COLOMBIA

AGROFORESTRY & SILVOPASTORAL PRODUCTION TO DECREASE USAID DEFORESTATION IN BIO-CULTURAL CORRIDORS















Conservation Enterprise Approach

USAID has been supporting partners in the Amazon Piedmont since 2013 to promote and build local capacity for sustainable agroforestry and silvopastoral production as a means to reduce deforestation and increase forest continuity within bio-cultural corridors. La Ruta del Queso was designed as a strategy to promote the anti-deforestation

cheese under the certificate of origin called Queso Caqueta. Mark Rausch, is a famous Colombian chef, has become the godfather of the Caqueta cheese. Farmers sign a conservation agreement and have created a network of private natural reserves registered at the National Parks Systems. A final evaluation of the program will be conducted during 2019.

ENTERPRISE TYPES

- Agroforestry production (coffee, cocoa and rubber value chains)
- Silvopastorial production (dairy value chain)

THEORY OF CHANGE

Support conservation enterprises

ASSUMPTION

Partners provided farmers with plant materials, technical assistance for sustainable production, and market linkages to restaurants in Bogota for their products. Partners also supported cheese factories to ensure high quality products.

Enabling conditions are in place to support sustainable enterprises

ASSUMPTION

The enabling conditions, such as technical capacity of farmers for sustainable practices and market linkages, are in place for farmers to sell their products.

WHAT IS MEASURED & HOW

Partners tracked the number of farms implementing sustainable production; and the value chains supported and/or strengthened for products.

Enterprises provide stakeholder benefits

ASSUMPTION

As a result of practicing sustainable production and selling products, production costs decreases, load capacity increases, milk productivity increases, and farmers' household income increases.

WHAT IS MEASURED & HOW

Partners tracked the number of farmers' households with increased economic benefits from selling their products.

Benefits motivate and enable conservation attitudes and behaviors

ASSUMPTION

As household income from enterprises increases, farmers are motivated to comply with conservation agreements to maintain and improve forest cover on their farms.

WHAT IS MEASURED & HOW

Partners tracked the number of farm plans / conservation agreements completed; number of hectares under agreements; number of hectares of biological significance and/or natural resources under improved natural resources management.

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

ASSUMPTION

As farms are managed according to plans/agreements, there is a decrease in the rate of deforestation from agricultural expansion and conversion to pasture for grazing, and an increase in the rate of forestation, including riparian forests, within the corridors.

WHAT IS MEASURED & HOW

Partners have developed a monitoring systems and tracked deforestation rates in the corridor. Using remote sensing data, evaluators will assess the change in rates of deforestation as a result of agricultural and pasture expansion and reforestation from sustainable management during program support and compare against matched sites without program support.

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

As deforestation rates decrease and forestation rates increase, the forest continuity is restored, and exiting forest remnants maintained within the corridors.

WHAT IS MEASURED & HOW

Using remote sensing data, evaluators will assess forest continuity within the corridor.



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ENTERPRISES FOR INDIGENOUS COMMUNITY FOREST MANAGEMENT

Alvaro Gaillour & Marioldy Sanchez Santivañez



Conservation Enterprise Approach

Since 2014, USAID has supported partners to build the social capital of indigenous communities to help create the enabling conditions for economic entrepreneurship and forest conservation. Beginning in 2017, partners have supported seven communities in the Ucayali Region of the Peruvian Amazon to develop sustainable businesses.

Community productive committees, with about 30 households each, recognized by their respective Community Assemblies, are engaged in Citeindigena SRL. Citeindigena, currently owned by 10 communities was established in 2012, aggregates and sells sawn timber from the communities and, with the support of USAID, is expanding to nontimber forest products and agroforestry products as well.

ENTERPRISE TYPES

- Timber
- NTFPs, including shiring a rubber, handcrafting, and
- Agroforestry products, mainly cocoa

THEORY OF CHANGE

Support conservation enterprises

Partners support communities in sustainable forest management, community governance, landuse conflicts resolution, and establishing and improving sustainable businesses. The partners are also transferring the community forest management and enterprise model to the civil society organizations and the government for scaling to other communities.

Enabling conditions are in place to support sustainable enterprises

ASSUMPTION

By building the enabling conditions, such as technical capacity, business planning, land governance, mobilization of public/private funding resources, and linkages with buyers, productive committees have the capacity to generate revenues and scale up the community forest management and enterprise model.

WHAT IS MEASURED & HOW

Partners track the number of community productive committees engaged in each type of enterprise.

Enterprises provide stakeholder benefits

ASSUMPTION

Enterprises provide increased and more stable revenues to community productive committees from selling their products.

WHAT IS MEASURED & HOW

Partners track the productive committees' revenues from selling products to Citeindigena. Partners track the number of people with improved economic benefits (including from participating in the productive committees) from sustainable resources management and/or biodiversity conservation.

ASSUMPTION

The enterprise revenues provide the needed funds for community productive committees to sustainably manage their forests.

Benefits motivate and

enable conservation

attitudes and behaviors

WHAT IS MEASURED & HOW

Partners track the number of hectares of biological significance and/or natural resources under improved management (sustainable management of forests by community productive committees)

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

ASSUMPTION

The financial and technical capacity for indigenous communities to conserve and sustainably manage their forests contributes to reductions in invasions of small scale slash and burn agriculture and illegal logging into the forest.

WHAT IS MEASURED & HOW

Partners track the number of hectares of areas of biological significance and/or natural resources under improved management (including a reduction in the incidents

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

Forest cover is maintained and there is a reduction/avoidance of greenhouse gas emissions on lands owned and managed by indigenous communities.

WHAT IS MEASURED & HOW

Partners track the number of hectares of areas of biological significance and/or natural resources showing improved biophysical conditions (e.g., forest cover).



