



UN
DP

*Empowered lives.
Resilient nations.*



THE POWER OF LOCAL ACTION

Lessons from 10 Years of the Equator Prize



EQUATOR  INITIATIVE



*Empowered lives.
Resilient nations.*

THE POWER OF LOCAL ACTION

Lessons from 10 Years of the Equator Prize

This book is dedicated to the memory of Benson Venegas.

Writers

Greg Mock
Joseph Corcoran
Oliver Hughes

Reviewers

Johanna von Braun
Alejandra Pero
Caroline Pedersen
Dilys Roe
Sean Southey
Sally Timpson

Equator Initiative

Environment and Energy Group
Bureau for Development Policy
United Nations Development Programme
304 East 45th St. New York, NY 10017
www.equatorinitiative.org

Cite as: United Nations Development Programme. 2012. The Power of Local Action for Sustainable Development: Lessons from 10 Years of the Equator Prize. New York, NY: UNDP.

Published by

United Nations Development Programme 304 East 45th Street New York, NY 10017

© 2012 United Nations Development Programme

The Equator Initiative gratefully acknowledges the support of its partners.



Convention on
Biological Diversity

CONSERVATION
INTERNATIONAL



Federal Ministry
for Economic Cooperation
and Development

FORDHAM
THE JESUIT UNIVERSITY OF NEW YORK



The Nature
Conservancy
Protecting nature. Preserving life.

pci media impact •))

RARE
inspiring conservation



UNITED NATIONS
FOUNDATION

TABLE OF CONTENTS

Preface	2
Executive Summary	4
Introduction	10
I. The Range of Equator Prize Experience	6
II. Catalyzing Effective Local Action: Lessons from Equator Prize Winners	28
Lesson 1: Local collective action provides a unique lens on sustainable development	28
Lesson 2: The social strand must come first	33
Lesson 3: Action for the environment will often produce development gains	39
Lesson 4: Community empowerment enhances conservation efforts	46
Lesson 5: Community-based action delivers the MDGs	54
Lesson 6: There is strength in the fusion of the modern and traditional	63
Lesson 7: Communication is a powerful agent of behavior change	68
Lesson 8: Land tenure security and property rights are essential	79
Lesson 9: Local good governance exists	87
Lesson 10: Scaling of success is possible and can bring landscape-level change	93
Lesson 11: Partnerships matter	100
Lesson 12: Local innovation breeds adaptation and resilience	112
III. Building on Success: Priority Actions to Support Local Initiatives	120

PREFACE



By Helen Clark
Administrator, United Nations Development Programme (UNDP)

In 2002, UNDP was a lead partner in launching the Equator Initiative at the World Summit on Sustainable Development in Johannesburg. The partnership grew from the observation that community-based action in developing countries was driving innovation, ingenuity, and achievement in biodiversity conservation and poverty reduction. The rural poor – directly dependent on biodiversity and ecosystems to meet their health, livelihood, and food security needs – were also advancing the most viable win-win solutions.

Ten years later, we have a knowledge base which reinforces this observation and reflects the transformative power of local action for sustainable development. UNDP's experience shows that community-based initiatives often capitalize on the 'nature-poverty reduction' link very effectively, bringing social, environmental, and economic benefits in the process.

From our experience in the more than 177 countries and territories where UNDP operates, we see a worldwide movement of grassroots innovation taking shape. The Equator Initiative has given this movement a face, and the UNDP implemented GEF-Small Grants Programme (SGP) has given it legs and life. Since 1992, SGP has dispersed more than 14,500 grants of up to USD 50,000 each for community-based projects. The program has grown from 33 countries in 1992 to 126 today, and is now the foremost global mechanism for financing local action.

UNDP takes community-based approaches seriously because they help national governments advance people-centered development solutions. Working with civil society to support innovation from the ground up is an important dimension of our country-level work. The bottom line is that local successes must inform global solutions as we build a path to a sustainable future.

This book represents a significant contribution to the literature on sustainable development, and draws from a uniquely rich and detailed body of case study material on 127 Equator Prize winning communities. We hope that the lessons presented here are of value to national and international policymakers, leaders in civil society and community-based organizations, and others.

As a knowledge broker in sustainable development practice, UNDP recognizes and embraces its responsibility to learn from what is working on the ground and to assist governments in the process of taking success to scale. It is ultimately only from thoughtful reflection on what is working, and what is not, that we will create a more enlightened policy landscape which empowers real achievement towards sustainable development.



Executive Summary

Over the past 10 years, the Equator Prize has been awarded to 127 outstanding local and indigenous community efforts to reduce poverty through the conservation and sustainable use of biodiversity. On its 10-year anniversary, the Equator Initiative has developed detailed case studies on each of these leading grassroots initiatives, and undertaken a comprehensive analysis of the commonalities, trends and lessons across the pool of winners.

This book presents the results of this analysis. Its objective is to distill key lessons on successful community-based action in environment and development. The book limits itself to a treatment of twelve key lessons with the greatest relevance for understanding and catalyzing effective ecosystem-based action at the local level. Case examples are deployed to illustrate lessons and sub-lessons.

Twelve Key Lessons

1. Local collective action provides a unique lens on sustainable development

The conditions that catalyze local collective action serve as a barometer of the needs and challenges of the world's most vulnerable populations and can help to elucidate demand trends for development support.

Collective action from the margins offers national governments and the international community a unique lens on the drivers, conditions and regulatory vacuums that rural communities face. Common catalysts of Equator Prize winner action are:

- Environmental threats, primarily from large-scale extractive industries like commercial fishing, logging, mining and agribusiness;
- Service gaps or institutional failures in health services, education, clean water access, sanitation, electricity, credit and savings services, vocational training, and more;
- A lack of legal entitlements or empowerment, including tenure insecurity, lack of enforceable property rights, and systematic political marginalization); and
- The desire to take advantage of new opportunities in enterprise and business development or to access new markets.

2. The social strand of sustainable development must come first

Successful initiatives prioritize the social processes that make collective action possible.

Collective action requires a considerable commitment to social processes, such as participation, inclusion, and the pursuit of equity, rights and empowerment. These must necessarily precede pursuit of environmental and economic benefits. By prioritizing social processes, Equator Prize winning initiatives produce benefits which include:

- Conflict resolution and peace-building, including normalizing post-conflict zones and resolving protracted resource conflicts;
- Community and personal empowerment, such as fostering group independence, self-reliance and agency and empowerment for women and other marginalized groups;
- Political and legal empowerment, through land tenure security, devolution of resource management authority, new regulatory authority, and policy influence); and
- Accumulated social capital to draw from in tackling other collective problems.

3. Action for the environment will often produce development gains

Environment can be a powerful platform for community-driven rural development.

The development model in Equator Prize winning communities has several defining features, which include:

- Enabling livelihood transformation and building a local 'green economy' through the transformation of village economies;
- Redefining ecosystem and agricultural productivity through new land use patterns and practices, land restoration and regeneration, and greater efficiencies);
- Going beyond the conventional conservation model, using conservation to achieve multiple benefits);
- Bringing improved market access through equitable market supply-chains, circumventing middlemen, and product certification;
- Developing new skills and providing access to new technologies;
- Stimulating investments in local infrastructure such as roads, water and sanitation, irrigation systems, energy access, education, health and more; and
- Positioning communities for new opportunities, such as payment for ecosystem services programs like REDD+.

4. Community empowerment enhances conservation efforts

Engaging local stakeholders in conservation efforts enhances not only local livelihoods, but conservation itself. It also brings more equitable development results.

But beyond this, it also vastly enhances the impacts of conservation itself. Areas in which local innovation and collective action can play a fundamental role in achieving conservation goals include:

- Targeted management of key wildlife species (and the monitoring and communication tasks that underpin this);
- Management of protected areas (both co-management in partnership with state authorities, and the creation of indigenous and community conserved areas);
- Preservation of genetic diversity, often as a facet of preserving cultural heritage; and
- Going beyond conservation to active ecosystem restoration.

5. Community-based action delivers the MDGs

Local ecosystem-based initiatives are a potent delivery system for the entire suite of Millennium Development Goals.

Equator Prize cases not only demonstrate the principle of "environment for development," but more particularly, the idea of "environment for the MDGs." The benefits produced by community-based management of ecosystems are not just environmental, but are economic, social, and cultural as well, and represent the whole range of development aspirations embodied in the MDGs. Examples from Equator Prize cases of benefits that directly address the MDGs include:

- MDG 1 - End poverty and hunger: higher local incomes, expanded livelihood options, and strengthened food security;
- MDG 2 - Universal education: greater access to formal education, ability to pay school fees, construction of schools, access to scholarships;

- MDG 3 - Gender equality: formation of women's self-help groups, granting of land rights to women, and awareness raising around gender issues;
- MDG 4 - Child health: greater access to health services, creation of programs to address malnutrition and control childhood diseases;
- MDG 5 - Maternal health: increased access to reproductive health, family planning and medical services;
- MDG 6 - Combat HIV/AIDS: awareness raising, education and outreach around HIV/AIDS;
- MDG 7 - Environmental sustainability: protection of species and habitats, adoption of improved harvesting systems, restoration of ecosystems, reforestation, and increased use of sustainable energy;
- MDG 8 - Global partnerships: creation of multi-sector, multi-level partnerships for technical support, finance, technology provision, market access, and outreach.

6. There is strength in fusion of the modern and traditional

Successful initiatives represent the fusion of modern and traditional knowledge, institutions, management approaches and governance systems.

Equator Prize successes show that traditional knowledge, institutions and experience are anything but static, and can be configured in innovative ways with modern approaches, technologies and governance systems to solve contemporary sustainable development challenges. Manifestations of the fusion of modern and traditional take many forms:

- The reintroduction of traditional resource management and governance systems, with modern enforcement backstopping;
- The development of value-added processing and marketing, using traditional resources and modern processing techniques and marketing methods;
- The establishment of seed banks that allow the reintroduction of heritage seed varieties, which can improve local adaptive capacity and food security; and
- The development of new markets for medicinal plants, which utilize local knowledge of medicinals and plant derivatives to meet the modern demand for natural health products.

7. Communication is a powerful agent of behavior change

Successful local initiatives use networking, knowledge exchange, technology and media to change attitudes, communicate incentives, catalyze collective action, and replicate best practices.

Communication is essential for cultivating the understanding and shared vision that underpins collective action, drives behavior change and makes win-win solutions possible. Notable communication trends among Equator Prize winners include:

- Peer-to-peer exchange and site visits for the transfer of best practices;
- Use of project sites as 'centers of excellence,' in the form of learning farms, demonstration plots, and training facilities;
- Use of extension services, including programs to "train the trainers";
- Use of culturally appropriate communication strategies, such as festivals, theatre, music and dance;
- Innovative uses of media and technology, including GPS mapping, radio, and video;

- Establishment of knowledge networks for conducting formal and informal information exchanges, trainings and research);
- Participatory needs assessments; and
- Youth and child engagement.

8. Land tenure security and property rights are essential

Improvements in land tenure security, property rights and resource access can be catalyzed at the local level.

Security of land and resource tenure is an essential enabling condition for local ecosystem-based initiatives. Equator Prize winners show that tenure security can be driven by communities and initiatives that demonstrate their effectiveness as land managers. Tenure gains have been achieved through several distinct routes:

- Engaging with local government authorities, both in proactive and retroactive recognition of local resource management efforts;
- Taking advantage of national policies and legislation that provide for formal legal recognition of community property rights and claims to customary lands; and
- Advocacy for improved tenure security through lobbying, political organizing, and education of local groups about their land rights under the law.

9. Local good governance exists

Governance structures of local initiatives can vary, but full and active participation of a range of stakeholders is critical.

Local good governance exists, and it can support the equitable sharing of benefits. A wide variety of institutional structures and governance systems can be found among Equator Prize winners, but most enable broad-based participation through a general assembly or similar joint decision-making body, and most incorporate accountability mechanisms such as elections. Some other common features include:

- A reliance on strong individual leadership,
- Establishment of mechanisms for leadership transition,
- Inclusion of marginalized or under-represented sectors of society in their membership, and
- Inclusion of traditional authorities in the governance structure.

10. Scaling of success is possible and can bring landscape-level change

Scaling is common, reflecting both the demand for local solutions and the power of peer-to-peer demonstration.

There is compelling evidence that rapid scaling is not only possible, but can be achieved with relatively small investments. Scaling is not one-dimensional; four distinct types of scaling can be identified in Equator Prize winners:

- Quantitative scaling, in the form of an increased membership base, geographic spread, and replication of the initiative's organizational model or management methods,
- Functional scaling, which results in an expanded scope or portfolio of activities or benefits,
- Organizational scaling, which brings greater internal capacity, financial independence, and staff development), and
- Political scaling, which manifests in greater policy influence and more effective network building.

11. Partnerships matter

Partnerships enrich local initiatives, connect them to vital support services and markets, and widen their spheres of influence and connection.

The importance of partnerships to enabling, sustaining, and scaling up community-based initiatives cannot be overstated. Among the salient lessons on partnerships are:

- Multiple and diverse partnerships are better, because this reduces overdependence on a single partner and strengthens resilience;
- Partnerships do not diminish autonomy—independence and self-reliance are still possible;
- Partners can increase access to markets, technology and specialized skills such as product certification, increasing the technical and financial viability of the initiative.;
- Research and monitoring partners (universities, NGOs, research institutes) allow local groups to refine their activities and demonstrate impacts;
- Small and well-targeted investments, such as seed grants, can bring big results by acting as catalysts for group activities;
- Productive and lucrative partnerships with the private sector are possible, usually in the areas of market access, manufacturing and marketing support, and product distribution; and
- Governments (local and national) are important partners too.

12. Local innovation breeds adaptation and resilience

Innovation, resilience and adaptive capacity are byproducts of trial and error processes

Resilience, as seen in Equator Prize winners, is best understood as being the result of social, economic, and environmental processes. Innovation and adaptation are at the root of much of the work of Equator Prize winners. Examples include solving local problems with local resources, providing new perspectives on chronic problems, taking creative approaches to community engagement and capacity building, and the adaptation of technologies and processes. One critical result of this embedded adaptive capacity is the ability to endure through failures and setbacks on the road to success, something which the majority of Equator Prize winners have experienced. What remains is an embedded resilience that defines true sustainability: resilience to not only environmental but also economic and social shocks, and which is rooted in local capacity.



Introduction

The Equator Prize recognizes community-centered action that conserves biodiversity and brings social and economic benefits that reduce poverty. When the Equator Prize was first awarded in 2002, it was already clear that local action, motivated and executed by community-based groups, could be a remarkable engine for achieving development goals in a way that empowered community members, promoted equity and inclusion, and maintained or enhanced ecosystem health. But perhaps no one—not even the architects of the Equator Initiative—truly understood the breadth of what was being achieved through communal action or the scope of innovation that was being advanced at the local scale across the globe.

Now, a decade and five award cycles later, the achievements and experiences of 127 prize-winning communities stand as a singular record of the potential of local action to sustainably manage natural resources, generate income, increase tenure security, expand local job opportunities, and gain political support. In this book we ask: What can these communities teach us about successful community-driven development focused on the sustainable use of local ecosystems? What is the potential range of economic, social, and environmental benefits that such efforts are likely to generate? What can these communities tell us about enabling conditions identified in previous research, such as tenure security, good governance practices, the capacity of local organizations, partnerships and support services, and communication and learning networks? Can these successes be extended to other similar communities, and, if so, what factors are most critical to this scaling up process?

On the occasion of its 10-year anniversary, Equator Initiative partners have undertaken this analysis to help answer these questions and to distill key lessons on successful community-based action in environment and development. The discussion and findings of this study are directed at five audiences most critical to the success of local development: policymakers, who are directly responsible for many of the ground conditions under which local communities work





and for identifying and nurturing community models that can be scaled up for macro-level effects; donors, who are in the position to offer seed grants and other support to enterprising communities, and to help local groups communicate their successes and participate in learning and enterprise networks; intermediary organizations like NGOs, local and national universities, and research institutes who engage directly with local communities as advisers and service providers, and who play a particularly important role in helping local organizations expand their capacities; and local communities themselves, who are looking for perspective on their own efforts and solutions to the many obstacles they face in pursuit of their goals.

11

Making the Most of this Resource

The findings offered in this study are based on a comprehensive review of detailed case study material developed for each Equator Prize winner. The Equator Initiative has undergone a multi-year process of collecting information and case material from winning communities, specifically with an eye to elucidating the ingredients of local best practice in environment and development. Equator Initiative staff worked with representatives from winning groups to document project catalysts, the genesis of winning ideas, institutional frameworks and governance systems, key activities and innovations, biodiversity impacts (species, habitats and ecosystems conserved), socio-economic impacts (changes in household income, community infrastructure, health, education and empowerment), policy impacts, financial and social sustainability, successes and challenges with replication, and the role of partnerships.

It is impossible in a “lessons learned” book such as the one presented here to capture the rich detail of each community story. Suffice it to say, however, that the full Equator Prize winner case studies provide a treasure trove of data and narrative material on how collective action for sustainable development evolves, finds social and cultural expression, and changes lives, landscapes and economies. This review is best understood and appreciated, then, with reference to the complete case studies, which are catalogued on the Equator Initiative website. Examples are provided here to illustrate trends, but cannot substitute for a thorough review of the material available in the individual case studies.

The Equator Initiative: A Partnership for Resilient Communities

The Equator Initiative brings together the United Nations, governments, civil society groups, businesses, and grass-roots organizations. The partnership arose from recognition that the greatest concentrations of both biodiversity and acute poverty coincide in Equator Belt countries, and the high potential for win-win outcomes where biological wealth could be effectively managed to create sustainable livelihoods for the world's most vulnerable and economically marginalized populations. The high dependence of the rural poor on nature for their livelihoods means that biodiversity loss often exacerbates local poverty. But by the same token, action to sustain ecosystems and maintain or restore biodiversity can help stabilize and expand local resource-based economies and relieve poverty.

The Equator Initiative is dedicated to recognizing and advancing local sustainable development solutions for people, nature and resilient communities. Key objectives of the partnership include: recognizing the success of local and indigenous initiatives, creating opportunities and platforms for the sharing of knowledge and good practice, informing policy to foster an enabling environment for local and indigenous community action, and developing the capacity of local and indigenous communities to scale-up their impact.

Important context for reading this book is understanding how the reviewed communities were identified and why they were singled out as best practice in community-based conservation and development. The Equator Initiative operates three distinct but inter-related programs. Equator Dialogues are an ongoing series of community-driven meetings and exchanges, held in conjunction with international environment and development forums, which provide opportunities for local and indigenous communities to share experiences, develop capacities and influence





policy. More than 500 local and indigenous leaders have participated in the ten dialogue spaces that have been held to-date. Equator Knowledge is a research, documentation and learning program focused on local best practice in sustainable development (of which this publication is a contribution). The case material upon which this book's analysis is based – as well as other Equator Knowledge publications – are available at www.equatorinitiative.org. The center of Equator Initiative programming is the Equator Prize.

The Equator Prize is awarded biennially to recognize and advance local sustainable development solutions. As local and indigenous groups across the world chart a path towards sustainable development, the Equator Prize shines a spotlight on their efforts by honoring them on an international stage. While winning communities receive a monetary prize – USD 5,000 for all winners and USD 20,000 for 'special recognition' winners – the primary emphasis of the Equator Prize has always been recognition and visibility. The Equator Prize is unique for awarding group or community achievement, rather than that of individuals.

A call for nominations is issued through the Equator Initiative partnership. Nominations may be submitted by local and indigenous communities themselves, or by third party organizations. Nominated communities are judged against a robust slate of selection criteria including impact, sustainability, innovation, leadership, empowerment of women, social inclusion, resilience, adaptability, and self-sufficiency (See Box 1 for more details). Nominations undergo a thorough, two-tiered review by a Technical Advisory Committee of leading environment and development practitioners, followed by a jury of experts that has included Nobel laureates, former heads of state, royalty, and leading thinkers on the forefront of environment and development discourse.

Box 1. Equator Prize Selection Criteria

Impact: Initiatives that have improved community wellbeing and local livelihoods through sustainable natural resource management and/or environmental conservation of land based and/or marine resources.

Sustainability: Initiatives that can demonstrate enduring institutional, operational and financial sustainability over time.

Innovation and Transferability: Initiatives demonstrating new approaches that overcome prevailing constraints and offer knowledge, experience and lessons of potential relevance to other communities.

Leadership and Community Empowerment: Initiatives demonstrating leadership that has inspired action and change consistent with the vision of the Equator Initiative, including policy and/or institutional change, the empowerment of local people, and the community management of protected areas.

Empowerment of Women and Social Inclusion: Initiatives that promote the equality and empowerment of women and/or marginalized groups.

Resilience, Adaptability and Self-Sufficiency: Initiatives demonstrating adaptability to environmental, social and economic change, resilience in the face of external pressures, and improved capacity for local self-sufficiency.

Over five cycles of the Equator Prize since its inception, the Equator Initiative has received more than 1,700 nominations from communities in more than 60 countries. Equator Prize winners then not only demonstrate a high level of accomplishment, but their stories provide a uniquely rich chronicle of the ingredients of successful collective action and effective practices, innovations, capacity growth, and persistence that other communities, governments, and development organizations can learn from.



The Range of Equator Prize Experience



Variety is a hallmark of Equator Prize winners, reflecting the diversity of groups, environmental conditions, and social and economic settings that occur in localities around the world. Indeed, looked at over 10 years, the range of groups, means, and achievements is vast. To make sense of this seemingly disparate collection of local initiatives requires examining both the groups involved and the activities they have undertaken.

What Kinds of Groups are Involved?

Equator Prize winners are all, by definition, community-based organizations or associations of local organizations—that is, groups whose activities are directed and carried out by members who live in the community that the activities will affect. These groups tend to be tuned to local concerns and cultural norms, conversant with local livelihood patterns, and aware of local environmental conditions and traditional environmental knowledge. It is for this reason (among many others) that they are often effective at channeling local needs into action. Equator Prize winning groups fall into a few (though rarely mutually exclusive) general categories:

- Community-based organizations (CBOs) such as local associations, user groups, and self-help groups focused on a local resource or protected area. Significant subgroupings within this category include:
 - Indigenous groups: Nearly 60% of Equator Prize winners are organizations of indigenous peoples or groups associated with the management of ancestral lands and territories.
 - Women's groups: Since women often take a leading role in natural resource management and household-level financial planning, it is not surprising that women's organizations are well-represented among Equator Prize winners: 12% are strictly women's groups, while many more include active women constituencies.
 - Community enterprises: Income generation is a common focus among most Equator Prize winners – over 50% incorporate some form of commercial enterprise – but some are structured entirely around ecosystem-based businesses.
- Meta-associations, such as producer groups, umbrella organizations, or federations. These organizations link several resource users or local groups, often from adjacent communities, around a common theme, set of related activities or shared market supply-chains.
- Non-governmental organizations that facilitate actions by other CBOs or individuals, often through capacity building, social or political organizing, research, networking with other groups, or creating linkages between CBOs and government officials or donors.

Programa de Campesino a Campesino, Siuna, Nicaragua (Equator Prize 2002)

Founded in 1992, this ‘farmer-to-farmer’ program operates throughout Siuna municipality. Three hundred volunteer extension officers work in over 80 communities and serve more than 3,000 subsistence farming families. Food security has been enhanced, household incomes improved, and regional governance strengthened.



While the diversity among these groups is substantial, there is much that links them. Equator Prize winners are all predicated on the recognition of local ecosystems as a community asset and collective action as a route to better ecosystem management and improved well-being. In addition, they all occur in rural areas and are subject to the strictures of rural economies hampered by restricted market access and inadequate transportation, communication, energy, and water infrastructure. And, while they exhibit high self-reliance and independence, they also embrace partnerships with government agencies and outside organizations that can support their efforts.

At the same time, it is important to keep in mind the very real differences between groups. These include not just culture and geography, but the wide variation in local microenvironments and ecosystem conditions they face. Localities also show significant differences in household income profiles and economic conditions, as well as social and political conditions. These account for the different resource management approaches, governance structures, and kinds of innovations found among Equator Prize winners, and ultimately the unique results they achieve.

La Fédération Locale des GIE (FELOGIE) de Niodior, Senegal (Equator Prize 2010)

Since 2005, this federation of women's economic interest groups rehabilitates ecosystems and promotes natural resource management in Saloum Delta Biosphere Reserve, benefitting more than 7,000 local community members. A 22-woman monitoring committee regulates the harvesting of marine and forest resources.



What Activities Do They Undertake?

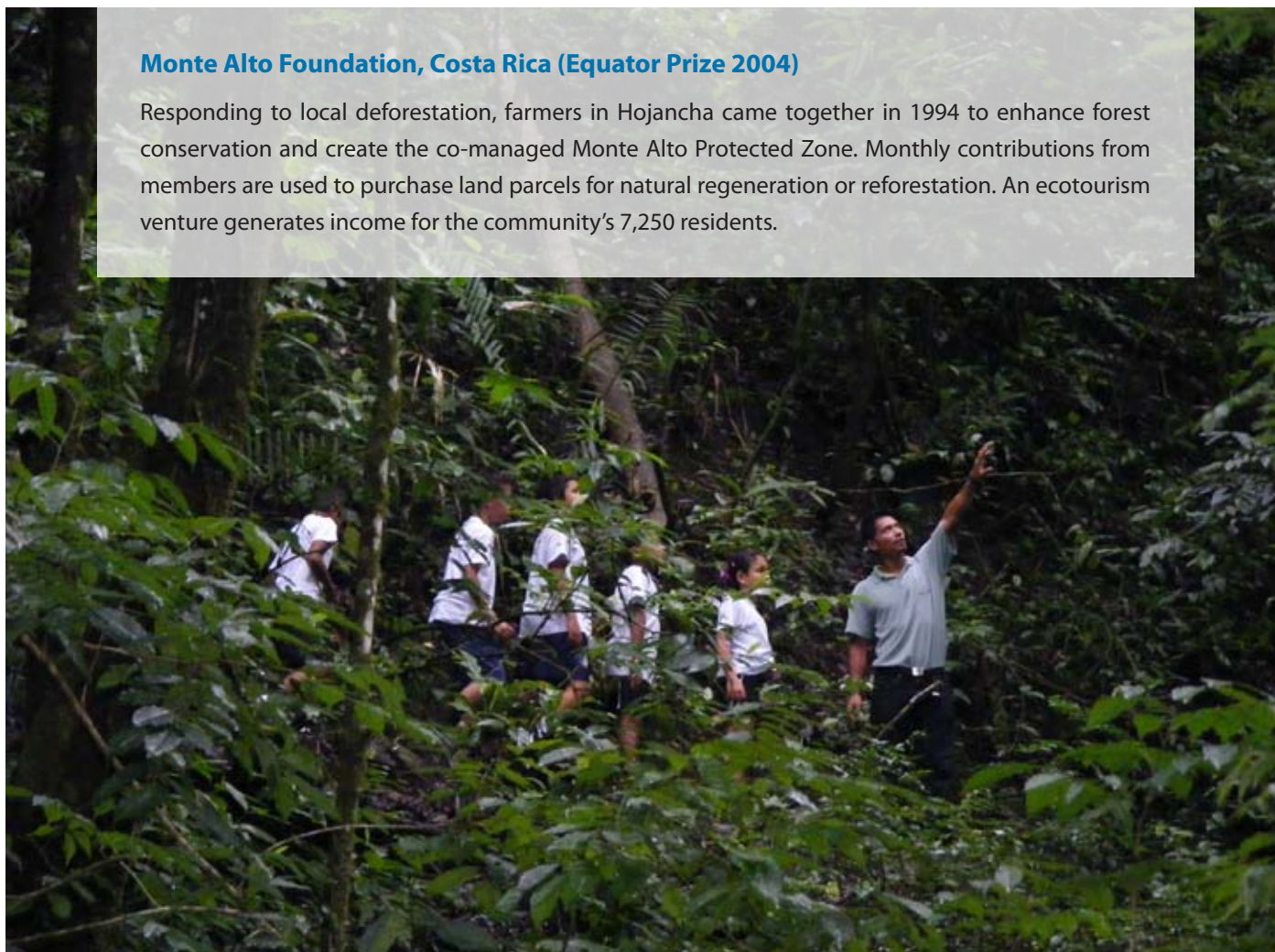
Equator Prize winners provide a good representation of the wide range of activities taking place at the local level today at the nexus of natural resource management and community development. These initiatives are multifaceted and involve a combination of activities to achieve conservation goals that in turn provide social and economic benefits both in the short and longer terms. The different kinds of activities can usefully be broken down as follows:

- **Ecosystem management:** Every Equator Prize winner is either directly engaged in some form of natural resource management or, in the case of some meta-associations and NGOs, helping local groups to do so. Winning initiatives can be divided into five primary categories of management reflecting the different major ecosystem types that local communities depend on: sustainable agriculture, freshwater (watershed) management, marine and coastal management, sustainable forestry, and drylands management. Protected area management is a notable subcategory that many initiative activities fall into, since many groups arise in response to land use issues associated with an existing protected area, or themselves create a community protected area.
- **Nature-based enterprise:** Income generation is an important goal for most Equator Prize winners, and many have established business enterprises connected to the management activities they undertake. These may involve marketing a commodity such as timber or fish, a niche product such as organic herbs or medicinals, a processed resource derivative or an experience such as ecotourism. Indeed, ecotourism, which represents a nonconsumptive and potentially high-income activity, is well-represented among Equator Prize winners; nearly half of all groups reported ecotourism among their activities, sometimes as a primary focus.

