Governments of Mexico and Ghana
United States Agency for International Development/
Private Voluntary Cooperation
Conservation International

USAID/PVC Matching Grant
Grant Number FAO-A-00-00-00012-00

Agroforestry-based enterprise development as a biodiversity conservation intervention in Mexico and Ghana

Final Evaluation Report

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Malaga/Spain, Hereford/UK
March 29, 2004

Dea ofru duapa na yepia no

The one who climbs a good tree deserves support

(Ghanaian saying)

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Introduction

The following report describes the results of the final evaluation of the USAID/PVC Matching Grant "Agroforestry-based Enterprise Development as a Biodiversity Conservation Intervention in México and Ghana," Award Number FAO-A-00-00-00012-00. The grant was implemented by CI's Coffee and Cocoa program, which forms part of the Conservation Enterprise department in CI's head office

The grant covers the period from October 1st, 2000, to April 15th, 2004.

The goal of the grant is the conservation of biodiversity in threatened tropical ecosystems.

Its purpose is to build the capacity of CI and its local CBO partners to promote low impact agriculture and conservation among small-scale coffee and cocoa farmers.

This final evaluation analyzes the first systematic attempt of CI's Coffee and Cocoa program to design and implement a project and identifies the key lessons learned before the approach is replicated in new project sites.

The evaluation's focus is determined by three audience groups:

1) The USAID PVC/ Matching Grant Scheme,
2) the CI Coffee and Cocoa Program at its headquarters in Washington DC, and the
3) México and Ghana CI country programs.

According to the USAID Evaluation Guidelines the report is structured in two parts, the first part assessing the effectiveness of the Program and the second part program management.

Within the first part, by comparing baseline data with end of project data the progress of the two country projects and of the headquarters unit towards their respective stated objectives is analysed. This includes finding out whether the overall model and approach as well as the activities implemented in field were effective, the developed partnerships productive and the operations sustainable. It also involves analysing the environment in which the two project sites are operating and identifying factors that promoted or hindered the approach.

Whereas the first part looks at results, the second part of the evaluation relates to the procedures employed. This is where CI's management processes and organisational structures relevant for the Coffee and Cocoa Program are examined. In this section CI's program management capacity is evaluated and the question answered to what extent the grant has enabled CI to improve its institutional capacity for promoting Conservation Coffee and Cocoa interventions.

The evaluation was carried out by a two-person team of external evaluators, Mr. Winfried Zettelmeyer, economist, and Mr. Alan Maddison, agronomist and tropical plant pathologist.

CI-DC staff and CI project staff in the field supported the evaluation team.

In DC, the person coordinating and overseeing the evaluation was the Advisor on Project Design and Management, Ms. Linda Klare-Repnik.

In Ghana, the key support people were CI's local project manager, Mr. Gyampah Amoako-Gyedu, and the local cocoa sector specialist Mr. Paa Kwezi on loan from MOFA to assure an in-depth understanding of the specifics of the Ghanaian cocoa sector.

In México, support was provided by the coordinator of the project, Mr. Santiago Arguello and the consultant for socio-economic studies, Mr. Arthur van Leuween.

The briefing in Washington and the field visits took place between November 11, 2003 and December 20, followed by a second briefing in Washington from January 5 to January 13.

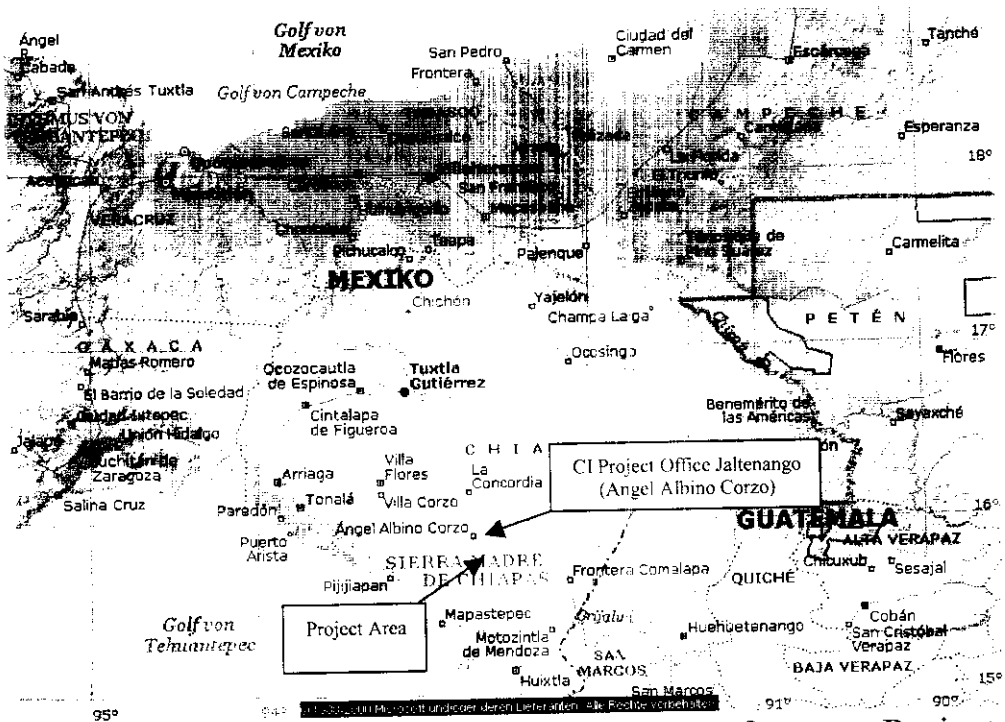
A list of the places visited, contacts made and documents consulted are presented in Annex 7.4 and 7.5.

The evaluators want to thank CI staff in Washington, in Jaltenango/Mexico and Accra Ghana for their trust, active involvement and support, their readiness to answer whatever question arose and for their patience in explaining the strategic lines and often complex details of this remarkable program that comprises subjects as wide apart as species, business development, ecological corridors, and poverty alleviation.