- Is it possible for Citeindigena to create the demand for products from the indigenous communities in a sustained manner over time?
- If Citeindigena is successfully enabled, can it function sustainably as a company?
- Is the sale of prioritized products enough to continue with Citeindígena as a commercial aggregator?
- Is it possible to generate a consensual vision of "indigenous businesses" in the communities?
- If we empower the community committees, will the value chains of the products (division of labor, roles and responsibilities) be consolidated?
- Are the committed products delivered (no product leakage / fulfillment of contracts)?
- Do communities respond to the market demands of Citeindigena?
- Does the increase in communities's income lead to compliance with sales contracts between communities committees and Citeindigena?
- Does the increase in income (and the change to a business mentality) lead to improved management of the forests by indigenous communities?
- Could the change to a business mentality affect the sense of identity and culture?



Sustainable harvest of shiringa rubber from natural forests © AIDER















Annie Wallace, Teresa Robles, and Regina Soto

THEORY OF CHANGE

Conservation Enterprise Approach

For about 20 years, USAID has funded organizations working in Petén, Guatemala to support community concessions in developing conservation enterprises in the Maya Biosphere Reserve (MBR). Created in 1990, MBR covers about 20% of Guatemala and hosts

a large number of endangered plants and wildlife. The community organizations that manage the concessions and own the enterprises are required to achieve Forest Stewardship Council certification and are responsible for patrolling, monitoring, and reporting illegal activities to the government.

ENTERPRISE TYPES

- Timber, including mahogany and Spanish cedar
- Non-timber forest products (NTFPs) such as xate palm, chicle latex, breadnut, and allspice
- Cultural and ecotourism services

Enabling conditions are

Support conservation enterprises

in place to support sustainable enterprises

Enterprises provide stakeholder benefits

Benefits motivate and enable conservation attitudes and behaviors

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

Partners have supported community organizations that manage concessions in the MBR in establishing and sustaining enterprises for timber and nontimber forest products.

ASSUMPTION

By building the enabling conditions, timber and NTFP enterprises of the community timber concessions have the capacity to generate revenues and engage participants over

ASSUMPTION

Enterprises provide increased and more stable income from salaries and payments for collecting and sorting NTFPs. Revenues will also contribute to in-kind community health and education services.

WHAT IS MEASURED & HOW

conducted household surveys and

KIIs with enterprise participants to

assess their perceptions of benefits.

ASSUMPTION

The enterprise benefits provides incentives for community members to sustainably manage concessions and protect against fires, illegal logging, and illegal colonization.

ASSUMPTION

Strong management of the concessions and their enterprises contributes to reducing deforestation threats. Joint law enforcement operations with government is also critical.

WHAT IS MEASURED & HOW

their perceptions of change in threats

incidents of fire within and outside of

Evaluators conducted KIIs with

park authorities and FGDs with

enterprise participants to assess

over time. Researchers track the

concessions.

WHAT IS MEASURED & HOW

Evaluators conducted KIIs with stakeholders, including park authorities, and FGDs with enterprise participants regarding their motivations for managing their concessions.

KEY LESSONS

Enterprise benefits incentivize concession members, but in some concessions, perceived lack of fairness in benefit distribution is source of conflict.

Improved forest cover and condition supports improved habitat for endangered species and also the sustainability of community enterprises.

ASSUMPTION

WHAT IS MEASURED & HOW

Studies conducted on deforestation rates within and outside of concessions and on abundance of jaguar and prey species.

KEY LESSONS

A study indicates that well managed concessions have reduced deforestation rates as well as, if not more effectively than surrounding government-managed protected areas. A study shows that active concessions harbor an abundance of jaguar and prey species.

WHAT IS MEASURED & HOW

Researchers and evaluators conducted key informant interviews (KIIs) with stakeholders and focus group discussions (FGDs) with enterprise participants on their perceptions of the influence of conditions on concession and enterprise development and sustainability.

KEY LESSONS

Concession governance and leadership, literacy rates, dependence on agricultural and livestock livelihoods, forest management knowledge, and concession size influence the stability of the concessions and their enterprises. Given conflict over high-value resources, continuous support, especially in governance, is needed.

KEY LESSONS

Researchers and evaluators

Concession members benefit more from direct employment and payments, but in some cases non-members also benefit from inkind community services provided through concession revenues.

KEY LESSONS

Concession members, incentivized by enterprise benefits, manage forests and protect from external threats and do so at least as well as other protected areas. However, it is becoming increasingly difficult to manage illegal activities given the lack of support for law enforcement.

The Asociación Forestal Integral Cruce la Colorada sawmill in Carmelita sustainably harvests mahogany and other timber from its community forest concession. Carmelita was the first concession in the region 20 years ago and is looking towards having to renew the contract with the government in five years.

© JASON HOUSTON FOR USAID

HONDURAS

ASSUMPTION

business development

Partners support community

members in technical training,

establishing market linkages,

value chain analysis, and business

management to help establish

and improve enterprises.



ENTERPRISES TO INCREASE RESILIENCE AND PROTECT WATERSHEDS



Sofia Mendez

Conservation Enterprise Approach

Since 2016, USAID has supported partners to increase livelihood resilience for vulnerable communities consistent with promoting the defense of the most important remaining forested areas in western

Honduras. The II areas of influence with biological significance are typically near the upper headwaters of watersheds that are under the threat of expansive agriculture and overuse of timber for fuelwood, making effective conservation critical to downstream ecosystems.

Conservation behaviors of

stakeholders contribute to

a reduction in threats (or

restoration)

Forest clearing for agriculture

water as inputs to production is

reduced in biologically sensitive

WHAT IS MEASURED & HOW

significance and/or natural resources

and the use of firewood and

areas in western Honduras.

Partners track the number of

hectares of areas of biological

under improved management

(including a reduction in the area

methodology (Terra I Honduras)

was developed to measure gains and

cleared for agriculture, affected

by forest fires etc). A satellite

losses of land coverage.

ASSUMPTION

THEORY OF CHANGE

Support Enabling conditions are in place to support sustainable enterprises

ASSUMPTION

By building the enabling conditions, such as technical capacity, business management, market linkages, conservation enterprises have the capacity to increase sales and create jobs.