- **Capacity development:** One defining trait of Equator Prize winners is their emphasis on developing new skills and the acquisition of greater institutional and resource management capacities in order to succeed in their missions. This often involves learning new technical skills for ecosystem management (such as biodiversity monitoring), business and financial management skills, and institutional development skills to enable the group to craft a common vision, enforce rules, and resolve disputes.
- **Social and political organization:** Equator Prize winners often succeed because they are able to create—both through leadership and participatory governance processes—a social dynamic in the community favorable to communal effort. This aspect of social organization often requires as much or more effort as the ecosystem management and enterprise activities usually associated with the group. Likewise, Equator Prize winners routinely use political organizing skills to influence the power dynamic in their area of work and gain allies in local and national government.
- **Climate change adaptation:** In many Equator Prize communities, climate change impacts are already an issue in the form of greater rainfall variability and increased risk of natural disasters. Some communities have responded by prioritizing climate change adaptation in their activities. Restoring mangrove forests to provide enhanced protection from storm surges is one typical example of such community-based adaptation. In farming communities, adaptations have included crop diversification, seed banks, erosion control, and better water management to increase resilience to droughts.

Monte Alto Foundation, Costa Rica (Equator Prize 2004)

Responding to local deforestation, farmers in Hojancha came together in 1994 to enhance forest conservation and create the co-managed Monte Alto Protected Zone. Monthly contributions from members are used to purchase land parcels for natural regeneration or reforestation. An ecotourism venture generates income for the community's 7,250 residents.



- **Sustaining indigenous cultures and communities:** The high percentage of indigenous groups among Equator Prize winners means that meeting the particular challenges of sustaining indigenous cultures is frequently an organizing principle for action. In these communities, establishing land rights to ancestral territories, restoring or re-energizing customary land management practices, and creating income opportunities that respect the local culture are often priority activities.

As mentioned, most Equator Prize winners undertake activities in several of these categories at once. The key is that activities are integrated into a program of action adapted to the circumstances, needs, and capabilities of the particular communities involved and that result in tangible gains in income, security, empowerment, or other benefits that can be identified by the group itself. Figure 1 offers a sample of some of the most prominent fields of work categories across Equator Prize winners.

Figure 1. A sample of Equator Prize winners by field of work



Itoh Community Graziers Common Initiative Group, Cameroon (Equator Prize 2004)

Through participatory planning, the agro-pastoralist Itoh community conserves land around Cameroon's Kilum mountain forest for grazing and agriculture. The community's two ethnic groups have collectively planted 30,000 trees to demarcate boundaries, protect a local watershed and provide fodder for livestock.



What are the Benefits of Equator Prize Activities?

The ecosystem-based activities of Equator Prize winners generate a wide array of economic, social, and environmental benefits. Together these benefits comprise the so-called “triple bottom line” that is often used to describe and measure the outcomes of sustainable development. These benefits are interdependent and mutually reinforcing. For example, the productivity and biodiversity gains that come from better ecosystem management are the basis for higher income, which is an incentive for continued improvements in management; similarly, the collective action that community-based initiatives require is the basis for group empowerment and social cohesion, which in turn makes further community action both more likely and more effective.

The timing of benefits and who receives them are just as important as the nature of the benefits themselves. Long-term benefits, such as major recovery of depleted fisheries or the generation of a substantial income stream from a new ecotourism lodge, often take years to evolve. Others, such as moderate increases in forage and other forms of subsistence income may come more quickly as the community adopts new harvest and tilling practices and ecosystem recovery begins. So may the social benefits of group decision-making and participation in resource assessment, restoration, enforcement, and other shared labor. The experience of Equator Prize winners is that a mix of short-, medium-, and long-term benefits helps to inspire and maintain group interest in the beginning, yet provide a reason to persist and grow the effort over the longer term. This is often articulated in the community-based natural resource management literature as “incentivization.”

Tariquía Reserve Beekeepers Association, Bolivia (Equator Prize 2008)

Since 1998, this association has provided alternative livelihoods for Chapaco families. Beekeeping has reduced over-reliance on unsustainable agricultural practices, alleviating pressure on the forest's fragile ecosystems. The cooperative works with 80 families in the production and marketing of organic honey.



Economic benefits

Economic benefits are clearly a principal focus of Equator Prize winners. An increase in household income is the most obvious—but certainly not the only—such benefit. Most Equator Prize winners are seeking not just more income, but a more diverse and stable economy for their members and a broader array of income opportunities in general. The most important economic benefits found in the case studies include:

- **Increased household income:** This can come from increases in either cash income or subsistence income—food, fodder, or other materials that are collected or raised for direct household consumption. Both are important to rural households, and both are affected by the ecosystem recovery and new business activities associated with Equator Prize winners. Greater cash income typically comes from new job opportunities from nature-based enterprises, greater demand for wage labor associated with managing or restoring local ecosystems, or increased sales of ecosystem-based goods and services
- **Greater market access:** Economic isolation is a common problem for smallholder farmers, artisanal fishers, and other village-level businesses, limiting the market and depressing the prices for local ecosystem-based goods. Equator Prize winners have met with good success in helping their members to access local, regional, and sometimes international markets and consequently raising their income potential. This often takes the form of assistance with licensing, certification and fair trade status.

- **Marketable skills:** The ecosystem-based activities of Equator Prize winners are good platforms for acquiring technical, business, and social skills that not only enable the community venture to succeed, but offer an experience and skills base for future employment or self-generated businesses.
- **New technologies and processes:** Exposure to modern harvest and management techniques, energy or processing technology, or connectivity options can open a pathway to greater productivity and sustainability. While technology transfer is not usually the primary focus of Equator Prize winner activities, it is often an important co-benefit.
- **Community infrastructure improvements:** While some of the economic benefits of Equator Prize activities accrue to individuals within the group, others appear as public goods such as improvements in the local transportation, fresh water, education, health, energy, or communication infrastructures that provide the foundation for the local economy.

Social Benefits

Social benefits are at least as important to Equator Prize winners as economic benefits. These benefits revolve around personal and community empowerment and the building of social cohesion. They contribute to a belief by community members in the potential of the group, and foster a sense of achievement and a willingness to innovate and take risks together. In other words, these benefits are central to the social processes at the heart of community-based activities, and Equator Prize winners would not proceed very far or very effectively without them.



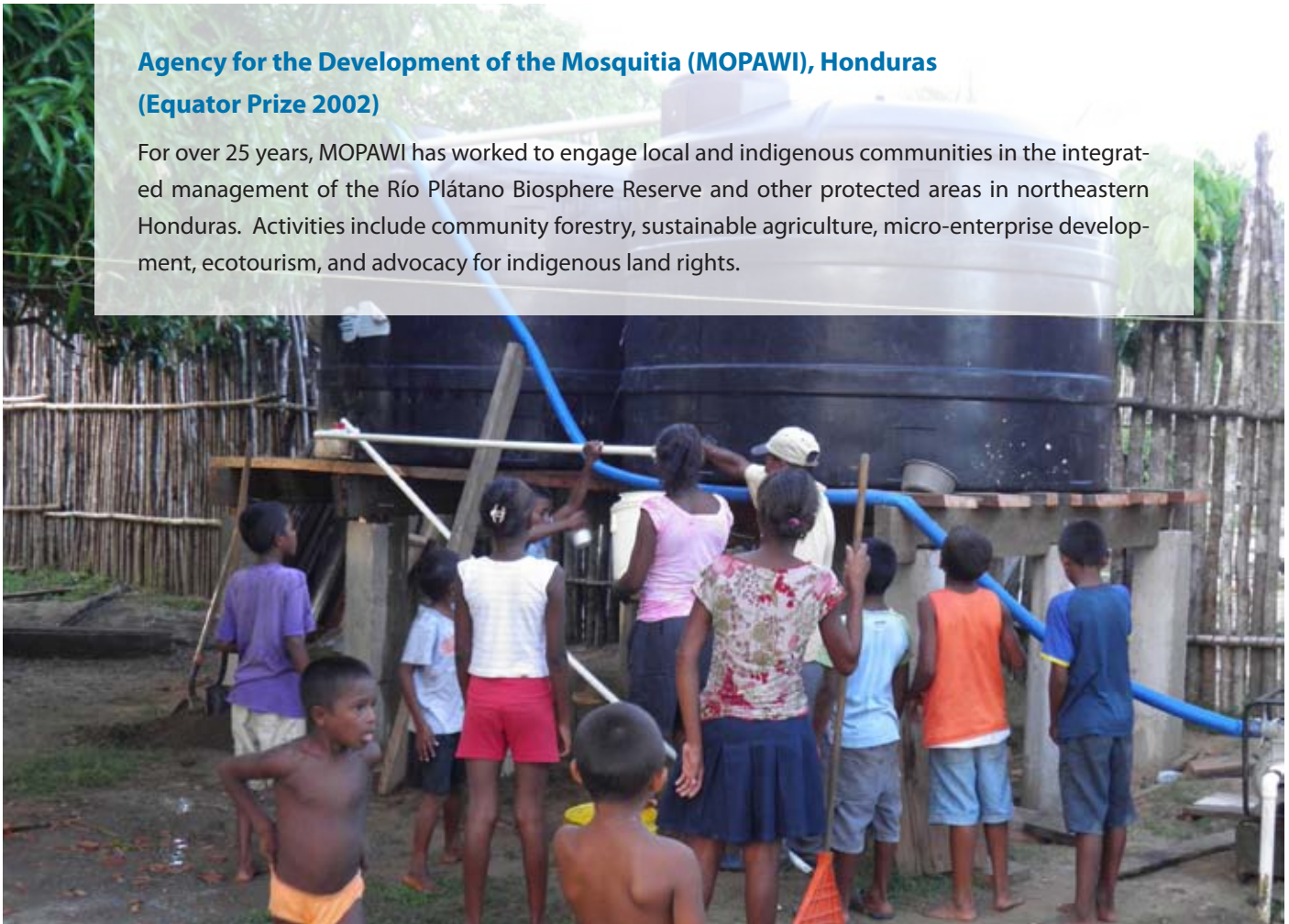
Ngata Toro Community, Indonesia (Equator Prize 2004)

Since their traditional lands were recognized in 2000, this community works through indigenous and women's organizations to sustainably harvest non-timber forest products and carry out low-impact agriculture, fish farming, and ecotourism in and around Lore Lindu National Park.

- **Personal and community empowerment:** Case histories of Equator Prize winners offer extensive evidence of the empowering qualities of the ecosystem-based work that these groups undertake together. At a personal level, this empowerment manifests as new skills that bring confidence and economic opportunity, a sense of acceptance into a group undertaking, and the feeling that positive change is possible. At the community level, it can appear as a willingness to take on shared responsibilities, and a sense of community potential, autonomy and self-reliance.
- **Legal and political empowerment:** Empowerment is not just a matter of gaining confidence and learning new skills. It is also a matter of receiving and exercising legal rights, gaining access to and influence over political institutions, and participating in the political process. Equator Prize activities often reach into these areas, oftentimes not as ends in themselves, but as means to assure their right to manage their local resources, to gain market access, to deal with bureaucratic obstacles, or to receive vital government services or financing.
- **Social capital and group cohesiveness:** Shared endeavors bring new levels of social interaction and new possibilities for social mobility. An increase in trust among group members increases the group's ability to work together effectively and to meet challenges without undue conflict.

Agency for the Development of the Mosquitia (MOPAWI), Honduras (Equator Prize 2002)

For over 25 years, MOPAWI has worked to engage local and indigenous communities in the integrated management of the Río Plátano Biosphere Reserve and other protected areas in northeastern Honduras. Activities include community forestry, sustainable agriculture, micro-enterprise development, ecotourism, and advocacy for indigenous land rights.





Environmental Benefits

Equator Prize winners are perhaps best known for their environmental benefits, which come in the form of increases in ecosystem health and the maintenance and restoration of biodiversity. Many of these benefits accrue to local people and provide an important incentive for community action. However, environmental benefits such as greater biodiversity and more productive and healthier ecosystems also extend to a wider group of beneficiaries at a regional, national, and global level.

- **Greater ecosystem productivity and stability:** Equator Prize winners typically change the way a local ecosystem is managed to make its use more sustainable. With less anthropogenic degradation and greater productivity, ecosystem functioning generally improves and with it the ecosystem's ability to remain viable under a variety of climatic conditions. This positive cycle can bring relatively quick rewards to local communities as ecosystems begin to recover some of their original productivity.
- **Maintenance of biodiversity:** Ecosystem recovery through better management often manifests in healthier populations of a wide range of endemic plant and animal species. In some instances, management efforts of Equator Prize winners may target the conservation of one or a few endangered species either for their intrinsic value to the community or for their usefulness as a support to ecotourism. A greater number or variety of species also extends the possible range of benefits that an ecosystem can ultimately produce—now and in the future.
- **Maintenance of watershed functions:** Since water is so vital an element of ecosystem productivity, it is not surprising that a significant percentage of Equator Prize winners are aimed at improving or maintaining watershed functions, particularly those focused on forestry and agriculture.

A Model for Local Action

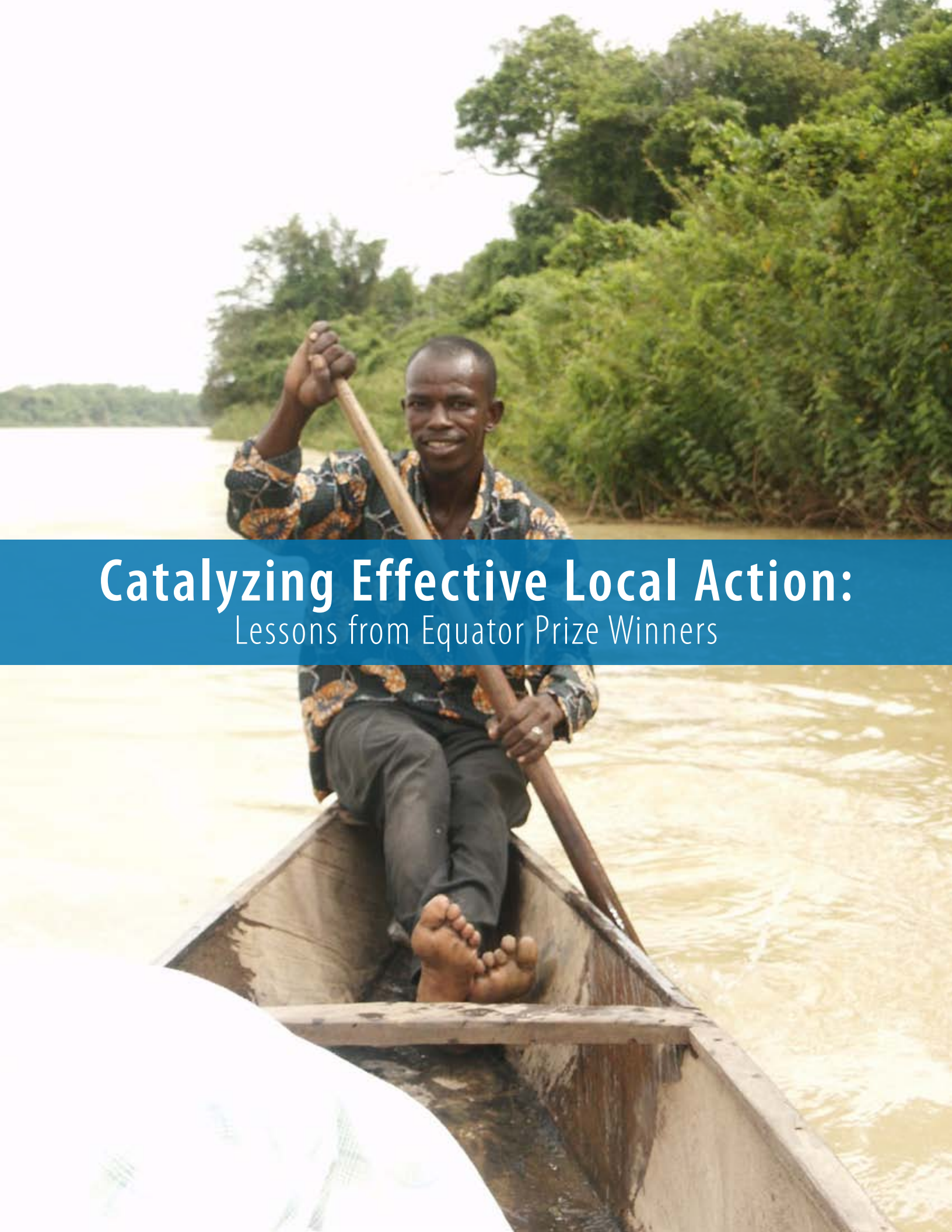
The diversity of Equator Prize winners and the depth and range of the benefits they have accrued attest to the fact that community-based action focused around sustainable use of ecosystems can be a highly effective model of local development. The achievements of these communities have not only enriched the communities themselves, but rippled out to affect surrounding communities, and in many instances, to influence policy at the state level. If ten years of the Equator Prize reveal anything, it is that local action works when it is grounded in local demand and provided sufficient access to critical resources and key support. And when it works, its effects can catalyze broad-scale and even landscape-level changes.

Equator Prize winners need not be seen as exceptions, but as forerunners of what rural communities can and must accomplish if they are to achieve the Millennium Development Goals (and the post-2015 MDG framework), build vibrant local economies, and reach beyond their current marginalization into the economic and political mainstream. In the next section on lessons, we deploy the cases to explore the salient features of the local development model exemplified by Equator Prize winners, including its reliance on collective action and the fusion of modern and traditional institutions. We also explore how Equator Prize winners communicate, what their institutional structures look like, what partnerships they enter into, and how they scale themselves up to widen their reach and spread their success.

Nam Ha Ecotourism Project, Laos (Equator Prize 2006)

Since 1999, conservation efforts in Nam Ha National Protected Area have been linked to local ecotourism, which now underpins the economy for the area's 57 villages and 3,451 households. The project has provided a model for co-management of Laos' protected areas.





Catalyzing Effective Local Action:

Lessons from Equator Prize Winners

The accomplishments of a decade's worth of action in Equator Prize winning communities are impressive by any standard. But equally important is the continuous learning—on the part of the communities involved and their partners—that has accompanied these achievements. Much of the knowledge gained is necessarily specific to the ecosystems and situations of each community. But when considered together and analyzed for common factors, these experiences sum to a larger legacy of observations, findings, and conclusions—the lessons of the Equator Initiative. Such a broad body of work can yield many such lessons. Here, we restrict our treatment to 12 overarching lessons with greatest relevance for understanding and catalyzing effective ecosystem-based action at the local level as a route to sustainable rural development, the rapid achievement of the Millennium Development Goals, and ultimately delivery of the post-2015 MDG framework.

Lesson 1: Local collective action provides a unique lens on sustainable development

The conditions that catalyze local collective action serve as a barometer of the needs and challenges of the world's most vulnerable populations and can help to elucidate demand trends for development support.

The groups that win the Equator Prize and the activities that they undertake teach us something essential about the environment in which local rural development takes place. These groups and activities do not arise out of nowhere, but reflect the livelihood threats that plague these communities, the drivers of biodiversity loss and ecosystem decline that are eroding the natural capital on which communities depend, and the service gaps and lack of legal and social empowerment that keep them marginalized. These common challenges become points of coalescence within the community that lead to action.

Equator Prize winners, then, offer national governments and the international community a unique lens on the drivers, conditions and regulatory vacuums that rural communities face. The conditions which motivate collective action in these communities serve as a barometer of the needs and challenges of the world's most vulnerable populations and can help to elucidate demand trends for development support. In Equator Prize winning communities, these motivating conditions tend to fall into four non-exclusive categories:

Environmental threats.

A review of Equator Prize winning cases makes it clear that a majority of these initiatives evolved to counter external threats to critical local ecosystems. External threats most often take the form of large-scale, extractive industries, primarily commercial fishing, logging, mining and agribusiness (involving land conversion for monocultures or plantations). These are often private sector interests that are making incursions into community territory or undertaking extraction on such a wide scale that key resources are being depleted and ecosystem services are being lost. A review of Equator Prize winner project catalysts reveals that, indeed, commercial extractive industries are not only one of the key drivers of biodiversity loss and ecosystem decline, but also a substantial marginalizing force for local and indigenous communities whose jobs, economies and livelihoods are linked to natural resource management.

In other cases (or in combination with external threats), projects emerged to counter internal environmental pressure exerted by members of the local community, often in the form of over-harvesting, unsustainable management techniques, or overgrazing. In the case of internal threats, factors cited by the communities often included an absence of livelihood options, deepening conditions of poverty and economic marginalization, or the collapse of a primary productive sector.

Farmers Association for Rural Upliftment (FARU), Philippines.

Catalysts for the formation of this association of indigenous farmers in Kalinga Province were both external and internal. External threats included large-scale mining and geothermal projects, while the internal threat came from local slash-and-burn agricultural practices. In response, FARU revived an indigenous community conserved area to protect the forest, and improved farm productivity through the introduction of locally appropriate technologies and agricultural practices. At the same time, the community lobbied successfully against the outside development projects, though geothermal companies continue to have designs on this area, and advocacy against large-scale industrial development remains an ongoing priority.



29

Coope Tarcoles, Cost Rica.

The artisanal fishers of Tarcoles faced declining fish stocks due to a combination of overharvesting by commercial shrimp boats and other bottom-trawlers and unsustainable local fishing practices. Development of the tourism sector along the coast threatened to restrict access to the shore and to marginalize their work. To combat overharvesting, the artisanal fishers cooperative devised fishing bylaws that stress sustainable practices. To confront marginalization from commercial tourism, the co-op launched a tourist venture of its own that offers a guided tour in which visitors interact with local fishermen and directly experience local fishing techniques.



Service gaps or institutional failures.

An equally common catalyst for Equator Prize-winning initiatives is the need to fill gaps in the public services traditionally provided by government institutions. Such service gaps include lack of access to health services, education, clean water, sanitation, electricity, credit and savings services, skills and vocational training, accreditation and certification, business planning and marketing support, and more. In the absence of government service provision—or in the case of the collapse of state institutions—communities will often mobilize to fill the vacuums that form and provide for the basic services needed to ensure local wellbeing.

Wechiau Community Hippo Sanctuary (WCHS), Ghana.

Of the 17 villages participating in community management of this wildlife sanctuary, 16 are not connected to Ghana's national electrical grid. Prior to the establishment of WCHS, only seven of these villages had access to safe drinking water. Since WCHS was formed, a borehole drilling program funded by the sanctuary's tourism revenues has brought clean water to all participating communities, and a solar lighting initiative has installed 550 lighting units. In addition, the WCHS management board has obtained donor funds to build two schools and equip three health clinics within the sanctuary.



Community-Based Integrated Rural Development (CBIRD) Centre, Sub Tai, Thailand.

For many years, the residents of the village of Sub Tai in the Pak Chong district of northeastern Thailand were forced to supplement their incomes by poaching in the nearby Khao Yai National Park, Thailand's oldest national park. Access to basic social services – medical care, education, skills training, and credit – was extremely limited. Consequently, local farmers were forced to borrow from money lenders who charged exorbitant interest rates, leaving villagers with a high debt burden. To escape the cycle of debt, farmers turned to illegal logging, the hunting of endangered species, and high-return but unsustainable farming practices. By offering a revolving fund targeted to support ecologically sound microenterprises, the CBIRD initiative has been able to both reduce local indebtedness and improve the conservation of the Khao Yai protected area.



Lack of legal entitlements or empowerment.

A large number of Equator Prize winners evolved explicitly to address tenure insecurity and a lack of resource entitlements for those most dependent on land, ecosystem services, and natural resources to sustain their livelihoods. A lack of enforceable property rights or the inability to participate substantially in the management of critical local natural resources is a key indication of marginalization, and communities (particularly indigenous groups) often respond to such institutional failures with concerted action.

Uma Bawang Residents' Association (UBRA), Malaysia.

Prior to the formation of UBRA, the land rights of the indigenous Kayan people in northwestern Borneo were not formally recognized by the government and their forests were under threat by commercial logging concessions. In response, the association established road blockades to halt logging efforts and used a system of participatory mapping to demarcate their territory. The information and maps produced were used to support official land claims, which resulted in legal designation of the UBRA Communal Forest Reserve.



Suledo Forest Community, Tanzania.

In 1993, the Government of Tanzania designated the Suledo Forest as a Central Government Forest Reserve; an attempt to stem the overexploitation of forest resources. This move – made with no local consultation – also functionally disenfranchised forest-dependent Maasai communities. Local tribes resisted the new arrangement, prompting the government to begin a process of devolution of forest use rights to the local level through Village Environmental Committees, where local communities were transferred responsibilities for formulating forest management plans and crafting by-laws to enforce them. Eventually, Suledo Forest was granted the legal status of a Village Land Forest Reserve, formally establishing local management authority.



New opportunities.

The factors motivating community action are not always negative. In many Equator Prize communities, the project catalyst has been the chance to explore new opportunities in enterprise and business development, to tap new markets or revenue streams with the potential to diversify the local income base, to access more favorable market supply-chains, or to join networks that could enhance their incomes or influence.

Chalalan Ecolodge, Bolivia.

The Bolivian government established the Madidi Protected Area in the upper Amazon River basin in northern Bolivia in 1995 at a time when the international ecotourism market was growing. The protected area overlapped with three legally designated indigenous areas (called Tierra Comunitaria de Origen) that were communally owned and managed by native communities. Residents in one community built an eco-lodge to generate new income for local residents. Community members constructed the facilities, manage the lodge, and provide ancillary services (such as guiding, food sourcing and transportation). Since receiving its first guests in 1998, the lodge has become a self-sustaining enterprise. Chalalan Ecolodge has become a nationally and internationally recognized model of sustainable tourism supportive of local indigenous culture.



Café la Selva, Mexico.

Café la Selva is a chain of cafes that sell organically grown coffee from indigenous farming communities located in the state of Chiapas. The enterprise grew out of recognition that a direct outlet for shade-grown coffee produced by small, low-income farmers would enable them to circumvent a supply chain dominated by middle men. The success of Café La Selva has allowed participating community members to increase their coffee production, quality, and revenues while simultaneously reducing their environmental impact.



As is clear, the factors that motivate Equator Prize-winning groups to act either directly threaten household budgets and the configuration of the local economy—which is often highly dependent on natural resources—or they promise a new way to use these resources to achieve an important economic, social, or political end. In many cases, several different motivating factors are present at the same time.

The key point here is that effective local action is motivated by conditions and opportunities clearly perceived by local residents as substantively affecting their daily lives. The demand for action that results makes sense within the local economic and cultural setting, even if the actions taken are based on ideas or management techniques acquired outside the community. One of the reasons that Equator Prize winners are so effective in delivering benefits is this strong basis in local demand, enunciated through the agency of local groups with their roots and membership from the affected community.

Lesson 2: The social strand must come first

Successful initiatives prioritize the social processes that make collective action possible.

Every Equator Prize winner is a demonstration of the power of collective action—the ability to act together to accomplish goals that are beyond the reach of individuals alone. Collective action can drive environmental and social change and magnify the benefits of sustainable ecosystem management, even in resource-constrained situations. But such joint action requires a considerable commitment to social processes like group communication, participation, visioning, negotiation, and the resolution of disputes. These allow a group to forge a unified vision of what can be accomplished and what benefits can be expected, to negotiate an action plan to achieve this vision, and to generate the will to carry it through in spite of obstacles or disagreements.

Equator Prize winners succeed because they understand that social processes must precede any management actions on the ground. Without a basis in trust and confidence in the equitable distribution of benefits, group effort is hard to inspire and even harder to sustain. A practical result of this understanding is that Equator Prize winners are highly participatory and generally quite inclusive. In addition, they often place as high a value on social benefits such as empowerment, access, cultural survival and identity, and security as they do on economic or environmental benefits.

This emphasis on the primacy of social benefits and the importance of group processes and participation is reflected in the make-up, actions, and accomplishments of Equator Prize winners. It has proven particularly attractive to marginalized segments of the population such as indigenous and women's groups, providing them a means to develop a voice and a context for action. For many indigenous groups, for example, ecosystem-based activities undertaken together have become a mechanism for cultural renewal—a natural expression of the deep connection they feel to their ancestral lands, and therefore an effective way to organize to address the lack of resource access and tenure security that many of them face. Likewise, the empowerment and solidarity that many women's groups undertaking ecosystem initiatives have shown reflects the opportunities that these activities have provided for developing leadership and organizational skills—opportunities often denied them in more conventional social settings.

Table 1. Selected Equator Prize Winners Serving Marginalized Groups

Project	Target Population
Aharam Traditional Crop Producers' Company, India	Socially and geographically marginalized communities in dryland Ramnad Plains, Tamil Nadu state
Asociación de Trabajadores Autónomos San Rafael-Tres Cruces-Yurac Rumi (ASARATY), Ecuador	Indigenous Quichua-Puruháe (Kichwa) peoples and the local agrarian communities of Guarguallá Chico, Guarguallá Grande, San Rafael, Tres Cruces, and Yurac Rumi, in the central Ecuadorian Andes
Associação Sociocultural Yawanawá (ASCYAWANAWA), Brazil	Geographically remote indigenous Amazonian Yawanawá community, located in the Indigenous Land of Rio Gregório, in Tarauacá Municipality, Acre
Pastoralist Integrated Support Programme (PISP), Kenya	Burji, Rendille, Gabra, Konso, Wata, and Borana ethnic groups in the Mt. Marsabit area, northern Kenya
Proyecto Nasa, Colombia	The indigenous Páez (or 'Nasa') communities living on the reservations of Toribio, Tacueyó, and San Francisco in the department of Cauca
Shidhulai Swanirvar Sangstha, Bangladesh	Delivers services to geographically marginalized riverbank communities in Natore, Pabna and Sirajganj districts in the Chalan Beel region, north-west Bangladesh
Ujamaa Community Resource Team, Tanzania	Works to improve the land rights of socially marginalised pastoralist and hunter-gatherer tribes in northern Tanzania, including the Maasai, Barabaig, Akie, Sonjo and Hadzabe
Agency for the Development of the Mosquitia (MOPAWI), Honduras	Develops livelihood opportunities for the Miskito, Tawahka, Pesch, and African-indigenous Garifuna communities of the Mosquitia region

Once the process of group interaction and engagement has begun in earnest, Equator Prize winners have found that work on the ground then helps to cement the group vision and increase the level of trust. The work of managing the local ecosystem together and undertaking a joint enterprise itself becomes the venue for a continuing process of building the community's social fabric, making communal action more efficient and coherent. This can generate a number of valuable social benefits, including:

Conflict resolution and peace-building.