Malaga/Spain and Hereford/UK, March 29, 2004

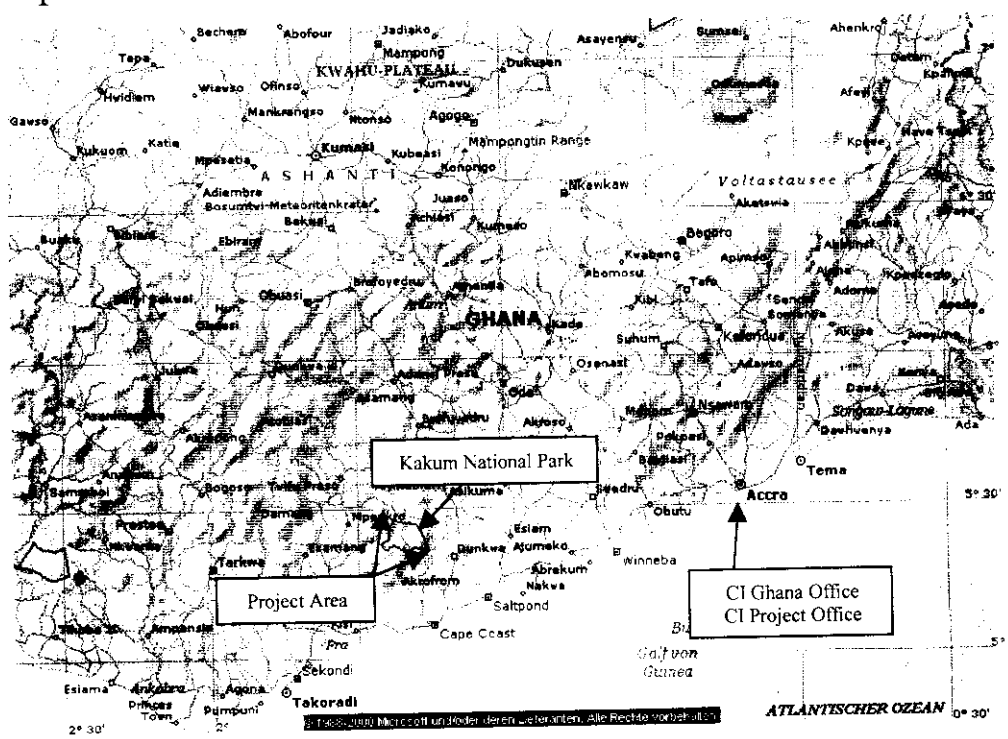
Winfried Zettelmeyer, Alan C. Maddison

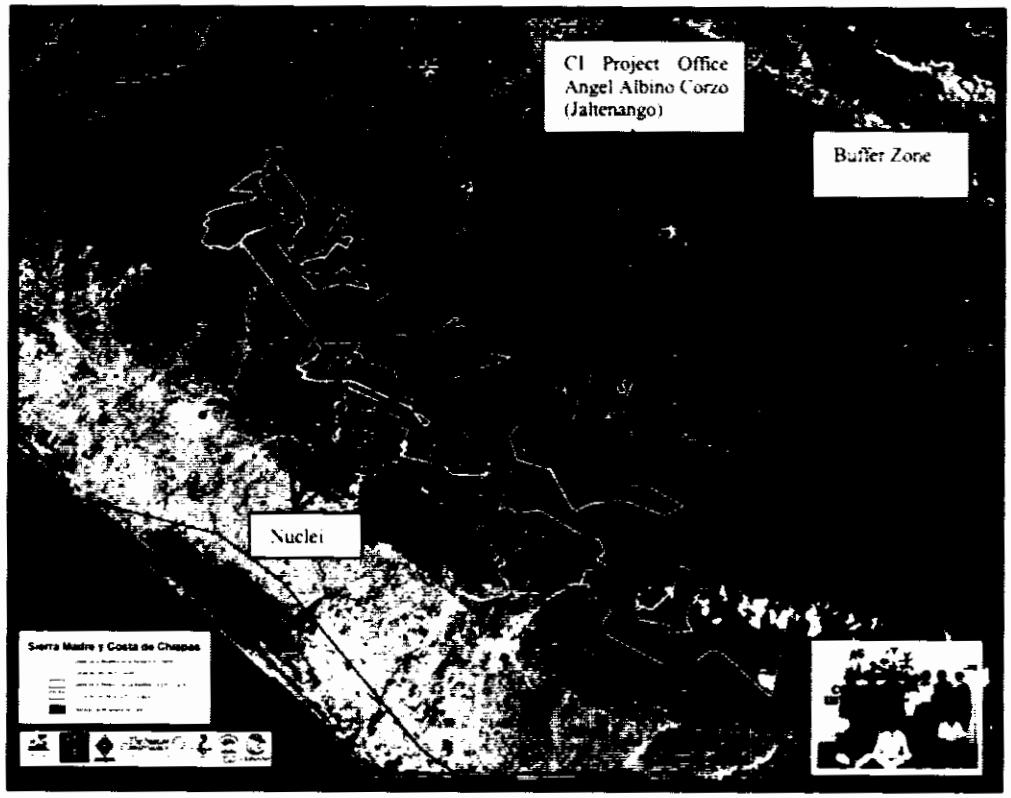
Maps



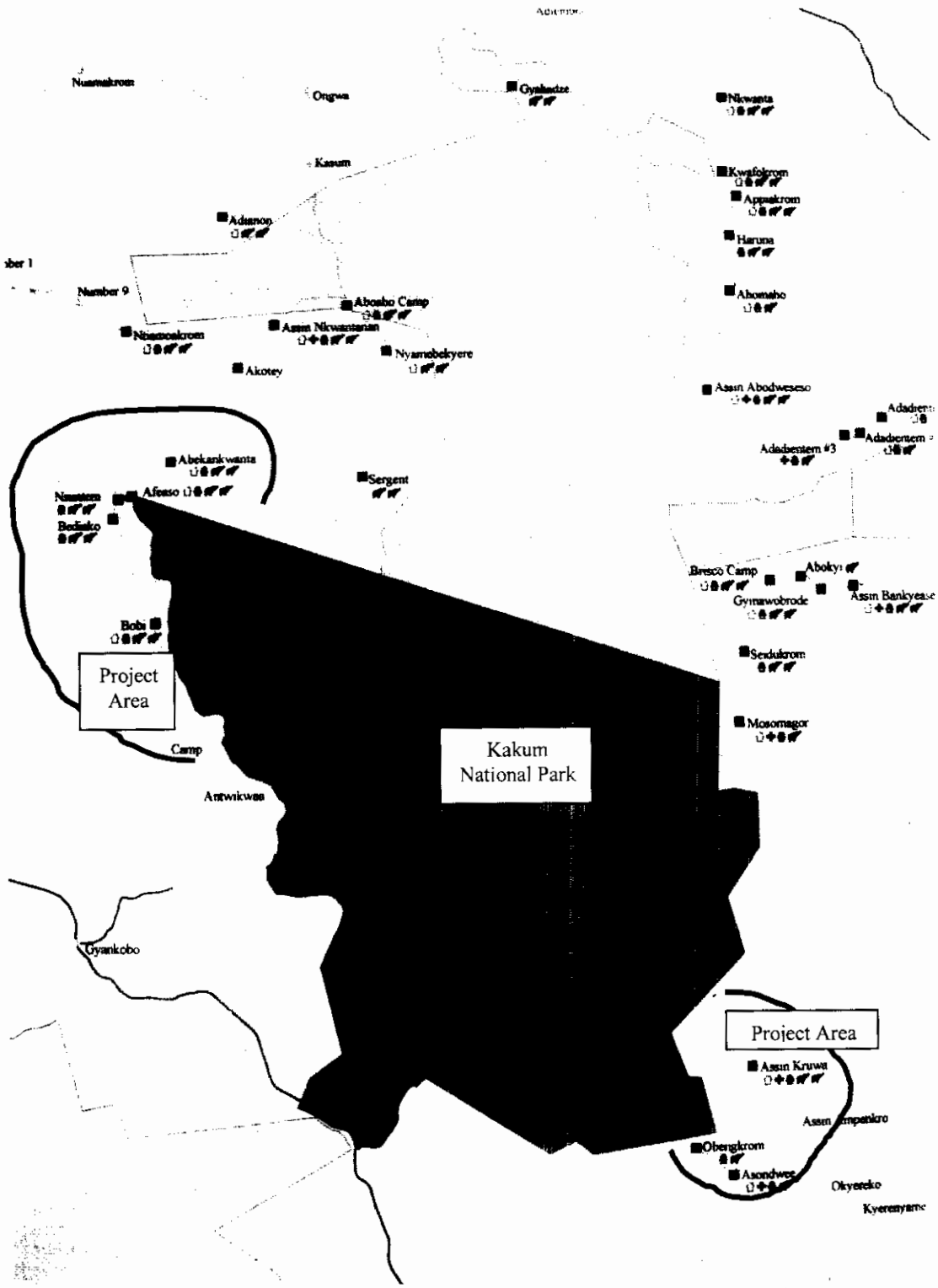
Map 1: CI Chiapas Conservation Coffee Agroforestry Project, Mexico

Map 2: CI Conservation Cocoa Agroforestry Project, Ghana





Map 3: CI Chiapas Conservation Coffee Agroforestry Project
Biosphere Reserve El Triunfo-Chiapas, Mexico



Map 4: CI Conservation Cocoa Agroforestry Project
Kakum National Park, Ghana

Acronyms

AESA	Agro-Ecosystem analysis
AMSA	Agroindustrias Unidas de México, S.A. de C.V.
BDS	Business Development Services
CABS	Center for Applied Biodiversity Science (CI)
CBA	Cost Benefit Analysis
CBC	Center of Biodiversity Conservation
CBO	Community Based Organisation
CBP	Conservation Best Practices
CC	Conservation Coffee
CCAP	Conservation Cocoa Aroforestry Program
CCBB	Coffee Cherry Boring Beetle
CCCP	Conservation Coffee and Cocoa Program
CED	Conservation Enterprise Department (Conservation International)
CEDEP	Center for the Development of People, Ghanaian NGO
CELB	Center for Environmental Leadership in Business (Conservation International)
CEPF	Critical Ecosystems Partnership Fund
CESMACH	Campesinos Ecologicos de la Sierra Madre de Chiapas (Mexican cooperative)
CI	Conservation International
CI-Ghana	Conservation International-Ghana
CI-Mexico	Conservation International-Mexico
CMCC	Conceptual Model Conservation Coffee
COCOBOD	The Cocoa Marketing Board (Ghana)
COMCAFE	Consejo Méxicano de Café
COMON	Comon Yaj Nop Tic Cooperative
CONANP	Comisión Nacional de Áreas Naturales Protegidas
CRIG	Cocoa Research Institute of Ghana
DC	Washington DC
DIP	Detailed Implementation Plan
DOSA	Discussion-Oriented Self Assessment
ECEA	Escuelas de Campo y Experimentación para Agricultores
ECOSUR	El Colegio de la Frontera Sur (College of the Southern Frontier)
EMDAP	Emerging Markets Development Advisors Program
FFS	Farmer Field School
FIRA	Fideicomisos Instituidos en Relacion con la Agricultura
FIRCO	Fideicomisos Instituidos de Riesgo Compatido
FLO	Fairtrade Labelling Organisations

FTV	Fondo de Inversión y Contingencia para el Desarrollo Rural Triunfo Verde (Finca Triunfo Verde)
GEF	Global Environment Facility
GIS	Geographic Information System
GPS	Global Positioning System
HQ	Headquarters, CI Washington DC
ICEAAC	Indigenas y Campesinos Ecologicos de Ángel Albino Corzo (Mexican Cooperative)
ICPM	Integrated Crop and Pest Management
ICS	Internal Control System
IDESMAC	Instituto para el Desarrollo Sustentable en Mesoamerica A.C.
ISMAM	Indígenas de la Sierra Madre de Motozintla
IUCN	International Union for the Conservation of Nature
JAS	Japanese Agricultural Service
KCA	Kakum Conservation Area
KKL	Kuapa Kokoo Ltd.
KNP	Kakum National Park
KNUST	Kwame Nkrumah University of Science and Technology
LFA	Logical Framework Approach
M&E	Monitoring and Evaluation
MOFA	Ministry of Food and Agriculture, Ghana
MOFA-ICPM	National Integrated Crop and Pest Management Program of MOFA, Ghana
NTFP	Non-timber forest products
OCIA	Organic Certification Inspectors Association
ORPAE	Organización Regional de Productores Agro-Ecológicos
OPCAAC	Organización de Productores de Cáfe de Ángel Albino Corzo
PCM	Project Cycle Management
PDMLC	Project Design, Management and Learning Cycle
PLEC	People, Land Management and Ecosystem Conservation, University of Ghana
PPA	People and Protected Areas
PRA	Participatory Rural Appraisal
PSP	Preferred Supplier Program (Starbucks)
PVC	Public and Voluntary Cooperation
PVO	Public and Voluntary Organisation
REBITRI	Reserva de la Biosfera "El Triunfo"
RDU	Research and Development Unit
SEMARNAP	Secretaría de Medio Ambiente, Recursos Naturales y Pesca
SMA	Strategic Management Approach
SOW	Scope of Work
SSS	Sociedad de Solidaridad Social

STCP	Sustainable Tree Crop Program
TAMARIN	Toolbox of Applied Metrics and Analysis of Regional Incentives
TNC	The Nature Conservancy (USA)
ToR	Terms of Reference
ToT	Training of Trainers
UCOAAC	Union de Cafetaleros Orgánicos de Angel Albino Corzo
USAID	United States Agency for International Development

1. Evaluation Profile Sheet

Agroforestry-Based Enterprise Development as a Biodiversity Conservation Intervention in Ghana and Mexico

Award No. FAO-A-00-00-00012-00

Project Sites

Washington DC

El Triunfo Biosphere Reserve of Chiapas, Mexico

Kakum Conservation Area, Ghana

Principal Partners

Ghana

- Kuapa Kokoo Ltd (a large farmer cooperative with about 40,00 members),
- Cocoa Research Institute of Ghana (CRIG),
- Integrated Pest and Crop Management Program (ICPM) of Ministry of Food and Agriculture (MOFA)

Mexico

- Six cooperatives representing over 1000 small-scale coffee farmers who live in the buffer zone and adjacent area of influence of the El Triunfo Biosphere Reserve. (CESMACH, ICEAAC, Comon Yap Nop Tic, ORPAE, OCAAC, FTV).
- ECOSUR, Research and Education College of the Southern Frontier
- REBITRI – CONANP, Management Unit of El Triunfo Biosphere Reserve

Duration of Grant: August 2000- April 2004 (no-cost extension from September 2003 to April 2004)

Beneficiary Populations:

- Mexico: 857 farmers living in small villages of 100 or less people within the sparsely populated (20 people per square kilometer) bufferzone of the Reserve. The average household size in these communities in 2003 was 4.9.
- Ghana: an estimated 400 farmers; nine communities took part in the training and an average of 50 is considered to be members of a community; Farmers in these communities support an average of 5.5 children.