WHAT IS MEASURED & HOW

Partners track the number of people trained in sustainable agricultural livelihoods; dollar amount of new net sales of participating conservation enterprises by type of enterprise; number of conservation enterprises adopting clean/renewable energy technologies and/or best practices; percentage of female participants in programs designed to increase access to productive economic resources; number of people (by gender and type of activity) with new employment (FTEs) created in participating rural conservation enterprises; number of private sector investment leveraged for conservation.

ASSUMPTION

Enterprises provide increased income to participants from selling their products or services and from using renewable energy sources (e.g., solar dryers and improve cookstoves) which reduces the costs of inputs for production. The increased income from non-agriculture conservation enterprises reduces participants' cost on energy and water by using cleaner production principles, and decreases their need to depend exclusively on agriculture (building resilience).

Enterprises provide

stakeholder benefits

WHAT IS MEASURED & HOW

Partners track the number of households with new income from conservation enterprises and number people with improved economic benefits (including from conservation enterprises) derived from NRM and/ or biodiversity.

enable conservation attitudes and behaviors

Benefits motivate and

ASSUMPTION

Increased income from enterprises not only reduces the need for expansive agriculture and unsustainable use of inputs for production, but also motivates participants to get involved in voluntary community conservation schemes such as working to preserve their watershed from forest fires, deforestation and other identified threats.

WHAT IS MEASURED & HOW

Partners track number households and microenterprises using renewable energy and applying clean production; number hectares of biological significance and/or natural resources under improved management, including areas where agricultural producers are implementing good agricultural practices to protect soil and water resources.

ENTERPRISE TYPES

- Agroforestry products, including cocoa, avocado, coffee, sugar cane loaves
- Livestock, including milk and beef
- Natural fiber crafts from junco, tule, tuza, and palma
- Clay products, including tile and brick
- Ecotourism, including hiking, climbing, cycling, mountaineering, river tubing and kayaking

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

Forest cover is maintained and there is a reduction/avoidance of greenhouse gas emissions on lands owned and managed by enterprise participants.

WHAT IS MEASURED & HOW

Partners track the number of hectares of areas of biological significance and/or natural resources showing improved biophysical conditions (i.e., area with forest cover within their 11 areas of influence based on satellite data from an early alert system). Partners will monitor felines and their prey.

Mountaineering training in Taulabe caves, Honduras. USAID/Honduras supports youth to increase incomes and thus see their future in Honduras while protecting the environment. © ANDREA TELLEZ/DAI

Kayaking training of local eco-tourism association in Lake Yojoa, Honduras. © ANDREA TELLEZ/DAI

INDONESIA



COMMUNITY-BASED CONSERVATION ENTERPRISES AROUND MARINE PROTECTED AREAS



Celly Catharina, Andrea Pavlick, Jason Seuc

Conservation Enterprise Approach

Located in the Coral Triangle, Indonesia's marine resources play a key role in maintaining the world's fisheries. The USAID SEA Project creates conservation incentives for communities around marine

protected areas (MPAs) by engaging small-scale fishers in business activities that enhance stewardship rather than over exploitation of resources.

ENTERPRISE TYPES

- Sustainable fishing initiatives for tuna, snapper, grouper, mackerel, sardines, anchovies, and flying fish eggs
- Sustainable community-based tourism services, including diving, snorkeling, recreational fishing, homestays, and resorts
- Salted fish and handmade soap made from coconut oil as part of sustainable tourism services

THEORY OF CHANGE

Support conservation enterprises

Partners provide technical and business development assistance to help build sustainable enterprises for communities

ASSUMPTION

around MPAs.

Enabling conditions are

in place to support

sustainable enterprises

By building enabling conditions,

business planning, and market

markets for sustainable products

linkages, fishers have stable

and/or tourism services.

such as technical capacity,

WHAT IS MEASURED & HOW Partners tracking the number of active community-based microfinance associations, number of enterprises established, and number of people engaged in enterprises.

KEY LESSONS

ASSUMPTION

Including adat management approaches (traditional knowledge) empowers communities to safeguard their natural heritage and ensure sustainability.

Enterprises provide stakeholder benefits

ASSUMPTION

Stable markets for sustainably harvested fish or ecotourism services will provide increased and stable income for communities.

WHAT IS MEASURED & HOW

Partners tracking the number of people with increased economic benefits derived from sustainable natural resource management and conservation (including from enterprises), including increased household income, assets, nutrition, and other benefits.

KEY LESSONS

Successful ecotourism relies on stakeholders that share a vision and work together to harmonize economic growth and ecological protection. Fisheries enterprises also provide significant benefits to participants.

Benefits motivate and enable conservation attitudes and behaviors

ASSUMPTION

Stable income for fishers helps communities, local government, and the private sector understand the value of conservation, management, and enforcement for protecting fisheries, critical habitats and marine-based livelihoods.

WHAT IS MEASURED & HOW

Partners tracking number of people demonstrating behaviors that contribute to biodiversity conservation, including those resulting from enterprise participation.

KEY LESSONS

MPAs fail due to social conflict over resource use. Therefore, enterprise benefits must be viewed as fair to for the enterprise to succeed (and working with stakeholders from the outset can achieve this).

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

ASSUMPTION

Improved management increases stakeholder engagement and compliance with MPA regulations and decreases use of unsustainable fishing practices.

WHAT IS MEASURED & HOW

The second second

Partners tracking number of hectares of biological significance and/or natural resources under improved natural resource management, including MPAs.

KEY LESSONS

Enterprise benefits help to provide motivation for conservation. Although challenging to establish, local community surveillance groups provide the quickest and most effective way to encourage compliance with local MPA regulations.

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

A decrease in unsustainable fishing contributes to healthier fish populations and improved coral reef, mangrove, and seagrass habitats, which in turn will provide for improved livelihoods.

WHAT IS MEASURED & HOW

Partners tracking number of hectares of biological significance and/or natural resources showing improved biophysical conditions. This indicator will document the change in coral reef cover, fish abundance and fish size in selected communities in three provinces as an outcome of improved MPA management.