Many areas are plagued by resource conflicts between adjacent communities or tribal groups or among different resource users within a single community. Communal resource management initiatives offer a productive forum for grappling with and defusing or resolving such conflicts.

Pastoralist Integrated Support Programme (PISP), Kenya.

On the arid rangelands of the Marsabit area of northern Kenya, a number of different ethnic groups practice mobile pastoralism, sometimes vying for access to critical water sources. Other challenges—from overgrazing to land use change to social instability and climate change—also threaten traditional pastoralist institutions and practices in the area. PISP, a local NGO, works to increase the number of water points that can provide safe and reliable water for livestock and people. Additional work to improve grazing management and to diversify the income stream of pastoralists has also helped to reduce pressure on natural resources and thereby lessen tensions between resource user groups. Holding community dialogues and engaging in shared maintenance of water infrastructure has also become an important tool to address the ecological and economic stresses that can exacerbate ethnic divisions. PISP's success in encouraging conflict resolution has had the effect of opening up previously disputed areas for grazing, thus increasing the available resource base and further reducing friction.



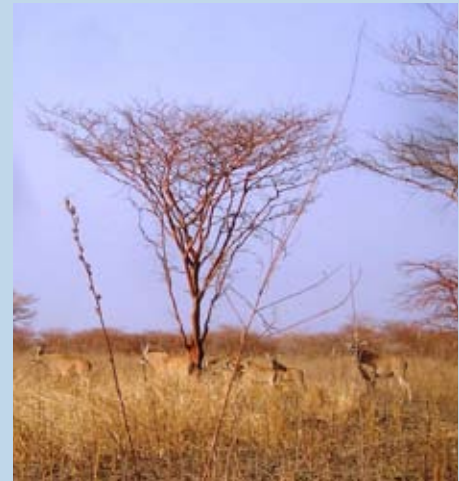
Réseau de Développement de Réserves Naturelles Communautaires (REDERC), Benin.

By encouraging the formation of local community protected areas—areas that could be shared and sustainably used by all groups in the community—this initiative has contributed to social cohesion among ethnic groups in Atakora, northern Benin. The initiative is headquartered in Papatia, a village inhabited by several ethnic groups including Fula, Ditammaris, Baribas, Peulhs, Lokpas, Yoms and Solas. REDERC's projects also include helping to create new income generating activities like bee-keeping, establishment of native plant nurseries, and promotion of the sustainable collection and sale of traditional medicinal plants. These community enterprises have strengthened the links between different ethnic groups and brought them together in the common goal of protecting and sustainably managing common natural resources.



Support Group for Conservation and Sustainable Development Initiatives, (CACID) Cameroon.

The rehabilitation of the Waza Logone floodplain in northern Cameroon brought together international researchers, NGOs, and the local organization CACID. Local practitioners led a critical element of the project: resolving conflicts between farmers, fishermen, pastoralists, and protected area authorities over access to the floodplain's natural resources. Conflict resolution was achieved through a participatory process. Based on interviews and surveys, CACID concluded that traditional methods used to settle conflicts tended to favor settled communities and the owners of fishing canals at the expense of the pastoralists. To address this imbalance, the project intervened on behalf of pastoralists, working through customary institutions to mediate resolutions that would be accepted by all parties. Often this involved establishing new transit corridors for pastoralists through settled lands, terms that were agreed through exhaustive discussions with all stakeholders.



Community-based initiatives focused on ecosystem management can also provide a means to stabilize the social and economic conditions in war-torn areas—a post-conflict recovery and “peace-building” process that can occur even when the conflict had little to do with natural resources.

The Inter-institutional Consortium for Sustainable Agriculture on Hillsides (CIPASLA), Colombia.

The Department of Cauca in southern Colombia has suffered from years of armed guerilla conflict, which has left a struggling local economy and high levels of poverty in its wake. CIPASLA, a consortium of over 30 local organizations and government agencies, has worked since 1993 to make local agriculture more profitable and sustainable by introducing new high-value crops and encouraging agriculture-related businesses such as dairy processing, poultry raising, and fish farming. Along with this work has come an attention to social welfare and community organizing that has helped to overcome the disruption caused by years of conflict. A big part of this success has been a concerted effort to give young people more economic options through training courses and apprenticeships—a strategy that has reduced both out-migration and the number of young men conscripted as guerillas.



The catalytic effects of community or personal empowerment.

In many cases, participants in Equator Prize-winning communities have never experienced this level of decision-making responsibility before, nor been given the chance to develop the kinds of capacities required to manage community resources or run a community enterprise. At an individual level, the resulting sense of capability and accomplishment can greatly increase personal well-being. At the community level, this kind of empowerment increases the group's sense of independence and self-reliance. Participants feel that they are taking positive steps to improve their own circumstances, rather than ceding all power to government authorities or outside actors. In this respect, success breeds success, creating a stronger social fabric on which future collective action can be built.

Oyster Producers' Cooperative of Cananeia (COOPEROSTRA), Brazil.

Prior to the establishment of this community effort to sustainably manage and market mangrove oysters from the Cananeia Estuary, the commercial oyster trade in the area was a low-profit business for local collectors, who had no direct access to markets and fell prey to opportunistic middle men who paid them very little. Over-exploitation of the oyster population was common, and collectors felt powerless to change the dynamic. With assistance from several NGOs and the cooperation of the local and national government, residents of the coastal community of Mandira established the Mandira Extraction Reserve, which they now co-manage with the IBAMA. Cooperative members are required to undergo substantial training in sustainable oyster management and marketing, information technology, and social organization. The result has been a feeling of economic empowerment and technical competence, in which their work—formerly undervalued—is taken seriously. A participatory governance model in which cooperative members engage in all stages of planning, implementation, and reporting has contributed to a feeling of self-reliance and empowerment. This has had a catalytic effect on other activities. Moheli women have purchased sewing machines to provide tailoring services, in particular to supply local beekeepers with clothing needs. This enterprise the further diversified into basket-making and handicrafts using oyster shells.



The combination of personal and group empowerment can be particularly strong for women and other marginalized groups whose social status often contributes to a sense of isolation and powerlessness. The role of many Equator Prize-winning communities in improving the status of systemically marginalized social actors cannot be underestimated.

Samudram Women's Federation, India.

This sustainable fishing federation empowers local fisherwomen in the state of Orissa, India. Previously marginalized and isolated groups of women have gained access to collective savings opportunities, credit services, and insurance coverage. The federation also provides access to health care, education, water, electricity and housing to all its members. In addition, women are supported to diversify their incomes, particularly during fishing closures or other restrictions. The majority of federation members belong to a lower caste and, as such, suffer social exclusion and persecution. Thus, the initiative has also been a source of empowerment for a socially marginalized segment of the population. Samudram works to change attitudes towards this population, and offers training and exchanges between the fisherwomen, other community leaders, bankers, and elected officials. With collective bargaining and a higher premium for their products, federation members have gained dignity and confidence, and are increasingly attaining higher positions in community decision-making processes.



Political and legal empowerment.

Many Equator Prize winners have also contributed to the political and legal empowerment of communities in pursuit of the group's business and social goals. For example, many groups are able to improve their legal tenure status through formal recognition by the state of their right to manage local ecosystem resources. In other instances, Equator Prize winners gain credibility, legitimacy and influence with local government authorities through their management and commercial successes, and are subsequently sought out by these authorities for their expertise and as a model for other villages. Case histories show that Equator Prize winners have also had considerable success in influencing resource policies at the local and national levels. This represents a significant change in status for villagers normally relegated to the political margins.

Camalandaan Agroforestry Farmers' Association (CAFA), Philippines.

Since 1983, CAFA members in Negros Occidental, Philippines have committed to maintaining forest cover on their farmlands and protecting adjacent forest areas from illegal logging and hunting. Since 2005, they have been officially recognized as forest wardens by the local government. The forest warden program has been highly effective, resulting in an 80% reduction in timber poaching. As a result of vigorous lobbying by CAFA, local farmers were granted land rights in 2003 and enlisted in a government community-based forest management program. Previously, local farmers had no tenure security and resided on what was officially state forest land. CAFA's work has become so closely tied to community functioning and wellbeing that several association members have been elected to positions in local government.





Case after case of Equator Prize winners demonstrates that the process of working together to achieve mutually agreed goals creates a positive dynamic within the group of participants that builds social capital and lends momentum to the effort and to tackling myriad social, environmental and economic challenges. Communities typically consist of a number of different subgroups whose interests don't always align. Aligning the goals, expectations, and ambitions of these different stakeholders so that they can work effectively together is not always a trivial matter. Equator Prize activities offer community members a chance to rally around an issue of common concern that promises more benefits than costs, but only if the group can cooperate. The newness of the activity offers an opportunity for members to take on new roles and to participate and communicate in ways that would not be possible on a more polarizing issue. The result can be greater trust and cohesiveness among members of the group and therefore a greater willingness to contribute their time and energy to the collective action. Importantly, this new social capital has enabled communities to tackle new challenges above and beyond the scope of the initial program. This spill-over effect is quite common in Equator Prize winning initiatives.

39

Lesson 3: Action for the environment will often produce development gains

Environment can be a powerful platform for community-driven rural development.

The use and management of natural resources is woven into the cultural and economic fabric of many—perhaps most—rural households in developing nations. In other words, local ecosystems are tied directly to livelihoods, cultural self-identity, and household health and well-being. When these powerful motivating forces are put into play, they provide a rationale for sustainable ecosystem management that results in perceivable benefits such as higher

household incomes, more control over culturally important lands or resources, improved infrastructure, or increased access to markets, education, health services, technology, financial services, or the levers of political power—all benefits that can be found within the Equator Prize winners. The experience of Equator Prize winners is that conservation is not generally pursued as a single end in itself, but as a means to achieve a combination of development goals, including preservation of the cultural fabric itself. This is particularly true for indigenous communities.

While some development literature in the last decade has cast doubt on the effectiveness of so-called “integrated conservation and development” projects, the record of Equator Prize winners strongly supports this integrated approach as an effective development model, although with a more nuanced view of “local development” and who must drive it. When framed in terms of livelihoods, empowerment, and cultural identity, sustainable natural resource management becomes a means to an end—an end that community groups have chosen themselves and shaped to fit the local context. Thus Equator Prize winners effectively demonstrate the principle of “environment for development,” or more accurately, “local environment for local development.”

The emphasis on sustainable resource management as a platform for achieving other development goals amounts to a significant alternative to the conventional rural development model based on the encouragement of extractive industries and large-scale commodity agriculture. The development model in Equator Prize winning communities, which could be summarized as “conservation for livelihoods and cultural sustainability,” has several defining features:

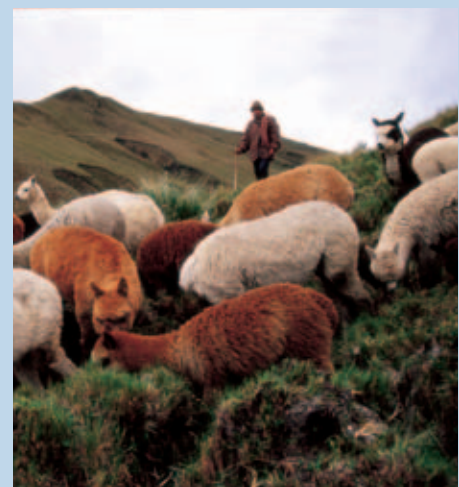
Enables livelihood transformation and builds a local “green economy.”

Equator Prize winners generate opportunities for sustainable income that can substantially enhance and even transform household and village economies. Indeed, it could be said that Equator Prize winners represent the leading edge of the emerging model of a “green economy” at the local level—an economy that generates income opportunities while maintaining ecosystem assets and reducing threats to local food and water supplies.

The Independent Workers’ Association of San Rafael, Tres Cruces, and Yurac Rumi (ASARATY), Ecuador.

The indigenous and campesino families belonging to ASARATY have replaced traditional cattle grazing with Alpaca farming and community-based ecotourism on the 8,000 hectares of montane grasslands they inhabit. The transition away from cattle raising has allowed the grasslands to recover from chronic overgrazing, which both diminished soil fertility and degraded water quality and quantity. ASARATY did not start as an environmental program per se, but was more a response to the high levels of poverty and food and water insecurity that plagued the area. Of the initiative’s 101 member families, 65 directly earn income from alpaca farming and ecotourism—a profound restructuring of the local economy.

The other families benefit from ancillary benefits such as access to alpaca dung (which is used for fertilizer) and increased freshwater access, which have raised agricultural productivity and greatly improved food security.



Sepik Wetlands Management Initiative (SWMI), Papua New Guinea.

In its work with 50 communities along the Sepik River—the longest river in New Guinea—SWMI has transformed the local economy and local treatment of wetlands. The sustainable harvest of crocodile eggs from nest sites along the river has become an important source of income for local residents. Previously, crocodile nest sites were being indiscriminately destroyed by wetland fires set for hunting, agriculture, or as part of land ownership disputes. SWMI instituted a program in which local crocodile egg collectors following specified conservation guidelines would receive a guaranteed return from a commercial crocodile egg retailer. The group has also provided training on crocodile farming and crocodile egg harvesting techniques. SWMI estimates that the combination of egg collection and crocodile farming to produce high-quality skins has doubled the annual income in participating communities, all while raising the awareness of wetland values and stressing the cultural importance of crocodiles.



Redefines productivity.

Equator Prize winners have successfully made the economic argument that alternative uses of land and marine resources are not only viable, but often far more productive from both a local and national economic perspective. The emphasis on ecosystem-based initiatives for small-scale farmers, fishers, grazers, and other resource users has meant that efforts are scaled appropriately for local groups, allowing benefits to be captured at the local level, increasing their development potential.

Redefining ecosystem productivity can involve adopting new land use or harvest practices to reduce their biological impact—for example, restricting where livestock can graze in order to prevent overgrazing, adopting different fishing patterns or more benign nets to reduce overfishing, or employing new plowing and planting techniques to reduce erosion. In addition, it frequently includes targeted restoration activities such as regenerating shoreline vegetation like mangroves or reeds to improve aquatic habitat, or replanting native tree species on degraded forest slopes. The net effect of these actions is to make the ecosystem both more productive and more stable. Greater productivity can translate into greater standing biomass—more or bigger plants and animals—and also a greater sustainable yield of products and services.

Fundacion para la Agricultura Tropical Alternativa y el Desarrollo Integral (FUNDATADI), Venezuela.

Small-scale coffee growers in the Barinas region of central Venezuela were plagued by pest problems and low profit margins, forcing residents to turn to high-impact activities such as converting the local forest to cattle pasture. With help from FUNDATADI, local coffee producers have established household level medicinal plant gardens as a supplementary agricultural enterprise. Medicinal plants are dried and processed into soaps, syrups, and other value-added products, which are marketed jointly through a cooperative called Aromas de Calderas. This enterprise has provided an alternative to forest clearance and yielded a year-round supplement to coffee income, which is concentrated in the harvest period of September-December, leaving small coffee growers without assured income for much of the year.



Phu My Lepironia Wetland Conservation Program, Viet Nam.

Located in the southwest corner of the Mekong Delta, the Ha Tien Plain is a shallow basin where floodwaters pool to create vast grasslands. Classified in its natural state as “unproductive,” the Ha Tien Plain has been the staging ground for several episodes of failed economic development, including forestry (22,000 hectares of abandoned Eucalyptus plantation), rice (extremely low yield) and the ongoing boom in shrimp aquaculture (the high acidity water requires constant neutralization). These activities by and large failed to alleviate long-term poverty, and also degraded the environment. Far from being unproductive, the Ha Tien grasslands support a wide array of plant and animal species. The Phu My Lepironia Wetland Conservation Project has successfully conserved a 2,890-hectare area of wetlands rich in Lepironia grasses, and has trained community members in sustainable harvesting techniques. Training in value-added secondary processing enables community members to transform dried grass stems into high-quality handicrafts. Incomes for more than 2,000 farmers have increased by as much as 500 percent, and awareness of the value of the local wetland ecosystem has grown considerably.



Brings improved market access.

Many Equator Prize winners have successfully overcome the challenges of accessing markets through coordinated marketing mechanisms such as cooperatives or producer groups that both extend the reach of local producers. By overcoming the logistical and financial difficulties presented by uneven or inequitable local economies, rural producers have reached urban and in some cases international markets. One notable area of activity is community mobilization to overcome the transaction costs of middlemen or other opportunistic groups that take advantage of distorted or asymmetrical market conditions. Another is the development and cultivation of market supply-chains that place greater emphasis on community production, social and environmental responsibility or fair trade.

Bolsa Amazonia, Brazil.

This regional support program assists rural communities in the Amazon basin to produce and sell sustainably harvested non-timber forest products such as acai fruit and coconut fiber. By helping local producers form cooperatives and small business enterprises, Bolsa Amazonia also helps economically marginalized communities benefit from consumer demand for environmentally sustainable and socially responsible products. The organization provides capacity building and training in business planning, value-added secondary processing, and packaging. One of the most important functions the organization serves, however, is as a conduit between small-scale producers and regional and international buyers. An online marketing information network called Sistema de Informação Mercadologica da Bolsa Amazônia (SIMBA) functions as an information bridge between producers and buyers interested in fair trade and organically certified products.



43

Community Markets for Conservation (COMACO), Zambia.

Working in Zambia's Luangwa Valley, COMACO promotes farming strategies that conserve local biodiversity and which have altered a local economy that was previously reliant on illegal logging to augment incomes. COMACO has increased local agricultural productivity, decreased deforestation rates, and made small-scale farming a profitable activity for rural households. Local produce is bought exclusively at the organization's 60 collection depots, a service which has the effect of reducing agricultural transport costs for marginalized and isolated farmers. In some rural areas where COMACO does not operate, transport costs can represent as much as 20% of the value of the commodity.



Develops new skills and provides access to new technologies and processes.

All Equator Prize winners rely on capacity development as part of the process of growth and empowerment that underlies their collective action. The acquisition of new technical, business, and social skills has had a catalytic effect on local enterprise development and organizational sustainability in many of these groups. At the same time, Equator Prize winners have also acted as a conduit for access to new technologies and processes needed to manage local ecosystems, increase productivity and income, or succeed as a commercial enterprise.

Green Life Association of Amazonia (AVIVE), Brazil.

Since 1999, AVIVE has built a trade in aromatic soaps, candles, cosmetics, and perfumes containing the oils of medicinal plants such as rosewood and andiroba. Association members (all of whom are women) have had to master a number of skills to ensure the long-term viability of the business, including: sustainable harvesting techniques (which ran counter to conventional collection practices), commercial-standard oil extraction and fabrication processes, business administration and marketing. One of the greatest obstacles to business development was navigating state regulatory frameworks and laws governing the manufacture and trade of medicinal plants. Training has paid dividends, as the organization is thriving and poised to expand its business to international markets.



Trowel Development Foundation, Philippines.

The focus of Trowel Development Foundation is the productive utilization of idle fishponds. Their main activity is the introduction of 'mangrove-friendly, biodiversity-enhancing, and disaster-resilient tie-crab fattening technology'. Individual crabs are tied to bamboo poles, which are staked two meters apart. Each pole has a buoy attached that floats above the surface of the water (useful for locating and recovering crabs when flooding or severe weather unhinge the poles). In addition to being an easily transferred technology, tie-crab fattening adds to the ease of harvesting, offers greater selection in harvesting based on weight and maturity, and provides a higher return on investment. On average, profits for tie-crabs are 50 percent higher than traditional methods. Trowel has established five community managed tie-crab farms, which benefit more than 250 fishing households.



Stimulates investments in local infrastructure.

In the vast majority of cases, a portion of the income or revenues produced in conjunction with Equator Prize winner activities is placed in a community fund that is then used to meet local infrastructure needs, provide for missing social services, and to develop community works projects. Most often, investments are made in roads; drinking water, sanitation, and irrigation systems; alternative energy systems; education, the construction of schools, scholarships and school fees; health services and medical clinics; or tourist infrastructure such as lodging and trails. These investments are not strictly economic in nature and show the indivisibility of social and economic benefits in most communities.

Ekuri Initiative, Nigeria.

Located in Nigeria's Cross River State, the Ekuri people manage a 33,600-hectare community forest adjacent to the Cross-River National Park. In the 1980s, the villages of Old Ekuri and New Ekuri were four hours from the nearest road. A logging company offered to build a road in exchange for logging rights, but the local chief refused, favoring instead an alternative that left the community in possession of its forest resources. The Ekuri Initiative sustainably manages the forest as a community asset, generating income, subsistence materials and food. To finance construction of its own road, the Ekuri people imposed levies on the sale of non-timber forest products, which were collected from every member of both villages. This levy system was in place for four years before the community collected enough to start constructing the 40-kilometer road. Construction of the road began in 1986, reaching Old Ekuri in 1990 and New Ekuri in 1997. In addition to allowing farm and forest products to reach new markets (which served as a boon to the local economy), the road has also made possible the transport of construction materials for two schools, a health center, and a civic center where the community meets to discuss forest governance decisions.



Positions communities for new opportunities.

Local groups with integrated environment and development approaches are well placed to take advantage of new environmental finance market mechanisms such as national and international REDD+ programs (Reducing Emissions from Deforestation and Forest Degradation) and Payment for Ecosystem Services (PES) programs. While these market mechanisms are still in their infancy, they offer the promise and potential of providing local and indigenous communities with additional sources of finance, and, in turn, additional economic incentives for long-term stewardship. The same qualities that have earned local groups Equator Prize recognition, including the ability to expand their successful programs to surrounding communities, are a good indicator that these groups possess the social, financial, and management capacity to absorb and manage such funds.

Asociación para la Investigación y el Desarrollo Integral (AIDER), Peru.

This NGO works with local and indigenous groups across Peru to design community-based forest projects that range from producing Forest Stewardship Council-certified timber to the reforestation and recovery of degraded lands. AIDER client communities have achieved several notable national firsts in the areas of certification and environmental finance. AIDER assisted the first community in Peru with FSC certification — the Shipibo-Conibo ethnic group, who manage a 35,000-hectare forest in Ucayali. AIDER also supported the country's first forestry project to be registered under the UNFCCC Clean Development Mechanism (CDM) and achieved validation of the Campo Verde Reforestation Project as the first forest carbon project to meet Voluntary Carbon Standards. Finally, AIDER's Madre de Dios Amazon REDD+ Project was the first in Peru to meet Climate, Community and Biodiversity standards.



Lesson 4: Community empowerment enhances conservation efforts

Engaging local stakeholders in conservation efforts enhances not only local livelihoods, but conservation itself.

Given the right conditions, community-based organizations can be potent platforms for delivering conservation benefits. Local collective action can improve the efficiency and long-term viability of interventions aimed at conserving endangered species, preserving genetic diversity, and improving ecosystem integrity. As development agencies and national governments strive to meet international targets on biodiversity conservation, local and indigenous organizations have increasingly come to the fore as implementing partners in state-led conservation efforts.

Many Equator Prize winners reflect this trend – representing local stakeholders in co-managed protected areas, for instance – while other groups have been the drivers of more endogenous conservation initiatives, such as the creation of community conserved areas that protect traditional lands, or the preservation of culturally-important native landraces and crop varieties. Other conservation efforts have taken place in opposition to state-backed processes such as road construction or large-scale extractive industries.

The lesson demonstrated by these cases is not only that conservation can deliver local benefits when done right, but that the level of conservation achieved can be vastly enhanced by community-based action. The comparative advantage of local organizations as vehicles for delivering messages to marginalized rural constituencies, the empowering effect of communal collective action, and the successful marrying of new technologies and processes with traditional institutions and cultural heritage make community-based organizations not just able partners in collaborative conservation, but the driving creative forces in such efforts.

Endangered species conservation.

Flagship species conservation is a component of the work of 65 of the 127 Equator Prize winners; in many cases, in fact, it forms a central focus of their work. In many other cases still, flagship species conservation has served the more pragmatic and functional purpose of creating a rallying point for collective action to meet a much broader ecosystem decline challenge. Many organizations have effectively used conservation of endemic wildlife species to create linkages with international organizations and donors. A good example is the designation of Important Bird Areas (IBAs), which are typically a combination of technical assistance from an international organization (like BirdLife International) and community-based monitoring and site support.

Kipsaina Cranes and Wetlands Conservation Group, Kenya.

This community-based organization has worked in conserving wetlands and their biodiversity in and around Saiwa Swamp National Park, Western Kenya, since 1990. Officially gazetted in 1974, Saiwa Swamp now forms Kenya's smallest national park, yet is home approximately 25% of Kenya's vulnerable Grey Crowned Crane population. The maintenance of this small but critically important crane population hinges on the integrity of the wetlands habitat and the availability of acacia trees as roosting sites. By the early 1990s, however, these key ecological features were under pressure from cultivation of the wetlands, often using fast-growing eucalyptus trees to drain the swamp, and deforestation. The catalyst for reversing these trends came from a leader of the local Catholic parish, who mobilized community members to conserve a 5 km-stretch of swamp – actively abandoning smallholder plots within the area and voluntarily planting a range of native tree species, including acacia varieties, around its border. This has allowed the wetlands to regenerate, and enabled the maintenance of a healthy crane population; the most recent count within the Kipsaina wetlands, in December 2009, found 35 individuals. What is especially noteworthy is that these results have been achieved despite relatively little economic benefit for the area's communities, barring the introduction of some alternative livelihood activities using funding from the International Crane Foundation. The basis has instead been recourse to an environmental stewardship ethic, mobilizing an already cohesive rural parish based on their shared religious beliefs.



Table 2: Contribution of Equator Prize winners to conservation of globally-threatened sea turtle species.

	Critically Endangered		Endangered		Vulnerable
	Hawksbill	Leatherback	Loggerhead	Green	Olive Ridley
Community Marine Association of Cruzinha da Garça, Cape Verde	x	x	x	x	x
Arnavon Community Marine Conservation Area Management Committee, Solomon Islands	x	x		x	
Bunaken National Park Management Advisory Board, Indonesia	x	x	x	x	x
Community-based Marine Management Foundation, Indonesia		x			
Conservation Society of Pohnpei, Federated States of Micronesia	x			x	
Collective of Women's Groups for the Protection of Nature (COPRONAT), Senegal			x	x	
Agency for the Development of the Mosquitia (MOPAWI), Honduras		x	x	x	
Nguna-Pele Marine and Land Protected Area Network, Vanuatu	x	x		x	
Indigenous Tourism Network of Mexico, Mexico	x	x		x	x
Roush Marine Protected Area Community, Socotra, Yemen			x	x	
Samudram Women's Federation, India					x
Talamanca Initiative, Costa Rica	x	x		x	
Village of Andavadoaka, Madagascar			x	x	

Invasive species eradication.

The importance of communication and awareness-raising for targeted species management is shown most clearly in cases of invasive species eradication, a component of the work of ten Equator Prize-winning initiatives. International strategies for biodiversity conservation highlight the identification of invasive alien species as a key task for national governments. The deleterious effects of invasive species on ecosystems are clearest at the local level and the processes involved in their eradication – from identifying threats to rapidly mobilizing action to address the problem – are well suited to local organizations.

Instrument of Peace School, Niger.

The village of Saga, located south of Niamey on the banks of the Niger River, was the initial setting for an innovative experiment in converting a troublesome invasive species in the river basin into an economic opportunity for the local community. The introduction of water hyacinth (*Eichhornia crassipes*) to the region has clogged local irrigation systems, limited navigability of the river, restricted access to local markets, and decreased the viability of the local economy, as well as severely impacting ecosystem health and water quality. It covers a large percentage of the river's surface, suffocating local biodiversity and blocking light from reaching underwater flora. The organization estimates that more than 60% of normal biomass has deteriorated since the water hyacinth has been introduced into the region, with predictably detrimental effects on endemic plant and animal species. École Instrument de Paix has mobilized community members to collect water hyacinth from the river, before drying the plant material for use in a number of income-generating activities. The organization has been particularly successful at promoting local production of fuel briquettes, which are made of both dried water hyacinth and agricultural waste. These briquettes help to generate income through their sale and improve energy access for marginalized riverbank communities.



Co-management of protected areas.

A total of 85 Equator Prize winners work in protected area management and show the range and spectrum of possible management options, from partial or complementary conservation to full ownership and exclusive management. The proximity of a state-designated protected area can be a mixed blessing for a rural community. It can be a source of tourist trade and employment, but it can also disenfranchise local groups from traditional resource uses and livelihoods within park boundaries. Equator Prize winners have been adept at finding ways to make local protected areas assets for the local community, through increasing rights to resource use, the creation of jobs for community members, and revenue-sharing arrangements. In many cases, this has taken the form of de facto management arrangements or the active participation of state authorities in conservation and restoration activities. In a number of instances, this arrangement has been formalized in a co-management configuration, where the state grants local people authority to make management decisions and implement conservation measures that can be pegged to national conservation objectives.

