

Local and Indigenous
Communities:
Innovation and
Leadership in
Biodiversity Conservation
and Poverty Reduction

UNDP Equator Initiative

Equator
Initiative



Local and Indigenous Communities: The Chief Users and Guardians of Biodiversity

- Manage or administer at least 22% of developing country forests
- Employ diverse landscape management approaches in over half the world's 102,000 Protected Areas
- Productive ecosystems are the basis of sustainable livelihoods
- Common pool natural resources are a key source of subsistence; the rural poor derive a significant percentage of their total income from ecosystem services
- The poor rely on the environment, natural resources, and ecosystem services for food security, health, and livelihoods and are particularly susceptible to biodiversity loss



Who are Local and Indigenous Communities?

- Indigenous Peoples
- Village Associations
- Local NGOs
- Micro-enterprises
- Youth and Women's Groups
- Cooperatives
- Self-Help Groups
- Savings Groups
- Local Authorities



Local Collective Action

- Successful biodiversity management and livelihood solutions often originate at the local level
- Local institutions are often adapted to social, economic, and environmental context at the local level
- The transformative potential of local and indigenous communities in biodiversity management and sustainable use has not been adequately recognized or harnessed
- Although local and indigenous communities are frequently the “target” of development efforts, their capabilities for self-organization and action with regard to biodiversity management are often ignored, undermined, or undervalued



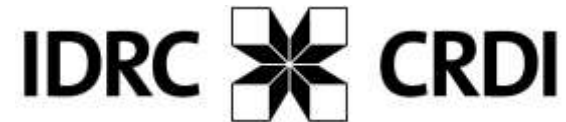
Equator Initiative: A Partnership for Sustainable Communities in the Tropics



Convention on
Biological Diversity



ecoagriculturepartners
landscapes for people, food, and nature



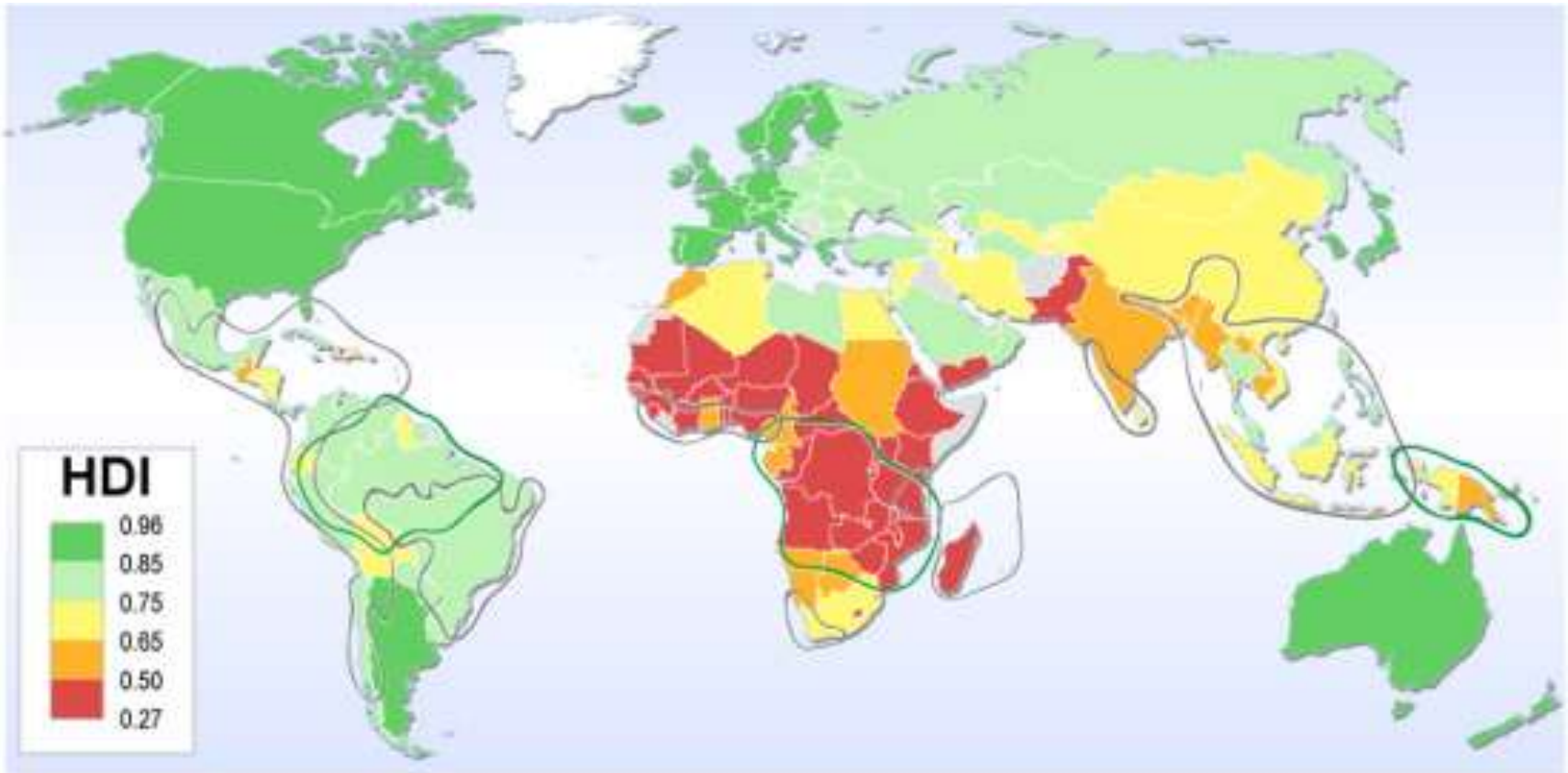
United Nations Development Programme (UNDP) Equator Initiative