KEY LESSONS

MPAs are most effective in protecting endangered and threatened species when they are established with local communities, who know where the species are and want to protect



Processing of anchovy catch © USAID-SEA ACTIVITY

NEPAL







ENTERPRISES TO REDUCE UNSUSTAINABLE RESOURCE DEPENDENCY FROM COMMUNITY FORESTS



ENTERPRISE TYPES

- Livestock (pigs, stall feeding for milking cow and goat, poultry, fish)
- NTFPs (plantation, collection, processing and marketing) - marmelous, chiraito, nettle powder, broom grass
- Beekeeping and honey
- Homestays
- High value crops plantation, processing and marketing (vegetables, tea, coffee, cardamom, fruit)
- Services (electrician, plumber, mason, carpentry, small retail shops, ICS - metal clay and biogas installers)

IMPACT EVALUATION

USAID is currently directing an evaluation to assess if livelihood programs, including enterprises, influence resource use and biodiversity outcomes. The evaluation will use a nested "before-after-control-impact" (BACI) design in which differences between treatment and comparison units are measured before and after the intervention. The evaluation will include three data collection efforts: interviews of community forest user groups, households within those communities, and biodiversity data collections within community forests. Around 3,400 forests plots and 5,400 households are surveyed for the study.

Conservation Enterprise Approach

100

USAID has supported partners to address biodiversity threats and climate vulnerabilities and improve community forest resource management in the Chitwan-Annapurna Landscape and the Terai Arc Landscape. Partners have supported Forest User Groups and

associated community organizations in developing conservationfriendly enterprises with the assumption that, as income from conservation-friendly enterprises increases leads to, conservation friendly behavioral change, household dependence on forest resources declines, and selected biodiversity elements improve.

THEORY OF CHANGE

Support conservation enterprises

Enabling conditions are in place to support sustainable enterprises

Enterprises provide stakeholder benefits

Household income, part-time and

cooperative shareholders, women

WHAT IS MEASURED & HOW

Partners tracking number employed,

% of employment and amount of

revenue/income generated from

conservation-friendly enterprises.

with forest user groups on income

generated and household survey

on wealth and wellbeing status of

members, including change in cash

and non-cash (subsistence) income

sources, assets, food, water, energy

security.

Evaluators conducting KIIs and FGDs

full-time employment, profit for

empowerment, and leadership

development increases from

friendly enterprises.

participation in conservation-

ASSUMPTION

Benefits motivate and enable conservation attitudes and behaviors

As household cash income firewood and timber decreases; encroachment of forest area for agricultural/residential purposes increases.

management/action plans prepared number of community-based antipoaching units form/mobilized, and hectares under improved management. Evaluators conducting KIIs, FGDs, and household survey with forest user group members on conservation awareness and participation in forest management

contributes to biodiversity a reduction in threats (or restoration) conservation

Conservation behaviors of

stakeholders contribute to

in conservation attitudes and

poaching.

behaviors will lead to decrease in

WHAT IS MEASURED & HOW

Partners tracking years of zero

maintained and trend or status of

KIIs with user group leaders on

illegal logging. Evaluators conducting

poaching of tiger and rhino

ASSUMPTION ASSUMPTION Change in forest resource use Threat reduction contributes leads to a reduction in incidents to forest maintenance of threats, such as overharvest of or improvement, such as fuelwood and high-value NTFPs improvement in forest health and key species populations. and encroachment in forest land, open grazing, forest fires, soil erosion (topsoil loss). Change

WHAT IS MEASURED & HOW

A reduction in

threats and restoration

Partners tracking area showing improved biophysical condition and number of individuals of tiger, rhino, snow leopard. Evaluators assessing forest condition using 47 biophysical variables and matching groundtruthed biodiversity data to remote sensing data for canopy cover.

ASSUMPTION

Partners provide value chain analysis, business plan development, technical assistance (knowledge, capacity and skills), equipment or material support for establishing conservationfriendly enterprises.

Woman tying broom grass to create household brooms © USAID - HARIYO BAN

ASSUMPTION

By building the enabling conditions such as registration of enterprises, business planning and technical backstopping from service providers, cooperative strengthening of community forestry group members, availability of raw materials, access finance and linkage with market, collaboration with local government, strengthen enterprise internal governance (common property), enterprises are established and sustained.

WHAT IS MEASURED & HOW

Partners tracking the number of enterprises established and strengthened, legal status of enterprises, people benefited, women entrepreneurs engaged, number of people employed, amount of revenue generated, number of PHPA conducted, number of business plans developed, amount of revolving fund mobilized, resources leveraged from local government and private sector. Evaluators conducting KIIs, FGDs, and household survey on participation in conservation activities and enterprises.

ASSUMPTION

increases from conservationfriendly enterprises, the need for illegal/unsustainable harvesting and selling of decreases; and involvement in conservation activities such as plantation, forest fire control, forest management including periodic revision and renewal of forest operation plans and youth involvement in CBPAUs

WHAT IS MEASURED & HOW

Partners tracking the number of

Freshly harvested cardamom ready for drying © USAID - HARIYO BAN





CONSERVATION ENTERPRISES IN COMMUNITIES AROUND PROTECTED FOREST AREAS



Khuong Tran Chinh, Scott Bartos

THEORY OF CHANGE

ENTERPRISE TYPES

- FSC-certified Acacia for timber on bare land
- Medicinal plants

Conservation Enterprise Approach

Since 2018, USAID has supported partners to organize groups of farmers around protected areas in the provinces of Thua Thien Hue and Quang Nam, where remnants of primary forest still exist. Enterprise support is focused on vulnerable communities, especially rural ethnic minorities living in poverty, who traditionally depend on forests for livelihood support. To ensure sustainability, the partners

mobilize funding to support village cooperatives, women's unions and other private sector stakeholders to establish enterprises aimed at generating income from sustainable sources, restoring forests, avoiding emissions from deforestation, and reducing climate vulnerability. It is still too early to know if enterprises will result in reductions in threats to protected areas.