Amani Nature Reserve, Tanzania.

This state-designated reserve was conceived as a partnership between the state and local communities. Three-quarters of the reserve's 8,400-ha area is reserved for biodiversity preservation, but the remaining area is divided between a "local use area" (6% of the area) and a buffer zone surrounding the core preservation zone (17% of the area). Both of these latter zones are meant to serve community needs and reduce pressure on the core area. A revenue-sharing agreement complements this zoning arrangement, with 20% of park revenues (entrance fees and research fees) going to buffer zone villages in compensation for their reduced access to the core zone. Local communities also serve on the Advisory Board, which is part of the official management structure of the reserve, giving them a voice in management issues. Village resource management plans have been drawn up with buffer zone communities to promote sustainable land uses within the buffer area. Ecotourism has become the main source of revenue for communities within the reserve, with the park's 340 bird species being a main attraction. However, the Amani initiative has been active in promoting other alternative, forest-friendly livelihoods as well, including butterfly farming, bee-keeping, fish farming, horticulture, and tree nurseries. Butterfly farming, for example, has increased incomes of participating households by about 25%. In sum, in return for their co-management, buffer zone residents now have secure tenure, a voice in park governance, and an economic interest in supporting the park's conservation mission.



Creation of indigenous and community conserved areas.

A number of Equator Prize winners have adopted a "bottom-up" approach to tenure and ecosystem management by creating their own indigenous and community conserved area (ICCA). A key element of most ICCAs is that they are created by local resource users to serve a local purpose, which distinguishes them from state-created protected areas or parks which arise from a vision conceived at a larger scale and not always with local consultation. Given their endogenous evolution, ICCAs are often highly effective in achieving both conservation and other social and economic goals. It is worth noting that local stewardship may also be the only viable option for protecting and managing areas of environmental importance where state management efforts have failed, or have yet to reach, leaving them vulnerable to uncontrolled exploitation. Establishing a community conserved area can act as a platform for defending traditional land and resources against external threats, and can provide a basis for achieving formal recognition of ownership from the state. In many cases, these areas may have historical bases in customary use restrictions or taboos, which can have the effect of strengthening formal conservation regulations.

Wechiau Community Hippo Sanctuary, Ghana.

This sanctuary consists of a 34-km stretch of riverine forest, floodplain, and savannah woodland along the Black Volta River, in northwestern Ghana. The sanctuary arose as a response to the general decline of hippopotami in the region due to a lack of formal protection measures and high levels of hunting. In 1998, the Paramount Chief of the Wechiau Traditional Area, along with his sub-chiefs and other local opinion leaders, elected to establish a community-managed sanctuary that would protect the hippos, restore degraded habitats, and ensure that local people were part of the decision-making process for development projects in the area. This followed the rejection of a proposal by Ghana's Wildlife Division to establish a government-run preserve in the area—a step which local leaders feared would jeopardize local autonomy. The sanctuary has two zones: a core zone that includes the river and a 1-2 km-wide riparian belt, in which all but a few human activities are prohibited; and a development zone that extends 5-10 km to the east of the core zone, in which human settlements and farmland are interspersed amid wooded savannah. Some 10,000 people live within the sanctuary in 17 communities. This balancing of ecological and social needs has ensured that the hippo population has stabilized and poaching has been eliminated; by contrast, 11 hippo deaths were recorded in the period between 1995 and 1997. Species diversity has also improved, borne out by careful biological monitoring.



Several factors figure in the sanctuary's success. For one, the sanctuary has brought many economic and social benefits. Ecotourism—with river safaris, shore-side hides for wildlife viewing, and cultural tours of local villages—is now a significant source of income in the region. Since 2008, the harvesting of shea nuts has also become a major income producer. Considerable infrastructure improvements have also come as part of the community sanctuary initiative. All 17 communities now have access to clean water supplies and solar lighting. Two new schools have been constructed and three health clinics have also been equipped. These benefits have built strong support within the community. Another key success factor has been the sanctuary's management structure, which is grounded in the customary leadership of Chiefs, but also utilizes a management board on which all four local ethnic groups are represented in decisions regarding development or environmental protection. The sanctuary's basic mission of hippo protection is also rooted in local traditions and myths, which respect the hippo as a benefactor to local people, and include a taboo on hippo hunting. The success of the Wechiau initiative has not gone unnoticed at the national level, and has brought the residents of the Wechiau communities increased tenure security. In 2009, Wechiau Community Hippo Sanctuary became one of Ghana's first Community Resource Management Areas, in which the government transfers legal authority to local people to manage their own parklands. The Wechiau sanctuary was used as a model during the design of this new national designation.

Preservation of genetic diversity.

Heritage seed varieties and crop landraces have often been used in a similar fashion to charismatic wildlife species as rallying points for collective action. Their conservation marries preservation of local genetic diversity with preservation of local cultural heritage; conserving, cataloguing, and reintroducing locally-important species is often considered a defense of traditional and indigenous culture. It may also allow group members to take advantage of markets for traditional natural products.

Equator Prize winners have evolved sophisticated means of engaging local communities in this work. One common innovation is that of seed banks for storing samples of native varieties, either in one centralized location or through a network of community-based banks. A total of nine Equator Prize winners have used this approach. Careful cultivation and identification of seed varieties is often carried out both in situ and ex situ, with training given to local producers in the tasks of seed propagation and multiplication.

Table 3: Summary of genetic diversity conservation activities

Group	Conservation focus	Activities
Genetic Resource, Energy, Ecology and Nutrition (GREEN) Foundation, India	Crops	Works with groups of smallholder and marginalized women farmers in the semi-arid regions of Karnataka, South India, to conserve agrobiodiversity; today, the foundation cultivates 328 varieties of indigenous seed, which have been revived, reintroduced, multiplied and stored in gene banks through both in situ and ex situ conservation.
Tribal Communities of the Jeypore Tract of Orissa, India	Rice	Cultivation and documentation of landraces with tribal communities living in the Jeypore tract, an origin site for rice diversity; 402 acres under landrace cultivation in 2009, and 978 farming families involved in the conservation and enhancement of genetic diversity of rice species; Village Seed Banks operating in 17 villages. Rice is now available year-round, bridging household food deficits.
Bamboo Village of Phu An, Viet Nam	Bamboo	Village-based Bamboo Eco-Museum and Botanical Conservancy currently house more than 350 species of bamboo from across Viet Nam, including threatened and endangered species; villagers have been trained in value-added secondary processing and the use of select bamboo species for ecosystem regeneration.
Women's Medicinal Plant Producers Network, Quibdó, Colombia	Aromatic and medicinal plants	Network of 200 Afro-Colombian women working in cultivation and processing of indigenous aromatic herbs and medicinal plants; have developed organic spices mix under brand name "Tana Organic Spices".
Rush and Reed Conservation and Diversification Program, Sri Lanka	Rush and reed species	Committee for People's Rights, based in Kalutara District, southwestern Sri Lanka, has pioneered the reintroduction of rush and reed species to household paddy fields for processing into value-added handicraft products.

Ecosystem restoration.

Many Equator Prize winners go beyond conserving biodiversity to actively rehabilitate degraded ecosystems. Of the 46 Equator Prize winners working in this field, 27 are engaged in restoring and sustainably managing mangrove forests, illustrating the clear benefits of mangroves as resources and flood buffers to coastal communities. In the majority of cases, ecosystem restoration has been driven by community livelihood and development needs, for instance through the integration of on-farm tree-planting for improving agricultural production, or reforestation around watersheds to secure freshwater provision. Local organizations are well positioned to mobilize large voluntary efforts to deliver the landscape-scale change that ecosystem restoration often requires.

The Collective of Women's Groups for the Protection of Nature (COPRONAT), Senegal.

In 1986, the government of Senegal established the Popenguine Nature Reserve, a 1,000-ha parcel of mangroves and lagoons on the Atlantic coast 50 miles south of Dakar. Although it was particularly noted for its value as a migratory bird habitat, local overuse had degraded the site substantially. COPRONAT formed a few years later as a spontaneous initiative of women's groups from eight villages surrounding the nature reserve who wanted to restore the productivity of the mangrove forest and wetlands, both for their intrinsic value, but also to encourage the development of an ecotourism trade to benefit the local economy. In 1993, COPRONAT began its program of mangrove rehabilitation, erosion control, waste management, and environmental education, and within three years had restored almost 10 ha of mangroves. In light of their stewardship of the reserve lands, the Ministry of the Environment in 1996 signed a Memorandum of Understanding with COPRONAT to co-manage Popenguine Nature Reserve. As the reserve and surrounding lands have recovered - 11,000 trees have been planted across a total of 100 square kilometers – and wildlife has returned, considerable growth in the ecotourism trade has resulted, including the construction of a tourist camp adjacent to the reserve that generates substantial local revenue.



Lesson 5: Community-based action delivers the MDGs

Local ecosystem-based initiatives are a potent delivery system for the entire suite of Millennium Development Goals.

Equator Prize winners not only demonstrate the principle of “environment for development,” but more particularly, the idea of “environment for the MDGs.” The benefits arising from Equator Prize winning community activities are not just environmental, but are economic, social, and cultural as well. These benefits arise together, are mutually supportive, and represent the whole range of development aspirations embodied in the Millennium Development Goals. In addition to the well-documented reduction in poverty and conservation of biodiversity, other oft-cited benefits include improvements in education and health care infrastructure, better nutrition, higher literacy rates, and the empowerment of women—all goals fully aligned with the MDGs. Additionally, the communal nature of work makes local ecosystem-based initiatives a good vehicle for delivering social and health services and education around such issues as HIV/AIDS and gender equality.

In most instances, these multiple benefits are generated at very low cost, since Equator Prize winners often have access to very limited funds to finance their activities. With their ability to do more with less and to reach vulnerable groups, community-based organizations are an effective way to “localize” the MDGs and accelerate their attainment.

MDG-1: End poverty and hunger.

It is perhaps not very surprising that almost all Equator Prize winners contribute to the achievement of MDG-1, since this is one of the main selection criteria for the award. The vast majority of initiatives have increased local incomes, expanded livelihood options, and improved local productivity, allowing participants to reduce or emerge entirely from their poverty. This has been true in many cases of the extreme poor—those earning less than USD 1 per day. Additionally, many Equator Prize winners have strengthened local food security and nutrition, thereby contributing to ending hunger and malnutrition. Whether through improved agricultural productivity, more sustainable harvesting practices, new and diversified food sources, seed banks and increased genetic diversity, or the promotion of ecoagriculture, many Equator Prize winners are responding to local food security challenges directly and with the support of partnerships.

Aharam Traditional Crops Producers’ Company, India.

Between 2003 and 2008, daily incomes of members of Aharam’s producer groups increased from around USD 0.44 to USD 1.12, representing an increase of 250 percent. Aharam programming and interventions can be attributed for these positive trends, not least of which because of their ability to access new markets and offer farmer higher prices for their agricultural produce.



Farmers Association for Rural Upliftment (FARU), Philippines.

This initiative of two indigenous groups aims to protect the environmental integrity of their ancestral domain through improved land management practices and more efficient agricultural techniques. Since FARU began its programming, rice production has increased by 36 percent and rates of poverty have decreased by 27 percent.



The Association of Manambolo Natives (FITEMA), Madagascar.

FITEMA encourages local farmers to plant off-season crops such as potatoes, beans, and cabbage in fallow rice fields. Local women are also encouraged to cultivate home gardens to augment incomes. Through these crop diversification efforts and improved rice cultivation techniques, FITEMA has reduced the lean period for rural households from seven months to three months.



Association of Indigenous and Peasant Producers (ASPROINCA), Colombia.

ASPROINCA has restructured local food production systems based on ecoagriculture principles and a stress on responsible soil management. The association has facilitated the recovery and reintroduction of over 70 varieties of traditional seeds, including 35 varieties of beans, five varieties of corn, and 10 varieties of sugarcane. This has allowed families to diversify the local food supply. Over 90 community greenhouses have been constructed for growing vegetables, medicinal plants, and ornamentals for sale in local and regional markets.



MDG-2: Universal education.

A high percentage of Equator Prize winners contribute to MDG-2, both by facilitating direct access to formal education and by mainstreaming environment and conservation issues into local curricula. In many cases, these groups have used new revenue streams to enroll children in schools, pay school fees, offer scholarships, and build or renovate schools. So too, winning initiatives have often become learning centers that host children and teens for field trips and conservation training courses, or work with local schools to mainstream environmental conservation, sustainable development, or pressing social issues into school programming.

Ese'ija Native Community of Infierno, Peru.

In a joint venture with a private sector partner, the Ese'ija Native Community has constructed and manages an eco-tourism lodge called Posada Amazonas. Between 1997 and 2007, net revenues for the community totaled more than USD 250,000. In 2000, rather than dividing profits equally among community members (standard practice), the community set aside 25 percent for investment in education, enabling the construction and operation of the only rural secondary school in the region.



Community-based Marine Management Foundation, Indonesia.

This locally managed marine area network has mainstreamed environmental education into schools in five different regions of Indonesia. The foundation has designed an impressive number of unique conservation modules for 27 primary schools, each focusing on the species of greatest importance to the local people. The success of this community-driven education program led to its adoption and formal uptake by local government.



Socio-Cultural Association of Yawanawá, Brazil.

The tribal territory of the indigenous Yawanawá people is located deep in the Brazilian Amazon. Since 2003, the association has introduced new economic opportunities to the remote community by forging a unique partnership with the cosmetics company Aveda. The community supplies Aveda with urucum fruit, which is used as a colorant in their products. Leveraging revenues from this partnership, the association has extended education services to the isolated community. Four schools within the Yawanawá territory now serve over 200 students. Indigenous teachers undergo training in a specialized program that includes local cultural and socio-environmental considerations.



MDG-3: Gender equality.

A large number of Equator Prize winning organizations are run by and for women, with an even greater number encouraging gender equality and the participation of women as an essential feature of their decision-making structures. In many cases, women have been at the forefront of innovation, the formation of cooperatives, and accessing new markets. In other cases, Equator Prize winning initiatives have served as a platform for raising awareness about gender equality, including such issues as the work burden placed on women, domestic violence, the difficulty many women face in securing land rights, and lack of access to credit and savings services. As such, local ecosystem-based initiatives have served as effective platforms for gender mainstreaming and women's empowerment.

57

The Women's Association of Isabela "Pescado Azul," Ecuador.

A small group of entrepreneurial women in the remote village of Puerto Villamil on the island of Isabela in the Galápagos Islands founded this association to provide jobs for unemployed women and sustainable economic alternatives for fishermen. The association focuses on value-added secondary processing in smoked yellow-fin and blue-eye tuna. Products are marketed and sold to tourists visiting the Galápagos Islands. The tuna is locally sourced from fishermen who adhere to sustainable fishing practices and principles. Prior to the initiative, the women of Pescado Azul had few employment opportunities; indeed, none had ever received a wage. The association now brings in an average of USD 150-250 per month to each member of the association, and has opened up a new and consistent market for artisanal fishermen. The association is governed exclusively by women. The group has drafted an operations manual, defined standard processing procedures, and established accounting and reporting policies to ensure transparency and good governance.



The Centre for Empowerment and Resource Development (CERD), Philippines.

CERD works to improve the sustainability of fisheries through the creation of fish sanctuaries in the province of Caraga, one of the poorest in the Philippines. The community-based organization also promotes sanctuary management by local fisherfolk organizations. Women's empowerment and raising awareness on gender issues are crosscutting themes of CERD's work. More than 50 percent of leaders in each fisherfolk organization are women, a substantial improvement from the almost nonexistent presence of women in leadership roles before the initiative began. CERD has also pioneered the creation of 'women-managed areas': shellfish harvesting sites that employ no-take zones and seasonal closures and which, importantly, are managed entirely by women. The first women-managed area was established in 2009 on Mahaba Island. By 2011, two more were established in two different barangays, covering a total area of 17.8 hectares of mangrove forest. CERD has also influenced a number of national government policies, notably including the 2009 Philippines "Magna Carta of Women" Act, which gives equal recognition to women fishermen, as distinct from women in the agricultural sector.



MDG-4: Child health.

While a smaller number of Equator Prize winners focus explicitly on MDG-4 (improvements in child health), several have shown relevant spillover benefits from improved access to public health services, better nutrition, and better population health as a result of sound environmental stewardship and ecosystem restoration. Revenues from Equator Prize winner activities are frequently reinvested into health infrastructure and health services, many of which are targeted at children. At the same time, many initiatives have focused on improving food security and nutrition, and in some cases specifically addressing children's malnutrition. Several initiatives also disseminate information on health and sanitation issues for children, as well as household and community-level solutions to disease control, particularly for water-borne diseases that disproportionately affect children. Improvements in safe drinking water access and supply are also a frequent Equator Prize winner community benefit. Finally, the environmental management practices of Equator Prize winners, such as the use of organic agricultural practices and the maintenance of watershed functions and shoreline mangroves, have reduced the risks from pesticide exposure, floods, and other environmental hazards—a community benefit that children share in.

Alimentos Nutri-Naturales Sociedad Anónima (ANSA), Guatemala.

ANSA addresses food security and child nutrition in the Peten region of Guatemala by revitalizing the use of Maya nuts, a traditional forest food that has substantial health benefits (vitamin content). Most notably, ANSA pioneered the “Healthy Kids, Healthy Forests” program in partnership with the Maya Nut Institute, BanRural, Rainforest Alliance, the Ministry of Education, and the Ministry of Agriculture. The program works through the Government of Guatemala to provide Maya nut-based lunches and snacks to schools across the country. In recognition of the success of the program, the Ministry of the Environment has financed the planting of 250,000 new Maya nut seedlings in the region to increase the Maya nut supply.



Shidhulai Swanirvar Sangstha, Bangladesh.

In the low-lying northwestern region of Bangladesh, a mosaic of wetland ponds and waterways make travel extremely difficult, particularly during the monsoon season when extensive flooding occurs. To address this challenge, Shidhulai Swanirvar Sangstha operates a fleet of 54 solar-powered boats to deliver services that range from schools to floating libraries and from health clinics to agricultural extension centers. The vessels are able to navigate waterways and pull up alongside villages that would otherwise be too isolated to receive such support. This has been particularly important for girls and women who are limited in their mobility because of cultural norms. Children take full advantage of the education and health facilities delivered to their doorsteps. In particular, female enrollment in formal education has increased substantially. Five floating health clinics provide awareness raising on issues such as sanitation, HIV/AIDS, unplanned pregnancy, reproductive rights and early marriage issues. An average of 300 patients per day are served by the five floating health clinics. Latrine usage has increased by 80%, while early marriage rates have fallen by 75%.



MDG-5: Maternal health.

A smaller number of initiatives focus explicitly on MDG-5 (improving maternal health). However, as mentioned, many of the initiatives have been started by women and operated to benefit women, not just economically but also in the provision of social services like access to healthcare. Local ecosystem-based initiatives offer a platform for women's empowerment and information exchange on women's health, including maternal and reproductive rights and family planning.

Village of Andavadoaka, Madagascar.

Madagascar has one of the world's fastest growing populations. On average, only one in five women has access to contraception. Rapid population growth has increased pressure on natural resources. In the case of the coastal village of Andavadoaka, this pressure involved overharvesting of the local octopus population – a high value species commonly collected by local fishermen. In response, the village has successfully instituted temporary “no-take” zones to manage fishing pressure and recover the octopus population. Building on this success, Andavadoaka opened a family planning clinic in 2007. The clinic provides reproductive health services, meeting a local demand for family planning. The initiative expanded into a broader Population, Health and Environment program that integrates sexual and reproductive health services into existing conservation activities. By 2010, this comprised four clinic sites and 18 community outreach programs, which provide condoms and birth control pills to more than 1,600 patients. Family planning projects have also sought the approval of village elders before beginning work in a community.



Association Songtaab-Yalgré, Burkina Faso.

This dynamic and growing association of organic shea butter producers began as a women's literacy initiative: a small group of women gathering to learn how to read and write. As the group grew, so did the breadth and scope of their activities. An initial focus on literacy quickly expanded to include women's health issues, then broader concerns of social justice and community wellbeing, and then prospects for sustainable income generation. Based on an informal stocktaking of the group's comparative strengths, the women identified shea butter production and processing as an area of common expertise and a potentially lucrative enterprise. The collective was formed in the mid-1990s and now employs more than 3,000 women in the production, processing and marketing of high-quality, organic shea butter. A women's health information center offers training and seminars on maternal health, HIV/AIDS and female circumcision.



MDG-6: Combat HIV/AIDS.

A comparatively smaller (though still significant) number of Equator Prize groups have undertaken awareness-raising campaigns on HIV/AIDS, as well as other major diseases such as malaria and tuberculosis. Among these groups, education and outreach is usually achieved through extension officers, on-site services and linkages with initiatives and networks working more exclusively on these issues.

Il Ngwesi Group Ranch, Kenya.

This Maasai group ranch in the central Kenyan district of Laikipia has established an 8,645-hectare community-conserved area that balances the needs of local pastoralists with wildlife conservation and the operation of a lucrative eco-lodge. In addition to the areas of freshwater management and education, eco-tourism revenues have been invested in targeted health interventions. The group runs a campaign called “Afya II,” which offers HIV/AIDS awareness-raising, testing and counseling. Also covering malaria and tuberculosis, the campaign targeted thirteen local group ranches, with a combined population of 40,000 people.



MDG-7: Environmental sustainability.

Given the focus of the Equator Prize, it is not surprising that all winners contribute in some way to MDG-7. What is perhaps more surprising is the scope and scale of local contributions in the areas of environmental conservation and sustainable use. A good number of these community-based initiatives have also been active agents of advocacy, drawing the attention of governments to the bearing of environmental issues on economic policies.

Pred Nai Community Forestry Group, Thailand.

This community-based organization was founded in the mid 1980s to reverse the effects of destructive mangrove harvesting near the coastal village of Pred Nai. A parallel goal was the recovery of local crab populations, which were (and remain) an important source of income for poorer members of the community. After developing a strong track-record of successful forest management and ecosystem restoration, the group became a model and point of reference for sweeping policy reforms that transferred forest management authority to communities. While the principle of community forest management is enshrined in the Thai constitution, for many years it had no basis in supporting legislation (and was even actively discouraged, particularly within and around national protected areas). As a result of advocacy by Pred Nai, the Community Forest Bill was enacted in 2007 by Thailand's National Legislative Assembly. By 2010, some 7,000 community forests had been registered by the Royal Forest Department under this legislation, offering legal recognition — and the increased tenure security that comes with it — to forest-dependent communities.



And though it is not explicitly a part of MDG-7, many initiatives have facilitated or directly provide access to alternatives sources of sustainable energy.

Association of Indigenous and Peasant Producers (ASPROINCA), Colombia.

In addition to its work restructuring local food production systems and reintroducing heritage seeds, ASPROINCA also provides biogas to local households as a low-cost and sustainable source of energy. The association has installed over 160 bio-digesters, which generate bio-gas from animal manure. Stoves and heaters are adapted to use the fuel, and the effluent is useful as a source of organic fertilizer for hay fields, commercial croplands and pastures. The use of bio-digestors has reduced consumption of firewood in the western region of the department of Caldas by over 60 percent, in turn helping to reduce deforestation. On average, the families associated with ASPROINCA receive 6 to 8 hours of energy per day per family from bio-gas.



MDG-8: Global partnerships.

Equator Prize winners exemplify what achieving MDG-8 can mean at the local level, demonstrating both the need for partnerships and their transformative power when carried out effectively. Almost all Equator Prize winners have used partnerships to advance their work, and few would have reached the level of success or scale they have without multi-level and multi-sector partnerships. Partners are enlisted for a number of different purposes, most often for finance, technical support, technology provision, market access, and outreach capacity. Common among Equator Prize winners are partnerships that facilitate local access to regional, national and international markets. Partnerships have not been limited to the non-governmental and public sector; many communities have forged mutually beneficial and equitable relationships with private sector partners as well. The Equator Initiative is itself an example of a global partnership, one of the few in fact that was launched at the World Summit on Sustainable Development in 2002 which remains in operation.

Green Life Association of Amazonia (AVIVE), Brazil.

AVIVE produces and markets sustainable cosmetics, perfumes, soaps, and candles from local materials. The association is an excellent example of a global, multi-sector partnership. WWF-Brazil provided technical and financial support in the initiative's early stages, particularly to locate a facility to produce and package soaps and candles. The ICCO Foundation and the Istituto Cooperazione Economica Internazionale provided financial and technical support for field monitoring of plants collected for oil extraction, the training of collectors, and the procurement of extraction equipment. GTZ-Brazil provides financial and technical support for activities related to producing and marketing vegetable oils, including management of value chains and product quality control. Petrobras (private sector) provides financial support for technical staff and supported in the procurement and construction of a unit for scaling up oil extraction. IUCN provided funds and technical support to implement ISSC FairWild certification. The SEBRAE and VERSUS cooperatives provide capacity building on developing trademarks. Precious Woods Amazon (a private Swiss FSC-certified timber company) provides financial and technical support for field monitoring, administrative support, and equipment maintenance.



Lesson 6: There is strength in the fusion of the modern and traditional

Successful initiatives represent the fusion of modern and traditional knowledge, institutions, management approaches and governance systems.

Equator Prize winners draw from two worlds: the world of traditional village institutions, governance systems and land management practices, and the world of modern state institutions, new social groupings and community organizations, globalized market economies, new technologies, and science-based management approaches. In the past decade, it has become more widely accepted that traditional knowledge and institutions can be quite relevant for sustainably managing natural resources, since they embody long familiarity with local ecosystems, cultures, and economies. The experience of Equator Prize groups clearly bears this out, demonstrating that when management practices are grounded in traditional knowledge and supported by customary leaders they are often accepted more readily. But, importantly, Equator Prize winner successes also show that traditional knowledge and experience is anything but static, and can be configured in innovative ways with modern approaches to solve today's management challenges.

In the best sense, then, these initiatives represent a fusion of modern and traditional approaches, with each enriching the other. This anchors work in accepted norms and governance, but allows it to take advantage of new approaches, technologies, and opportunities for social interaction. For example, the use of traditional forms of resource management allows participants to benefit from years of adaptive learning tailored to local systems and consistent with local values and forms of social interaction. But new forms of resource monitoring and production

technology can increase the efficiency of management, and new forms of processing and marketing can increase the net benefit to the community. Likewise, the involvement of customary tribe or clan-based authorities can lend local legitimacy to communal activities, while the involvement of new community groups such as resource user groups, self-help groups, or women's groups can demonstrate the value of inclusiveness, transparency, participation, accountability, and entrepreneurship—modern governance norms that underlie much of the success of community-based ecosystem initiatives.

Manifestations of the fusion of modern and traditional take many forms:

Resource management systems.

The reintroduction of traditional management systems has been shown to be surprisingly relevant and effective in a number of Equator Prize winner communities. In many instances, these systems fell out of use not because they were ineffective, but because they were displaced by the state or other outside entities to assert control over local resources. When community groups are allowed to revive these practices—usually with several innovations from modern management practices—they often show good results and positive environmental and economic benefits.

Guassa-Menz Community Conservation Area, Ethiopia.

For over 400 years, the grasslands in the Guassa area of Menz in Ethiopia's central highlands were governed under communal management known as the Qero system. In this system, elected headmen determined when and for how long local people could harvest thatch grass and graze their livestock. After a period of public use, the headmen would close the area from further harvest to allow for the ecosystem to recover, sometimes for as long as five years. Following the revolution in 1974, all rural land was nationalized as part of agrarian reform, and the Qero system was no longer sanctioned by the state. This resulted in year-round exploitation of the grasslands and subsequent degradation. In 2003, the Qero system was revived. Control of the grasslands (and responsibility for enforcing closure periods) was transferred to the Guassa Conservation Council, a body containing representatives from each of the nine local jurisdictions and representatives to the district and national government. This traditional land management system has been complemented by more modern governance elements. A group of eight villagers have been trained as ecological monitors to track the grassland health. Another twenty community scouts have been trained in local bylaw enforcement and conflict resolution to deal with transgressors. In 2008, the national government legally recognized the area under the revived Qero system as the Guassa Community Conserved Area.



Kalinga Mission for Indigenous Communities and Youth Development (KAMICYDI), Philippines.

KAMICYNDI works to improve food security for the indigenous Kalinga people, while also ensuring the ecological integrity of mountain forests. The association has drawn heavily from traditional farming practices and customary forest management systems, including: fitu, a system of hunting that preserves forest cover; pinagwa, a system of watershed management that prohibits forest clearing; and ara, an indigenous irrigation system for rice terracing. These traditional approaches have been augmented by a robust reforestation program and by the introduction of new food sources (mud fish, soy and mango). Biodiversity monitoring (using modern sampling techniques) is conducted regularly to measure changes in forest composition and health.



Value-added processing and marketing.

The use of modern processing and marketing methods is often a straightforward way to increase the income from traditional agricultural goods and other nature-based products. Value addition and tapping new markets can mark the difference between what has formerly been a subsistence or low-profit activity into a money-making venture.

Aharam Traditional Crop Producers' Company, India.

In Tamil Nadu state in southern India, this company helps farmers transform their business models, making use of traditional agricultural products but also undertaking value-added secondary processing to increase incomes. The construction of a mango pulp processing facility means that farmers can sell high-quality pulp to juice companies for much higher premiums than they receive for the fresh fruit. Processed pulp also has a longer storage life, providing local producers with a larger window for marketing and negotiating fair sale prices. Another program involves training farmers in seed collection and trading. Farmers that use seed grooming techniques (e.g. selective pruning to increase seed size and quality) are able to sell certified seeds and supplement their incomes.



