesy of CIA World Factbook and Wikipedia.

Suggested Citation
PROJECT SUMMARY

Through participatory planning and mapping exercises, the agro-pastoralist Itoh community conserves land around the Kilum mountain forest for grazing and agriculture. This forest fragment had previously been under threat from encroachment for timber harvesting and clearing for agriculture. It is the largest remnant of montane forest in the Bamenda Highlands of Cameroon’s Northwest Province. These forests support a high diversity of unique flora and fauna, including two endemic bird species, and provide a range of ecosystem services for the mountain’s local population.

Activities have focused on an area reserved for grazing, around which the community’s two ethnic groups have collectively planted 30,000 trees to demarcate boundaries, protect local water sources, and provide fodder for livestock. Some of these multipurpose tree species have had medicinal and ethno-veterinary uses, reviving traditional approaches to treating human and animal ailments.

TABLE OF CONTENTS

Background and Context  4
Key Activities and Innovations  5
Biodiversity Impacts  6
Socioeconomic Impacts  6
Policy Impacts  6
Sustainability  7
Partners  7

KEY FACTS

EQUATOR PRIZE WINNER: 2004
FOUNDED: 1992
LOCATION: Itoh, Northwest Region
BENEFICIARIES: 60 members of the Itoh community
BIODIVERSITY: Reforestation of a 140-ha grazing area
The Kilum mountain forest is the largest remnant of montane forest in the Bamenda Highlands of Cameroon’s Northwest Region. It supports a high diversity of flora and fauna, including two endemic bird species, and provides a range of ecosystem services for the local population. The forest forms a critical watershed for the 100,000 people who farm the mountain’s slopes, acts as a natural defence against soil erosion, and provides a wealth of forest products including fuelwood, building and thatching materials, medicines, and honey. The mountain slopes also provide land for farming and livestock-rearing, activities that for decades have sustained the local communities of the village of Oku. Increasing competition for land between tribal groups, however, has heightened pressure on the mountain forest’s borders. Overexploitation of its resources and increasing deforestation led to increased protection efforts during the late 1980s and 1990s.

**Communal grazing areas**

With restrictions on the use of resources available to the communities bordering the forest reserve, the Kilum Mountain Cooperative Union was created in 1992 to mobilize the population of Oku to explore sustainable options for balancing crop farming and the rearing of goats and cattle. This cooperative comprises six settlements spread around the forest reserve, each possessing a communal grazing area that has been demarcated by government and traditional authorities to serve as an alternative grazing pasture for livestock.

**Conflict resolution in Itoh**

One of these six communities, Itoh, is made up of 60 members belonging to two ethnic groups. The Itoh communal grazing area covers about 140 hectares of land between the rivers Ntio and Mih, which emanate from the Kilum mountain forest. The community grazing area is used by both the native community – predominantly agrarian households living around the communal grazing area in surrounding villages – and the Mbororo, who settled in the community grazing area over 30 years ago and are mostly pastoralists. This has occasionally led to confrontations between the two groups as a result of destruction of crops by cattle belonging to the Mbororo, or encroachment on grazing land by farmers in search of additional land for cultivation.

The Itoh community was the setting for a creative initiative that sought to reduce this conflict and alleviate the livelihood constraints imposed by the ban on land use within the forest reserve. Central to this was improving the efficiency of the use of the limited resources available in the grazing area and in the surrounding villages through the integration of crops and livestock, maximising the productivity of both livelihood activities.

**Rotational grazing and ‘living fences’**

With assistance from national and international partners, the group established a ‘living fence’ around its communal grazing area, improved the diet of livestock by planting high-nutrition grasses, and adopted a rotational grazing system to allow the recovery of the pasture area. Initiative members also planted some 30,000 trees in and around the site. These trees have served various purposes for the Itoh community: they have medicinal properties, have served as sites for bee hives, and provide vegetative cover for a water catchment area. A central feature of the initiative was the establishment of a permanent water source for livestock. The decision to install a separate water source for access by the village, providing the first clean water supply to the school, health centre and market, proved to be a crucial side-benefit that convinced community members to support the initiative.

In general, strategies for improved resource management have raised livestock-related income by increasing the amount of available livestock forage, improved protection of adjacent forest and watershed areas, and greatly reduced conflicts between pastoralists and farmers.
Key Activities and Innovations

The project involved a variety of national and international experts who advised community members on improved practices, focussing on maximising effective land-use in and around the common grazing area. Researchers from the Institute of Agricultural Research for Development (IRAD), a Cameroon state research organization under the authority of the Ministry of Scientific Research and Innovation, advised on modern livestock production, tree nursery techniques, fence construction, pasture improvement, and the management and use of medicinal plants in the treatment of livestock diseases. The ‘living fence’ was planted to prevent livestock from straying onto neighbouring farms and to guard against agricultural encroachment on grazing pasture. The grazing land was subsequently divided into paddocks for cattle, goats and sheep, to enable animal grazing in rotation. Improved forage species were also introduced along with livestock production infrastructure (including a cattle dip) while water supply systems were constructed for use by human and livestock populations.