Support conservation

enterprises

ASSUMPTION

Partners have conducted livelihood analysis, value chain assessments, and supported community groups around protected forests within a proposed biodiversity corridor in establishing and improving enterprises.



Handicraft production © USAID -**GREEN ANNAMITES**

Enabling conditions are in place to support sustainable enterprises

ASSUMPTION

By building the enabling conditions through a value chain approach, including technical capacity, business planning, and linkages with buyers, agricultural cooperatives and community forest groups generate revenues and engage more members over time. Strengthening the cooperative alliances will support enterprise sustainability and benefits from a structured relationship with the government.

WHAT IS MEASURED & HOW

To identify enterprises, partners conducted extensive surveys and participatory exercises with community groups. Partners track the number of individuals trained in sustainable forest management and climate-smart agricultural practices, funds mobilized to support enterprises, and people with improved capacity (gender and ethnicity disaggregated data).

Enterprises provide stakeholder benefits

ASSUMPTION

Enterprises provide participants with increased and more stable income from selling products and services.

WHAT IS MEASURED & HOW

Partners track the number of people receiving livelihood co-benefits (monetary or non-monetary) and benefiting from scaling up of successful business models, and amount of income reported from scaling up successful business models.

Benefits motivate and enable conservation attitudes and behaviors

ASSUMPTION

If the communities are able to general legal income from enterprises, then they reduce the effort put into activities that degrade the forest in the buffer zones of the PAs.

WHAT IS MEASURED & HOW

Partners track the number of hectares of biological significance and/or natural resources under improved management, including by community groups participating in enterprises.

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

ASSUMPTION

Strong management of agricultural cooperatives and community forestry groups and their enterprises contribute to reductions in wildlife poaching (mostly small mammals for their consumption and trade), illegal timber and NTFP harvesting for consumption and sale in domestic markets, and encroachment into forests for shifting cultivation and acacia plantations.

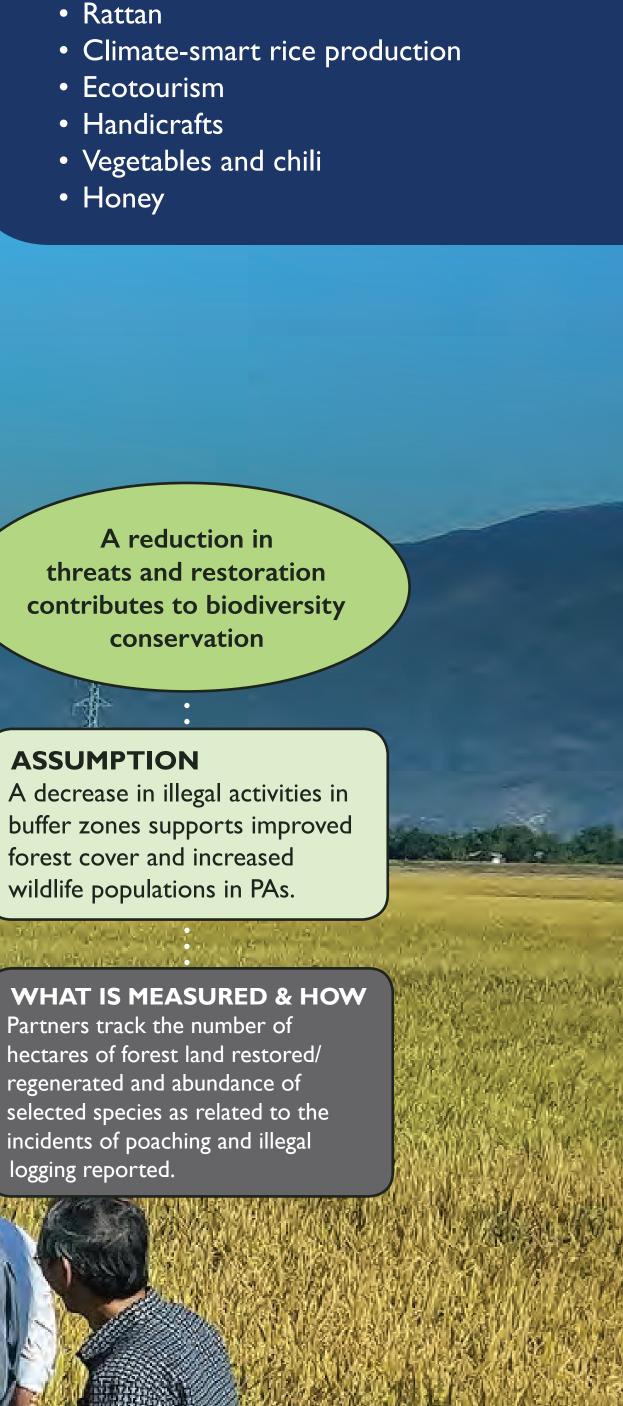
WHAT IS MEASURED & HOW Partners track the number of hectares of biological significance and/or natural resources under improved management, including the number of incidents (poachers, illegal loggers), as reported by the PA.

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

A decrease in illegal activities in buffer zones supports improved forest cover and increased wildlife populations in PAs.

hectares of forest land restored/ regenerated and abundance of selected species as related to the incidents of poaching and illegal logging reported.









ENTERPRISES AS INCENTIVES FOR COMMUNITY CONSERVATION

Beatrice Wamalwa, Brian Otiende, Ben Wandago and Mikala Lauridsen

Conservation Enterprise Approach

USAID is promoting conservation enterprises as an economic empowerment tool in supporting the implementation of the community conservation model across various critical ecosystems throughout Kenya. The number of people with increased economic benefits has increased and over 4.3 million hectares of biological significance have been placed under improved natural resource management. USAID's partners in Kenya include: the Northern

Rangelands Trust (NRT) and Maasai Mara Wildlife Conservancies Association (MMWCA) that are umbrella organizations representing over 50 conservancies in the northern and southern rangelands of Kenya. Efforts include supporting improved livelihoods of landowners and community members for biodiversity conservation and human well-being outcomes and improved governance and leadership structures as well as financial sustainability of the conservancies.