PVC-PVO match totals

PVC Total Expenditures	$1,717,055
PVO Total Expenditures	$1,737,708

DIP approved: April 10, 2001

Evaluation Start Date (Start implementing SOW): November 1, 2003

Evaluation End Date (submission of final report to PVC): April 2nd, 2004

2. Summary of Conclusions and Recommendations

Conclusions

- CI's Conservation Coffee and Cocoa Program (CCCP) supported by the USAID PVC matching grant "Agroforestry-based Enterprise Development as a Biodiversity Conservation Intervention in Mexico and Ghana" has produced impressive results and a *great part of the objectives* outlined in the 3-years grant proposal of 1999 *has been achieved.*
- The program has, as planned in the original proposal, *successfully developed capacity* to design agroforestry-based conservation enterprises which biodiversity conservation requires.
- The preemptive *approach* to conservation of nature through behavioral change based on biodiversity-friendly cultivation practices, access to credit and markets and economic incentives for farmers *has proven its suitability*.
- The program team at headquarters in Washington and in Mexico and Ghana have developed and tested a series of *tools and procedures* which *allow* the program's successful *replication* in other coffee or cocoa growing areas of biodiversity hotspots.
- Some of these tools, such as the Project Design and Management Framework, are *useful* for the implementation of projects *beyond the boundaries* of the Conservation Enterprise Department where the CCCP is located.
- From the point of view of the USAID/PVC matching grant program, the *grant has thus served its purpose*. The grant was *matched dollar for dollar* with funds raised by CI in the U.S. and the host countries.
- The program's results have *contributed to poverty alleviation*, USAID's important goal, *and to biodiversity conservation* at the same time.
- Three years were *not sufficient to achieve the sustainability* of the projects. Both need *continued support* over a number of years.
- *Sound planning and monitoring of performance* is a major factor for effectiveness and efficiency of the operation.
- Due attention has to be dedicated at an *early stage* to the fundamental *issue of financial and economic viability*to the benefit of realistic planning as well as sustainability.
- *Quickly scaling up* is the number one requirement in order to reach the necessary income to make the Business Development model sustainable.

Recommendations

DC

- That CI continues to support Agroforestry Enterprise Development appropriate to forest conservation, as exemplified by the Coffee and Cocoa Program, in locations where commodity crops are already growing over substantial areas of buffer zones.
- That commodity crop enterprise development support is seen by CI as a long term process, of at least 10-15 years duration, because of the need to change long held patterns of behaviour, and because of the innate long term nature of tree crop cycles and habitat restitution.
- That CI accepts that investment in supporting the program will be considerable over at least the first five years, until some stability is achieved in the perception of shade grown

coffee as a valuable concept by consumers, producers, cooperatives and clients (coffee companies).

- That CI encourages its partners to take a long term view too, and to have patience, especially with respect to the speed with which new schemes are introduced, for example changes to the purchasing chain.

Mexico

- That support for the ongoing activities is continued for at least another 3-4 years.
- That efforts should be made to scale up. The parameters are laid out in the EMDAP study, but the model and its assumptions from July 2003 have to be verified and updated.
- That a realistic continually updated plan of operations and thorough monitoring of the growth path and the set financial targets is put in place.
- That the project is integrated into CI's regional structure, but that forceful and swift decision making is ensured by delegating as much as possible to the local project level.
- That in the short term, export services should be provided by an experienced institution (such as AMSA at the moment). However, in the long term, cooperatives should again be given this opportunity. Further training will be necessary.
- That full transparency in the supply chain is ensured to facilitate the transfer of economic benefits to producers. Transparency should apply equally up the chain (millers, exporters, roasters) as well as down through the cooperatives.
- That CABS, Washington, collaborate with the Reserve and other partners, on biological monitoring.

Ghana

- That CI ensures careful monitoring of and support to its continuing partnerships, as the idea is still very new and will need CI to take a strong lead position in promoting it.
- That a full-time project coordinator be hired with a finance and business background with full decision power and operational independence within the framework of his/her terms of reference.
- That a sustainability study as it was done in Mexico is undertaken that would analyse different models of financing including other than full fees for services.
- That shade reduction in existing cocoa is kept to a minimum until more is known about yield in relation to different shade regimes in traditional cocoa.
- That particular emphasis is given to support for establishing new plantings on abandoned cocoa fields, and for nurturing biodiversity within them.
- That any future collaboration with the Sustainable Tree Crops Program bears in mind the preceding recommendation, that emphasis be put on new plantings on abandoned cocoa fields wherever possible, with increased biodiversity as a component.
- That the conservative and flexible approach shown by CRIG regarding appropriate shade tree density is reflected in the messages given to trainers and farmers.
- That the initiative in the area of desirable and undesirable shade tree types is taken up again, and that the direction for urgently needed, essential research on Conservation Cocoa agroforestry is formulated together with CRIG and the producers.
- that monitoring is integrated into the current activities of all staff, especially where CI has overall reporting responsibility in activities involving partners.

- That brokering between the chocolate industry and Kuapa and/or other farmer associations be reinitiated to obtain organic/fairtrade/Conservation Cocoa premiums and negotiate with the Cocoa Board how these premiums can be made available to farmers and Kuapa in the context of the present marketing structure.

3. Program Background

3.1 Origin of the Matching Grant Program for Mexico and Ghana

USAID's Office of Private and Voluntary Cooperation (PVC) located within the Agency's Bureau for Humanitarian Response (BHR) is the focal point for the Agency's partnership with U.S. Private Voluntary Organisations (PVOs). The PVC Matching Grant Program focuses on strengthening the technical and organisational capacity of U.S. Private and Voluntary Organisations (PVOs) and through them on strengthening partnerships with local organisations to achieve sustainable service delivery. PVOs are awarded Matching Grants based on their capability to implement successful sustainable development programs.

The major objectives of the Matching Grant Program are to:

- expand and strengthen the *field programs* of U.S. PVOs in order to increase prospects for sustainability and results in program areas that are consistent with USAID policies and priorities;
- assist U.S. PVOs to further *enhance their planning systems*, management systems and technical competencies to carry out development programs;
- build the *capacity of local NGOs*, governmental and community-based organisations (CBOs), and/or for-profit enterprises through formalised partnership agreements with U.S. PVOs; and
- *increase U.S. private resources* directed to development assistance by matching private contributions on a dollar-for-dollar basis through a combined public and private partnership.

Conservation International (CI) is a global Washington DC based non-profit organisation active in more than 30 countries, with a budget of around US$ 100 million in Fiscal Year 2004. It was founded in 1987 and defines as its mission "to conserve the earth's living natural heritage, our global biodiversity, and to demonstrate that human societies are able to live harmoniously with nature".

CI started operations in Mexico and Ghana in 1997ç98 with the goal to conserve biological diversity in threatened tropical ecosystems through the promotion of environmentally sustainable agroforestry crops, an increase in farmers' revenues and the reduction of pressure on the protected areas.

Funded by the Ford Foundation and other donors CI had been working from 1997 with four Mexican cooperatives on organic certification, computer training, accounting and bookkeeping, marketing, contract negotiation, financing and coffee exports.

In Ghana CI had been working since 1993, when the government invited it to help develop the management strategy for the Kakum National Park. From 1998 CI, together with Kuapa Kokoo Limited, the trading arm of Kuapa Kokoo Farmers Union, a cocoa cooperative founded in 1993, undertook a pilot project for organic cocoa with the objective of promoting conservation through sustainable farming techniques and of generating more benefits for Kuapa's farmers through market development.

CI also had an agreement with Twin Ltd., a UK based NGO dedicated to the economic development of farmers' organisations, which had been Kuapa's business development partner since its inception to provide managerial and trade capacity building, as well as to coordinate Kuapa's international marketing plans in the event of external market liberalization.

CI's grant proposals in December 1997 and December 1998 to USAID's PVC office were unsuccessful. In August 2000 however, USAID/PVC accepted an application by CI from 3rd of December 1999 for Fiscal Year 2000 for a matching grant of US$1,717,364 (Award Number FAO-A-00-00-00012-00) for the program **"Agroforestry based-Enterprise Development as a Biodiversity Conservation Intervention in Mexico and Ghana** (Conservation Coffee and Cocoa Program - CCCP). The proposal 1999 was the result of two years of discussion, strategy development and the joint implementation of the mentioned pilot organic programs in both countries.

The grant's purpose was to build CI's capacity in Washington DC to develop and promote conservation enterprises based on coffee and cocoa on the one hand, and to build the capacity of CI's local partners in two project sites: Chiapas/Mexico, and Kakum Conservation Area/Ghana on the other. For this reason the proposal contained three site specific sets of objectives for Washington DC, Mexico and Ghana with separate budgets.

3.2 Rationale for the program

CI focuses, apart from wilderness and marine areas, on "biodiversity hotspots" in areas of unique biological richness that suffer extensive human impact and and are facing threats of destruction. Currently, 25 biodiversity hotspots have been identified worldwide. Contrary to conservative positions in the environmental discourse which view people mainly as a threat to nature and tend to impose conservation policies on civil society ("fence and protect policy"), CI's hotspots approach is based on the assumption that conservation can succeed only if local people fully participate in, and benefit from, the preservation of their natural resource base. Consequently, CI's Center for Applied Biodiversity Science (CABS) include into their work not only species, protected areas and landscapes (ecological corridors) in the biological and geographical dimension, but also the demographic, economic and political trends these are exposed to, the "socio-economic drivers to biodiversity loss".