Making the most of medicinal plants

Among the multi-purpose tree species planted were the Afromontane hardwood pygeum (*Prunus africana*). This multi-faceted species is traditionally used in north-west Cameroon as fuel wood, charcoal, for poles, hoe and axe handles, in honey production, protecting water catchments, for marking boundaries, and especially for its medicinal properties for both humans and animals. It can be powdered into a tea for genito-urinary issues, allergies, inflammation, kidney disease, malaria, stomach ache, fever, chest pain, and heart burn. It also has value on international medicinal markets, and its harvest is carefully regulated within Cameroon. Its bark can be locally harvested and sold in small quantities, however, providing farming households with an additional source of potential revenue. Other tree species planted included calliandra, erythrina, gmelina, acacia, and leucaena.

Capacity building in veterinary medicine & disease control

International partners to the project provided further training and capacity building. Staff from the United Nations Development Programme/Africa 2000 Network in Cameroon supervised project activities and gave trainings in group and farm management. This institution was also responsible for identifying and coordinating external expertise that contributed to the project, including training in ethnoveterinary medicinal practices. These practices have proven immensely successful in the Northwest Province of Cameroon, where Fulani herdsmen manage more than 400,000 head of cattle. In recent decades, the evolution of the Fulani from nomadic to semi-nomadic and transhumant livestock owners has created significant challenges for controlling outbreaks of livestock diseases. The introduction of orthodox veterinary medicine during the 1940s failed to reach some remote areas, while causing knowledge of ethnoveterinary practices to be lost. Since the late 1980s, Heifer International/Cameroon Ethnovet Project has helped to reintroduce many of these practices, including the use of medicinal plants to treat livestock.

These activities yielded remarkable results. Among the most significant impacts was a reduction in the destruction of farms by cattle and the encroachment of crop farmers onto grazing land by almost 100 per cent. Other short-term gains included an improvement in cattle feeding through the use of improved forage species (such as *Brachiaria* grasses, *Stylosanthes*, and *Tripsacum laxum*, or Guatemala grass) and pastures; a reduction in land degradation and overgrazing through rotational grazing methods; the provision of potable water to the livestock and human populations in and around the grazing area, reducing the transmission of water-borne diseases from livestock to humans; the protection of the watershed within a 150-metre radius of the forest; the reduction of tick-borne diseases among livestock populations; and an improvement in the social relations between the two ethnic groups, who have been brought together in common cause.
The 140-ha Itoh grazing area was previously devoid of trees. Planting over 30,000 multi-purpose trees changed the biophysical appearance of the land, creating a wooded ecosystem. The trees provide shade to livestock, and serve as medicinal plants and fodder. The tree belt planted within a 150-metre radius of the water catchment area has substantially improved protection of the watershed. Community members have also witnessed an increase in the number of bee hives in the area, thanks to the planting of trees like calliandra, leucaena and acacia. Strategies introduced for improved land management have also been replicated in neighbouring communities, and by Itoh group members in their own households.

Improvements in the pasture options for local herders have in turn reduced pressures on the Kilum forest reserve, allowing regeneration of wooded land. The conservation of Cameroon’s montane forest is of global importance as it constitutes one of over 40 endemic bird areas in Africa identified in 2002 by Birdlife International, and represents the last hope for survival of several species unique to the ecosystem. These include the endemic Bannerman’s Turaco (Tauraco Bannermanii) and Banded Wattle-Eye (Platysteira Laticincta).

**SOCIOECONOMIC IMPACTS**

The initiative has generated a variety of sources of income for its beneficiary community, diversifying the livelihoods of households that were previously over-reliant on agriculture or pastoralism for subsistence. For instance, the sale of forage seeds from calliandra trees planted by the initiative provides the community with an average annual income of USD 500. Some of the trees used for fence construction and paddock subdivision are medicinal, providing a reserve source of income for community members. The trees also serve as forage for livestock in the dry season when most of the vegetation is dry and feed resources are scarce, while flowering tree stands planted in the grazing area have allowed farmers to supplement pastoralism incomes with the sale of honey, making this a more viable livelihood activity by bringing bee hives closer to farming households.

The group has been able to increase their stock of cattle and goat with the savings from the judicious management of project resources provided by donors. The beneficiary group harvests an average of 20 litres of milk from their cattle herds, which is shared among them for household consumption. Annually, an average of three cattle and five goats are culled and sold, with the income shared equally among the community members to pay for children’s education.