THEORY OF CHANGE

Support conservation enterprises

ASSUMPTION

Partners help develop business plans, set up savings and credit schemes, create market linkages, business networks and partnerships, and provide other technical support to establish enterprises.

Enabling conditions are in place to support sustainable enterprises

ASSUMPTION

By building the enabling conditions, such as governance systems, credit, and technical capacity, enterprises are established and sustained.

WHAT IS MEASURED & HOW

Partners track the number of enterprises established and tourism partners/investors.

Enterprises provide stakeholder benefits

ASSUMPTION

Participation in conservation enterprises increases household income.

WHAT IS MEASURED & HOW

Partners track the number of people with improved economic benefits from NRM; value of revenue generated from improved NRM (includes income from enterprises); number of landowners/people receiving land lease payments and proceeds from sales of cattle and

ASSUMPTION

As household income from enterprises increases, the need for unsustainable land use practices and habitat degradation declines, and compliance with management plans (e.g. rotational grazing) and reporting violations increases.

Benefits motivate and

enable conservation

attitudes and behaviors

WHAT IS MEASURED & HOW

Partners track the area under improved NRM (e.g rotational grazing management and compliance with resource use plans, which is reported by the conservancy.

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

ASSUMPTION

Change in forest resource use and compliance with management plans contributes to a reduction in threats, such as elephant poaching, overgrazing, fencing that inhibits wildlife movement, and fuelwood collection.

WHAT IS MEASURED & HOW

Partners track the incidents of poaching which are reported by community rangers. There are various other influences on threat reduction within conservancy, for example, increased monitoring and enforcement.

ENTERPRISE TYPES

- Ecotourism (camps & lodges, safaris)
- Livestock
- Crafts
- Mangos
- Fish

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

Threat reduction contributes to forest maintenance or improvement, such as increase in forest cover and species populations.

WHAT IS MEASURED & HOW

Partners track the number of hectares of biological significance and/or natural resources showing improved biophysical conditions (i.e., improvement in one or more natural resources).

MALAWI







LUCHECHE **COOPERATIVE**

ESSENTIAL OIL AND CHARCOAL ENTERPRISE TO REDUCE DEFORESTATION



Madalitso Kaferawanthu

ENTERPRISE TYPES

Essential oil and sustainable charcoal from plantations of Lemon Eucalyptus (C. Citriodora)

Conservation Enterprise Approach

In January 2016, a USAID supported partner provided a three year grant to the Kawandama Hills Plantation (KHP). KHP is a company established in 2009 with a 55 year lease within the Viphya Plantation to a large tract of grassland with small pockets of indigenous forest, adjacent to the Perekezi Forest Reserve. KHP operates an essential oil and sustainable charcoal business produced from their plantations of Lemon Eucalyptus. In addition, KHP has supported farmers in adjacent communities to establish a cooperative, and plant trees on their property. The members then sell the leafy biomass to KHP, twice per year, at a fair market rate, which KHP uses to distill essential oil. This relationship economically benefits cooperative members and KHP, and the sustainable charcoal is helping to offset illegally and unsustainably produced charcoal.

THEORY OF CHANGE

Support conservation enterprises

ASSUMPTION

Partners provide training and quality seedlings to cooperative members to plant eucalyptus on marginal lands so that they can commercially supply leafy biomass to KHP for essential oil distillation while not competing with production of agricultural crops for consumption.



A KHP employee loads a half orange kiln with Corymbia citriodora offcuts to make sustainable charcoal © GINA ALTHOFF/ TETRA TECH

Enabling conditions are in place to support sustainable enterprises

ASSUMPTION

The enabling conditions, such as materials and technical capacity are in place for the cooperative members to grow trees and sell biomass to KHP and for KHP to directly employ about 200 people.

WHAT IS MEASURED & HOW

KHP tracked annual yields of leaf biomass, oil, and charcoal; KHP annual revenues; number of cooperative members participating; income earned by cooperative members; qualitative assessment of issues with expansion, such as infrastructure and markets for charcoal, and managing community members expectations.

KEY LESSONS

Given the time and resources available, only a limited number of community members could participate in selling biomass to KHP in this phase, but growing interest. Revenues increased.

Enterprises provide stakeholder benefits

ASSUMPTION

There is an increase in household income to cooperative members from the sale of leafy biomass to KHP, and households have a supply of sustainable wood.

WHAT IS MEASURED & HOW

KHP tracked their annual total income distributed to members and annual % increase in total income distributed to members.

KEY LESSONS

KHP and cooperative member income increased. The periodicity and timing of cash income is important, as selling biomass produced on marginal lands provides cash income to households when needed to purchase inputs for agriculture.

Benefits motivate and enable conservation attitudes and behaviors

ASSUMPTION

As household supply of sustainable wood increases, their need for using illegally harvested firewood from the Reserve decreases; as household income from leaf sales increase, their need to produce and sell charcoal within the Reserve decreases.

WHAT IS MEASURED & HOW

KHP described their perceptions regarding members' decreased need to collect fuelwood from the reserve. Cooperative members documented their use of harvested Lemon Eucalyptus offcuts in place of wood collected from the Reserve.

KEY LESSONS

KHP reported that members had less need to collect fuelwood from the reserve; and less need to illegally produce/sell charcoal for income generation.

There is high demand from surrounding communities to expand the Cooperative / Lemon Eucalyptus outgrower program, however the costs of leafy biomass transport to the KHP oil processing facility is the limiting factor.

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

ASSUMPTION

As the need for using illegally harvested firewood from indigenous trees declines, community members no longer illegally cut native forests in the Reserve. As cash income from leafy biomass sales increases and is available prior to the planting season, the need to illegally produce/sell charcoal decreases.

WHAT IS MEASURED & HOW There was no before/after

assessment of illegal fuelwood cutting and charcoal production intensity.

KEY LESSONS Too early for lessons.

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

As community members no longer cut native forests, deforestation rates decrease, tree species diversity is maintained/increases, and habitat for wildlife improves in the Reserve.