New uses of heritage seeds and varieties.

Rural farmers often still rely on heirloom crop varieties that have fallen out of commercial favor, or which have been actively forced out of general use by monocultures or restrictions on seed exchange. Many traditional seed varieties have desirable properties that can make them the basis of new products or can take advantage of niche markets for traditional goods. In many cases, cultivating traditional seed and crop varieties can also become part of a strategy to increase agricultural diversity in order to increase food security or reduce vulnerability to crop failures due to climate change or natural disasters. In many Equator Prize winner communities, we see traditional seed and crop varieties being deployed for modern uses, modern markets and to meet modern food security, adaptation and ecosystem regeneration needs.

The Artisans Association of Arbosol and Huaca de Barro (AAAHB), Peru.

This women's association in the Morrope District of Peru helps farmers revive and expand traditional cotton production methods using native cotton varieties. These varieties hold several advantages over commercial cotton: they are perennial, yielding high-grade fibers for up to six years without replanting; they are pest resistant and can be grown in arid and high-saline soils; and they come in a range of shades that distinguish them from standard cotton and make them well suited to artisan markets where their novelty is an asset. Since the 1930s, however, Peru's agricultural authorities have carried out a campaign to eradicate native varieties, fearing they were a source of disease that would affect commercial cotton varieties. AAAHB has worked hard to debunk this myth, and to revive traditional cultivation patterns and weaving techniques.



Community Development Centre, Sri Lanka.

This NGO promotes the use of 60 indigenous varieties of roots and tubers—particularly yams—as a way to increase food security and provide alternative income options to rural families in Sri Lanka. Organic yam farming uses local varieties that are adapted to the area, does not require the clearing of land, is possible in many different landscapes and soil types, and produces a nutritious food source at a fraction of the cost of the main staples in the area: rice and bread.



New markets for medicinal plants.

Local knowledge of medicinal plants is often extensive, reflecting a long history of everyday use as well as an awareness of their commercial value. With demand for medicinal plants and spin-off products now burgeoning in urban markets, several Equator Prize winners have capitalized on their botanical expertise, encouraging cultivation and processing of local medicinals as the basis for new nature-based enterprises.

Muliru Farmers Conservation Group (MFCG), Kenya.

In 2005, MFCG built a facility to process *ocimum kilimandscharicum*, a medicinal plant traditionally used by forest-adjacent communities to treat cold and flu symptoms and as a mosquito repellent. The essential oil is extracted in the processing plant and compounded into an ointment called “Naturub”. The group’s products are widely marketed in both urban and rural areas, selling over 400,000 units by 2010. This sustainably harvested non-timber forest product allows community members to earn a good wage, while also reducing mounting pressure on Kakamega, Kenya’s only surviving rainforest. While the enterprise is entirely community managed and founded on traditional ecological knowledge, it takes advantage of modern manufacturing processes, and uses private sector partners to take care of distribution and mass marketing.



Medicinal Plants Conservation Centre (MPCC), India.

MPCC encourages conservation, supports local livelihoods, and improves the health of rural communities in the state of Maharashtra. The community-based group focuses on the revitalization of traditional health practices and the use of medicinal plants. In cooperation with the state Forest Department, and with local communities in the lead, MPCC uses nurseries and ‘commercial herbal production centers’ to sell sustainably cultivated medicinal plants. The organization oversees a network of 13 medicinal plant conservation areas, which have formal state recognition and cover an area of over 200 hectares. Local Management Committees have formed in each medicinal plant conservation area to manage the nurseries and regulate fire and grazing. Seed funds are provided to Local Management Committees to initiate production of herbal drugs as a local enterprise. The establishment of nurseries, demonstration plots, nature trails, and ecotourism sites have helped restore traditional health knowledge and folk traditions associated with medicinal plants.



Lesson 7: Communication is a powerful agent of behavior change

Successful local initiatives use networking, knowledge exchange, technology and media to change attitudes, communicate incentives, catalyze collective action, and replicate best practices.

Equator Prize winner activities are social ventures that rely upon cooperation within the group, active learning, acceptance by the community at large and, ultimately, acceptance by government entities. Communication is critical to all of these and Equator Prize winner communities make clear that effective local action is underpinned by good communication skills.

It can be tempting with community-based approaches to imagine that cooperation in service of better livelihoods or environmental conservation arises naturally among group members, based on its inherent value or a shared understanding that something “needs to be done.” This can be particularly tempting when dealing with environmental issues, where we hope that people are impelled to “do the right thing” and that this is sufficient for creating group cohesion. In reality though, individuals and groups need to understand the benefits that can be expected from undertaking a new activity, and how these compare to the costs. This is particularly true in cases where a new collective activity means forgoing short-term gains, individual rights, or a traditional activity for the promise of long-term gains and new benefits. Individuals and groups need to know what they stand to gain for their effort. Even where immediate benefits exist, they will not act as group incentives unless clearly communicated. Communication, then, is essential for cultivating the understanding and shared vision, which underpin collective action and drive behavior change.

What stands out as a trend across Equator Prize winners is how many have, through their communication strategies, successfully created a sustainable development ethos that permeates entire communities and even regions. Beyond the community level, communication has driven more macro-level behavior change as evidenced through changes in environment and development policy at the state level, replication of successful community models across different sectors and ecosystems, and the ability to access funding from donors.

Equator Prize winners use many different kinds of communication to achieve their ends. Knowledge networks and peer-to-peer extension through site visits connect Equator groups with other similar groups and with outside sources of information, and provide a platform for rapid learning and cross pollination. Communication with donors, government agencies, and politicians through newsletters, articles, and visits create vertical linkages with those in a position to provide financial, technical, or political support. Communication with the surrounding community and stakeholders through direct means like radio, performances, fairs, and newsletters offer a way to gain local support and spread the news about local benefits. In the case of several farming and fishery projects, rapid scaling of a group’s impacts has been achieved through neighbor-to-neighbor knowledge exchange, in which social learning and skills transfer substitute for formal extension or outreach efforts. And communication within the group through shared exercises like participatory mapping promotes mutual trust, a shared sense of mission, and a common understanding of the resources involved and the potential benefits of better management. Following are some notable communication trends among Equator Prize winners:

Peer-to-peer exchange and site visits.

In place of more traditional outreach and extension services, many Equator Prize winners have adopted a communication model of peer-to-peer learning in which neighboring communities meet to share best practices face-to-face. In contrast to what might be considered a more traditional development model – where the transfer of knowledge and expertise is North-South or vertical – peer-to-peer learning is horizontal and prioritizes local knowledge and experience, as well as local leadership. The overwhelming majority of Equator Prize winners use this approach to share experience, lessons learned, challenges, and to transfer best practices. Equator Prize winners are quick to note the importance of investing in peer-to-peer exchange and suggest that the uptake time of good practices in resource management, governance, and business development can be reduced significantly by empowering groups that have experienced success to directly share, communicate, and demonstrate their approach with less advanced initiatives. To the extent that “seeing is believing,” those participating in peer-to-peer learning exchanges are able to witness first-hand the benefits and incentives of a new activity or approach. In addition, this communication method has been important for communities working on ecosystem-based or landscape-level approaches, where natural resource management techniques and conformity with rules and regulations need to be harmonized beyond an individual community or village.

Talamanca Initiative, Costa Rica.

Started in the mid-1980s, the Talamanca Initiative brings together three local organizations and networks to improve the livelihood options of local farmers and to reduce deforestation. The initiative currently oversees more than 20 grassroots organizations, and it stands as the largest producer and exporter of organic produce in the country. Its success sharing organic farming methods has made it a best practice site for peer-to-peer learning. A regional training centre known as Finca Educativa has been established in the Talamanca Indigenous Reserve. It serves over 2,000 people per year, providing courses and workshops in agriculture, health, locally and environmentally appropriate technology, and conservation (endangered species protection, reforestation, and biological monitoring).



Project sites as “centers of excellence.”

Many groups have taken the peer-to-peer learning approach one step further by establishing on-site, community-run training centers. These learning farms, demonstration plots, and meeting spaces have incorporated on-site learning as a central and permanent feature of their work by constructing training facilities that can accommodate regular visits from other communities, researchers, and government officials. Again, by prioritizing peer-to-peer and hands-on learning, this approach has proven particularly valuable in the scaling of community best practices through the very direct exchange of knowledge, experience, and technical know-how. The approach has been equally effective for political advocacy and communicating with government officials and extension agents, offering them a direct window into community-based action, letting them assess technical and capacity gaps that government may be able to address, but also allowing them to benefit from the expertise that many Equator Prize winners have developed through years of experience.

Riba Agroforestry Resource Center (RARC), Cameroon.

RARC has established a community-funded Rural Resource Centre to provide training in agroforestry and nursery management. The center also serves as a clearinghouse for seeds, grafts, and cuttings. It covers six hectares of land, contains dormitories for visiting farmer groups, a tree nursery, demonstration plots, and a training hall. In addition, RARC is affiliated with several demonstration farms that are owned by local farmers employing RARC-recommended crops and practices. Adoption rates for RARC agroforestry techniques have increased more than 50 percent. The center receives neighboring farmer communities, agricultural extension officers, and has even hosted government staff.



Use of extension services.

Many Equator Prize winners focus on taking new knowledge and expertise to communities directly, working through extension services – local engineers, agricultural experts, and outreach officers. These individuals or groups travel to communities to conduct trainings and to tailor best practices to the needs and ecological conditions of that particular group. This model has proven particularly effective in technology transfer. Extension officers serve as communication conduits between the initiative and its constituents, ensuring responsive and tailored interventions and ongoing learning. The approach has also been used in “train the trainers” programs, in which organizations train local farmers to be experts who can either train other farmers or set up model farms.

Association Adidy Maitso, Madagascar.

The association aims to improve local farming practices, improve incomes and reduce pressure on the biologically diverse Didy Forest. Population pressure, a shortage of arable land, illegal logging, and slash and burn agriculture all threaten the forest. As part of its strategy to raise the productivity and sustainability of local agriculture, Adidy Maitso uses on-the-ground agricultural extension and outreach officers that it calls “farming engineers.” A training center (called Maison Koloharena) has been established to carry out capacity building activities and serves as a communications outpost for participating engineers. Engineers fall into one of three categories: farming facilitators, farming extension agents, and model farmers. The farming facilitators are responsible for outreach, make courtesy calls at the request of community members, raise awareness on conservation issues and priorities, and disseminate improved farming and animal husbandry techniques. Farming extension agents also make courtesy calls, but their main responsibility is conducting demonstrations for farming communities. The model farmers have applied the new techniques in their own fields, which are then used as demonstration sites of best practice for the entire community. To ensure a process of ongoing and responsive learning, each farming facilitator, extension agent, and model farmer is responsible for producing one radio show each week. The farming engineer program arose out of dissatisfaction with the normal process of one-off training courses. Instead, the association opted for a train-the-trainers approach that offers more direct, continuous, and in-depth communication with local farmers. This approach has thrived, and represents a model for high-impact and effective environmental education and knowledge transfer.



Use of culturally appropriate communication strategies.

Equator Prize winners tend to know their clientele well, and make an effort to communicate in ways that will be most appropriate for the group and surrounding communities given their level of education, mobility, and social standards. Communication often takes the form of culturally relevant events, activities, and media. Festivals and marches are one example of a strategy regularly employed by Equator Prize winners to raise the profile and visibility of an issue or group activity. They provide a public rallying point for action and awareness-raising, and are often connected to events that celebrate a shared cultural identity. This has been a particularly important tactic for groups whose activities center on advocacy and activism, such as those communities seeking greater legal recognition of property rights or resource entitlements. Another significant trend is the use of theatre, music and dance, in which environment and livelihood challenges find expression through locally relevant arts. Other groups use murals and posters to bring their work and the challenges confronting the community as a whole to the attention of the general public.

Amal-Crab Bay Community Resource Management Initiative, Vanuatu.

The successes of the Amal-Crab Bay initiative in sustainably managing marine resources in their traditional tabu area, located on the eastern coastline of the island of Malekula, has been underpinned by innovative awareness-raising efforts. A critical partner in this has been Wan Smolbag Theatre, a Vanuatu-based group that was created in 1989 by a group of part-time actors to work with communities on social, health, human rights and environmental issues. With only one small bag to carry a few costumes ('Wan Smolbag' in Bislama, pidgin English), the troupe produces plays and drama sketches, and conducts participatory drama workshops in Vanuatu's most remote villages. The success of the theatre has triggered interest from government agencies, NGOs and development programmes looking to raise awareness about issues in sustainable development. The Wan Smolbag Theatre has produced short (20- to 50-minute) theatre pieces and videos on environmental, health, human rights and population issues in remote villages located on more than seventy of the archipelago's islands.



Innovative uses of media and technology. What is surprising about Equator Prize winners is not only the number that use media technology to communicate both within and beyond their communities, but the number that have adapted new and innovative purposes for what might be considered traditional media. In some cases, groups have connected with partner organizations with expertise in certain media technologies, such as GPS mapping and motion-activated cameras. In others, however, groups have used what might be considered standard media – radio, video, and projection systems – to carry out communications strategies that are remarkably well adapted to local context, capacity, geography and culture. Box 2 lists some of these innovations.



Box 2. Some Innovative Uses of Technology for Communication

Motion-activated cameras: Both Wechiau Community Hippo Sanctuary (Ghana) and Monks Community Forestry (Cambodia) have used motion-activated cameras to communicate species richness within their conserved areas, capturing sightings of rare or endangered species, as well as deterring illegal poaching by photographing transgressors.

Aerial surveying: In partnership with Wildlife Conservation Society, Organización de Manejo y Conservación has facilitated an innovative educational partnership with LightHawk Uaxactún, a U.S. pilots NGO dedicated to conservation. The groups have partnered to fly villagers over areas of the Mayan Biosphere Reserve forest in Guatemala to educate local community members on both the condition of the intact forest as well as external threats on the periphery of their land. Community leaders are flown to various areas of the reserve where extractive industries such as oil and timber have either degraded or destroyed forest cover or facilitated land incursions by neighboring communities prone to slash and burn agriculture.

Wildlife identification: Sri Lanka Wildlife Conservation Society has cooperated with the University of Moratuwa to develop a low-cost and highly effective technology to gather information on elephant behavior, habitat usage, abundance, movement and distribution. Their “eleID” programme is an automated elephant identification system that makes use of facial/pattern recognition software. It functions as an intelligent database that is loaded with pictures of elephants and helps to develop a constantly updated habitat monitoring mechanism. When a picture of an elephant is uploaded into eleID, a specially developed algorithm analyses the picture and searches the database for previous sightings of that particular animal. In the case that that individual has been sighted and captured before, it identifies the animal and adds the new picture to the corresponding record. As the system evolves, the accumulated data helps to extract demographic and behavioural information on elephants, which is crucial for communicating the development of long-term strategies to mitigate human-elephant conflict.

GIS Mapping: Following Rapid and Participatory Rural Appraisals, The Uma Bawang Residents’ Association produced a land use map for their Keluan project area in the forests of Sarawak, Malaysia. With the help of a partner organization, the initiative was subsequently able to employ Geographic Information Systems (GIS) technology to turn the map into a digital record. This computer-based system has allowed the initiative to capture, record, store and analyze data over time, and has been used to defend the community’s borders in court. The use of GIS layers combined with recent satellite imagery has also facilitated the use of the Keluan map for resource management purposes, communicating land boundaries and usage zones to members of the community.

Video: A number of Equator groups use participatory video as a communication strategy. Komunitas Nelayan Tomia (KOMUNTO) has used video technology in the promotion of knowledge exchange between fishing communities bordering Wakatobi National Park. As well as broadcasting radio programmes on sustainable fishing in local languages and in Bahasa, the initiative has used digital video cameras to document the challenges of communities in one region to share with communities in another. This has proven a useful tool in both creating a sense of shared effort and collective action, and in transmitting success stories from one area to another.

Shidhulai Swanirvar Sangstha, Bangladesh.

In one of the most unusual outreach and communication strategies among all of the Equator Prize winners, Shidhulai maintains a fleet of 54 vessels which it uses as floating schools, libraries, health clinics, and agricultural training and extension centers. Shidhulai's fleet, which is solar-powered and equipped with the latest communication technologies, allows the organization to serve local communities located along the extensive wetland ponds in the country's northwest districts. During the annual monsoon, the area expands to form a vast body of water that makes conventional travel difficult. Of Shidhulai's fleet, 20 boats are outfitted as floating schools that move along the wetland canals from village to village holding three classes per day, six days a week in classrooms outfitted with internet-linked laptops. Ten library boats are similarly fitted with books, computers, printers, and mobile phones, allowing villagers to stay connected by internet or phone and access government services. Five health clinic boats bring free healthcare to more than 300 people per day, while five agricultural extension boats train farmers in sustainable farming methods. Training classes use locally developed content, including web tutorials, animation, and documentaries. Some programming is offered at night to accommodate farmer schedules, including a series of video tutorials that are projected onto large screens on the riverbank, allowing villagers to view from their houses.



The use of radio in particular can be seen across a large number of Equator Prize winners, and has been highly effective at reaching geographically isolated groups, coordinating the efforts of extension officers, and, in some cases, ensuring that programming and activities offered are responsive to local needs. Table 4 lists some of the ways in which Equator Prize winners use radio programming as a tool to achieve their missions.



Table 4. Examples of the Use of Radio by Equator Prize Groups

Project	Radio Use
Association Adidy Maitso, Madagascar	Adidy Maitso has used radio programming to broadcast messages on sustainable farming techniques to 16 farming villages in the Ankeniheny-Zahamena forest corridor, overcoming high illiteracy rates.
Bunaken National Park, Indonesia	The Bunaken Concerned Citizen's Forum (FMPTNB) represents all 30,000 villagers bordering the Bunaken National Park. To keep even the most remote villages informed on management issues and livelihood development programs, the forum runs a 36-station, park-wide VHF radio network.
Camalandaan Agroforestry Farmers' Association, Philippines	Forest wardens have been provided with radio transceivers, forming a relay communication system to monitor illegal forest intrusions in the Southern Cauayan Municipal Forest and Watershed Reserve.
Fiji Locally-Managed Marine Area Network, Fiji	Radio broadcasts on the success of fishing communities in managing local marine areas has played a crucial role in the replication of the LMMA approach across Fiji's islands.
Il Ngwesi Group Ranch, Kenya	Il Ngwesi purchased a radio station from Kenya's Communication Commission that allows its nine armed wildlife rangers to communicate across the sanctuary area.
Mosquitia Pawisa Apiska (MOPAWI), Honduras	Using media such as radio, posters and workshops, MOPAWI has informed more than 500 local people in the most remote villages of the region about their legal rights to traditional land as documented in national law on Afro-Honduran Indigenous Peoples.
Pôle des actions d'intégration des droits humains en afrique (PACINDHA), Mali	PACINDHA used 13 national television broadcasts and over 50 radio programs to combat poaching of chimpanzees in the Bafing Wildlife Reserve.
The Smallholders Foundation, Nigeria	Smallholders Farmers Rural Radio broadcasts programming ten hours a day on agricultural management, environmental conservation, and market supply-chain information to over 250,000 smallholder farmers. Broadcasts are aired in the local Igbo language, and enable economically marginalized farmers to acquire modern agricultural and environmental management techniques, receive up-to-date market information, and provide a platform on which to advertise their products.

Creation of and participation in knowledge networks.

Most Equator Prize winners participate in some form of organized knowledge network that can serve as a platform for formal or informal information exchanges. These networks are vital to the learning cycle that defines successful community-based work, as well as to the social and political organizing that sustains these groups and fuels their growth. A number of Equator Prize winners are associations or federations, and thus their work is actually defined by their networking capabilities, which can take the form of on-line networks, as well as participation in face-to-face consultations, training programs, and joint research programs. Many other groups are members of more traditional organizations such as cooperatives or producer groups, which provide a more conventional means of knowledge exchange and commercial organization. In either case, communication through networking helps to drive innovation and lower risks and costs by sharing successful strategies and pursuing joint activities that network members could not or would not undertake themselves.

Conservation Society of Pohnpei (CSP), Micronesia.

This network of seven marine protected areas around the island of Pohnpei in the Federated States of Micronesia has made good use of knowledge networks. The group uses both on- and off-island training and learning exchanges between staff and participating communities. The group also runs a comprehensive monitoring program – carried out with the help of community volunteers – to identify biological trends across the MPAs.



Oyster Producers Cooperative of Cananeia, Brazil.

The formation of this cooperative has not only allowed local oyster collectors to organize and market their products directly to local and regional markets, but also created a forum for the exchange of experiences among producers and for participating in training courses on sustainable oyster management, information technology, and business finance and administration.



The Indigenous Tourism Network of Mexico.

This association brings together 160 indigenous tourism microenterprises. It holds an annual National Tourism Fair, which includes expositions on indigenous music, dance, and cuisine, as well as panel discussions on indigenous tourism. The association also offers on an ongoing basis a series of 30 training workshops for its members on topics ranging from “Biodiversity as an alternative for the development of indigenous villages” to “Management of computer equipment and internet services.”



Participatory resource and needs assessments as social learning.

A common task among Equator Prize winners is the demarcation of territory and assessment of the ecosystems that are to be communally managed. Many groups have used this as an opportunity for social learning by employing a process of participatory assessment, in which community members take the lead in measuring and demarcating local resources themselves. Approached as a joint effort, the assessment exercise can be an important source of internal communication and mutual understanding of the resource base and the management challenges the group faces.

At the same time, many groups undertake participatory needs assessments, which translate as social mapping exercises. Often undertaken to map community strengths, weaknesses, opportunities and threats, the participatory needs assessments help to identify priority interventions and the kind of tailoring needed to adapt a successful approach to the environmental, socio-economic and cultural circumstance of particular groups. It is a noteworthy trend that many Equator Prize winners do not assume that a best practice in one community or village can be simply transplanted to another without a process of tailoring, tinkering and adjustment to meet specific local needs, to suit particular socio-environmental conditions and, importantly, to foster a sense of community ownership.

77

Uma Bawang Residents' Association (UBRA), Malaysia.

This community-based organization operates in the Malaysian state of Sarawak. Members of the association work with GIS survey and mapping technology to compile land use maps of communally managed forests. While customary land rights (like those of the indigenous Kayan people who are part of UBRA) are recognized by the Malaysian government, many lands have not been officially demarcated, making them vulnerable to conflicting claims from outside interests. These maps then have allowed a number of different communities to effectively communicate with one another and provide a spatial basis for legally defending community land claims in court.



Association of Indigenous and Peasant Producers (ASPROINCA), Colombia.

ASPROINCA works in the Andean region of Caldas to improve livelihood options for rural households. Specifically, the initiative has developed a suite of agricultural techniques to improve soil conservation, watershed protection, and on-farm energy production. The association employs a diagnostic approach, which uses participatory needs assessments to tailor interventions for individual farms and micro-watersheds. ASPROINCA conducts a feasibility study for each individual farm, and then develops a strategic plan based on the findings. Interventions are then tailored to the specific needs and challenges of that productive system. Property management plans are developed with a focus on agro-ecology and focus on needed adjustments to the production landscape as well as any new technologies that would be beneficial to that particular farm. These plans are then elaborated in consultation with each family with the support of an ASPROINCA promoter, who prioritizes the problems, identifies viable solutions, and explores potential capacity building and training options. After going through this procedure, families are then eligible to access resources through a rotating credit fund.



Youth and child engagement.

Communication for behavior change can also take the form of speaking to a certain demographic of the community. Noteworthy in this regard is the trend among Equator Prize winners to engage youth and children who will ultimately be the arbiters of whether or not an activity succeeds or can sustain itself over longer periods of time. Engaging youth in environmental awareness raising efforts has proved to be a popular and effective means of changing local attitudes to conservation at the grassroots level.

The Toledo Institute for Environment and Development (TIDE), Belize.

TIDE promotes sustainable income generation and local co-management of both forest and marine resources in the Maya Mountain Marine Corridor. A central programmatic dimension of its work is conducting student education and outreach, actively engaging local students in environmental action and working to 'build environmental literacy'. As part of this program, TIDE makes presentations on marine ecosystem management at local primary schools and offers field trips to the community-operated marine reserve. TIDE also oversees the Freshwater Cup Environmental Football League; to qualify as a participating team, students must organize environmental restoration projects in the community. A Youth Conservation Competition is also held annually, where young people compete for associate degree scholarships by making stage presentations on environmental themes. Finally, TIDE conducts an annual summer camp with a different environmental theme each year.



Conservation Society of Pohnpei (CSP), Micronesia.

CSP raises the capacity of communities to co-manage local marine protected areas. The organization operates an environmental education program which reaches more than 8,000 students in 27 schools across the Island of Pohnpei. The program has three main components: a youth-to-youth mentoring program, aimed at grade school students; a 'green road show,' which has staff from CSP travel to local elementary schools and make interactive presentations; and an environment club, which is targeted towards local high school students.



Combined with pioneering uses of technology, cultural awareness-raising, social exchange, and active participation in knowledge-sharing networks, Equator Prize winners have demonstrated the creative impact of effectively communicating for behavioural change. These channels of communication and shared learning underpin landscape-scale transformations. Innovations and local adaptations have allowed rural communities to conceptualize their shared heritage and common spatial domain, catalyzing powerful collective action and strengthening social ties. Once established, these communication networks act as effective vehicles for transmitting a range of messages on subjects such as health, gender equality, and education; in this way, communication capacities allow for further change and enhanced social cohesion.

Lesson 8: Land tenure security and property rights are essential

Improvements in land tenure security, property rights and resource access can be catalyzed at the local level, and are ultimately necessary for communities to deliver sustainable development benefits

Security of land and resource tenure is an essential enabling condition for local ecosystem-based initiatives. For small-scale farmers, artisanal fishers, forest-dependent communities, and pastoralists, lack of secure tenure stands as a principal obstacle to productivity, investment, and livelihood security, and a significant disincentive to the kind of long-term stewardship that sustainable use of ecosystems requires. These findings, supported by years of research, have gained increasing acceptance in developing nations among government officials concerned with rural development, poverty reduction, and broad-based economic growth.

Yet the problems of tenure security and access have proven difficult to address. National systems of property ownership are complex, with state-sanctioned tenure systems often existing side by side with customary tenure systems recognized by local tribal authorities. Overlapping and conflicting land claims are common, and the legal status of customary communal lands is sometimes uncertain. In many cases, the state itself asserts ownership over forest, pasture, and fishery resources that for generations have been managed by local peoples. The result is that many rural resource-dependent communities do not hold title to their local ecosystem base—often their ancestral lands—and resource disputes are common. Within this context, meaningful tenure reform is hard to achieve. Legal reforms that alter existing tenure patterns and empower local resource ownership can be controversial and difficult to enact on a national basis, given the economic, social, and political value associated with land and property rights.

In spite of these difficulties, Equator Prize groups have been remarkably successful at improving their tenure situations, either securing legal title to the local lands or resources with which they are involved, or legal recognition of the right to use and manage them. In many cases, this has been driven by communities and initiatives demonstrating their effectiveness as resource managers. By showing that community-based management can often produce greater economic benefits and healthier ecosystems than state management of the same parcel, many Equator Prize groups have received formal endorsement of their local stewardship from local government authorities. The same level of government has also played a proactive, rather than retroactive role in devolving land and resource management to communities in many Equator Prize cases, for instance through participatory bylaw-creation and land use planning. In a few noteworthy cases, national level policies have been the drivers of improving land tenure and resource access status for local stakeholders. Finally, Equator Prize winners have also demonstrated the effectiveness of concerted advocacy efforts for securing devolved resource management concessions.

Catalyzing tenure gains at the margins.

The relationship between grassroots civil society and local government officials is not always productive, and in some cases may even be antagonistic. Equator Prize winners, however, show that benefits can accrue to both parties from close cooperation. Where district-level (or equivalent) authorities are empowered to engage with non-governmental stakeholders in pursuing shared goals, a more equitable and democratic model of sustainable development can be forged in which pressing local needs are prioritized. Chief among these is recognition of community rights to the autonomous management of their resources, particularly when there is a track record of success which shows they can do so effectively.

The Centre for Empowerment and Resource Development (CERD), Philippines.

This pioneering initiative has demonstrated the effectiveness of devolving resource management to fisherfolk organizations, and of targeting women for managing sustainable marine harvesting zones. Its innovations and successes have been recognized by local government authorities at the barangay and municipal levels, who have integrated community fisheries management plans into development strategies for the region. CERD works at every stage of this effective transfer of fisheries management – including tenure and resource entitlements – from the state to coastal communities through its Fisheries Integrated Resource Management and Economic Development (FIRMED) program. This transfer of authority is underpinned by extensive advocacy, community mobilizing, participatory planning processes, and network development, focusing on the relationships between its fifteen fisherfolk organizations and barangay officials. The legal mandates for all of CERD's devolved management structures are secured through barangay-level resolutions, municipal ordinances, and community-based management stewardship contracts.



Community-based Marine Management Foundation, Indonesia.

Since 2002, the foundation has assisted local marine management committees across eastern Indonesia in developing regulations to govern resource management. Many communities have also developed resource use maps to demarcate their traditional fishing grounds. These regulations and maps have subsequently been given legal status by sub-district government authorities, strengthening synergies between the LMMA initiatives and regional coastal development policies. The foundation has helped communities to meet the required standards for resource regulations by facilitating legal support from the law department at Brawijaya University, in Malang, East Java. To date, eleven sites have had their usage regulations recognized by government authorities, formally recognizing the rights of these local committees over their marine resources.