- Recognition that the greatest concentrations of poverty and biodiversity are found in the Equatorial region
- The evolving trend of local leadership in advancing innovative projects in biodiversity conservation and poverty reduction
- Need for knowledge and celebration of community-based action on the ground
- United Nations World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa, 2002




Equator
Initiative

Concentrations of Biological Wealth and Human Poverty in the Countries of the Equator



 Selected terrestrial biodiversity hotspots

 Selected major wilderness areas

Sources: UNDP 2004, Conservation International 2004

Equator Initiative: Action Areas

Equator Prize

- Celebrating successful local initiatives

Equator Dialogues

- Creating opportunities for sharing community experiences and good practice
- Informing policy and fostering an enabling environment for local action

Equator Knowledge

- Building the capacity of grassroots organizations to deliver results and scale-up impact



Equator Prize

- Honoring outstanding community initiatives that effectively reduce poverty through the conservation and sustainable use of biodiversity
- Four prize cycles (2002, 2004, 2006, and 2008)
- Over \$US 1.34 million awarded directed to local and indigenous practitioners in 55 countries



Equator Dialogues

- Create opportunities for local voices to highlight and celebrate the success of grassroots action to achieve the MDGs, while fostering peer-to-peer exchange and direct access to policy dialogue and decision-making
- Community “dialogue spaces”: community-driven meetings held in conjunction with national and international policy-making fora



Equator Knowledge: Research

- Understand and communicate ways in which communities can contribute to biodiversity conservation and poverty reduction, and build political and public support for local initiatives and grassroots action
- Working with partners to research ways in which local and indigenous communities create successful biodiversity...
- Working with community networks to disseminate lessons learned and promote peer-to-peer exchange

Ecole Instrument de Paix - Niger

Equator Prize 2004

Full Nomination

Description: This creative NGO, founded by three villages living near the Niger River, employs an innovative strategy to turn the environmentally destructive water hyacinth into an opportunity for local people. Using the impacts of this invasive species as the central theme for environmental education and development activities, the organization works to improve incomes and food security through the manufacture and sale of hyacinth compost, woven products and cooking briquettes.



Key Activities and Innovations: The key activities of the Ecole Instrument de Paix-Niger include hyacinth composting and agriculture, and manufacturing crafts, paper and briquettes. Craft products are created from dried stems of the hyacinth that women then weave into mats and baskets. The hyacinth is also dried and compressed to create briquettes that are used in cooking. The initiative sponsors a youth cultural troop that informs and educates people about environmental topics through story-telling, song, dance, and plays.

Key Impacts:

- Biodiversity
- Endogenous flora and fauna are able to reproduce and play their role in the ecosystem
- Genes and ecosystems have been enriched through...