A fundamental assumption that led CI into interventions in the area of coffee and cocoa cultivation is that the overall goal *conservation of tropical biodiversity* can, given certain conditions, be achieved through agroforestry. Agroforestry is believed to contribute to biodiversity in three ways:[1]

- by reducing the pressure to deforest remaining forest land and to degrade forests through excessive extraction of their resources (agroforestry-deforestation hypothesis);
- by providing suitable habitat for forest-dependent plant and animal species (agroforestry-habitat hypothesis); and
- by creating biodiversity-friendly connections ("corridors" or "stepping stones for wildlife") between existing patches of natural habitat, buffering them against more hostile land uses (agroforestry-matrix hypothesis).

Coffee and cocoa agroforestry has an economic and conservation potential impact in the field which is critical to CI's broader landscape approach to conservation. Effective biodiversity corridors require economic development opportunities that can reach a large population of stakeholders, based on activities that provide habitat for local flora and fauna. These opportunities need to involve major export crops and engage globally important industries and policy makers who are important for future investments using the experience from this program. This is true for coffee and cocoa.

[1] Götz Schroth, Gustavo A.B. da Fonseca, Celia A. Harvey, Claude Gascon, Heraldo L. Vasconcelos, Anne-Marie N. Izac, Arild Angelsen, Bryan Finegan, David Kaimowitz, Ulrike Krauss, Susan G. Laurance, William F. Laurance, Robert Nasi, Lisa Naughton-Treves, Eduard Niesten, David M. Richardson, Eduardo Somarrib, Nigel I.J. Tucker, Grégoire Vincent and David S. Wilkie: Agroforestry and Biodiversity Conservation in Tropical Landscapes - a Synthesis, Island Press 2004 (forthcoming).

Diversified shaded coffee fields benefit the biology of tropical forest ecosystems by providing a critical habitat for plants and animals. In Mexico, researchers found considerably more bird species in shaded coffee fields than in those with no shade, and for cocoa fields in Ghana a species diversification comparable to that of undisturbed forests which coffee and cocoa fields can thus successfully connect as corridors. Diversified shade coffee and cocoa reduces soil erosion and retains soil moisture, suppresses weed growth, supplies nutrients through leaf litter, hampers the spread of wind-borne diseases, protects trees from tropical sun and heavy winds and provides habitat for beneficial insects that help control pests.

For both coffee and cocoa cultivation areas, plant species composition and the management of shade trees vary much between plantations and from region to region. From a conservation point of view, the greater the structural and floristic diversity of the canopy, the higher the likelihood that resources will be provided for a greater array of organisms.

However, the specific agricultural and economic needs of coffee and cocoa farmers and the prevalent extension policies might not coincide with maximum biodiversity. Coffee and cocoa cultivation, depending on the prevailing socio-economic conditions, can constitute as much a threat for the conservation of forests as an opportunity and has been, in fact, a major factor for the advance of the agricultural frontier in the past. The expansion of the coffee crop in Mexico due to booming coffee prices between 1970 and 1982 led to the incorporation of large tracts of forest into coffee production, and later, with falling prices and the corresponding pressure for yield increases, based on yield focussed technical assistance packages, contributed to a thinning or total elimination of tree cover ("sun coffee"). In Ghana, similarly, reduction in cocoa productivity has been motivating farmers to abandon their farms and clear additional forested land where this was still available, thinning or eliminating shade trees ("sun cocoa") to boost cocoa yields, with devastating effects on the number of species of nearly all groups of flora and fauna, and reducing the buffer effects on neigbouring protected areas.

Also, legal systems that link land tenure to deforestation send perverse signals in terms of conservation of biodiversity. The higher profitability that tree crops such as coffee or cocoa show in newly deforested areas provides an equally perverse incentive for farmers to establish new plantations in primary forest rather than replant already cultivated land, in order to take advantage of the richer soils, as long as forest land is readily available.[2] This means that agroforestry practices have the highest biodiversity enhancing potential in those areas where forest land has either been reduced or even eliminated, as in the biodiversity hotspots, or where its use been restricted through declaration as parks and other protected areas, making it unavailable for agricultural exploitation. Here, the combination of the classic protectionist and the more recent people-oriented approaches to conservation complement each other most effectively, creating synergistic effects. Biodiversity friendly coffee and cocoa agroforestry thus turn into a means to cope with reduced land availability, going hand in hand with measures such as access to special markets, ecotourism development, payments for watershed functions, carbon credits trading etc., to compensate former forest users for the foregone forest products and foregone benefits of shifting cultivation.

The ensemble of production practices, quality criteria and marketing of so called "Conservation Coffee" and "Conservation Cocoa" lead towards a more biodiversity friendly land use in the buffer zones around protected areas and are well suited for small-scale farmers. The practices enhance crop health, require little capital, and use locally available materials and labor. The cultivation areas provide, at the same time, connectivity (corridors) between patches of primary habitat. With large, well-established markets and sufficiently high producer benefits forest frontiers become socially and politically acceptable and stable,

[2] See section 5.1.5.1

reducing pressure on forest resources. Development of Conservation Coffee and Conservation Cocoa on small farms thus yields habitat protection for the conservationist and, from the point of view of social development, poverty reduction at the same time.

According to the grant proposal from 3rd of December 1999 the El Triunfo Biosphere Reserve and Kakum National Park were chosen because

- they were biologically rich ecosystems under threat with a high conservation priority;
- the areas were surrounded by buffer zones with small-scale farmers practicing traditional production systems;
- CI objectives and those of the local USAID mission were compatible;
- the respective CI country program was dedicated to increasing its capacity;
- partnerships with existing farmers' organisations with compatible objectives had been established; and
- farmers were determined to be stakeholders in local conservation strategies.

These selection criteria, according to the proposal, reflect CI's belief that successful conservation strategies must address the economic needs of local people through the development of community-owned businesses, based on the sustainable use of natural resources with a long-term viability after the end of external support.

3.3 Situation on the ground, status of interventions at the beginning of the program and relevant baseline data

The small-scale coffee and cocoa farms under modified forest canopies surrounding the El Triunfo Biosphere Reserve in Mexico and Kakum National Park in Ghana still harbor significant levels of biodiversity. They serve as buffer zones for the biodiversity within the adjacent protected areas and as corridors between them.

In both project sites, coffee and cocoa respectively represent a significant percentage of beneficiaries' household income (40% in Ghana and 90% in Mexico). Landholdings are small (on average 3 hectares in Mexico and 5.5 hectares in Ghana) and households are therefore very dependent on these cash crops.

In both sites at the inception stage of the program, socio-economic conditions of the majority of coffee and cocoa farmers had deteriorated over time and forceful action was required to stop further encroachment on forest areas. In Mexico as well as in Ghana in the past decades markets for agricultural inputs and for coffee and cocoa had been closely regulated and supported by international and/or Government dependent institutions. In the case of Mexico, these were the International Coffee Agreement and the Instituto Mexicano del Café [INMECAFE], in the case of Ghana the International Cocoa Organisation (ICCO) and the Cocoa Marketing Board [Cocobod] of Ghana. Market had subsequently been fully or partially (Ghana) deregulated in the course of structural adjustment policies and the liberalisation of trade. As a consequence, formerly subsidised input costs increased sharply. Many farmers abandoned the use of agrochemicals, resulting in increased levels of disease and pest infestations. Produce in Mexico had now to be sold to private intermediaries at low prices as these were not supported any more by Government. Regulation before had discouraged the formation of producer organisations in both sites.

Farmers in the project sites lacked affordable alternatives for chemical inputs, extension services and governmental credit schemes had ceased. Prices gave them little incentive to invest in field renovation and replanting, a process essential to maintaining crop productivity. Yields decreased substantially. There was a critical need for increased research and

dissemination of effective cultivation methods with locally available materials and labor and minimal capital investments, compatible with biodiversity conservation.

In Mexico, in the preparation period of the project, farmers lacked technical skills to control pests and diseases prevalent especially at lower altitudes, nor did they know much about conservation practices such as terracing, compost, barriers against erosion and diversification of shade tree species and shade management. Due to inadequate processing infrastructure, coffee quality was poor, transport costs high and farm-gate prices correspondingly low. There were few credit opportunities available to finance time dependent coffee harvesting other than through advanced cash from private coffee buyers at high interest rates. Cooperatives in Mexico had been established only recently, after the Mexican Coffee Institute fell apart in 1989 along with the International Coffee Agreement. They functioned poorly with the exception of one that had profited from cooperating with CI from 1997 on , and the average annual membership turnover rate of the cooperatives was high (44%). People in the area were generally aware of the environmental benefits of nature reserves, but they had little awareness of the environmental benefits of organic coffee and they associated organic coffee only with a higher price.

In Ghana baseline studies confirmed the threat posed to Kakum Conservation Area (KCA) by shifting cocoa cultivation by small-scale farmers. Farm productivity and profitability in the area had generally declined to the point that farmers abandoned existing plots and moved on to clear new pieces of forest in order to take advantage of better soils. This destructive cycle, as pointed out above, had resulted in the loss of virtually all natural forest remaining outside the protected area. The conversion of cocoa farms into crops such as maize, cassava, and oil palm represented another threat to the KCA as annual crops planted up against the park's boundary create a more abrupt transition from forest to farm areas, and oil palm plantations harbor less biodiversity than diversified shade cocoa farms and are more taxing on soil fertility than cocoa.

Key challenges and constraints faced by Ghana farmers were the lack of knowledge of appropriate farming techniques, including biological pest control, and the high cost of farm inputs , combined with the complete breakdown of extension services due to the dismantling of the Cocoa Services Division of the Cocoa Board and the lack of credit. Given that farmers could not afford agrochemicals without the subsidies offered before liberalisation, virtually the only management practice was biannual weeding and harvesting.