In other cases, communities have been supported in establishing rights to land and resources from the outset, thanks to policies that empower local government authorities to engage communities in by-law creation, participatory mapping, and land use planning. While these processes themselves may be flawed in reality – bureaucracy is often cited as a major impediment to working productively with local officials, while governance is a critical issue at this level – the principle that customary resource managers can proactively establish their tenure rights through dialogue with local government representatives is a positive one.

81

Kibale Association for Rural and Environmental Development (KAFRED), Uganda.

The village community of Bigodi, near the town of Fort Portal in western Uganda, straddles an 8-km stretch of papyrus wetlands that is home to a relative abundance of wildlife. Eight primate species, including an endemic variety of Red Colobus, and more than 200 bird species are sufficient to draw tourists from the neighbouring Kibale Forest National Park, for which the Bigodi swamp forms an important wildlife corridor. Through the work of KAFRED, the village community has been able to benefit substantially from this ecotourism trade by establishing guided tours along a boardwalk through the wetlands, supplemented by the sale of handicrafts by the village women's group. Conservation of the wetlands has limited alternative opportunities for agriculture, however, and initially came at a cost to farming households bordering the swamp. Sustainable management of the area was therefore backed by the creation of by-laws in 1995, developed in a highly participatory fashion in tandem with local government authorities. This process allowed the management of the swamp to be devolved to KAFRED, providing the legal foundation for the group's work in wildlife conservation and income generation that has benefitted the national park and local stakeholders in equal measure.



Rufiji Environment Management Project, Tanzania.

Between 1998 and 2003, this IUCN-led intervention in the Rufiji Delta area of Tanzania worked through the Rufiji District Council to develop village environment management plans in consultation with local communities. The project oversaw the effective transfer of resource management authority from the central government to four pilot villages – Mtanza-Msona, Jaja, Twasalie and Mbunjumvuleni – comprising communities in the floodplain and delta areas affected by the flooding of the river downstream of the Selous Game Reserve. Central to this was resolving the complex land tenure situation in the region, blurred by the processes of resettlement and migration during Tanzania's villagisation scheme. Land-use maps were collaboratively produced by teams of researchers, government officials, and the communities themselves using Landsat images, aerial photographs, detailed landscape analysis, ground-truthing, and incorporation of the results into a geographic information system (GIS). These maps then formed the basis of participatory land use planning at the village level, focusing on empowering women as prime resource users in a relatively traditional Islamic society. The enduring impact of the project has been closer cooperation between communities and local government in preserving the region's delicate socio-ecological balance. The project provided evidence for the view that seemingly intractable land rights situations can be resolved at the local level.



Supportive legislation for local resource access and indigenous land rights.

In some instances, Equator Prize groups have been able to capitalize on national legislation facilitating the transfer of resource management authority or land ownership to the local level. As the rationale for community-based natural resource management has become clearer and successful examples of this have emerged, some national governments have begun to put in place legal frameworks for local devolution and co-management. Equator Prize groups have used these opportunities to put themselves forward as competent local partners that can deliver on the promise of devolution.

The Association of Manambolo Natives (FITEMA), Madagascar.

This association has helped community groups from 12 forest villages in the Manambolo Valley to take advantage of Madagascar's reintroduction of a customary resource management system in rural and coastal settings known as Dina. Traditionally, Dina are local rules or codes of conduct developed and applied by communities and typically passed on as oral tradition. While Dina are still fairly common throughout Madagascar, they do not carry the force of law. The abolition of the Dina system following French colonization of Madagascar in the 17th century led to extensive deforestation as populations grew and unregulated forest conversion to agriculture expanded.



In an attempt to re-integrate such customary rules with laws governing the use of natural resources, the Malagasy state adopted Dina as a legally recognized governance tool in 1996 through the GELOSE legislation. This law allowed the transfer of limited management rights over natural resources from the state to community associations according to a renewable contract between the state, the community association and communal authorities. According to the Dina in the Manambolo Valley area, village elders direct the timing, frequency, and quantity of the harvest or use of all forest products, including wildlife, fish, and even honey. Thanks to the work of FITEMA, reviving the Dina system has helped to preserve rainforest habitat, which provides a home for lemurs and other endemic species that fuel a growing ecotourism trade. In addition, FITEMA has focused on relieving pressure on forest areas by increasing and diversifying crop yields in adjacent agricultural zones through introduction of new crops and farming practices and installation of irrigation systems. Currently, local communities manage nearly 19,000 ha of government-owned rainforest under the Dina system; of this, some 1,000 ha have been legally transferred to local jurisdiction through signing of formal agreements with the Department of Water and Forests.

Captaincy of the Upper and Lower Izozog (CABI), Bolivia.

CABI is a grassroots indigenous organization representing 10,000 members of Bolivia's Izoceño-Guaraní people, living in 23 communities along the Parapetí River in the biologically diverse Gran Chaco region. Negotiations between Bolivia's government and CABI began in the 1990s, resulting in two landmark agreements. With technical support from the Wildlife Conservation Society, CABI successfully proposed the establishment of the Kaa-Iya del Gran Chaco National Park and Integrated Management Area (KINP) in 1995. The organization was subsequently named co-administrator of the park. At 3.4 million hectares of uninhabited forest and scrubland, the park is the largest protected area in Bolivia, and contains the largest area of dry tropical forest under protection in the world. Establishing the national park was part of a broader CABI land management strategy, however. In 1997, CABI presented a demand for a Tierra Comunitaria de Origen (TCO) – a designated indigenous territory – under Bolivia's new agrarian reform law. The government approved the request, while retaining ownership rights to underground minerals and awarding water rights to the local municipal government. By April 2005, 300,000 hectares of land had been titled. When the process is complete, 1.5 million hectares of formerly public land will be owned by CABI, as the indigenous people's legal representative, with the remainder of the 1.9 million hectares in private, nonindigenous ownership. In contrast to other cases in Bolivia, where parks and indigenous territorial claims overlap and are a source of conflict, CABI's approach created the opportunity to manage a total of 5.3 million hectares of the Bolivian Chaco based on principles of rainforest conservation and sustainable use of wildlife and other natural resources.



Advocacy for improved tenure security.

Many of the vehicles that Equator Prize groups have used to improve their tenure situations involve demonstrating to state authorities that it is in the state's interest to recognize and support local resource management rights. While this non-confrontational approach has often yielded positive results, Equator Prize winners have also demonstrated the power of well-targeted advocacy efforts for securing improved tenure and resource rights.

Ujamaa Community Resource Team (UCRT), Tanzania.

UCRT works across northern Tanzania to help secure land and resource rights for pastoralist, farmer-pastoralist, and hunter-gatherer communities, many of whom are negatively affected by the existence of large protected areas including the Serengeti, Tarangire, and Ngorongoro conservation areas. UCRT's approach has capitalized on Tanzania's village land legislation, which allows communities to develop by-laws and land use plans for their customary lands, and has also focused on improving the ecosystem management capacity of these communities. By guiding socially marginalized groups through the arduous process of securing official rights to land, the NGO has secured several landmark agreements, including the legal demarcation of the first village for hunter-gatherers in Tanzania. Where this approach has not been sufficient, however, the group has also worked in direct political advocacy on behalf of these communities. For instance, in 2008 UCRT took community representatives from across the northern districts of Tanzania before the national parliament to protest a proposed law that would have forced pastoralist communities out of "game controlled areas," that is, areas managed exclusively as game habitat. The bill was eventually amended to allow pastoralists to continue their traditional resource use in these areas. The success of UCRT's multi-pronged approach indicates that, in spite of the complexity of the tenure/resource rights issue, it is possible to make progress with a systematic approach to improving the legal literacy of communities, supplying critical technical help to meet bureaucratic requirements, and building local resource management and governance capacities, combined with direct advocacy when needed.



Conservation Melanesia, Papua New Guinea.

Since 1995, the biologically diverse Collingwood Bay area on the coast of Oro Province, north-eastern Papua New Guinea, has been the setting for a conflict between the province's indigenous Maisin people and proposed commercial logging and palm oil development of the region's forests. The Maisin community numbers around 3,000 members living in nine coastal villages spread across the bay. Their ancestral lands cover around 262,000 hectares of tropical forest, forming the watershed of five major rivers. In 1998, 38,000 hectares of the Maisin customary lands were fraudulently signed over to a Malaysian investor in the capital city of Port Moresby. The land was purchased from individuals claiming to represent the Maisin people, but was carried out without the knowledge of the community. The investor planned to clear the forest for palm oil development; the first the Maisin knew of the land lease was when barges arrived in Collingwood Bay in June 1999 carrying bulldozers and other logging equipment. Conservation Melanesia, a local environmental NGO, was a critical ally in combating this attempted logging operation. In close consultation with village representatives, the organization has coordinated a multi-pronged approach to securing the community's rights to the area, including working with researchers to document the area's rich diversity of flora and fauna, raising local awareness of environmental conservation and landowners' rights, and widely publicizing the Maisin's struggle to preserve the rainforest. Delegations of Maisin travelled to the United States, Japan, Australia, and New Zealand to speak before audiences of conservationists and to seek out financial support their cause, while CNN and the Australian Broadcasting Corporation covered the story of the Maisin's fight against commercial logging. After a three-year battle, in May 2002 the Papua New Guinea National Court ruled in the Maisin's favour, returning the title of their land back to them. The challenge for the community and for Conservation Melanesia since this ruling has been developing a sustainable, long-term resource management strategy that effectively conserves the Maisin's traditional forest land and supplies the community with a means of supporting themselves.



Equator Prize winners demonstrate that, even in the absence of broad-based tenure reforms at the national level, communities can often improve their tenure status markedly with actions at the local level—actions that are within their own power. There is no single strategy for securing and enhancing community stewardship over territory and resources. Rather, there are a number of approaches, but all require a well-articulated plan for exercising local management authority put forward by a local organization with standing in the community—qualities embodied by most Equator Prize groups. On the part of national governments, the cases demonstrate that tenure reform can be led by national policies and legislation, and can be realized by empowering local governments to work with grassroots civil society. Granting rights to land and resources to local communities has benefits for conservation and development – catalyzing this process at the margins can effect sweeping transformations in rural landscapes.

Lesson 9: Local good governance exists

Governance structures of local initiatives can vary, but full and active participation of a range of stakeholders is critical.

Participation is at the core of Equator Prize success, encouraging a sense of ownership of the group's activities, and helping to catalyze and sustain collective action. At its root, participation underpins the process of creating the "community" at the center of the initiative, that is, the collection of individuals or groups committed to act in concert for shared benefits. In some cases this community may already exist, forged by a shared tribal or cultural heritage, or identity with a place or political jurisdiction like a village. But even in the most uniform group, different needs and visions may be present, and a unity of purpose –or sense of community—cannot be taken for granted. Further, in many Equator Prize initiatives, the group of stakeholders is quite broad, and their perspectives may vary considerably. For example, the "community" in many Equator Prize winners may, in reality, comprise several neighbouring villages, perhaps bordering or inhabiting a protected area; an indigenous people spread over a large area of land; or even a collection of many different individual communities united through a federation or network of similar initiatives.

In all of these cases, participation in the governance of the initiative is critical for creating the sense of shared responsibility, sacrifice, and benefit that distinguishes Equator Prize winners. In the same way that tenure and access rights give Equator Prize groups "ownership" of the physical resources they need, participation gives group members ownership of the decision-making process. Participating in decisions on how the ecosystem should be managed or the enterprise conducted, what rules should be adopted to insure sustainability, or how benefits should be shared gives people a stake in the effort's success and encourages them to continue their collective action and abide by the group's rules, in other words, to act as a community.

Governance structures that allow for participation.

However, the ability of group members to participate depends a good deal on the governance structure of the initiative, that is, its institutional setup and the relative role of group members and group leaders in making decisions and distributing benefits. Equator Prize groups show a wide variety of institutional structures. Most include some sort of joint decision-making body such as a general assembly through which members are either directly involved in taking management decisions or are consulted on major issues and undertakings. In some cases, group action proceeds only when a general consensus is reached among members; in others, a simple majority is required. In many groups, day-to-day decisions are not made by the general membership, but left in the hands of a Board of Directors, executive committee, or various expert committees.

The point here is that many different institutional structures, adapted to the many different circumstances present in Equator groups, have been shown to succeed at the local level. The quality that links them is an embrace of community participation not as window dressing, but as a fundamental strategy to express community demand, guide project activities, and sustain community interest over time. Even where more hierarchical customary leadership is involved, essential aspects of consultation, inclusion, and other features of democratic governance have generally been included.

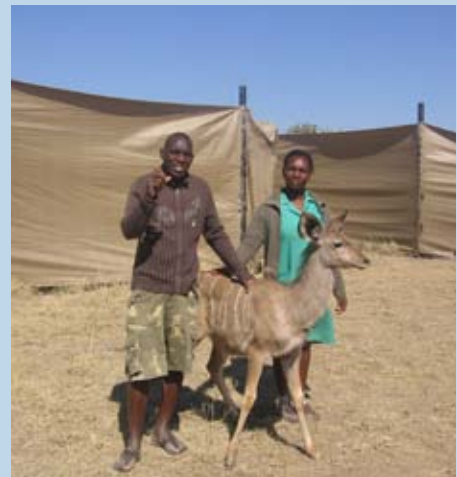
Arnavon Community Marine Conservation Area Management Committee, Solomon Islands.

Although the Solomon Islands government holds jurisdiction over the waters surrounding Arnavon Island, three neighboring tribes have claimed customary use rights to these waters, creating conflict among these groups and leading to unsustainable use of the area's marine resources. The Arnavon Community Marine Conservation Area and its Management Committee emerged as a response to this dispute and an answer to the resource depletion. The Management Committee consists of two elected representatives from each of the three competing villages, as well as representatives from key government ministries concerned with marine resources and conservation, the provincial government, and an environmental NGO. The formation and governance of the Marine Conservation Area has been a catalyst for greater interaction and social cohesion among the three communities, since conservation and development decisions taken by the group—such as the designation of no-take zones or investments in alternative livelihood projects—are made with the assent of the communities themselves and are calibrated to distribute joint benefits and costs equally.



Nꞑa Jaqna Conservancy, Namibia.

This conservancy in north-eastern Namibia covers some 9100 km² of arid woodlands and desert populated by the indigenous San people. The general governance structure for the conservancy, in which local communities have obtained wildlife management and use rights on state-owned land, is prescribed by Namibian law, including a general assembly in which each conservancy member over 18 years of age can vote. But Nꞑa Jaqna has adopted a highly consultative governance model that goes far beyond the legal requirements. Conservancy leaders drive from village to village, often spending days at a time in their cars crisscrossing the remote area in order to discuss the conservancy management plan with each community and receive its endorsement. This reflects the fact that the San do not have a hierarchically structured leadership system, and view their leaders more as chairmen whose responsibility is to convene and oversee the discussion among villagers.



The Association of Forest Communities of Petén (ACOFOP), Guatemala.

This federation spans 23 community organizations managing 450,000 hectares of the Mayan Biosphere Reserve. The sense of “community” in this case comes from their combined efforts to sustainably manage the reserve’s forests in individual concessions. The organization has fostered a strong sense of collective action through a highly participatory institutional structure in which officials elected from the membership serve two-year terms on various decision-making bodies, including a General Assembly, Management Board, Audit Commission, and Executive Board. The General Assembly is composed of all individual members and organizations of the federation, and its decisions supersede all other decision-making bodies. Within the organization there are other entities which, although not regulated in the statutes, are of great importance for the community stewardship process. One such example is the Advisory Council, which is made up of key leaders who have at some point played a role within the community organizations. They give advice on high priority issues in order to help the board of directors and the Executive Board to make more consensus-based decisions.



Typically, Equator groups use some form of formal or informal vote as part of their participatory process, and often elections are used as a primary accountability mechanism. Other accountability mechanisms such as official minutes, year-end reports, and open account books are also a part of many initiatives. Thus, most Equator Groups reflect the core values of democratic governance, in which those affected by decisions are encouraged to be part of the decision-making process—either directly or through a representative—and are supplied with the information and opportunity to do so.

However, there is considerable variability within this general model, reflecting the particular membership, culture, and work of the group. For example, in many groups, traditional institutions such as village councils or chiefs are part of the governing body. Inevitably, governance structures reflect the culture and customary views on decision-making of the groups involved. The key, however, is that these structures facilitate the creation of the “community” as a context for collective action, both by tapping into existing traditional authorities and by extending membership of this community to previously disenfranchised groups.

The Wechiau Community Hippo Sanctuary Management Board, Ghana.

In a society where traditional village authorities play a vital role as opinion leaders, and in which customary norms contained in legends and taboos underpin conservation efforts, the integration of existing local hierarchical systems within the initiative's modern management structure has been fundamental to its success. The sanctuary's Management Board balances the participation of traditional authorities from its 17 constituent villages, including Wala chiefs and Wala and Birifor community representatives, with non-voting advisory bodies that include the Ghana Tourist Board, regional government representatives, and the Nature Conservation Research Centre, a Ghanaian conservation NGO.



Proyecto Nasa, Colombia.

One of the principle objectives of the Nasa Project is to increase the political and organizational capacity of Colombia's indigenous Páez peoples, who have been disproportionately affected by violence in the Valle del Cauca region. By strengthening regional political autonomy and exercising their political rights, the indigenous groups involved in the project have successfully lobbied for access to a greater share of public funds and services. In an unprecedented wave of electoral victories, indigenous councils have sent representatives to national and provincial legislatures, have taken control of numerous municipal governments, and have even been voted into executive positions at the provincial level, supported by coalitions of indigenous, labor, peasant (campesino), and urban popular organizations. Their struggle has led to legal recognition of the fundamental rights of indigenous peoples, such as recognition of the autonomy of their resguardos (communal indigenous lands) in the 1991 Colombian Constitution.



Leadership and participation.

Many Equator Groups have been created and led by charismatic individuals with strong leadership qualities. Though Equator Prize activities are defined by group effort and community participation, their vision, goals, and activities are often inspired and guided by strong community leaders. Good leaders are dynamic yet flexible, allowing them to work at different levels to catalyze and channel group action, interact with local and national government, coordinate external support, and communicate successes. But it is also important to acknowledge that, unless they take care, strong leaders can sometimes become a center of gravity that dominates decision-making and discourages free and open exchange and participation. Fortunately, there are many examples among Equator Prize cases of leadership that has been both inclusive and inspiring of the group's vision.

Monks Community Forestry, Cambodia.

This innovative initiative provides one of the best examples of the power of leadership both to provide direction and to inspire participation at the same time. In 2001, the Venerable Bun Saluth, leader of a community of Buddhist monks called the Samraong Pagoda, initiated the protection of an 18,000 ha forest parcel in northwest Cambodia. Responding to forest loss due to timber concessions, illegal logging, and land encroachment, the monks determined to demonstrate with their protection the Buddhist teachings of elimination of suffering of all living beings and, with their actions, to inspire the community to a deeper awareness of the importance of the forest and its sacred nature. Monks are well-respected in Cambodian society and considered to be working for the good of all people, so their message was well-received. Many local residents were also directly dependent on the forest for income and subsistence, increasing the relevance of the protection effort. As a consequence, many people from the six villages in and near the forest began to participate in the forest protection patrols. As the initiative matured, a Community Forest Management Committee composed of monks and villagers was formed and eventually the forest was legally designated by the government as a community forest and by-laws for use drawn up. While the monks still act in a leadership position and compose part of the Community Forest Management Committee, ownership of the initiative and most of the work of managing the forest has broadened to include the 3,700 residents in the surrounding villages.



One of the concerns around strong leadership involves the question of leadership transition or succession. Charismatic leaders sometimes seem irreplaceable, yet for the initiative to sustain itself a transition to new leadership must be negotiated at some point. Leadership transition can sometimes destabilize the internal dynamics of a group, but it can also spur new creativity, expansion, and a reexamination or realignment of management goals and strategies, and can thus be an important stage in the group's evolution and maturation, opening the door to greater participation. A few groups have incorporated leadership transition in their governance structures.

Association of Smallholder Agroforestry Producers RECA Project, Brazil.

Situated in Porto Velho, in the north of the Brazilian state of Rondônia, Projeto RECA (Reflorestamento Econômico Consorciado e Adensado, roughly translated as “Joint Consortium for Economic Reforestation”) has brought tangible benefits to migrant farming households by restructuring local forest-based agriculture, and developing secondary processing of natural resources. The initiative works through a highly participatory producer group model, with groups of neighbouring households represented in central RECA decision-making processes by a coordinator, a leader and a women’s representative. Taken together, the coordinators of each group make up the RECA board, of which two are elected to hold the positions of president (a term of two years) and vice president. The president does not coordinate decision-making, but rather is responsible for conducting discussions among the coordinators to ensure decisions are taken in a fair and equitable manner that is consistent with member demands and needs.



The lesson from Equator Prize winners is that local good governance does exist, and that it can support the equitable spread of benefits from targeted investments. This answers an often-heard call from governments and donor agencies for accountability and inclusion at the grassroots level. Equator groups actively seek to include under-represented, disenfranchised, and socially marginalized sectors of society, while often supporting traditional authorities. This highly participatory model of collective action can also act as a complement to formal democratic institutions of local and state government. In cases where participation in elections may be low or geographically isolated communities are located far from political centers, Equator Prize winners can act as proxies for expressing local demand. Modern institutional models have been adapted to fit local scenarios, ensuring that development needs are expressed and met.

The experience of Equator Prize winning initiatives demonstrates that group governance is not a static condition defined by a codified institutional structure and an unchanging leadership group. It is a more fluid and dynamic process that must reach across landscapes and generations to unite stakeholders in common cause and to nurture the leadership that will see this vision into the future. The communities that endure at the heart of Equator Prize groups are forged through active sharing in the costs and benefits of local action. They demonstrate not only that strong and equitable governance is possible at the grassroots level, but that it is vital for sustainable local development.

Lesson 10: Scaling of success of success is possible and can bring landscape-level change

Scaling is common, reflecting both the demand for local solutions and the power of peer-to-peer demonstration.

Equator Prize cases offer encouraging news for governments and multilateral donors searching for local approaches to sustainable development that can be “scaled-up” – expanded in scope and reach – or “scaled-out” – successfully replicated in another setting. Many Equator Prize cases present compelling evidence that rapid scaling is not only possible, but can be achieved with relatively small investments. This finding is critical in arguing against the idea that local solutions invariably stay local, or that investing in grassroots initiatives is not cost-effective. In fact, demonstrable success in one locale can and often does have a catalytic effect, spurring its adoption by neighbouring groups or in other contexts. This has been actively facilitated and encouraged by a range of methods employed by Equator groups.

The Yayasan Mitra Tani Mandiri (YMTM), or Independent Farmer’s Partnership Foundation, Indonesia.

YMTM began its work on the Indonesian island of Timor in 1995 in five villages with 297 households. By encouraging the formation of local farmers groups and the adoption of sustainable crop and agroforestry techniques to replace the predominant “slash and burn” methods, YMTM was able to help local farmers to significantly raise their income and preserve their soil and water resources. By 2006, buoyed by its success and additional funding, YMTM had expanded its working area to 22 villages and 2695 households; by 2010, YMTM was working with 40 villages and some 5300 households. Moreover, at least 10 other local foundations have adopted YMTM’s model of combining agricultural extension services and institutional development to give communities the technical and political means to grow their local agricultural economies while sustaining their soil.



The scaling of Equator Prize winners is not one-dimensional. Four distinct types of scaling can be identified in case studies:

Quantitative scaling.

This is seen where a program or organization has expanded its size by replicating itself or increasing its membership base, its constituency, or its geographic influence. Equator Prize groups have generally achieved quantitative scaling through direct outreach to local groups in similar circumstances. Indeed, the basis of most scaling in Equator groups is the power of peer-to-peer communication and demonstration. This has been behind many cases of rapid growth in membership, which has transformed some initiatives from community-level initiatives to landscape-scale movements.

Community Markets for Conservation (COMACO), Zambia.

This social enterprise has grown from a few hundred rural farmers in Zambia's Luangwa Valley to more than 32,000 in around seven years, largely due to the visible benefits—in greater food security and increased cash income—from adopting a suite of conservation farming techniques such as dry-season land preparation using no or minimal tillage, use of crop residues to suppress weed growth, and rotating and inter-planting crops with nitrogen-fixing species. Farmers join small producer groups of around 15 families, which then receive on-going training and demonstrations from COMACO's extension workers and a large contingent of lead farmers selected for their training skills. COMACO then agrees to purchase any surplus the farmers produce, and rewards farmers with a yearly dividend if they comply with COMACO's approved practices.



Aharam Traditional Crops Producers' Company, India.

Aharam has reached around 15,000 rural producers in the same time period as COMACO, encouraging organic farming methods and medicinal plant collection in the Ramnad dryland plains of India. As in the case of COMACO, rural producers were encouraged to change farming practices by the improvements in household food security and incomes they observed in households that belonged to these organizations. This was facilitated by the peer-to-peer learning model used by Aharam, which encourages dialogue between member and non-member farmers, supplemented by formal training. Regular producer group meetings—augmented by financial incentives—encourage adherence to sustainable farming techniques and ease the transfer of knowledge between the central organization and its farmer clients. Aharam has also employed a producer group-based participatory guarantee system to ensure that commodities meet organic quality standards.



Beyond simple growth in an organization's membership, quantitative scaling also encompasses the replication of an organization's management methods or organizational model by outside groups. Success is a powerful message that similar groups in other communities are anxious to hear. The demand for a viable route toward resource security, greater income, and a way out of the political marginalization experienced by many villagers has meant that Equator groups have been sought out as exemplars, mentors, and advisors by many outside groups. This mode of organic scaling is thus personal and well-supported by local demand, which probably accounts for its effectiveness. Yet many Equator groups that have exported their techniques and tactics have also understood that flexibility is required as well, since every local situation is unique.

The Muliru Farmers Conservation Group, Kenya.

The Muliru Group in western Kenya has pioneered home cultivation of the indigenous medicinal plant *Ocimum kilimandscharicum* as a way to increase agricultural incomes and relieve pressure on the nearby Kakamega forest. The group has grown rapidly since it built a processing plant in 2005, with the acreage under cultivation increasing 700%. With 40% of the local population—some 2500 people—now involved in cultivation and processing, and average incomes increasing by 300%, interest in the Muliru model has spread both within and beyond Kenya. Knowledge generated by the project, which turns the processed *Ocimum* into a commercially successful medicinal balm, has been exchanged through lectures, demonstrations, storytelling, radio and television interviews, and site visits and exchanges. Since its inception, over 800 people have visited the initiative to learn about its cultivation, production, and marketing techniques. Two communities outside of Kenya—the East Usambara Farmers Conservation Group in Mazamba, Tanzania, and the Budongo Community Development Organization in Masindi, Uganda, have now adopted the initiative's model as a means of creating sustainable local employment that can ease pressure on nearby forests.



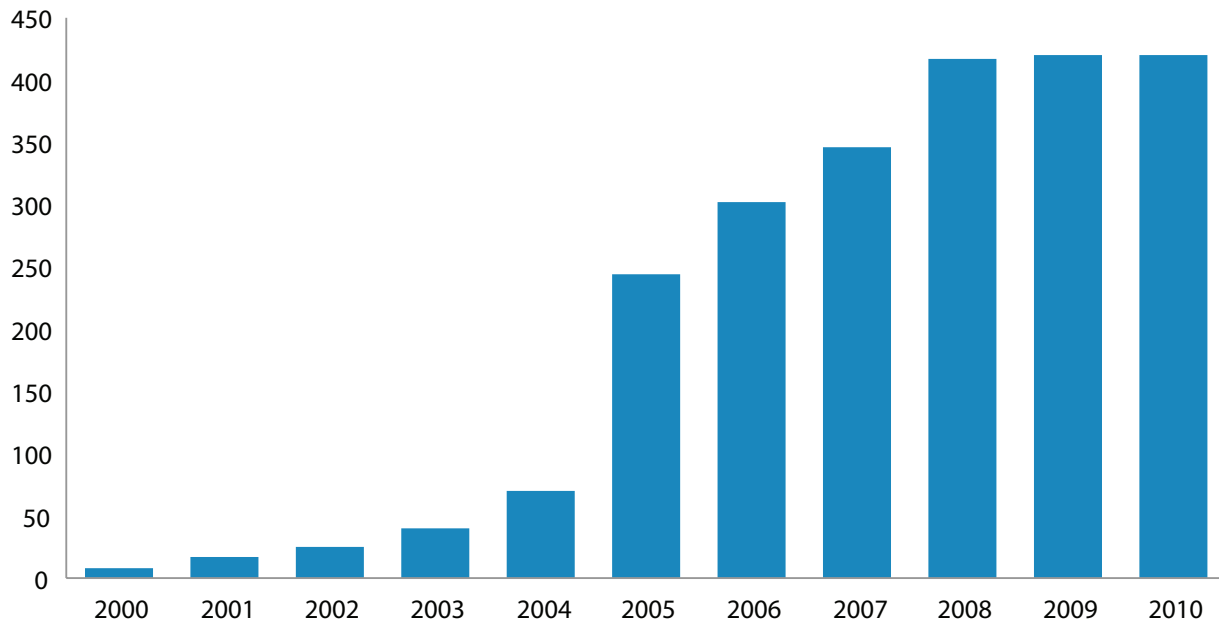
Fiji Locally-Managed Marine Area Network, Fiji.