The supply of clean drinking water has reduced water-borne diseases, while medicinal plants harvested from tree bark treat both livestock and human diseases. The improved availability of water has also had the benefit of demonstrating the value of ecosystem conservation to local residents, enabling savings in medical expenses and healthier households.

**Empowerment of women**

The project’s gender dimension is reflected by the membership of the group. One third of group members are female – these women take part in all project activities. Improved water availability and reduced distances for forage collection have particularly benefitted local women. In a pioneering initiative promoted by the project, women are also beginning to be empowered to inherit livestock, despite local customs that traditionally dictated that livestock pass to male family members. In addition, women members have benefitted from training in all aspects of the project, including modern cattle-rearing techniques, tree nurseries and tree planting, ox farming, pasture improvement, and capacity-building project management skills.

**POLICY IMPACTS**

In its range of benefits for local people, the Itoh initiative has served as a model for conflict resolution and sustainable land management for pastoralism within the Northwest Province of Cameroon. This has long been a challenge for government authorities and NGOs working for sustainable development in the region, who have often been helpless to prevent the rapid deterioration of pasture areas due to overgrazing by growing cattle populations and overexploitation by expanding human settlements.

The Itoh community has demonstrated that through the pursuit of a common vision, conflicts can be overcome by shared work for mutual benefits. In the case of this initiative, water turned out to be the key resource that brought peaceful co-existence between social groups within the community.

The effort to protect the water source located within the grazing reserve against encroaching farmland has changed the perception of the farmers themselves who, at the outset of the project, perceived the livestock grazing land and the project as a threat to their own survival. The supply of PVC pipes to the community by the mayor of the Oku Rural Council to extend the water supply from the project area to surrounding social structures – including primary schools, a health centre, and the village market – has helped the community to understand the importance of resource management and conservation.

In return, the project has received the support of traditional village authorities, who have promised to impose sanctions on those members of the community who do not respect the protective measures put in place in the grazing area, and specifically in the water catchment area. Meanwhile the village population has continued planting trees to protect the water source and reinforce fencing around the grazing land, indicating a high level of local support for the initiative.
SUSTAINABILITY

Capacity building and personal empowerment

Targeted capacity building of the beneficiary population by the project’s national and international advisors has allowed the beneficiaries to master the various techniques necessary to sustain the initiative. Evidence of this can be seen in the implementation of acquired techniques and strategies in the households of individual group members. Training in ‘group dynamics’ has focussed on good governance, participatory approaches to local development, and the transparent management of resources. The resulting high level of accountability and transparency has helped to strengthen beneficiaries’ individual commitment to the initiative. Group members hold regular meeting to assess their activities and elaborate new work plans and strategies.

Social participation and the strengthening of social bonds

The initiative has led to the development of new social bonds within the community, uniting two previously antagonistic social groups in common interest. This prioritising of building the social fabric has also illustrated the crucial importance of achieving high levels of local ownership of community development initiatives.

Environmental and economic sustainability

Through the ongoing afforestation process, the initiative contributes to the ecological sustainability of the Kilum Mountain forest reserve and reduces degradation of the environment, while providing substantial and sustainable sources of income for its beneficiaries. The demonstration of the linkages between these benefits has been fundamental to the sustainability of both.

PARTNERS

The initiative has been able to successfully mobilize a diverse range of technical, financial, and material contributions from its participating institutions, demonstrating the importance of diversifying partnerships for delivering in different areas of expertise and comparative advantage.

- The European Union: The EU provided USD 45,000 for the key project activities of the Itoh initiative. These funds were used to purchase materials and equipment such as barbed wire for fence construction and farming tools, as well as paying for specialized labor for capacity building trainings.

- United Nations Development Programme (UNDP)/Africa 2000 Network - Cameroon: This national network of development professionals supervised project activities and provided technical assistance through capacity building of the beneficiary population in project management and group dynamics. This institution was also responsible for recruiting necessary external expertise to strengthen the capacity of the beneficiaries in various technical aspects of the project, coordinating a portfolio of financial and technical assistance.

- Institute of Agricultural Research for Development (IRAD): This Cameroon-based institute supplied technical assistance in modern livestock production techniques, tree nursery techniques, fence construction, pasture improvement and the management and use of medicinal plants in the treatment of livestock diseases. Thanks to the training provided by these experts, group members are currently able to implement these practices without external assistance.

- The Ministry of Livestock: Staff from the zoological, technical and veterinary centre have assisted the group in controlling livestock diseases and have provided training in basic veterinary care.
FURTHER REFERENCE