In total, the proposal mentioned five significant obstacles that the program intended to address:

1) Lack of knowledge of farmers and their organisations in effective, low-input agricultural techniques;
2) insufficient institutional capacity and management expertise;
3) low capitalisation and little access to credit at reasonable interest rates;
4) limited market access and lack of information required to operate effectively; and
5) insufficient scientific understanding of the ecological value of traditional agroforestry systems and their impact on product quality.

3.4 What the program sought to achieve

According to the grant proposal, the goal of the program - conservation of biodiversity in threatened tropical ecosystems – could be reached if farmers substituted their traditional cultivation methods by biodiversity friendly practices ("milestone")[3].

From its previous experience in coffee and cocoa, as well as non-timber forest product (NTFP) and ecotourism projects CI highlighted important lessons that were – even if not sufficient, as it turned out – extremely important to put the program on the right track:

- Local participants must see economic benefits early in the project;
- accounting procedures and financial records should be as transparent as possible;
- communities need to participate in all aspects of a project's design and implementation;
- monitoring and evaluation must be fully integrated into enterprise activities;
- verifiable conservation links must be identified and monitored over the project's life.

CIbelieved that the challenges in producing, processing, trading and marketing coffee and cocoa confronting small-scale farmers and their organisations were interrelated and had to be addressed concurrently in a comprehensive, "field-to-consumer" support program. It was to provide farmer organisations with the tools and capacity to train their members in organic and agroforestry techniques, and to generate market incentives for adopting them, thus turning the organisations into "conservation enterprises" based on diversified coffee and cocoa production.

This field-based approach included:

1) institutional development to strengthen the organisational infrastructure of the cooperatives, and increase their management expertise and capacity to provide services to their members;
2) financial strengthening of these partner CBOs to generate the capital needed to compete with local intermediaries and obtain full market value for their members' products;
3) training and agricultural assistance in pest management, soil conservation, field diversification and post-harvest processing techniques;
4) certification assistance in obtaining the organic and Fairtrade certification necessary for accessing premium markets;
5) a monitoring and evaluation protocol to understand and measure the social, economic and ecological benefits of agroforestry systems;
6) design of a verification system that builds on the existing organic certification systems to demonstrate a clear link between farmers and conservation;
7) market information and access to the international marketplace;
8) market partnerships with industrial clients to benefit from technical assistance, quality control feedback and to create long-term demand for local partners' products;
9) creation of consumer products that contain CBOs' cocoa and coffee and served to educate consumers about biodiversity conservation and sustainable development;
10) media campaigns and related outreach activities to raise awareness about these products and the biological and economic importance of agroforestry systems;

[3] In CI's terms a "milestone" refers to "project purpose" in traditional Logical Framework usage, whereas CDI's term "outcome" corresponds to overall goal.

11) standards for agroforestry production of cocoa and coffee to further promote community-based conservation enterprises as a conservation tool; and

12) promotion of scientific and academic research to further understand the contribution of agroforestry to biodiversity conservation.

A central strategy of the grant proposal was to develop CI's agroforestry enterprise capacity in its Washington DC office team and, jointly with the Ghana and Mexico offices, develop, evaluate and refine methodologies to continually improve the program's approach ("adaptive management"). This technical capacity was then to be transferred to the local partner CBOs, enabling them to promote agricultural techniques compatible with the conservation of these protected areas and buffer zones.

CI would enter into brokering relationships between farmer organizations and the private sector. Whereas farmer organisations would benefit through higher prices, guaranteed markets, the private sector's expertise, quality feedback and the reputation required for funding by financial institutions, the private sector partners would profit from the product's quality and the association with environmental issues that would improve their corporate image and secure supply of high quality coffee and cocoa.

Eventually, comparing experiences from both field projects and areas of expertise would allow identification of the variables that must be addressed in order to replicate agroforestry projects across the wide range of distinctive socio-economic and ecological conditions found in other coffee and cocoa producing countries.

3.5 Principal partners

Partnerships with local entities were an integral part of the project's approach to create an efficient and sustainable model for producing and marketing Conservation Coffee and Cocoa.

3.5.1 International Partners

The international market partners involved in the project's trade, marketing, and quality control components for coffee of *Mexican* origin were:

The Starbucks Coffee Company, Seattle WA/USA, the leading retailer, roaster and brand of specialty coffee in the world with retail shops in North, Central and South America, Europe, the Pacific Rim, and the Middle East. Starbucks seeks sustainable sources of quality arabica coffee, typically grown in areas rich in biodiversity to demonstrate its commitment to the environment and meet the increasing consumer demand for more ecologically sensitive coffee.

As early as October 1998, Starbucks and CI signed a first Memorandum of Understanding with which Starbucks committed to providing financing of US$50,000 per year for three years, and technical assistance to participating farmers. They were also developing a pilot purchasing program and contributing to raising awareness of the connection between coffee and conservation.

Starbucks would later, after the operations had turned out a success, increase its cooperation: a second MoU was signed in 2000 expanding the partnership to include work with coffee farmers in 5 regions in Latin America and Asia, develop Starbucks' green coffee purchasing guidelines pilot program, create a year-round product line reflecting Starbucks' commitment to environmental and social quality, and enter into discussions with other leaders in the coffee business. A third MoU, from August 2003, extended the collaboration for another 3 years, including the following initiatives:

- *At origin:* Continuing to work with small scale coffee farmers in areas where biodiversity is threatened such as Mexico, Colombia, Peru, Costa Rica, and Panama

through purchase of coffee, technical assistance, providing a market, a financial contribution of $350,000 per year for 3 years, and continued in-kind technical assistance.

- *In the Starbucks supply chain:* Working together to implement the Starbucks coffee sourcing guidelines within the Starbucks supply chain, including growers, importers, exporters, and processors. To support staff time and resources associated with this work, Starbucks commited to providing $50,000 in year 1 and $125,000 per year in years 2 and 3 for this effort.
- *With Starbucks consumers:* Publicly communicating the connection between coffee and conservation to Starbucks consumers and the interested public. To partially offset CI's costs associated with this outreach effort, Starbucks commited to providing $75,000 per year in years 2 and 3 for this effort.
- *With CI supporters:* Publicly communicating about the partnership's efforts to address the impacts of coffee production on biodiversity conservation.

Starbucks came to visit the Chiapas project site, discussed coffee quality with farmers, provided feedback on coffee samples, helped to identify problems in processing, storage and handling and facilitated the export, import and customs process. The coffee produced by the farmers participating in CI's program in Chiapas, called "Shade-Grown Mexico", was sold in Starbucks' stores.

CI also worked with Green Mountain Coffee Roasters (Waterbury, VT USA) which purchased coffee from the organic project and provided $35,000 per year. Frontier Cooperative Herbs (Boulder, CO/USA) who provided quality control feedback and purchased coffee; the Organic Products Trading Company (Vancouver WA/USA) who visited the project and made presentations on coffee sampling procedures and coffee contracts. In 1997, Rapunzel Pure Organics (Kinderhook, NY/USA) bought coffee from the previous project and donated $15,000.

For cocoa in *Ghana* the planned international market partner in the project's trade, marketing and quality control components was Twin Ltd., mentioned above, a UK based NGO and trading company dedicated to the economic development and trading strength of farmers' organisations. Twin was to collaborate with CI in providing managerial and trade capacity building, as well as coordinating Kuapa's international marketing plans. TWIN Trading Ltd buys directly from producers, channels the product into the Fairtrade networks and had helped Kuapa Kokoo , together with Body Shop, to set up the Day Chocolate Company in the United Kingdom, of which Kuapa Kokoo owns 33%.

However, two factors caused the project to make a significant change of focus. First, in 2000, the Ghana government declared that it would not allow the production of organic cocoa, owing to the risk it perceived from pests and diseases to its major agricultural crop. Though challenging one of the basic premises of the project, it was not in fact problematic for CI to adjust its production focus to allow for appropriate use of chemicals to conserve yields where necessary, while still pursuing the agroforestry concept.

The second factor had larger implications. The proposal had been written on the assumption that the government would liberalize the external market, so that Kuapa Kokoo would be allowed to export directly. Though enabling legislation was passed, the government pulled back from the process and the external market remained under the control of the government's Cocoa Marketing Board throughout the project. As a result, the market development component of the project had to be played down substantially.

In spite of this, in collaboration with CELB, CCCP did maintain throughout the project contact with the major chocolate companies, primarily through their trade association. This dialogue provided a forum to debate the issues of sustainability and biodiversity and established the relationships that enabled a collaborative process to be established for presenting a new project in January 2004 to UNDP for GEF funding.

CI and, with a small amount, the Ricoh company who provided $15,000 funding to CI in each of the last two years of the project, have been the only sources of counterpart funding. Apart from them there was no external funding in Ghana until Kuapa received further financing from the Critical Ecosystems Partnership Fund (CEPF) in 2003 which went into the extension of the project.

3.5.2 Local Partners

The program focused on partnerships with cooperatives to deliver a complete range of services to their farmer members.

3.5.1.1 Partners in Mexico[4]

Before starting the PVC grant, CI had collaborated for the past three years with four cooperatives and a local secondary agricultural school, which was to assume the management of a training center to train agricultural "promoters". At the end of 2003, the number of cooperatives had risen to six. The agricultural practices were developed in partnership with various organisations active in the reserve, such as ECOSUR, CONANP, and FIRA.

3.5.1.2 Partners in Ghana[5]

The main local partner in Ghana, according to the proposal, was to be Kuapa Kokoo Ltd, the trading branch of the largest farmer association in the country with 450 local groups (societies) and some 30.000 farmers at the time, the partner in the previous organic project.

No other local Ghanaian partner is explicitely mentioned in the grant proposal. At the inception of the project however, a stakeholders identification and analysis was done that called for other partners on board. As a result of the Planning Workshop held in May 2002 the following institutions joined CI and became very important in the implementation of the project: the Cocoa Research Institute of Ghana (CRIG), the Integrated Pest and Crop Management (ICPM) department of the Ministry of Food and Agriculture (MOFA), MOFA's Agricultural Extension Agents, PLEC-University of Ghana, and IRNR-KNUST: The Institute of Renewable and Natural Resources in the Kwame Nkrumah University of Science and Technology in Kumasi.