The community of Ucuivanua on the eastern coast of Fiji's largest island was the site of the first "locally managed marine area" (LMMA) in Fiji in 1997. In consultation with scientists from the University of the South Pacific, villagers declared a 24-ha stretch of inshore waters closed to fishing and shellfish collection for three years, a practice in keeping with the traditional practice of declaring taboo prohibitions on local fishing for certain species. After 7 years of local management, the clam populations had rebounded in the LMMA and village incomes had risen significantly with increased harvests. News of Ucuivanua's success spread rapidly, and with it the practice of declaring LMMAs.

A support network—the Fiji Locally Managed Marine Area Network—sprang from this. From its beginnings in one village in 1997, the locally managed marine area model grew exponentially (see Figure 3). By 2009, the network had increased to include some 250 LMMAs, covering some 10,745 km² of coastal fisheries, or more than 25% of Fiji's inshore area. This process of rapid replication has been mirrored across the Pacific, as other countries have followed Fiji's example, with flourishing networks developing in areas of Indonesia, Micronesia, Papua New Guinea, the Philippines, and the Solomon Islands. Various strategies have been used to communicate the success of the LMMA approach within Fiji. Newspaper articles, radio shows, television, newsletters and brochures are some of the media used to disseminate the network's work across the country, leading to requests for technical advice from individual communities.



Figure 2. Growth of the Fiji Locally-Managed Marine Area Network (Fiji, Indonesia, Micronesia, Papua New Guinea, the Philippines, and the Solomon Islands), 2000-2010



Functional scaling.

This refers to organizations increasing their scope of activity, or expanding their portfolio of activities. Functional scaling allows Equator Prize groups to diversify the services they render and reach beyond their original task to offer complimentary activities that expand their operational range. It makes them more effective service providers offering a broader range of benefits.

Kijabe Environment Volunteers (KENVO), Kenya.

KENVO has worked with rural communities on the Kikuyu Escarpment in Kenya since 1996, with a primary focus on forest conservation and reforestation. The organization has evolved beyond this initial focus, however, and has developed into a flexible delivery mechanism for donor-funded interventions and a powerful vehicle for holistic local development. Their current range of activities includes selling affordable fuel-efficient stoves to poor farming households; distributing mosquito nets to combat increased incidence of malaria in escarpment communities; encouraging bee-keeping and fish-farming as alternative livelihood activities for farmers; intervening in conflict resolution over water access between Maasai and Kikuyu tribes; installing water tanks and tree nurseries in local schools as part of a comprehensive environmental education program; and developing eco-tourism through the creation of an eco-lodge in partnership with a local Maasai tribe.



97



Organizational scaling.

This takes place when an initiative strengthens itself internally, gaining in capacity, experience, financial independence, and effectiveness within the community. For example, many Equator groups have increased their financial independence by diversifying their funding sources and developing commercial enterprises. Others have increased their management capacity through staff development, or strengthened themselves institutionally through strategic partnerships. This type of organizational development improves their long-term effectiveness and sustainability.

Talamanca Initiative, Costa Rica.

The Talamanca Initiative brings together Asociación ANAI (a local NGO), local communities, a rural producers association, and government ministries to encourage farmers to adopt practices that both conserve the environment and generate income in the Talamanca region of Costa Rica. Over three years, ANAI met weekly with farmers from local communities to design regional programs to address sustainable development and conservation issues. This led to the formation of many new grassroots organizations such as the Association of Small Producers of Talamanca, a regional training centre, and community savings and loan groups. As a result of this organizational development, the initiative now involves more than 20 grassroots organizations, 1,500 families, small producers and Costa Rica's Ministry of the Environment and Energy. Participants include men and women of all the social and ethnic groups of the southern Caribbean region of Costa Rica, including Afro-Caribbean, indigenous, and mestizo peoples. Through concerted local capacity building and skills training, the Talamanca Initiative has developed a multi-faceted approach to sustainable development.



Political scaling.

In addition to their success at direct communication with other groups, Equator Prize winners have proven adept at influencing policy at the regional or national level in ways that encourage local initiatives. This ability to engage in the political process and forge relations with the state and other influential organizations is a form of political scaling that complements and intensifies the physical and geographic scaling where initiatives grow and replicate their activities among new groups in new locations.

Andavadoaka, Madagascar.

The village of Andavadoaka along the southwestern coast of Madagascar provides an elegant demonstration of both physical scaling and political scaling resulting in significant policy influence at the national level. In 2003, two large commercial seafood marketers began to significantly increase their purchase of marine products from coastal fishers along the southwest coast, with octopus representing some 70% of the products purchased. With the sudden increase in commercial interest and the resulting increase in fishing pressure, the local octopus population declined rapidly. In response, village leaders sought a more sustainable mode of octopus collection than the unregulated hunting then practiced. With guidance from Blue Ventures, a UK-based NGO, Andavadoaka created a trial “no-take zone” in 2004 where octopus hunting was banned—effectively the first locally managed marine area in Madagascar. The no-hunting rule was socially enforced, rooted in the tradition of Dina, or local codes of conduct, which are common throughout Madagascar.



The results of the collecting ban were dramatic. When the ban was lifted after seven months, the mean weight of octopus caught had increased almost 50%, translating to increased financial returns to local fishers. These results galvanized the leaders of nearby villages, prompting many to ask Andavadoaka for support in creating no-take zones in their own near-shore waters. An inter-village organization was created to assist these villages, and ultimately 23 villages—including Andavadoaka—came together to form the Velondriake Locally Managed Marine Area, containing not just temporary octopus no-take zones, but other permanent no-take areas where fish, mangroves, and other marine organisms are protected. In July 2006, leaders of these 23 villages proposed to the government a unified Marine Protected Area combining these local management zones. The government was impressed with the effectiveness and social benefits of the local effort, and embraced the idea of community-based marine management. Since 2008, the government has created 50 additional locally managed marine areas, and in 2010 it granted Velondriake and 71 other local reserves provisional protected status under Malagasy law. Thus, in six short years, the Andavadoaka model of marine management had spread along some 400 km of Madagascar’s coast and catalyzed a significant change in marine management policy that favored local control.

The ability to scale shown by Equator Prize communities has important implications. If local ecosystem-based initiatives are to offer an alternative or complementary rural development model, then these initiatives must demonstrate that they can replicate successes in many communities so that they create an aggregate impact at a regional and national scale. Equator Prize experience shows that scaling, driven from the local level, is quite possible. This organic scaling has proceeded, for the most part, even without concerted government intervention. It is effective because it is well-calibrated to the goals and capacities of local groups and well-informed about the obstacles to local action.

Scaling is essentially a reflection of many of the key strengths of Equator Prize winners: communicating messages for behavioural change, demonstrating results, and the recognition that participatory and inclusive processes underpin transformative social change. Yet this organic scaling undoubtedly suffers from many limitations, such as lack of technical and financial support and a lack of coordination and effective communication among different local groups. Presumably, a coordinated national program to encourage local scaling could address some of these limitations—both technical and at the policy level—and measurably speed the scaling process.

Lesson 11: Partnerships matter

Partnerships enrich local initiatives, connect them to vital support services and markets, and widen their spheres of influence and connection.

The importance of partnerships to enabling, sustaining, and scaling up community-based initiatives has been emphasized from the genesis of the Equator Initiative in 2002. While Equator Prize groups tend to be highly self-reliant, there are many ways in which outside partners can contribute to the success of community-driven projects by providing catalytic funds, advice, appropriate technology, and a myriad of support services that these groups cannot yet provide for themselves. The history of the Equator Prize, then, is also a history of successful partnerships, from which several salient findings emerge:

Multiple and diverse partnerships are better.

Each Equator Prize winner typically has a number of partners, spanning a wide range of organizations. Such diverse and cross-sector partnerships allow local groups access to many different kinds of support: financial, technical, organizational, commercial, and political. Many partners are NGOs—some local and others national or international—or other civil society organizations, such as national federations or unions. These organizations often provide guidance with the process of social organization, conduct various kinds of capacity building, provide specialized services such as accounting or legal services, or help local groups connect with similar groups in regional or national associations.

Scientific organizations and universities often advise on environmental management, monitoring, or access to appropriate technology. National or international development organizations may be a source of start-up funds or other financial support, as well as a partner in networking with other organizations, and communicating with governments, technical communities, and peer groups. Private sector partners may provide access to commercial markets, business associations, and new technologies. Government officials are sometimes part of the governance structure of the initiative (e.g., sitting on the governing board), or enter into legal agreements for the co-management of local ecosystem resources. Government is also a frequent source of technical and business extension services. This multiplicity of partners keeps groups from becoming dependent on any one or two partners for assistance, whether it be financial or technical, and thus increases the autonomy and sustainability of initiatives.

Table 5. COOPEROSTRA Partner Organizations and Their Roles

Institution	Relation to the Project	Type of organization	Role in the Project
Cooperative of Oyster Producers of Cananéia	Primary Group of Beneficiaries; Lead Organization	Organization of producers	Organization of extractors, management of the venture
Residents' Association of the Extraction Reserve of Mandira District	Sister Organization of Local Project Beneficiaries	Community organization	Organization of the community, experimentation in management techniques
Forestry Foundation of the State of Sao Paulo (Secretary of State for the Environment)	Co-ordination of the Program of Planning the Use of the Mangrove Swamp Oyster in the Estuary of Cananéia	Government of the State of São Paulo	Technical support for the design of projects, fund raising, publicity, political and financial support
Fisheries Institute (Secretary of State for Agriculture and Supply)	Co-coordination of the Program	Government of the State of São Paulo	Research on the natural stock of oysters in the mangrove swamp and management techniques of the resource and publicity
Nucleus of Support of Research on Populations in Humid Areas in Brazil	Technical and financial support	University of São Paulo	Social research, political and financial support
C. E. Gaia Ambiental [Gaia Environmental]	Technical support	Local non-governmental organization	Organization of the extractors, participation in studies
Margaret Mee Botany Foundation	Financial support	Non-governmental organization	Donor of financial resources, administrative support
Pastoral Commission for Fisheries	Political support	Non-governmental organization	Organization of the extractors, political support
Institute Adolfo Lutz (Secretary of State for Health)	Technical support	Government of the State of São Paulo	Quality control of product (laboratory analysis)
Ministry of the Environment (Projects PED and PD/A)	Financial support	Federal Government	Financial support
Municipal Government of the Seaside Resort of Cananéia	Financial support	Municipal Government	Donation of land for construction of purification station

The Nguna-Pele Marine and Land Protected Area Network, Vanuatu.

Nguna-Pele has brought together a vast array of partners since its initiation in 2003. Among more than 60 different partner organizations are local and regional NGOs including the Wan Smolbag Theatre Group and the Foundation for the Peoples of the South Pacific, a non-profit group that provides capacity building to indigenous communities to improve their project management skills. The Environment and Fisheries Departments have been consistent supporters of the Nguna-Pele initiative since its initiation, while the Vanuatu Environment Unit has provided technical assistance. The Government of Vanuatu has recognized the Nguna-Pele area as the first example of a community-managed network of marine reserves and conservation activities in Vanuatu. U.S. Peace Corps Vanuatu has provided volunteers for project sites. Researchers from James Cook University have focused on adaptive community conservation in Nguna-Pele, while the university has also supported local technical capacity for social and ecological monitoring. University of the South Pacific has conducted studies within MLPA conservation areas; and Reef Check International has collaborated with the Nguna-Pele network to conduct reef assessments. Finally, the initiative has partnered with Sailaway Cruises, a private tourism agent located in Vanuatu's capital that specializes in eco-tourism, to bring visitors to the islands.



The Inter-institutional Consortium for Sustainable Agriculture on Hillsides, Colombia.

This association has an organizational makeup that incorporates six regional and local governmental agencies and authorities; five non-governmental organizations; one international partner, in the form of International Center for Tropical Agriculture; and the Cabuyal River Watershed Users' Association, an umbrella group consisting of twenty grassroots initiatives working in and around the Cabuyal River watershed.



Partnerships do not diminish autonomy.

Equator Prize partners have consistently shown that it is possible to provide planning and organizational support, conduct capacity building programs, encourage institutional development, and provide funds without diminishing the autonomy or disrupting the grassroots nature of Equator Prize groups. Both partners and Equator groups have contributed to this ability to remain autonomous. Successful partners understand that they are not in a lead role, but a facilitating role, responding to a community's demand for services. This is not to pretend that partner organizations do not act from their own agendas in providing services or funds. However, effective partners operate from the clear understanding that their success ultimately hinges on empowering the local group and helping it to clarify and actualize its plans, not on increasing its dependence on a particular service or funding scheme. On the community side, strong leadership has often served to maintain the autonomy of Equator groups by clearly presenting the group's vision and retaining for itself the leadership role in the partnership. The institutional structure of Equator groups, emphasizing joint decision-making and participation, also tends to retain authority with the community. In other words, Equator groups have proven adept at remaining the center of gravity of their initiatives while absorbing help from other organizations.

Makuleke Ecotourism Project, South Africa.

Located in the northern part of South Africa's Kruger National Park, the 24,000-hectare Makuleke concession was created in 1998 following a widely-publicized land rights campaign on behalf of the displaced Makuleke community. Deciding to retain its conservation status for its own benefit, the community entered into a joint management agreement with Kruger National Park. The agreement returning land title back to the community allowed two roles for strategic partners: conservation management and commercial development. South Africa National Parks was identified in the agreement as the partner for the former, while Makuleke maintained complete autonomy in choosing its commercial partner. A contract was signed with Wilderness Safaris, a company specializing in luxury ecotourism across southern Africa, for the construction and development of Pafuri Camp, an eco-lodge enterprise situated within the community's traditional lands. What emerged then was a unique partnership between a community, a private sector partner and the state. Ownership of the Makuleke community land was returned to the Communal Property Association, which holds responsibility for the land on behalf of community members. The land itself remains part of Kruger National Park for a period of 50 years, subject to review after 25 years. A joint management board was established for the day-to-day management of conservation activities in the territory, while all commercial benefits arising from the land accrue to the community, and South Africa National Parks remains responsible for conservation matters subject to directives from the joint management board.



Local groups can graduate from partner support.

While external partners play critical and often long-term roles in local initiatives, their support can be phased out over time. Equator Prize winners demonstrate various ways of doing this, including the development of self-financing commercial activities, creation of endowments to replace project-based donor support, or making the transition from externally-led conservation and development interventions to locally-owned programmes of work. A key facet of this is organizational capacity building, to ensure that capacity exists on the ground to continue managing projects beyond external technical assistance. Another common strategy is that of empowering community youth members to take on leadership roles within the organization. Finally, the creation of locally-managed NGOs to replace the work of external partners has been an important stepping stone for many Equator Prize cases.

Tribal Communities of the Jeypore Tract of Orissa, India.

The M.S. Swaminathan Research Foundation (MSSRF) was concerned about the rapid depletion of rice diversity in the Jeypore tract of the Indian state of Orissa, once the home of the largest number of rice varieties in India, numbering more than 1750 strains. With a pro-poor, pro-nature, pro-women mandate, MSSRF undertook to improve the condition of poor farmers while revitalizing vanishing rice varieties. In 1998, the institute began a project on the conservation, enhancement, and sustainable use of local rice biodiversity, involving revitalization of traditional rice conservation practices, participatory plant breeding, development of new markets for the conserved rice varieties, and introduction of appropriate technology to facilitate rice farming. While coordination of initial research, pilot studies, and funding was handled by MSSRF, the institute has increasingly handed control over to local actors among the tribal communities of the Jeypore Tract through the development of community-based organizations that are carrying out projects with increasing autonomy from the foundation. These include the Panchabati Grama Unnayana Samiti (PGUS), Central Village Committees, the Kalinga Kalajeera Seed Growers Society (KKSGS), Village Seed Banks, self-help groups, and the project's central management committee. These local institutions have the ability to sustain, enhance, and expand the project's environmental benefits within the district's communities and ecosystems.



Partners can increase access to markets, technology, and specialized skills.

Partners can fill gaps in the experience and capacity of local groups. Many rural community groups lack access to markets beyond their local outlets due to isolation, lack of transportation infrastructure, and lack of commercial contacts. Thus, expanding market access is often a key element in their strategy to start new enterprises and increase livelihood options and income. Many other groups require specialized help meeting technical requirements such as organic certification to raise the value of their products. Still others lack technology appropriate to their environmental management or commercial needs. Equator Prize communities have found effective partners in each of these areas. Some come from the private sector, but many are NGOs, federations, or commercial associations or co-ops.

Network of Women Producers and Sellers of Medicinal and Aromatic Plants of Quibdó, Colombia.

In 1996, six female family heads from the small communities of Tanado and Samurindo in the Chocó Region of Colombia, decided to seek a sustainable solution to the challenges related to the production and sale of aromatic and medicinal plants. They relied on the traditional livelihood practice of gathering and marketing these local medicinal plants and spices as a source of income to support their families. Low prices and the time spent in collecting these plants made it a relatively unproductive activity, however. With the assistance of Fundación Espavé, an environmental NGO, a market study was carried out to identify options for value-added processing of medicinal and aromatic plants. The study found strong local demand for “Verdura Chocoana” – a mixture of wild cilantro, oregano, white basil, purple basil, poleo, gallinita, and long onion. By 2002 the project had expanded to encompass a network of 75 Afro-Colombian women who cultivate herbs and medicinal plants in family gardens for sale to women’s groups that specialize in value-added processing. The network – named Red de Mujeres Productoras y Comercializadores de Plantas Medicinales y Aromaticas de Quibdó – has also developed an organic certification process under the brand name “Tana Organic Spices.” In addition to assisting in organic certification and the initial market study, Fundación Espavé has been critical in guiding participatory research into the properties of new species, providing training to collectors, securing market entry, and marketing and promoting the network’s produce. The network has continued to grow in numbers and strength, and currently brings together 200 women.



Research and monitoring partners allow local groups to refine their activities and demonstrate impact.

A number of organizations—such as universities, research institutes, environmental NGOs, and government departments—have become research partners with Equator Prize groups, helping them to establish baseline data and then to monitor the effects of their environmental management as well as their business and social programs. The ability to experiment with different approaches and see the effects has been invaluable to groups, helping them learn and evolve quickly through “adaptive management.” Systematic monitoring has also empowered groups with the ability to identify and demonstrate the benefits of their work. These are both key ingredients in the longevity of Equator groups, and their ability to communicate and scale up their activities.

Sepik Wetlands Management Initiative, Papua New Guinea.

This group uses an array of methods to monitor crocodile population numbers in the Sepik River in partnership with both local communities and Papua New Guinea’s Department of Environment and Conservation. Night counts are conducted by staff members and community volunteers, using flashlights to count crocodiles based on the light illuminated from their eyes, while population monitoring is also carried out through aerial surveys. Members of the initiative and the Department of Environment and Conservation fly in helicopters 50-60 meters above ground to spot crocodile nests, which are recorded using GPS. These surveys have revealed that the crocodile population has been steadily increasing between 1998 and 2010; the latest survey, covering 50 villages, counted over 500 nests.



Guassa-Menz Conservation Area, Ethiopia.

Biological monitoring in the grasslands of this conservation area is carried out by trained volunteers drawn from the four nearest communities. Financial support and training for these monitors has come from the Darwin Initiative, supported by the UK Government, and the Frankfurt Zoological Society. The community monitors track indicators of the ecological health of the conservation area, including vegetation cover and the populations of key animal species such as the Ethiopian wolf, as well as illegal harvesting during the closed season. Their monitoring and outreach efforts have been invaluable in raising awareness of the importance of conserving the area’s wolf population.



Sociedade Civil Mimirauá, Brazil.

This group currently co-manages the Mimirauá and Amanã Reserves, covering a combined total of 3.5 million hectares of flooded tropical forest and wetlands in the heart of the Amazon rainforest. Founded in 1992, the initiative is an environmental policy and research body that brings together academic bodies and local communities in the sustainable management of the area's wetland resources. Its principal objective was the development of a sound, science-based management plan for the Mimirauá Reserve that combined a conservation strategy with sustainable natural resource management activities for the local population. The results of the initiative's work led to the declaration of Mimirauá as a "Sustainable Development Reserve" in 1996—a new category of protected area under Brazil's National System of Conservation Units. Since 1999, the initiative's research has been coordinated by the Mimirauá Institute for Sustainable Development, a twin initiative that is related to the Sociedade Civil Mimirauá, but which is affiliated with the Ministry of Science and Technology. The Institute has compiled comprehensive baseline and time series datasets on twelve areas of study. Monitoring has been conducted on water levels and climate in Mimirauá and Amanã Reserves; freshwater science; aquatic and terrestrial biodiversity; health and nutrition in local populations; various social and economic indicators, including local market studies; and on the use of natural resources including forests, wildlife, and fish. These data inform ongoing analysis of the effectiveness of community-based resource use plans undertaken by eight research groups. This information is catalogued online, and has been used to demonstrate the efficacy of community-based management to government partners and donors.



Small, well-targeted investments can bring big results.

Financial support, even in small amounts, can be catalytic if the support meets an Equator group's well-articulated need. For example, many Equator Prize groups have received relatively modest grants from the UNDP-implemented Global Environment Facility Small Grants Programme to bankroll activities integral to the initiative's early work. Communities often report that these funds proved critical to the project's ultimate success. Small grants that can be rapidly deployed are often well-suited to local groups' needs, where initial investments may be modest, but timeliness is important in order to maintain enthusiasm and show early results.

Roush Protected Area, Yemen.

The Roush Community Marine Protected Area is located off the coastline of Socotra, an island lying east of the Horn of Africa and south of the Arabian Peninsula. Known as the "Galapagos of the Indian Ocean" for its exceptional biodiversity and species endemism, Socotra is nonetheless beset by income poverty and declining marine diversity, as local fishing communities lose out to large-scale commercial interests. In response to the proposed sale of an important parcel of coastal land, the Roush community came together in 2008 to protect their fishing grounds and marine sanctuary by establishing an ecotourism enterprise. A grant of USD 23,320 from the GEF Small Grants Programme (SGP) was used to construct an eco-lodge and campsite to serve as a tourism attraction, capitalizing on the area's unique marine biodiversity. Investments focused on improving the local water supply and basic accommodation infrastructure, while community members were given training in guiding, hospitality, and biodiversity monitoring by SGP staff. The use of customary regulations to govern marine resource access, the sharing of benefits from ecotourism revenue, and a focus on improving gender equality have ensured that these initial investments in physical and human capital have been sustained by the community, yielding positive benefits for marine biodiversity and local livelihoods.



Beyond demonstrating the effects of initial grants in catalyzing collective action, the experience of Equator Prize winners with small grants also illustrates the potential for gradually scaling up financial assistance, helping to build the capacity of local organizations to absorb further funding and diversify their programme areas.

Pôle des actions d'intégration des droits humains en afrique (PACINDHA), or the African Center for the Integration of Human Rights, Mali.

This NGO mobilizes local communities in western and southwestern Mali to sustainably manage natural resources and protect biodiversity. Since 2003, the initiative has received nine grants from the GEF Small Grants Programme for the implementation of a range of diverse activities, including the protection of wildlife and fauna species, combating the use of polluting substances, and improving land management and access to water for local communities.



For an investment of around USD 223,000 over eight years, PACINDHA has successfully rejuvenated 200 ha of *Detarium Microcarpum* in ten villages throughout Ouelessebouougou; created 20 local agreements for natural resource management; worked with 200 community groups to sustainably manage more than 5,000 hectares of forest; protected 918,000 hectares of land in the Boucle de Baoulé Biosphere Reserve; reduced poaching of chimpanzees in the Bafing Wildlife Reserve; led 80 farmers in the restoration of 320 hectares of degraded land through the seeding of *Andropogon gayanus* and production of organic fertilizers, which has increased ground water and reduced the need for polluting chemical fertilizers; and trained 400 farmers from ten villages in seasonal penning of animals.

Table 6. PACINDHA Projects Receiving GEF Small Grants Programme Funding

Project title	Period	Amount funded (USD)
Bafing Wildlife Reserve Chimpanzee Protection (pilot study)	2003-4	1,000
Bafing Wildlife Reserve Chimpanzee Protection	2004-6	31,229.80
Management and restoration of <i>Detarium Microcarpum</i> population in Ouelessebouougou municipality	2004-6	31,164.80
Protection of <i>Prosopis Africana</i> and <i>Pterocarpus erinaceus</i> and prevention of coal mining on hillsides	2005-6	16,229.57
Elimination of leaded petrol in Africa for improving air quality	2005-7	25,340.58
Development of a legal and institutional framework for the protection of chimpanzees in the Bafing Wildlife Reserve	2006-8	33,876.63
Supporting communities in combating the illegal wildlife trade and reducing Persistent Organic Pollutants (POPs)	2006-8	27,808.71
Improving access to clean drinking water in Koussan	2008-9	19,394.00
Land rehabilitation through planting of <i>Andropogon Gayanus</i> and capacity building of CBOs in Koussan	2008-10	37,197.16
Total:		223,241.25

Productive and lucrative partnerships with the private sector are possible.

Not every Equator Prize group participates in a commercial enterprise, but where they do, private sector partners can play a pivotal role, bringing a level of market access and business acumen that can increase the enterprise's commercial success and raise its income potential significantly. Private sector partners can often supply manufacturing, marketing, or distribution expertise that local groups do not possess, particularly in the beginning. For example, a number of Equator Groups partner with commercial tourism outlets to develop or carry out their ecotourism or game-hunting enterprises, taking advantage of their urban contacts and logistical and marketing abilities. Looking from the perspective of the private sector, experience with Equator Prize groups demonstrates that rural community-based organizations can be reliable partners that are worth seeking out and investing in.

Carnaúba Viva, Brazil.

Carnaúba Viva works in the distinct ecosystems of northeastern Brazil to conserve the carnauba tree (*Copernicia prunifera*), a species of palm native to the region. The initiative supports indigenous peoples within the Jaguaribe Açú territory to sustainably harvest carnauba tree derivatives and to connect with lucrative markets. One transformative partnership has been with Petrobras, a Brazilian multi-national energy company. Carnaúba Viva sources sustainably harvested carnauba tree fiber from local communities to produce steam transmission line coverings that are purchased by Petrobras. The carnauba fiber offers a more durable, sustainable and cost-effective alternative to the aluminum coverings previously used by Petrobras. The organization has transformed the local economy, working with 700 artisans by 2010, and has overseen an average increase in household income of 5 percent per year, as well as improved job security in an uncertain economic climate.



Torra Conservancy, Namibia.

The Torra Conservancy, located on communal lands in the Kunene region of northwest Namibia, is home to more than 1,200 indigenous peoples spread over the 352,000-hectare territory. In 1995, Torra conservancy began a search for investors to develop an ecotourism enterprise in the territory. The Ward 11 Resident's Association was legally constituted to represent the conservancy community in negotiations. Every household in every settlement of the territory was able to register association members. After a great deal of interest from different investors, the association selected Wilderness Safaris Namibia to develop an eco-lodge. This partnership represented the first joint-venture agreement in the country between a conservancy group and a private tourism company. The contract signed between the two parties provided the community with a rental fee for the use of the land and 10% of the net daily rate on each bed night sold. The contract also stipulated that local residents be employed in the lodge and be provided with management training. Provision was also made for the community to incrementally acquire ownership of the lodge. Torra Conservancy operates and maintains Damaraland Camp as a profitable ecotourism enterprise. Since its opening in 1996, the camp has been staffed entirely by local community members and, since 2002, managed exclusively by local residents. Jobs at Damaraland Camp provide additional and direct income for 22 full-time employees and managers. Additional revenues are generated through rent received from Wilderness Safari Namibia. This rental arrangement is a key element of the land tenure agreement which underpins the joint venture.



Governments are important partners too.

Government—at the local and national levels—has a pervasive influence on local nature-based initiatives. Local and national governments generally have ownership and management responsibility for natural resources. They also regulate commerce in natural resource commodities like farm products, timber, fish, coffee, and sometimes even non-timber forest products like rattan, bamboo, or medicinal plants. They create and allocate large-scale timber, mining, and fishing concessions. They control business licenses, taxes, and even tourist visas. These responsibilities for regulation and oversight create the potential for conflict with community initiatives that rely on local resource management authority and earn income from regulated commodities and activities.

However, governments also offer a variety of services that make them natural allies to community-based initiatives as well, from agricultural extension, to enterprise development, to technology transfer, to public finance. Equator Prize groups have shown that it is quite possible and beneficial to have government authorities as active partners in their work. Beyond the technical or financial benefit itself, the process of partnership encourages a different kind of relationship in which the local initiative gains legitimacy and is seen by government as a capable and competent actor whose interests in conservation and development can be aligned with those of the state. From the other side, Equator groups are less likely to view government in paternalistic or adversarial terms, and more able to engage in serious communication and interchange. The result can be fewer bureaucratic obstacles and more policy influence for local groups, including a greater ability to scale up their local model with state help.

Pred Nai Mangrove Conservation and Development Group, Thailand.

The village of Pred Nai, on the eastern seacoast of Thailand, is the site of a pioneering attempt to prevent the destruction of one of the largest contiguous fragments of mangrove forests in Thailand. In response to logging and intensive shrimp farming operations in the 1980s, villagers came together to draw up a community-based forest management plan, in partnership with the Thailand Royal Forest Department (now part of the Ministry of the Environment), taking advantage of a constitutional provision that stipulates that local communities have the right to participate in natural resource management. The Pred Nai Mangrove Conservation and Development Group is a prominent example of successful cooperation between the country's national forest authority and a local community, and has acted as a flagship project for sweeping forest policy reform.