Profile in Brief

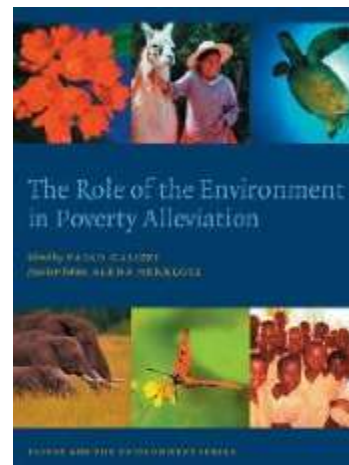
Classification

- Community-based Organization
- Community-based Entrepreneurial Initiative

Field of Work

- Agriculture
- Medicinal Plants
- Non-Timber Forest Products
- Sustainable Products

Project Catalyst



Equator Knowledge: Community Knowledge Service (CKS)

- Catalyze regional knowledge sharing networks that identify, coordinate and link local best practices in biodiversity management and sustainable use
- Facilitate peer-to-peer learning and knowledge exchange visits
- Identify and establish regional “centres of excellence” to facilitate ongoing peer-to-peer learning
- Create a web portal dedicated to local learning and knowledge sharing



Equator Prize 2008: Winners

Centre d'Appui au Développement Intégral-Mbankana (CADIM)

Democratic Republic of Congo

- Reduced pressure on natural forests
- Increased biodiversity and a resurgence of plant and animal species that had previously disappeared
- Increased agricultural productivity
- Economic and agricultural diversification
- Improved supply chain to markets in Kinshasa for food, charcoal, and agricultural products
- Support to neighboring communities to replicate innovative forestation and agricultural techniques



Fédération Régionale des Groupements de Promotion Féminine Senegal

- Protect two species of mangroves:
Rhizophora racemosa and *Avicenia nitida*
- Female empowerment
- Oyster farming has become a productive, competitive, employment-generating industry
- Recovery of oyster industry has contributed to exchanges between rural community organizations, both nationally and internationally



Community Markets for Conservation (COMACO) Zambia

- 40,000 snares and 800 firearms surrendered
- Over 30,000 *acacia albida* trees planted
- 8,000 bee hives provide alternative sources of income to unsustainable charcoal-making
- Wildlife numbers have stabilized over 450,000 hectares of land
- Nearly 85% of households achieved food security in the nine-month target time period
- Former poachers and hunters doubled incomes by transitioning to sustainable agriculture
- One donor dollar generates six dollars of direct rural income



Kijabe Environment Volunteers (KENVO)

Kenya

- Forest rehabilitation
- Over ten groups registered and engaged in micro-conservation activities
- Water harvesting, tree farming and apiculture
- Instituted a revolving loan and micro-credit scheme
- Individuals trained at a KENVO site become instructors for new members
- Works with local schools to catalyze biodiversity conservation activities
- Professional guiding training and ecotourism



Kwetu Training Centre for Sustainable Development Kenya

- Over 30,000 mangrove seedlings planted
- More than 1,000 bamboo and casuarina trees planted to supplement firewood needs
- Fishermen enabled to negotiate the prices of mud crab, fish and prawns from 150 to 300 Kenyan Shillings
- Formation of user groups and community forestry associations
- Provisions made in the Forestry Act for community groups to manage mangroves
- Model has been replicated for apiculture, agroforestry, fisheries, environmental conservation and education, and reproductive health



Nꞛa Jaqna Conservancy

Namibia

- Resurgence in elephant, giraffe, wild dog and roan antelope populations
- Employment opportunities for the !Kung San as tour guides, game guards and harvesters
- Increased incomes from trophy hunting contracts, tourism activities, and the commercial sale of forest products
- Training for local groups in finance, management, governance, and tourism
- Income diversification through harvesting of organic plants
- Community land use and resource rights have been secured



Ujamaa Community Resource Trust (UCRT)

Tanzania

- Community-conserved areas created in key wildlife corridors
- Tourism ventures incentivize conservation of natural vegetation for livestock and wildlife
- In Loliondo, seven Maasai villages have increased their income from eco-tourism, from roughly US\$30,000 in 1998 to over US\$300,000 in 2007
- Private sector partnerships enable villages to earn income through community-based tourism ventures
- Supported over 20 villages in northern Tanzania to secure land rights and resource tenure



Wechiau Community Hippo Sanctuary (WCHS)