3.6 Current implementation status

The program based on this grant started on October 1st, 2000, for a period of 3 years to September 30th 2003. The original grant period was later extended cost neutral until April 15th 2004. At the time of the evaluation the award provided by PVC has been totally spent, US$ 659,243 in DC, US$ 645,925 in Mexico and US$ 412,195 in Ghana. The awarded amount was matched one-to-one (cash and in-kind) by June 2003, through fundraising and effective financial administration by CI/CED and field staff.

Apart from annual reporting requirements and quarterly match reports the grant agreement obliged CI to undertake this external project evaluation at the end of the grant period based on

[4] see 4.3.1.1 for details
[5] see 4.3.1.2 for details

detailed guidelines provided by PVC. An external mid-term evaluation was not carried out. This Final Evaluation took place between November 11, 2003 and February 22, 2004.

3.7 CI's overall development plans

The Proposal had outlined CI's future plans to replicate the program's approach over the next five years within corridor strategies under development in Colombia, Peru, Indonesia, Brazil and Guatemala. In 2003, the focus was shifted to Costa Rica, Peru, Panama, Colombia and the Western Region in Ghana. Of the 25 biodiversity hotspots worldwide, 15 are major coffee producing regions and 14 are important cocoa growing areas; hence, unsustainable agricultural expansion represents a significant threat to global biological diversity.

The future projects are to sustain the capacity CI will build with the program and allow refining of the design and implementation of additional projects and ensure sustained funding of the International Support Team. The proposal predicted that these projects will be self-financing in five years and sustain the program's increased capacity. (For a more detailed outline of CI's overall development plans see section 4.3.4.4).

4. Program Effectiveness

4.1 Program Model or Approach

4.1.1 The Business Development Services Approach

The Conservation Coffee and Cocoa Program's approach was based on the rationale, outlined above, that conservation of tropical biodiversity, if forest clearing is controlled, can be promoted through agroforestry by (1) reducing the pressure to clear remaining forest land, (2) by providing suitable habitat for forest-dependent plant and animal species, and (3) by creating biodiversity-friendly corridors between existing patches of natural habitat.

To achieve the conservation outcomes farmers had to adopt biodiversity friendly production practices on the one hand, and embrace conservation principles in general, on the other. Coffee and cocoa farms had, so the assumption went, the greatest potential due to their large scale, affecting land use over a large area and being major international commodities.

The vectors for this change, as outlined in the Proposal, were the mentioned partner farmers' organisations, that is, cooperatives, in Mexico and Ghana. These would be the engines of growth and efficient buyers and suppliers of coffee and cocoa. This approach is in line with the Business Development Services (BDS) model that is favored by donors and the enterprise development community. The BDS model argues that services should be provided competitively and the costs of providing them recovered as far as possible through transactions or other mechanisms such as payment of fees. The project tried to make cooperatives efficient providers of services that farmers needed.

In order to operate according to the vision of the BDS approach as vibrant, competitive and independent organisations by the end of the project, the local partners' expertise had to be developed. Only then could they on their own supply members with services which, in turn, would be payed for by the program or their members.

The program's "field-to-consumer" approach included the above mentioned set of capacity building measures in the areas of production, processing and marketing of cocoa and coffee and thus involved agricultural training, business planning, credit, trade support and long-term market development. This training was to come from CI as a provider of services to the partner cooperatives. Once their overall expertise was sufficient, the CBOs themselves, through their staff and specially trained members would service the farmers, and CI could

retire to the role of "service facilitator". The cooperatives would then be able "to operate as effective businesses that promote conservation"

The advantage of this model, once in place, was that it was demand driven, that is, dependent on farmers' expressed needs for services. Nothing would be pushed onto them they would not require. Also, it would be financially sustainable provided the benefits to farmers and their willingness to pay were sufficiently high.

4.1.2 Brokering between farmers and the private sector

The trump card of the approach was less its comprehensiveness[6], but what CI calls "brokering relationships between farmers and the private sector", that is, market outlets with very favourable conditions and cooperation in the technical field with clients. Coffee roasters (and client chocolate manufacturers, as it was still assumed at the start of the project) could benefit from the "green image" and a high quality product, and producers and their organisations from considerably higher prices than the mainstream market, access to private sector expertise, quality feedback and guaranteed outlets which would also facilitate access to credit. CI's achievement of having brought the most important US and international coffee roaster and coffee shop chain on board with conservation, and equally the program team's success of turning the relationship into a long-term and expanding cooperation based on achieving production that benefits biodiversity, farmers and coffee quality, are indeed *extraordinary and unique* and this type of private sector partnership is widely recognised as a model. On this basis successful business development was likely.

In addition, CI's proactive, development-centered approach to biodiversity conservation tied two often conflictive goals – protection of the environment and reduction of poverty – firmly together. Conservation is clearly defined as the overall goal at the top of the hierarchy of objectives, but socio-economic development is and has to be achieved in the process, according to CI's belief that successful conservation strategies must address the economic needs of local people. These projects, thus, appeal as much to conservationists as to development donors such as USAID. CI can confidently "fly their true colors"[7].

4.1.3 Cooperatives as partners

However, were cooperatives the right partners to achieve CI's objectives ?

Two constraints come to mind:

(1) The "outcome", conservation, refers to specific target *areas* – the biosphere reserve El Triunfo in Mexico and the Kakum National Park in Ghana, respectively. It was here where the ultimate program effects were to be produced. Only on the level of means came the target *group* – coffee and cocoa farmers – into play and in both sites, especially in Mexico, the wide geographical dispersion of the cooperatives' members, some of them far from the protected

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[6] for which uniqueness can hardly be claimed given the existence of many other [development] projects with a similar layout in the past ("approche filiere"), see for example from the recent past the project "Apoyo a los sistemas productivos sostenibles de los campesinos cafetaleros del Sur Oriente de Ecuador", OIKOS – Cooperação e Desenvolvimento: "Esta propuesta pretende ... lograr disminuir los niveles de pobreza en la Cuenca Binacional del Chinchipe. Para esto se estructurará un Centro de Servicios con capacitación, asistencia técnica e infraestructura para los productores organizados en Grupos de Transferencia Tecnológica (GTT's). Paralelamente se creará una Empresa de Comercialización, (propiedad de los beneficiarios directos), responsable de vender en el mercado internacional el café, en el mercado local y regional los subproductos elaborados en microempresas de los productores y operar con microcréditos para la cosecha de café, asi como capital de operación para las microempresas de transformación..."

[7] The PVC Technical Review Report on the DIP 2001 had still noted with suspicion: "CI's true colors are showing here. For CI, the real 'goal of this project is to conserve...biodiversity' with coffee/cocoa CBOs merely serving as useful tools to that end.... In truth, CI is ultimately uninterested in these products and people per se. Hence CI's tendency to shrug off related farming-system or agronomic issues, equity concerns and ... people-level impacts." This statement, of course, is unfounded as the environmental and the social objective depend on each other, and secondly, CI proposes to build capacity in specifically poverty associated areas such as, among others, business and financial planning; credit and financing; marketing and trade, product quality control; organic agricultural methodologies; organic certification; and community based natural resource management, hiring for these purposes a Business and Trade Support Coordinator, a Certification, Standards and Agricultural Assistance Coordinator and an Institutional Development and Finance Coordinator.

areas, meant that the effect of the program on biodiversity through habitat creation would obviously be diminished.

As A. van Leeuwen, the author of the three socio-economic studies in the Mexico project forcefully argues, to conserve nature and to successfully introduce Conservation Coffee it is necessary to consider a *community* level approach without which problems such as deforestation, contamination of streams and rivers, and the Broca infection from neighboring coffee plantations could not be attacked as successfully[8]. The Ghana household impact study of 2003 puts forward the same arguments, however, these are not necessarily backed up by local conditions in Ghana, as a good part of its conclusions and recommendations are taken over literally from the Mexican Socio-economic Survey of 2002.[9]

The CCCP program went to some lengths to meet this geographical challenge to the approach. In Mexico, non-member farmers were allowed to join the project's verification scheme of best practices and to sell coffee at preferential prices[10]. In Ghana the project team saw the need to open the scheme up to non-members of Kuapa societies when tensions rose in the communities, especially those with few Kuapa members, over the unequal distribution of benefits between members and non-members. But, as will be seen later, the initial focus on cooperatives prevented full efficiency from the start.

(2) Given their checkered history in development in the past, by applying the business development services concept to the Mexican agricultural cooperatives as the main partner, CI navigated into dangerous waters. In the decades long history of development organisations many of them have seen their projects run aground due to the inherent weaknesses of cooperatives in certain socio-economic and cultural contexts. As it turned out in this program too, it proved difficult to convert these organisations into "effective and efficient businesses" and "service providers" for their members and the sustainability of the past efforts is, at present, not evident (see section 4.3.4).

Cooperatives work properly when they are "democratic organisations controlled by their members, who actively participate in setting their policies and making decisions...elected representatives (being) ... accountable to the membership"[11]. If they profess and apply ILO's seven internationally recognised co-operative principles[12], they can, in fact, become competitive enterprises as efficient in their business operations and use of capital as others in the marketplace and a Business Development Services strategy can very well be applied to them. Moreover, cooperatives are likely to provide the services at less cost.