The project has also been used as a model for community-based resilience in the face of the growing threats of climate change. Mangrove reforestation provides an attractive option for both mitigation and adaptation: regenerating coastal forests that sequester carbon from the atmosphere, and are therefore eligible for pilot REDD+ schemes; and creating a barrier against extreme flooding events such as tsunamis. In 2011, this role for Pred Nai was recognized by the creation of a climate change learning exchange network for coastal communities, supported by the Thai, Swedish and Norwegian governments and the Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC). The Community-based Learning Centers component will help in restoring some 5,150 hectares of mangrove forest along the coastline, which will serve as a greenbelt, carbon sink, and an income source from seafood. This represents a wide-scale expansion of the Pred Nai model to neighbouring communities, and builds on over fifty workshops conducted by RECOFTC with coastal communities between 2009 and 2011 addressing the local impacts of climate change.

Lesson 12: Local innovation breeds adaptation and resilience

Innovation, resilience and adaptive capacity are byproducts of trial and error processes

The ability to innovate is one of the criteria used to select Equator Prize winners. Local conditions often do not allow for simply importing a model of community action or a business plan from outside and expecting it to meet the needs of rural communities and ecosystems. Innovation allows community groups to tailor their efforts to local environments and changing conditions, to cope with limited resources and support, and to take advantage of new markets and opportunities. It is hard to imagine that Equator Prize groups would have achieved nearly so much without the ability to innovate, and the flexibility and resourcefulness that this implies. Although it is risky to generalize, innovation within Equator Prize cases seems to be fostered by inclusive leadership and group participation that creates an opening for creative approaches to emerge from the group.

Innovation is also closely tied to a group's ability to absorb and adapt to change—its “adaptive capacity.” Environmental change, particularly climate change, has become an increasing concern for rural communities, but rapid social and economic changes pose an immediate threat as well. A common theme emerging from Equator Prize winners is their capacity to handle long-term change. Without this ability, the immediate poverty and environmental gains achieved by Equator communities would not have been sustained. Developing broad partnerships to meet critical capacity gaps and prioritizing the training of project staff are also key traits that enable this durability and resistance to ecological, social, and economic shocks.

One trait common to Equator Prize winners in which their adaptive capacity and resilience comes through is their ability to handle setbacks on the road to success. Equator Prize winners clearly demonstrate that there is no one route to achieving livelihoods and conservation goals, but that this more often consists of trial and error, underpinned by social cohesion and group trust.

Solving local problems with local resources.

In some cases, Equator Prize winners have had to innovate from the very beginning in order to meet their objectives. Particularly in cases where state or NGO-led development interventions are yet to reach, communities have sought solutions in their existing comparative advantage. Often this is their natural capital, albeit frequently under threat from overexploitation. The ability to recognize these natural assets, and to realize social and economic gains from their sustainable use, is the hallmark of endogenous community-led development that defines many Equator Prize winners.

Union of Farmer and Indigenous Organizations of Cotacachi (UNORCAC), Ecuador.

The remote communities of Ecuador's inter-Andean valleys have long faced the twin challenges of food insecurity and environmental degradation. Malnutrition affects approximately 40% of the population of this region, while farmers receive limited technological and economic support from formal institutions. These efforts have proved insufficient both in terms of improving agricultural productivity and in meeting the demands of local and foreign markets. UNORCAC was founded to address the related problems of household food deficits and the erosion of genetic diversity, turning the relative abundance of rare native crop and fruit species to the advantage of farming communities. Through the systematic conservation of a wide variety of native crop, tuber, root, fruit, cereal, and medicinal plant species, the initiative has improved the diversity of income and nutrition sources for 3,225 farming families. Four local varieties - blackberry, cape gooseberry (known locally as “uvilla”), pepper, and the fig-leaf gourd (a type of squash known locally as “sambo”) – have been prioritized for value-added processing, while the initiative has also developed “agro-tourism”, allowing international tourists to learn ancestral agricultural practices, enjoy traditional meals, and purchase crafts made using local materials and techniques.



New perspectives on chronic problems.

In many cases, Equator Prize winners have mobilized to address a protracted socio-environmental problem. Because of the perspective that comes with knowledge of what has been attempted, what has been successful, what has been less successful, and how the problem has evolved and changed over time, it is from within communities that fresh approaches to solving seemingly intractable problems often originate. Examples include combating human-wildlife conflict, over-harvesting of local resources, or poaching within protected areas.

The Pole Pole Foundation, Democratic Republic of the Congo (DRC).

In 1975, the area covered by Kahuzi-Biega National Park expanded by a factor of ten, growing from 60,000 to 600,000 hectares of forest in eastern DRC. The newly-incorporated 540,000 hectares of lowland forest were home to the endangered Eastern Lowland gorilla (*Gorilla Beringei graueri*), as well as many indigenous Batwa communities. In a story all-too familiar to the history of protected areas, however, the newly-designated reserve entailed the forced relocation of these communities, as well as depriving those bordering the park of a source of local livelihoods, food, and cultural heritage. The predictable pattern that followed was one of widespread poaching within the park's boundaries that defied official attempts at enforcement. Gold mining and hunting of the park's primate species continue to present a threat to Kahuzi-Biega, worsened by the ongoing armed conflict in the region that simultaneously makes thriving ecotourism a distant possibility.

The Pole Pole Foundation, however, has pioneered an innovative scheme of giving poachers training in becoming artisans, carving wooden representations of the gorillas they formerly hunted. These handicrafts have been sold on international markets, bringing in an average income of USD 30/month for those involved. The promotion of other alternative livelihood activities around the park – including rearing pigs, chickens, and goats, creating mills for cassava, and extensive tree-planting for agroforestry – has helped to slowly turn the tide: between 2005 and 2007, human incursions within the habituated gorillas sector of the park fell by 12%.



Creative approaches to community involvement and capacity building.

Developing the capacity of local stakeholders to play leading roles in the implementation of initiatives has been a fundamental factor in the sustainability of Equator Prize winners' work. Almost every case highlights "capacity building" as an ongoing concern of their work, while many cite it as having a catalytic effect in stimulating collective action. As defined in the majority of cases, this process encompasses more than simply skills training in technical or management aspects of the project, however. It is typically used to describe the process of empowering individuals within the organization, or within its target community, to play more active and leading roles in the initiative. In this sense, it captures the ability of Equator Prize to successfully identify local talent and potential, and to broaden the support base for their work.

Toledo Institute for Environment and Development (TIDE), Belize.

In an effort to build community interest and capacity to manage the Port Honduras Marine Reserve, TIDE has created a Community Stewards Program, in which fifteen stewards from seven communities adjacent to the reserve receive training on marine and terrestrial ecosystems, environmental law, computer skills and outboard engine maintenance for small watercraft. These skills mean that the stewards can directly and substantively contribute to management of the reserve. At the same time, the stewards act as conduits of information to the larger community, and have thus become a key strategy in TIDE's community outreach and education efforts.



Trowel Development Foundation, Philippines.

This initiative working in the eastern Philippines province of Northern Samar has taken a novel approach to spreading its innovative method for improving the productivity of crab farming. Fishing households that receive training in tie-crab fattening technology are encouraged to share this assistance with other families through the initiative's 'Passing on the Gifts' scheme. To date, this has allowed more than 250 households to benefit from the approach. These families can now meet basic needs as a result of increased incomes and diversified livelihood options; on average, participating families have seen an increase in monthly earnings of USD 69.



Local adaptation of technologies and processes.

Many communities freely adapt monitoring, measurement, or manufacturing technologies to their local needs. A majority of Equator Prize winners have benefitted from external technical support from partners, supplementing locally-developed approaches. It is widely acknowledged that simply importing externally-derived technologies or processes to rural settings rarely works, however, owing to social, cultural, or infrastructural factors. The case material presents examples of how these imported techniques can be modified to fit local conditions. Indeed, it demonstrates that this process of local modification is often fundamental to improving the level of local ownership of the project.

Community-based Marine Management Foundation, Indonesia.

This network coordinates conservation, environmental education and livelihoods programming centred on locally-managed marine areas in 26 sites across eastern Indonesia. Within this network, several autonomous community management committees have successfully adapted technologies and processes to fit local needs, making them best practice cases for replication. For instance, villages in the Padaido Islands have become known as “community mappers” for their success in fine-tuning the use of GPS devices to map local marine resources, which in turn has helped them to resist the destructive effects of commercial fishing companies operating within their traditional fishing grounds. The maps have been approved by local government bodies as well as the state Fishery Department as a basis for management, including the issuance of fishing permits. The Tanah Merah Bay conservation group, meanwhile, based in Jayapura, Papua, has become proficient in developing home-made Fish Aggregation Devices using an average of 60-70% recycled rubber from used car tires in place of more expensive nylon rope. These cases of successful tailoring technologies to fit local conditions have made them centres of excellence within the network.



The Centre for Biodiversity Protection and Sustainable Use of Natural Resources (Polopróbio), Brazil.

This research institute based in the Brazilian state of Acre devised a method for the artisanal processing of raw latex obtained from *hevea brasiliensis* rubber trees, suitable for small-scale production in forest-based communities of indigenous rubber tappers in the Brazilian Amazon. Replicating the technology is a highly individualized process, taking into account the social and cultural setting of each client community as well as the difficulties of establishing forest-based production. The technology is currently being used at eleven sites across four Brazilian states, benefitting a total of 600 people, including communities from the indigenous Kaxinawá, Shanenawa, Apurinã, and Kaxarari tribes. A kilogram of rubber processed by conventional methods is typically sold at around R\$3.50 (USD 2.20); when processed into high-quality products using Polopróbio's method, one kilogram of rubber is now worth on average R\$50.00 (USD 30).



Failure is a part of getting to success.

The stories of Equator Prize winners rarely describe untrammelled pathways to success; rather, they depict a series of obstacles that have been largely overcome through creativity and resourcefulness. Every case, moreover, describes challenges that the initiative continues to face. The solutions to overcoming or circumventing these roadblocks have typically emerged from a process of trial and error, in which the rural community has acted as a laboratory for introducing, refining, or discarding new approaches. Even in cases that have ended in failure, this process ought to be embraced as the embodiment of adaptive learning. Local organizations are the vehicles for ground-truthing innovations for ecosystem management in rural settings. Through the process of fine-tuning these innovations, they act as incubators of good practice in local sustainable development. One field in which this is seen is the introduction of new livelihoods to relieve pressures on natural resources.

Tribal Communities of the Jeypore Tract of Orissa, India.

As well as its work in preserving Orissa's rich heritage of native rice varieties, this initiative has sought to develop alternative livelihoods for Jeypore's remote tribal communities. Between 2004 and 2009, a range of livelihood projects and community development projects were introduced in six villages – Chendia-Jhiligaon, Dhola-Jhiligaon, Kaudiaguda, Kusumguda, Paknaguda and Uduluguda – targeting the poorest households. The full list of individual and group activities included the production of vermicompost, mushroom cultivation, off-season vegetable cultivation, inter-cropping of taro and yam, fish-farming, tamarind value addition, small-scale rice-hulling, leaf plate-stitching, groundnut cultivation, mungbean cultivation, bamboo craft-making, and constructing shallow wells for irrigation. Inevitably, not all of these interventions were successful: water scarcity hampered the cultivation of off-season vegetables, while the lack of marketing facilities meant that bamboo craft production eventually ended. On the other hand, communal vegetable cultivation, vermicomposting, backyard poultry farming and fish farming were all enthusiastically embraced, while groundnut cultivation now provides the largest source of income after rice paddy farming.



Resilience: building on innovation and adaptation.

The benefits accruing from Equator Prize activities are both cumulative and synergistic. As most of the cases attest, the final result is more than a simple summation of economic, social, and environmental gains. In the best instances, what results is an increase in the overall resilience of the local ecosystems and the human communities that inhabit them. This translates to a greater capacity to handle stresses and weather adverse circumstances—be they economic, social, or environmental.

This definition of resilience encompasses a broader remit than the ability to adapt to climate change, although this threat may be the source of many of the shocks that rural communities face. For example, in the case of Trowel Development Foundation above, mangrove restoration has increased the area's ability to handle coastal flooding, which is critical given scientists' predictions that storm surges in the region are likely to increase in frequency and magnitude. The restoration work has also increased the area's ability to support a crab harvest; technical and marketing assistance from a local NGO has enabled the growth of a viable crab aquaculture industry, adding a vital income source with good growth potential to a community where employment prospects are scarce. The strengthening of local fishermen's associations, meanwhile, has created an informed and organized corps of community members ready to work together on the restoration and aquaculture projects. While it is hard to measure, it is clear that the combination of these factors has considerably increased the resilience of fishing communities in Northern Samar.

Resilience, then, should be seen as an embedded quality, arising not only from the maintenance of productive and stable ecosystems, but also from strong social cohesion and the durability of local organizations. The prioritization of social processes by Equator Prize winners ensures that these facets are not ignored, but rather are fundamental to the development of effective conservation and development efforts.

Garifuna Emergency Committee of Honduras (CEGAH), Honduras.

This multi-layered resilience is arguably best seen in the case of CEGA, a women-led initiative that arose in response to the devastating effects of Hurricane Mitch on Honduras's agrarian Garifuna communities. Beyond initial disaster relief efforts, the initiative has sought to improve local resilience to future environmental disasters. By conserving forests, incorporating sustainable agricultural practices for hillside farming, adopting appropriate technologies, rehabilitating beaches, and supporting the land reform efforts of disenfranchised Garifuna communities, CEGA is helping to ensure that future generations of Garifuna are able to live prosperously and in balance with healthy ecosystems.





Building on Success

Priority Actions to Support Local Initiatives

As is clear from the examples and discussion above, Equator Prize communities have borne out in their varied experiences the original hypothesis behind the Prize: that local action, centered in local organizations and driven by local demand, is an effective route to attaining both development and conservation goals. Indeed, if anything, the benefits achieved have exceeded original expectations, and at remarkably low cost.

While these achievements are substantial, there is considerable scope—and need—for them to expand. Indeed, without a concerted effort to extend these successes, Equator Prize cases will remain the exception and not the norm for rural natural resource-dependent communities. In this section, we propose a slate of priority actions that governments, donors, NGOs, and other support groups can take to create the enabling conditions for the kind of local ecosystem-based initiatives that Equator Prize communities have undertaken. We also include actions that the local organizations driving these initiatives can take themselves to catalyze their own internal development and improve their effectiveness and sustainability. These recommendations are drawn both from the case lessons of the previous section and our analysis of the building blocks of local success.

The Building Blocks of Successful Local Action

Two central insights from the Equator cases inform our analysis and recommendations:

- The potential of the rural green economy. Equator cases demonstrate that there is a direct relationship between the health of ecosystems and the opportunities of rural communities to build their assets, expand their economic opportunities, and achieve healthier and more secure lives. While ecosystem decline has imperiled these opportunities for many communities, direct local action as exemplified by the Equator cases has provided a means to restore and expand these opportunities, while also reaping a suite of social benefits as well.
- The centrality of local organizations. Local organizations are key to this transformative action. By being socially embedded in the community, they are in the best position to inspire collective action. The development outcomes they deliver are in many instances more sustainable and equitable because these groups prioritize the social processes behind collective action and because they can reach marginalized groups more easily.

In addition to these broad insights, the cases—supported by much research and experience over the last few decades—have helped identify the building blocks of successful local action. Identifying and understanding these success factors is the first step in forging an action agenda to support these local initiatives, based on the Equator Prize lessons. Our working model includes both external factors and internal factors.

- External factors comprise the enabling environment of policies, rights, support, and partnerships that provide a fertile field for local ecosystem-based initiatives to take root and grow. These factors are influenced by governments, donors, development agencies, NGOs, and other outside actors. The enabling environment for local action includes:
 - Resource rights and organizational rights. Resource rights or tenure offer local people the rationale for investing in local ecosystem management; organizational rights provide local organizations the legal space to organize and engage in joint activities, be they social, commercial, or political.

- Supportive tax and regulatory regimes. The success of local ecosystem management efforts and the enterprises associated with them are often highly dependent on resource licensing requirements, harvest and sales regulations, and the local and national tax structure.
 - Capacity-building and support services. Capacity building allows local organizations to acquire critical skills necessary to manage ecosystems and conduct commercial enterprises; support services allow outside groups to provide these skills in the interim until local groups gain the capacity to provide these services themselves.
 - Adequate and appropriate finance. External sources of finance—from development agencies, government programs, NGOs, microfinance, or commercial banks—allow local initiatives to cover their start-up costs and invest in good ecosystem management before their activities begin to generate revenue.
 - Partnerships and linkages. Connections with outside groups give local groups access to a wide variety of opportunities for learning, research, and business development, as well as access to new markets and technologies.
- Internal factors comprise the internal dynamics of local organizations—the group processes that foster collective action and allow these organizations to generate and sustain local initiatives. These include:
 - Participatory and accountable governance. Participation in the group's decision-making process is vital to "ownership" by the membership of the actions the group decides to take. Accountability requires those who make decisions and take actions on the group's behalf to answer for these decisions to group members and other stakeholders.
 - Communication and knowledge exchange. Communication within the group is essential to align goals, inspire action, and resolve disputes; communication and knowledge exchange outside the group enables learning, and conveys the rationale and benefits of the group's actions to the surrounding community, government, and other stakeholders.
 - Innovation and adaptive learning. Innovation allows groups to tailor local solutions to their need; it contributes to the process of adaptive learning, in which the group monitors the results of its actions and makes adjustments to optimize its ecosystem management and enterprise and maximize the benefits these yield.

The extent to which these building blocks or success factors are present will in large part determine the speed and depth of local achievements and the likelihood that they will be scaled up to yield greater impact over a larger group of beneficiaries.

Priority Actions to Support Successful Local Action

Given the importance of the building blocks of success identified above, the actions of governments, donors, NGOs, and other support organizations should be directed toward providing these success factors to the widest extent possible. The guidance below is offered with this in mind. Taken together, the actions proposed here will make significant progress toward providing a true enabling environment for local success and will prompt the internal growth and institutional development of local organizations. This list of actions is clearly general in nature. It is not meant to be exhaustive nor overly prescriptive, but rather indicative of the areas where the case studies show that focused effort could yield real improvements on the ground.

Priority actions for national and local policymakers:

- **Pursue targeted policy reform to provide enabling conditions.** National and local governments are clearly the lead players in bringing about enabling conditions for successful ecosystem-based initiatives at the community level. Particular policy needs vary greatly by country, but the three most critical areas for policy action concern the basic architecture of rights and agency that underpin local efforts.
 1. **Provide supportive tenure frameworks.** A tenure framework that supports local ecosystem-based initiatives is one that legitimizes customary tenure arrangements, including communal tenure; provides local mechanisms to resolve conflicting land and resource claims; and provides a route to tenure security on state lands through co-management arrangements. The cases show that some governments, such as Madagascar, have created legal frameworks that could provide useful models for recognizing customary tenure within the current state tenure system, and regularizing the creation of co-management agreements.
 2. **Provide favorable tax and regulatory regimes.** Accommodating and encouraging local green economies such as those developed in Equator Prize communities requires adjusting tax and regulatory policies so that they do not unfairly burden small rural producers. Examples include expensive harvest permits and management plans for harvesting forest products and licenses for the secondary processing of essential oils and botanicals. Many of these regulations and taxes are designed with larger producers in mind, creating a significant bias against small producers. Lowering the aggregate burden of taxes and regulatory costs would increase the financial viability of local nature-based enterprises and recognize the important role they can play in expanding local economies.
 3. **Legitimize and empower local organizations.** The state can explicitly support the variety of local organizations that drive local development—from NGOs and CBOs to unions and cooperatives, commercial associations, and federations—by legitimizing these organizations in law, providing the legal space for them to function without unduly restricting their membership, funding, or operations. By legally defining these organizations and providing a route for their official registration, the state can empower them with legal standing and provide them with guidelines for good governance. At the same time, care should be taken not to undermine the autonomy of local organizations. In some cases, too robust oversight of these civil society organizations in the past has kept them from operating freely, from directly tapping outside funding, or from entering into formal partnerships with outside organizations. The result has been counterproductive in terms of local empowerment—a restriction of the right of association that underlies the action of local organizations, undercutting their innovation and effectiveness.

- **Adopt a different partner paradigm for government.** Equator Prize cases have demonstrated that central and local governments can be some of the most valued partners of local initiatives. But this requires substantial adjustment of the typical relationship between government agencies and local clients to emphasize the government's supporting role, providing planning, capacity-building, assessment, and other support services. This re-envisioned role should emphasize the government's particular capabilities in the following areas:
 1. Enterprise planning, product research, and market development through rural enterprise programs.
 2. Capacity development through extension services and business training programs.
 3. Environmental and economic monitoring and assessment, including the provision of mapping and data services.
 4. Abstracting lessons learned and applying them at the policy level to support scaling up of successful local models.

Priority actions for donors:

- **Provide a finance mechanism appropriate to local groups.** Access to financial services tailored to the needs and institutional capacities of local groups is essential to the start-up and sustainability of local initiatives. In many cases, the challenge is not only to tap a sufficient quantity of funds, but to receive these funds in a staged manner that does not overwhelm the capacity of the group to manage these funds. Donors have considerable experience with delivering funds in the amounts and timing appropriate to small and widely diverse groups. The GEF Small Grants Program is an example of a decentralized and efficient delivery method for funding the kinds of community-driven projects and initiatives that EP-winning groups undertake. Making this kind of support more widely available to community groups is one way that donors can contribute to the scaling up of Equator Prize successes. Moreover, this kind of community-appropriate delivery mechanism is necessary not just for conventional forms of donor support, but also for new revenue sources such as REDD+, carbon markets, and other forms of Payments for Ecosystem Services (PES).
- **Foster intermediary support organizations.** Equator Prize experience has shown that some of the most effective work in the critical area of local capacity development is carried out by so-called intermediary support organizations (ISOs)—NGOs or other specialized civil society groups that have credibility at the local level but maintain high-level contacts and organizational skills that local groups often lack, allowing them to operate in the space between the state and local levels. Their interventions and training programs are typically adapted to the needs of local groups in ways that government agencies and outside groups often find it hard to achieve. Supporting the development and continued action of these intermediary groups is one of the most effective contributions that donors can make to local capacity development. Donors are in a good position to do this, because one of the biggest challenges ISOs face is finding a sustainable funding supply, given that they generally provide their services for free or at cost to local organizations, and therefore lack a consistent revenue source. Donors can also contribute to ISO growth and effectiveness by providing funding and opportunities for off-site training and leadership development.
- **Facilitate learning, communication, and knowledge sharing.** Donors are in a good position to help local groups further their already substantial use of communication and knowledge-sharing methods. This can

come through direct support for site visits and face-to-face exchanges among community groups, by enabling participation in web-based learning networks and best practice forums, by helping local groups to document and report their methods and achievements to national and international audiences, or in a variety of other ways. This is one of the most immediate ways in which funders can contribute to the scaling up of successful local models developed in the “laboratory” of Equator Prize groups.

- **Recognize and reward innovation.** The history of the Equator Prize shows that recognition of a group’s accomplishments can bring significant ancillary benefits, such as a higher national and international profile, and with this, greater access to important government, business, and funding contacts. Specifically acknowledging and rewarding innovation among community initiatives through similar prizes and awards, or through the provision of additional seed money, travel experiences, training experiences, or internships, could help to foster what has proven to be a key factor of local success. Given the growing interest in finding successful models of community-based climate adaptation, this may be a particularly important area to recognize and reward innovation.

Priority actions for NGOs and other support groups:

- **Promote organizational development of local groups.** Local organizations constitute the most potent resource available to local communities in their bid to achieve their development goals. The case studies affirm the central role in local initiatives that these groups play as repositories of social capital, sounding boards for local demand, and nucleation points for collective action. Not surprisingly, the history of most Equator Prize achievements closely tracks the development and maturation of these groups. As this maturation process proceeds and local groups gain capacity, breadth, and stability, their ability to generate benefits increases commensurately. NGO partners can contribute to this maturation by providing training and consultation that goes beyond the acquisition of technical and business skills, and is explicitly targeted to organizational development, including helping the group to examine and systematize its processes for planning, decision-making, and conflict resolution within the group, as well as its strategies for outreach, influence, and scaling up.
- **Catalyze the development of appropriate metrics and indicators.** Monitoring and performance assessment are an essential aspect of learning and adaptive management within local initiatives. They are also key elements of accountability—both within local groups and to outside partners, funders, and government authorities. Metrics for some aspects of local initiatives exist, such as indicators of ecosystem health and productivity, or measures of economic benefits such as household income. However, in other areas, such as the measurement of social benefits like empowerment or political influence, or the multifaceted benefit of resilience, metrics are considerably less well developed. Since some of the most important benefits of local action fall into these “soft,” hard-to-measure categories, this metrics gap can be a problem. Ideally, development of relevant metrics would involve collaboration between appropriate research institutions and the local groups who will be applying these metrics. For example, many Equator Prize groups have already established partnerships with national universities to advise them on ecosystem management and technology issues, and collaboration on metrics design would be a natural extension of this collaboration.
- **Coordinate delivery of specialized support services.** Especially in the beginning, local initiatives require a variety of support services, from business and financial services, to technology training and legal help. No one is more important in the realm of capacity development and service delivery to local groups than NGOs and other community-based organizations, who often specialize in delivering these services, either as partners or

as contractors. While some progress has been made in coordinating the delivery of these services, there is much room for improvement if the scaling up of local successes is to be made possible. This may involve the establishment of national clearinghouses for service provision or the creation of consortia of service providers that allow local groups easier access to these services—a form of “one-stop-shopping.”

Priority actions for local groups:

- **Embrace accountability.** The maturity and functionality of local organizations is not only measured by their skills development, business acumen, and quantitative growth. It is also measured by their level of accountability—in particular to the group membership, but also to outside funders, partners, and government agencies. Many Equator Prize winners have found that embracing greater accountability is part of a natural progression in the group’s organizational development. Accountability mechanisms such as elections, audits, regular activity reports, and formal feedback sessions can help achieve equity and encourage participation within the organization, which are the basis of its legitimacy among group members and outside stakeholders. However, an embrace of accountability need not be formulaic: the right mix of accountability mechanisms will vary among groups depending on their size, leadership, culture, and the diversity of and relationship among members.
- **Encourage healthy leadership transition.** Whether local organizations such as Equator Prize winners can sustain themselves over time and continue to build on their successes is still an open question, given the relative newness of most of these local initiatives. There is no doubt, however, that all groups will at some point face a transition from the original leadership if they wish to continue their activities indefinitely—a potentially jarring event for groups with strong and catalytic leaders who inspired the group’s original actions. However, a small group of EP winners has established procedures to bring about a more regular process of turnover among top decision-makers as a way to encourage greater participation and an on-going process of renewal within the group. This may provide a model for other initiatives to follow as they grapple with institutional growth, evolution, and sustainability in the years ahead.
- **Document results to communicate success and increase influence.** In an era of performance-based evaluation and the widespread availability of media and communication outlets, local initiatives should have no doubts about the power of information to help them communicate their successes, justify their actions and methods, and find suitable partners to help them achieve their ends. Today, the majority of EP winners are adept at measuring ecosystem change and quantifying the environmental effects of their management. Most have also begun to quantify their economic impacts, though in less detail. Far fewer attempt to measure their social benefits in a systematic way, in part a reflection of the lack of standard measures, as alluded to above. As a result, most community initiatives cannot yet provide a comprehensive view of their achievements, including both benefits and costs. The ability to provide such a view is not just good public relations, but is necessary to guide and inform a larger commitment by governments and donors to scale up their support for local community-based action.
- **Diversify activities, partners, and funding sources to improve resilience.** Nearly all Equator Prize winning initiatives start small, focused on one or two activities or products, with a select few partners and funders. While this is appropriate in the beginning, experience shows that over-reliance on a single resource, business model, partner, or funder can be dangerous. For example, reliance on ecotourism as the sole source of income for an initiative can leave the initiative underfunded if tourist visits fall due to increased competition in the area, or a cut-back in travel due to an economic downturn like the recent global recession. Likewise, reliance on a single funder

can put the initiative in jeopardy if the funder's priorities change. Many Equator Prize groups have mitigated these risks by diversifying their activities, and expanding their partnerships and donor portfolios. For example, ecotourism may be just one income stream alongside other activities like specialized agriculture or the production of handicrafts. This kind of expansion and diversification relies to a great extent on gradual expansion of the group's technical, business, and organizational capacities. Thus, diversification is probably best approached as a long-term strategy as a group naturally scales up its activities and matures as an organization.

Localizing Sustainable Development

This paper highlights the power of local initiatives to transform landscapes and achieve meaningful rural development milestones within marginalized groups. Such initiatives effectively localize the Millennium Development Goals, using the environment as a platform and local organizations as the delivery mechanism. By recognizing ecosystems as a critical asset for economic and cultural survival, conservation goals become aligned with local needs. The Equator Prize cases, then, are a fitting testament to the promise of sustainable development sketched out 20 years ago in Rio. If sustainable natural resource use is to become a reality, local people as the primary day-to-day users—and chief stewards—of ecosystems must drive this change.

Yet even as we celebrate the power of local initiative, we realize that enabling and scaling up such local efforts requires action at the national and international levels. Providing an enabling policy environment, making available adequate and appropriately delivered finance, providing opportunities for capacity building and organizational development for community groups, making essential support services available, and encouraging monitoring, assessment, and accountability will require a coordinated and integrated effort by governments, NGOs, donors, and local groups themselves. Indeed, a final lesson of the Equator Prize cases is the critical link between successful

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.



Equator Initiative

Environment and Energy Group
Bureau for Development Policy
United Nations Development Programme
304 East 45th Street, Room 640
New York, NY 10017
USA

Tel: +1 212.906.6206

Fax: +1 212.906.6642

E-mail: info@equatorinitiative.org

Web: www.equatorinitiative.org