Ghana

- Hippo populations have stabilized, with modest growth
- Species of birds and mammals locally extirpated are returning to the sanctuary
- No loss and perhaps gains in invertebrate biodiversity
- No loss and modest gains in bird numbers
- Increased access to safe drinking water
- New income opportunities: tourist-related businesses, souvenir manufacturing, organic shea butter cooperative, and ecotourism employment



Community Development Centre (CDC)

Sri Lanka

- Identification and reintroduction of over 60 indigenous varieties of roots and tubers
- Seed banks and exchanges maintain agricultural biodiversity
- Community farms are 100% organic
- Rainwater harvested through rainwater tanks
- Female empowerment, leadership, and livelihood generation
- Monthly net profit from yam sales: 5,000 Sri Lankan rupees/family
- Indigenous yam varieties known to hold medicinal properties; application (and commercial viability currently being explored



Sri Lanka Wildlife Conservation Society (SLWCS)

Sri Lanka

- Reduced human-elephant conflict
- Elephant deaths decreased dramatically
- Innovative land-use practices have promoted agricultural biodiversity
- Reduced dependency on forest resources
- Over 70% of land abandoned due to elephant raids is now being cultivated for profit
- Crop losses reduced by 100% in some areas
- Property damage and cost of repairs reduced
- Expenditures on elephant deterrents and crop protection substantially reduced



Arnavon Community Marine Conservation Area Management Committee

Solomon Islands

- Area under protection among the most important nesting grounds for endangered Hawksbill turtle
- Monitoring turtle nesting grounds shown significant increases in nesting numbers
- Protection of fish spawning areas
- Trade improved between villages, as has collaboration to address common environmental and economic challenges
- Ecotourism activities have led to income diversification
- Community has informed Solomon Island Government policy development



Camalandaan Agroforest Farmers Association

Philippines

- Over 1,200 hectares of mature secondary forests demarcated as biological reserve
- Improvement of watershed ecosystem services, benefiting both upland and downstream communities
- Endemic floral, avian, mammalian and herpeto-faunal species conserved
- Tree farms provide shade and food to wildlife and improve water quality
- Secured land tenure
- Tree farm project has motivated farmers to make long term investments in land



Conservation Society of Pohnpei (CSP)

Micronesia

- Establishment and management of 11 community-based marine protected areas
- “Ridges to reef” strategy addresses pollution affecting the health of coral reefs and fish stocks
- Key fish species and benthic habitats are monitored inside and outside of each MPA
- Sponge and coral farms generate revenue for communities
- Number of active sponge farms grew from two in 2001 to twenty in 2007
- Environmental awareness increased through partnership with six elementary schools



The Indonesian Community-based Marine Management Foundation (PLKL)

Indonesia

- Kei Island community: 300% increase in sea cucumber species
- Kei Island : 1,644% increase in sea cucumber abundance inside *sasi* area; 2,142% increase outside the *sasi* area
- Tanimbar Kei: trochus catch increased 483% over four years; income increased 22-30%
- Support communities to develop and implement alternative livelihood approaches and livelihood diversification through training programs and feasibility studies
- Influenced policy by creating new regulations at the local, district, and provincial levels; resulted in the creation of thousands of hectares of community managed conservation areas



Nguna-Pele Marine Protected Area (NPMPA)

Vanuatu

- Fish biomass and marine invertebrate abundance in community reserves significantly larger than in unmanaged areas
- Live coral cover significantly greater within marine reserves due to protection from destructive fishing activities
- Doubling of average community incomes over the last five years
- Community-based projects have nearly tripled since MPA began
- Total area now managed is over 300 hectares, including sea grass, intertidal lagoons, and coral reefs



Tmatboey Community Protected Area Committee

Cambodia

- Tourism revenues are contingent on responsible management of habitats and the protection of key species
- Reversal in declines in globally threatened wildlife species
- Populations of the white-shouldered ibis (one of the rarest species in the world) have more than doubled since 2003
- Deforestation rates have declined and encroachment into key wildlife areas has ceased
- Tourism enquiries are growing at approximately 30% annually
- Revenues raised in 2008: \$US11,000; one-third used for local development projects



Poloprobio Rio Branco

Brazil

- Sustainable land-use projects reducing deforestation, logging, and slash and burn practices
- Environmental awareness on the sustainable extraction of rubber increased
- Indigenous rubber extraction techniques led to increased incomes and employment opportunities
- Each 60 kilogram unit of rubber sold generates a gross income of over R \$3,000.00 for a single family
- Poloprobio's techniques have been successfully replicated in Belterra Flona Tapajós and shared with indigenous peoples of Kaxinawá, Shanenawa and Kaxarari in Acre