When CI arrived in Mexico, however, they faced 'cooperatives that had members', and not 'farmers that had cooperatives'. The socio-economic surveys in Mexico confirm the program's assumption that the main driving motivation of farmers to join and stay in the project is the economic benefits which they expect from their cooperative. In Ghana the benefits did not originate as much from higher market prices for cocoa - Kuapa Kokoo paid a

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[8] A. van Leeuwen, Socioeconomic Survey 2002, page 44. The author of the three socio-economic studies in Mexico writes already in his report from 2001: "The project ought to apply a territorial approach to define its intervention and monitor its impact. In defining the criteria for the sample in the current study an explicit territorial approach was revealed, i.e. areas closer or in the El Triunfo reserve are more important than those farther away. Moreover, the objective of the project is conservation of biodiversity in a protected area and the buffer zone around it. However, the project strategy is based on assistance to cooperatives. Cooperatives have their members spread over the region and do not necessarily cover adequately a community or other type of area. In order to secure an impact on the reserve and in the bufferzone the project's intervention should explicitly be focused in those areas. A first step could be to broaden the project's intervention towards a communal level, where clear problems of coordination have been identified (e.g. pest control)" (page 41).

[9] Compare Arthur van Leeuwen, Socio-economic Survey 2002, pages 47-49 and pages 38-40 in Yaw B. Osei-Owusu: Household Survey 2003. Household Level Impacts of Conservation Cocoa-Agroforestry Project, August 30, 2003

[10] Arthur van Leeuwen, 2002, p.44: "This year's major involvement of the project directly with communities and households, instead of only working with cooperative directives, is very well acknowledged."

[11] ILO: Promotion of Cooerpatives Recommendation, ILO Conference 20-6-2002, Recommendation 193

[12] Voluntary and Open Membership, Democratic Member Control, Member Economic Participation, Autonomy and Independence, Education, Training and Information, Co-operation among Co-operatives, Concern for Community. E.Chavez, ICA: ECOSOC Ministerial Roundtable."Increasing productivity of rural work", 30 April 2003

small annual bonus and slightly higher buying prices than competitor organizations - but rather from increased yields or, at least, the expectation of them. However it was, to a high degree, not the cooperative's members, that is the owners, who defined the operations and activities, as it happens in a mainstream enterprise. The ones for whom the incentives were conceived in order to change their practices, did not have a final say about the distribution of benefits.[13]

The Business Development Approach's main requirement, the existence of a "business" in the entrepreneurial sense, was, thus, not evident in Mexico. To people traditionally used to free or very low cost public services, a fee-charging business-to-business relationship – CI soon demanded fees for their services - was a concept that trickled in only slowly.

Another important condition was not entirely met either: Very similar to an organisational development context, the services of strengthening their organisation in various respects that were offered to the cooperatives by CI, in order to be "owned" and put to use, ideally should have been demanded by the cooperatives themselves. At the planning stage, the question is not only "what services do clients really *need* ?"[14], but also: "which of the services do clients *want* ?", and, importantly, "*why don't they want (some of) them* ?". As it turned out, some of the cooperatives in Mexico did not especially care, among other things, for transparent, member controlled business plans and for the conservation goal as such either.

The Mexican cooperatives failed to fulfill some of the basic criteria needed to appropriately function as future BDS providers because they were, essentially, not businesses: they lacked commercial focus and business culture, and transparent accounting and management systems[15]. As the program depended on strengthening the capacity of existing extension systems before conservation practices could effectively be promoted, this turned out to be a hurdle difficult to overcome.

In Ghana conditions in terms of cooperative efficiency were better. Kuapa had established itself well in the farming community as an appreciated market outlet among other cocoa buying organisations and as an agent for social concerns of the communities. Here the problem was rather the geographical dispersion of its members with respect to Kakum National Park and, given the barriers to direct export and the reduced price advantages available to Kuapa, there limited commitment to conservation from which nothing tangible in the short term could be gained.

In the light of the effectiveness and, especially, the efficiency of introducing biodiversity friendly production practices on a large scale, it would have been much more convenient, of course, to focus on medium and large coffee producers instead of small scale coffee farmers. However, apart from the political acceptability of this approach, the lesser impact on poverty alleviation and the eligibility of public development funding such as a PVC grant, it would not have addressed the origin of the main threat, shifting small scale cultivation. Whatever the inconveniences, there was no other partner with some sort of extension system for small farmers available, and the creation of cocoa growing associations by communities close to the protected areas, with a business mentality and in competition with the recently founded

[13] See the experiences with Japanese agricultural cooperatives in D. Prakash: Development of Agricultural Cooperatives. Relevance of Japanese Experiences to Developing Countries *New Delhi 2002*

[14] See Alexandra O. Miehlbradt and Mary McVay (ILO): Developing Commercial Markets for Business Development Services, Turin September 2003, 14, et passim

[15] For the BDS conceptual framework see Alexandra O. Miehlbradt and Mary McVay (ILO): Developing Commercial Markets for Business Development Services, Turin September 2003, page 47 and passim; E. Millard: *Business Planning for Environmental Enterprises*, Washington 2003, proposes four main components for an enterprise assessment: (1) Strategic Leadership and management, (2) Financial resources, (3) Marketing and operations, and (4) Human resources and service provision. Whereas the split in the Mexican cooperatives between owner and decision maker might have been caught under point (1), accountability is not really provided for in these categories.

cooperatives would have been a very difficult task indeed. The difficulties that arose from partnering with cooperatives were unavoidable if the planners did not want to put the entire program in jeopardy. Turning cooperatives into businesses in the first place became inevitably part of the project's mission.

4.1.4 CI's comparative advantage

As much as the unfamiliarity with current planning tools[16] constituted a major disadvantage, CI's comparative advantage with respect to the approach lies in its environmental competence, especially the increasing biological impact monitoring capacity, although in both projects, due to the short time of the program's activities, this has not become operational yet.

Also, CI went into this program with lessons learned from their previous Non-Timber Forest Product activities (oils, tagua, Brazil nuts and ecotourism), especially the consciousness of the need for immediate economic benefits for producers which was so excellently put in place in Mexico through the Starbuck's partnership, and CI rightly, though not completely successfully, insisted on transparency and democratic procedures within the partner organisations, notably the Mexican cooperatives.

CI's considerable advocacy potential and ability to establish partnerships with partners with, at first sight, apparently unreconcilable positions, as the Ghana experience shows, is also a major advantage. The need for matching acquired funds, provides, of course, as much motivation for partnerships as the expected synergy effects.

In total, CI's approach appears to have succeeded – sustainability is another matter and is addressed further on[17].

4.1.5 Simplification of the approach

Possibilities of simplification of the approach, that is achieving similar conservation impacts at as broad a scale without an intensive site-level engagement, are difficult to find. Sorting possible biodiversity interventions on a scale of simplicity/directness, the program's activities are admittedly rather complex and indirect.[18] The program's goal is the conservation and or increase of biodiversity habitat on the basis of the existing forest in a buffer zone. Alternative ways to the program's efforts towards reduced-impact land and resource use could, in theory and ordered by increasing complexity, be

- increase of the legal protection status of the area and enforcement of strict regulations;
- creation of economic alternatives for the absorption of the agricultural labor force by the agro-industrial or service sector inside (ecotourism, bioprospecting, other NTFPs than coffee and cocoa), or outside areas of high biodiversity;
- investment in biodiversity products such as watershed protection and carbon sequestration;
- investment in biodiversity use rights, such as conservation concessions[19];
- performance based payments for biodiversity conservation (e.g. bird breeding etc.).

However, apart from the fact that some of the above alternatives are highly unlikely to be successful, given the socio-economic, cultural and political environment in Mexico and Ghana, alternatives to the selected approach are not visible to the evaluators. The areas in question are, after all, occupied by high value agricultural cash crops on which the livelihood of a large population depends.

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[16] see section 5.1 below

[17] section 4.3.4

18 See Ferraro and Kiss: Direct Payments to Conserve Biodiversity, Science, Vol 298, November 2002

19 Rice (CI/CABS): Conservation Concessions Concept Description, November 2002

The program, for both sites, intended to draw instead upon a powerful driving force to encourage farmers to change their farming practices towards conservation: strong income incentives. This succeeded only for Mexico. In Ghana, due to the Government's marketing policy, the income incentive is not strong and a sustainable conservation effort uncertain. All in all, continuing and developing agroforestry is the only practical and promising alternative; conceptually as simple as it can be, in its implementation, however, inevitably complex.

4.1.6 Competing or complementary programs and/or approaches

The Business Development Services Model, the basis of the program's approach, aims at financial self-sufficiency through the commercial activities of the process of financing and trading coffee produced by the participating farmers. The associated services required by farmers and cooperatives will be paid for by establishing market mechanisms to supply services. The necessary economies of scale required to successfully implement such a model make it critical that a certain minimum production and sales volume be achieved. The question is if there are other programs or approaches available to farmers that might limit these economies of scale from being attained. The following discussion is restricted to coffee, as it does not, presently, apply to cocoa in Ghana.

The CCCP's cooperative partners are selling the participating farmers' coffee in the gourmet or specialty coffee market (almost exclusively Starbucks, which represents 60-70% of the North American Specialty Coffee market). The requirements for farmers participating in the Conservation Coffee program are related to the adoption of the best practices for Conservation Coffee. The degree to which farmers adopt these best practices determines the amount of coffee they can offer to the CCCP's marketing partners and the amount of credit through the financing sources made available through the program. These practices were developed collaboratively with several organizations over the past eighteen months. These best practices are based on the *Conservation Principles for Coffee Production,* a global framework for promoting environmentally and socially responsible coffee production. CI assisted in developing the principles, to which over a dozen of organizations and institutions subscribed[20], and now uses this framework as the basis for all of its work in coffee. These principles were designed to be compatible with existing sustainable coffee initiatives such as Fairtrade, certified organic, shade grown (Bird-Friendly) and Rainforest Alliance certified coffees.

In terms of marketing the coffee produced by participating farmers, the CCP approach accesses markets that are compatible with the conservation coffee approach and the products available from the project sites. One element of this approach is to access markets for other schemes that seek to promote environmental and social benefits in agricultural production:

Organic labeling of food like coffee or cocoa focuses on conditions at the point of *production*, such as the absence of chemical fertilizers and synthetic pesticides from the production process. Certification costs are charged to producers and can be as high as 5% of the sales value.