WHAT IS MEASURED & HOW

Outside of the grant to KHP, the Project conducted a forest inventory of the Reserve, which documented baseline species diversity, size class, regeneration, etc. So this could be "measured" in future.

KEY LESSONS Too early for lessons.

TANZANIA







ENTERPRISES TO IMPROVE CHIMPANZEE HABITAT AND POPULATIONS



Bronwyn Llewellyn, Jestina Kimbesa, Karolyn Upham

ENTERPRISETYPES

- Coffee
- Beekeeping/Honey
- Woodlots
- Mangoes
- Mushroom collecting
- Ecotourism

Conservation Enterprise Approach

USAID is supporting partners to work together with communities, local government authorities, and government agencies to address threats to chimpanzees in Western Tanzania. During the past eight years, partners have worked with local farmers in 74 villages around both District Forests and Village Forests in the Katavi and

Kigoma regions to establish conservation enterprises. The program has recently been expanded to include a total of 104 villages. An evaluation was conducted for the first four years of implementation. Lessons from the first eight years in establishing enterprises are being applied to the next phase.

THEORY OF CHANGE

Support conservation enterprises

ASSUMPTION

Partners conduct value chain assessments and provide technical assistance to community groups around district and village forests to establish enterprises.



Enabling conditions are in place to support sustainable enterprises

ASSUMPTION

By building the enabling

conditions, such as business

credit programs, and market

established and sustained. An

evaluation of the first 4 years

of implementation found that

adoption of some of the some

enterprise activities was mixed.

The new model for this phase

is to set up "Community

Conservation Banks," with

participants selecting their

enterprises and the banks

providing ongoing technical

trainings).

linkages, enterprises are

planning and technical capacity,

Enterprises provide stakeholder benefits

ASSUMPTION

Household income increases from participation in conservation enterprises.

WHAT IS MEASURED & HOW

Evaluation of the first 4 years of implementation found, in reviewing progress towards targets, that performance indicators tracked by partners for livelihoods were reported in the aggregate, not by household or enterprise, where most decisions are made. The next phase will adapt for these issues. Partners will track the number of people and villages with increased income from enterprises and dollar value generated via environmentally friendly enterprises.

Benefits motivate and

enable conservation

attitudes and behaviors

ASSUMPTION

As household income from enterprises increases, the need for fuelwood collection, charcoal making, and agricultural encroachment into the forests and wetlands declines, while compliance with forest resource use plans and reporting violations increases.

WHAT IS MEASURED & HOW

Partners tracking implementation of management plans with a semi-structured questionnaire and FGDs regarding participation in forest management activities.

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

ASSUMPTION

Change in forest resource use and compliance with resource use plans contributes to a reduction in threats, such as incidents of illegal timber and charcoal production and encroachment for agriculture, and in a reduction in contact with chimpanzees.

WHAT IS MEASURED & HOW

Partners tracking the number of weekly forest loss alerts received, disaggregated by village, district, and Tanzania National Parks Authority. Gombe Stream Research Center tracks human contact with chimpanzees and disease transmission.

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

Threat reduction contributes to forest maintenance or improvement, such as an increase in forest cover and chimpanzee populations.

WHAT IS MEASURED & HOW

Partners tracking % forest loss, number of chimpanzees using corridors, and chimpanzee population size.



Local dancers perform for ecotourists.
© BRONWYN LLEWELLYN

WHAT IS MEASURED & HOW

assistance (as opposed to one-off

Partners tracking the number of active community-based microfinance associations, number of enterprises established, and number of people engaged in enterprises.

Selling honey © BRONWYN LLEWELLYN

UGANDA



CHIMPANZEE TRUST
Chimpanzee Sanctuary & Wildlife Conservation Trust
NATIONAL FORESTRY AUTHORITY

HIGH-VALUE CROPS & HONEY ENTERPRISES IN COMMUNITIES AROUND FOREST RESERVES & NATIONAL PARKS



Shawna Hirsch

THEORY OF CHANGE

Conservation Enterprise Approach

USAID has supported partners over the past 8 years to work with the National Forestry Authority (NFA) and the Uganda Wildlife Authority (UWA) to engage communities in agreements to manage resources in the buffers of protected areas (PAs), reducing crop raiding from wildlife, such as chimpanzees and elephants, and threats from illegal activities. To date, a small subset of the community households in the villages or parishes volunteer to pilot the enterprises. Through technical assistance, equipment and seed grants through the Uganda Biodiversity Fund, community groups have established various enterprises.

ENTERPRISE TYPES

- High value crops, such as chili and vanilla cultivation not palatable to wildlife
- Beekeeping and honey processing

Support conservation enterprises

ASSUMPTION

Partners have supported community groups that are establishing enterprises.

signatories to agreements in



Growing chili in the buffers of a protected area to earn income and reduce human-wildlife conflict © AFRICAN WILDLIFE FOUNDATION **Enabling conditions are** in place to support sustainable enterprises

ASSUMPTION

By building the enabling conditions, such as technical capacity, business planning, equipment, and market linkages, community enterprises have the capacity to generate revenues, demonstrate benefits, and engage more members over time.

WHAT IS MEASURED & HOW

Partners tracked the number of enterprise groups. Partners conducted key informant interviews (KIIs) with stakeholders and focus group discussions (FGDs) with enterprise participants on their perceptions regarding the influence of conditions on enterprise development and sustainability.

KEY LESSONS

Longer time-frames needed to establish enterprises. Formation of legally-recognized cooperatives strengthens community cohesion around enterprises. Participants need business development skills to position themselves to "push" toward the market "pull". Initially producers were linked with specific buyers who determined prices; partners learned that "market flexibility" allows producers to potentially find diverse and stronger markets.

Enterprises provide stakeholder benefits

ASSUMPTION

Enterprises will provide community members with increased income from selling chili and honey to buyers. Chili will deter elephants from damaging crops. Benefits will also improve the relationship with

WHAT IS MEASURED & HOW

Partners tracked increased revenue accruing to communities from enterprises. Partners conducted FGDs with enterprise participants to assess their perceptions of benefits.