Cooperativa Agro-extrativista Yawanawa – COOPYAWA

Brazil

- Expansion and full protection of the Yawanawá tribal territory
- Yawanawá land covers over 43% of the State of Acre and includes 187,000 acres of the preserved territory of the Amazon
- Formalized a partnership with international cosmetic company, Aveda Corporation, on the purchase of *urucum* plants for cosmetics production
- Social and income generation projects have created opportunities for different indigenous groups of the Brazilian Amazon



Beekeepers Association of the Tariquia Reserve

Bolivia

- Honey extracted and produced without harming local trees or altering ecosystems
- Introduction of beekeeping has had positive impacts on other local natural resources
- Cooperative activities have translated to food security and food diversification
- Honey production grew from 90kg in 1998 to seven and half tons in 2007
- More than 100 producers, with 150 new partners applying for admission
- Beekeeping facilitated broad range of local action that has led to improved livelihoods and quality of life



Chalalan Ecolodge

Bolivia

- Spearheaded creation of the Madidi National Park
- Chalalan has helped counter an estimated 35-50 illegal logging camps
- More than 45 families have access to agroforestry activities
- Improved community access to secondary education and markets for agricultural products and crafts
- Provides families with improved access to education and land tenure



Artisans Association of Arbolsol and Huaca de Barro of the Morrope District

Peru

- Five natural colors of native cotton recovered and shared with other villages
- Agro-ecological pest control
- Organic fertilizer used for cotton and other crops
- Improved local irrigation systems, increasing agricultural productivity and improving potable water quality
- Empowers local women with new income generating activities, including handicrafts and the sale of organic fertilizer
- Model is being duplicated at the district level in Mórrope



Association of Residents for the Progress and Development of Campo Amor, Zarumilla

Peru

- Reforested surrounding mangrove swamps with over 100,000 forest plants
- Treatment of waste led to reduced rates of environmental pollution and greenhouse gas emissions
- Reforestation of predatory species in dry and tropical forest
- Local women have implemented self-help groups for handicrafts, preparation of food products, and chicken farming
- Promotion of ecotourism in the National Sanctuary of Mangrove Swamps in Tumbes
- Work has been replicated in other areas of Peru



Association of Indigenous Producers and Farmers of Riosucio, Caldas Colombia

- Recovered 35 varieties of beans, five varieties of corn, and ten varieties of sugarcane
- Installed 160 bio-digestors for the generation of biogas from animal manure, reducing deforestation from fuel wood collection
- Seven biodiversity reserves have been established and 3,000 trees planted
- A micro-credit fund supports over 270 families with loans to improve and diversify agricultural and livestock activities
- New methods for animal husbandry and agricultural production have diversified local incomes and reduced local reliance on coffee production



Serraniagua Corporation

Colombia

- Registered 284 bird, 56 mammal, 77 amphibian, seven reptile, three snail, 24 insect and 636 plant species
- Organic farmers markets, regional bio-trade events, and production groups in cocoa, coffee, sugar, and ecotourism
- Environmental advocacy for the provision of technical and social services to implement best practices and sustainable production in the region
- Creation of 60 natural reserves along the corridors of the Tatamá National Park and the Serrania de los Paragua



Union of Farming and Indigenous Organizations of Cotacachi Ecuador

- Return of 10,000 plants of 15 traditional crop varieties (roots, tubers, grains and fruit)
- Exchange native seed varieties
- Promotes apiculture and markets honey, offering supplemental income
- Tourism network of 15 lodges in five communities receives up to 3,000 visitors annually
- Creation of Sumak Mikuy, a micro-enterprise that provides access to national and international markets for locally grown and processed products



Scaling Up Local Biodiversity Conservation Best Practice

- Local groups make significant contributions to national and international environment and development objectives, including the Millennium Development Goals (MDGs)
- With the right support, local and indigenous groups can scale-up and replicate their work



Ways Forward

- Rights, Access, and Finance Mechanisms
- Enhance Local Biodiversity Management Capacity
- Facilitate Local Learning and Knowledge-Sharing
- Strengthen Community Voices in Policy Processes