KEY LESSONS

Continued support from partners is needed to find consistent markets for enterprise products or develop additional income generating activities for sustainable benefits.

Benefits motivate and enable conservation attitudes and behaviors

ASSUMPTION

Enterprise benefits will provide incentives for community members to comply with the terms of the agreements, increase monitoring by community scouts, and report incidences of threats to PA authorities.

WHAT IS MEASURED & HOW

Partners tracked the number of agreements developed between government and communities. Partners conducted KIIs with stakeholders, including park authorities, and FGDs with enterprise participants regarding their motivations for signing and complying with CFMAs/MOUs.

KEY LESSONS

Engagement in enterprise activities incentivized community members to sign agreements. Partners reported that even before revenues were generated, relationships with PA authorities improved and reporting of illegal activities increased; which partners attribute to "intrinsic incentives" - e.g., organization and recognition of community groups who participate in conservation.

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

ASSUMPTION

Strong management of the community groups and their enterprises under agreements contributes to reducing poaching, retaliatory killing, illegal logging, overharvest harvest of NTFPs, and agricultural encroachment into PAs.

WHAT IS MEASURED & HOW

Partners tracked government reports and conducted KIIs with park authorities and FGDs with enterprise participants to assess their perceptions of change in threats over

KEY LESSONS

Partners reported less crop damage in increased forest protection. Community groups, incentivized by enterprise support, monitor and report threats.

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A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

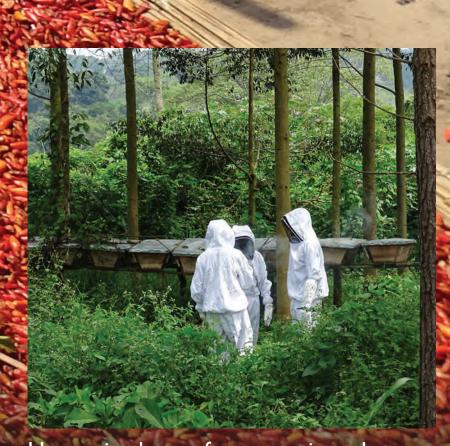
A decrease in human-wildlife conflict and illegal activities in buffers will support improved habitat and wildlife populations in PAs.

WHAT IS MEASURED & HOW

Improved habitat and wildlife populations in buffers of PAs has not yet been measured

KEY LESSONS

Tracking biophysical changes will require building partnerships with agencies to support broader landscape-level



Harvesting honey from an apiary along the boundaries of a central forest reserve © AFRICAN WILDLIFE FOUNDATION







ENTERPRISES THAT CHANGE POACHERS INTO FARMERS COMMITTED TO CONSERVATION



Jassiel M'soka, David Arnaldo Mijan, Jeremy Boley, Harry Ngoma, Catherine Lwando-Tembo

Conservation Enterprise Approach

From 2012-2017, USAID supported Community Markets for Conservation (COMACO) an organization that supports wildlife conservation in eastern Zambia by providing training to small-scale farmers in sustainable agricultural practices and alternative livelihood opportunities for illegal wildlife poachers. COMACO turns their

agricultural produce into high-value food products that are sold through-out Zambia under the brand It's Wild! This is in exchange for their commitment to conservation and illegal firearms and snares. This approach is aimed at reducing poaching in the national parks and game management areas.

ENTERPRISE TYPES

Farming crops such as nuts, rice, beans, soy and forest products such as honey that are processed and sold under the brand "It's Wild"

THEORY OF CHANGE

Support conservation enterprises

COMACO organizes members

into producer groups, which are

accredited to a cooperative, and

provides technical assistance

to former poachers who sign a

using nitrogen enhancing trees,

organic fertilizers and practices

"conservation pledge" in farming

ASSUMPTION

in minimum tillage.

Enabling conditions are in place to support sustainable enterprises

ASSUMPTION

The enabling conditions are in place for poachers to become farmers as part of a producer group.

WHAT IS MEASURED & HOW

COMACO tracked the number of lead farmers trained, producer groups formed, farmer cooperatives formed and registered, and the total number of individual farmer members; % increase in food crop yields; % of farmers engaged in more than 3 income activities other than farming (e.g., beekeeping, livestock); % of farmers producing 3 or more food crops per year.

KEY LESSONS

Farmers trained had increased yields and were engaged in more than 3 income activities and producing more than 3 food crops per year.

Enterprises provide stakeholder benefits

ASSUMPTION

Household income and food security increases from increased yields. Chiefdom communities receive dividends for conservation efforts.

WHAT IS MEASURED & HOW

COMACO tracked the % increase in average household incomes of members and the % of households that are food secure.

KEY LESSONS

Did household income and household food security increase? Why are why not?

Conservation behaviors of stakeholders contribute to a reduction in threats (or restoration)

Farmers no longer poach, and

incidents of illegal poaching in

therefore there is a decrease in

WHAT IS MEASURED & HOW

Are incidents of threats in protected

Was there a decrease in incidents of

poaching? Why or why not?

areas monitored, and by whom?

ASSUMPTION

protected areas.

KEY LESSONS

ASSUMPTION

As household income from enterprises increases, the need for poaching in protected areas will decrease. Farmers are also motivated to plant trees for chiefdom communities to receive conservation dividends.

Benefits motivate and

enable conservation

attitudes and behaviors

WHAT IS MEASURED & HOW

COMACO tracked the number of farmers adopting Sustainable Agriculture Land Management that provide carbon credit incentives.

KEY LESSONS

Did farmers with increased average household income adopt Sustainable Agriculture Land Management? Why or why not?

A reduction in threats and restoration contributes to biodiversity conservation

ASSUMPTION

There is an increase in wildlife populations in protected areas.

WHAT IS MEASURED & HOW

Are wildlife populations in protected areas monitored and by whom?

KEY LESSONS

Was there an increase in wildlife populations? Why or why not?

Peanut butter is one of the products sold by It's Wild. © COMACO (itswild.org)

Former poachers (?) © COMACO (itswild.org)