Fairtrade certification criteria cover *both trade and production* conditions. Producers must be small family based growers, organized into democratically ruled associations and pursue ecological goals conserving natural resources and limiting chemical input use. Buyers' purchasing agreements must extend beyond one harvest cycle, guarantee the relevant

[20]CAB International, Coffee Board of India, Coffee Quality Institute, Conservation International, Consumer's Choice Council, Greenpeace, Indian Institute of Plantation Management, National Wildlife Federation, Oxfam, International Private Sector Consultative Board, International Coffee Organization, Rainforest Action Network, Rainforest Alliance, Seattle Audubon Society, Smithsonian Migratory Bird Center, Songbird Foundation, Specialty Coffee Association of America.

minimum price and pay a premium of 5 US cents/pound above the world market price (New York "C" and London "LCE" prices). Certified organic coffee gets a further US$ 0.15 per pound. Importers must offer pre-financing equal to 60 percent of the contract value upon request. The cost of Fairtrade certification is borne by Northern importers, not by producers.[21]

Another element of the program's approach is to access the growing market for specialty or high quality coffee by developing long-term relationships with coffee companies. Specifically, the major market for participant's coffee, and the program's main private sector partner, is the Starbucks Coffee Company. Over the period of the PVC grant, CI has taken the lessons learned from its work in Mexico and elsewhere, and worked with Starbucks to develop a purchasing program based on the Conservation Principles for Coffee Production. Launched in November 2001, Starbucks Preferred Supplier Program (PSP) seeks to reward farmers for the their performance in applying the *Principles*. During the first phase of the PSP, farmers were rewarded through a sustainability points system that increases the price by 10 cents per pound for meeting the full score of 100 points. 50 points relate to environmental impact[22], 30 points social conditions[23], and 20 points for economic issues[24]. Additionally, organic certified coffee is awarded 15 cents per pound equal to Fairtrade. To belong to the scheme, farms have to be verified by an independent inspector. The cost for verification is borne by the vendor. In Mexico, CI assisted two cooperatives, representing 310 farmers, and 14 large-scale farmers were qualified as PSP participants in 2003.

The CCCP's approach to market access and development has provided the Mexican coffee producers with four outlets for their coffee options:

(1) The conventional market with low prices but without any costly practices to observe;

(2) Fairtrade with a small premium over world market price, certification costs borne by the cooperative as well as the buyer. This market has no special requirements for coffee production over and above the generic requirements on social, economic and environmental development (prohibited pesticides list). However, it does imply significant costs to the cooperative to become qualified. This option is not open to new cooperatives as the list is currently closed to new applicants. Additionally, coffee buyers must pay an additional ten cents on top of the minimum price to the Fairtrade labeling organization;

(3) Organic certification with a higher price premium, but a certification process with significant annual costs. The process to certified organic status takes three years, during which yields may be reduced by the lack of chemical inputs without any additional revenue yet. While most farmers in Mexico are not using agrochemicals, the cost of being certified during transition combined with the costs of applying the organic practices during the transition period represent a significant barrier to entry.

(4) Specialty coffee market provides farmers with the highest prices as it provides farmers with access to the above markets. This category includes co-branding of product with market partners, which includes "Shade Grown Mexico",

(5) Preferred Suppliers Program status, which incorporates the first three categories above, and includes a verification process that can be conducted in conjunction with the other certifications. This opportunity also creates opportunities for in-transition coffee, which are higher than for conventional coffee, and "sustainability points" are awarded.

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[21] see for details Fairtrade Labeling Organisations International: Fairtrade Standards for Coffee

[22] Soil management 5 points, Water reduction 5 points, Clean water 5 points, Water buffer zone 5 points, Forest and biodiversity conservation 5 points, Use of shade 5 points, Energy use 5 points, Pest management 5 points, Accepted agrochemical 5 points, Waste management 5 points

[23] Wages and benefits 10 points, Health and safety 10 points, Living conditions 10 points

[24] Transparency from supplier to farm level 20 points

All of these options represent the CCCP's comprehensive approach to providing farmers with market access.

What are the threats for conservation coffee ?

First, there is a general potential threat for the conservation goal originating from the conventional coffee market. If prices *rise* substantially to or above the level of shade grown coffee, farmers would abandon the scheme as its production costs are higher than for conventional coffee. If prices *fall* further than the present low level, pressure on natural forest would rise again. Although both developments are said to be unlikely, the degree of threat can only be determined by a thorough market study which is not in the range of this evaluation.

As for organic labels, Conservation Coffee qualifies for organic certification as well, and there would be, consequently, additional market outlets for farmers apart from Starbucks. However, the threat consists in the fact that, at equal prices for both "labels", organic practice requirements are less than the ones for Conservation Coffee. This is certainly true for the environment category (water buffer zone, forest and biodiversity conservation etc.) which increases production costs.

The Fairtrade market is definitely the greatest threat for Conservation Coffee insofar as it gives local actors the opportunity to utilize the cooperatives to access their clients on behalf of other cooperatives elsewhere in Chiapas. This has repeatedly disturbed the program. For little additional cost a coffee farmer, when the opportunity arises, can sell his product for a price that leaves him a higher margin than for Conservation Coffee. After previous events, when cooperatives working with the project had considered this option, the recent "walk out" threat in late 2003 of 4 cooperatives was also due to the opportunities they thought they might have on the Fairtrade market. However short-sighted such decisions might be, they are not conducive to a steady development of the program towards self-sufficiency. A continuous effort is necessary to keep farmers and organisations on board, showing them that only Conservation Coffee offers a guaranteed market and operational support.

The likelihood of competition of other NGOs offering similar services for lower prices is small. CI's program is reputed for quality and reliability as the socio-economic surveys confirm. IDESMAC's GEF-funded project El Triunfo Biosphere Reserve: Habitat Enhancement in Productive Landscapes started in 1999 and its "Café Amigable para la Naturaleza" did not get as far[25]. The "competition" that existed from 1999 with the GEF project was clearly won by the CI coffee project. At its present stage, a program such as the CCCP is too complex and difficult to be duplicated quickly by competitors, especially if they do not have the backing of an internationally dominant client.

However, in the end for the sake of the conservation objective, such projects could and should become partners, even though it didn't happen in this case. Such partnerships would be another way to scale up and enhance conservation as the overall goal.

[25] see Ayuda Memoria GEF Proyecto de Mediano Tamaño Conservación de la Biodiversidad Mediante el Mejoramiento del Habitat en Paisajes Productivos de la Reserva de la Biosfera El Triunfo, Chiapas, México, 14-01-1999;
Memorias del Taller "Indicadores para una Cafeticultura Sustentable: Conservación y Desarrollo." Llevado a cabo los días 29 y 30 de junio del 2000 y organizado por Pronatura Chiapas A. C. e IDESMAC;
Memoria 3° Reunión Sobre Normas para la Certificación del Café Sustentable en México San Cristóbal de las casas, 19 de febrero de 2001; according to oral information this project concentrated too much on organisation and to little on conservation content and on market outlets. Their vision in that respect was so limited that they critisised CI's heavy involvement with marketing support. The GEF funds finished at the end of 2001. Some work was continued with national funds. The sustainable coffee concept never got off the ground.
Ayuda Memoria Evaluacion de Medio Plazo. GEF Proyecto de Mediano Tamaño Mejoramiento del habitat en paisajes productivos de la Reserva de la Biosfera "El Triunfo", Chiapas, México. 2 a 10 de Mayo del 2001.

4.2 Achievement of Objectives

The evaluation of the program showed some peculiarities different from other projects in the development area:

Firstly, with the pronouncedly "adaptive management" environment in this program, the evaluation of the program's main achievements and the progress towards each major objective as defined in the Detailed Implementation Plan (DIP) was not easy because of the substantial change of strategies that had become necessary during implementation. It led to what might be called an excessive "drift of objectives" and of their corresponding activities over time, so the evaluation had to "hit moving targets".

While the broad conservation strategy – behavioural changes at the farm level in favour of conservation - has been maintained over the entire period, at the objectives (or "key results" in the terminology adopted by the CED) level this drift is notable from the first unsuccessful grant application to USAID of December 1997 and December 1998 through the DIP and the subsequent implementation phases of the program in 2001 and 2002, until one year before the end of the program.

In a situation of moving targets like this, the evaluation focussed as much on the manner in which this pilot phase – the grant - was used to adapt to reality, that is, if the right steps were taken in adjusting objectives (see section 5. Program Management) as it does on achievement of targets. This is especially true for Mexico where an important part of the currently stated objectives and indicators were introduced only in June 2002, that is 15 months before the original closure date of the project. In Ghana, mainly objective No.1 had to be substantially modified due to an incorrect assumption about the Government's cocoa strategy.

Secondly, the introduction of objectives for headquarters separate from those in the field sites is somewhat unusual, but stems from PVC' strategy to create capacity in US-PVOs. The distinction made it possible to separately monitor spending of funds abroad and in the US. However, from a methodological viewpoint, it duplicated most objectives. The DC specific ones, capacity building and monitoring (objectives 1 and 6), were, in fact, preconditions to reach results in the project sites and could very well have been incorporated into these, just like any other backstopping from headquarters. In this way there would have been only two framework matrices with their corresponding share of creation of capacity in headquarters. This should be kept in mind for the planning of the ongoing replication process.

Thirdly, some deviations from the LFA standards have to be noted which also have to do with the capacity building objective in headquarters and the field. Inserting monitoring as a project objective is, in principle, an aberration (DC objective 6, Mexico objective 5, Objective 4 for Ghana, for this site misnomered "Project partners apply adaptive management approach" - adaptive management comprises more than monitoring !) Objectives do not refer to implementation prerequisites or tools, but address clearly identified needs/problems of the *target population*, not of the implementers. That is, objectives are *future desired benefits* to which the beneficiaries attach priority. Monitoring at project and CBO level should in future be introduced as an activity at each project site.

4.2.1 Major successes, challenges and constraints in achieving each objective at the three sites

4.2.1.1 Washington DC Site[26]

CI, in following PVC's guidelines for reporting, separated as well as it could the documentation of contributions made in Washington DC from those resulting in-country, but this was difficult because there was so much integration in activities, naturally, between headquarters and Mexico and likewise between headquarters and Ghana. The overlap in objectives and indicators present in the three DIPs would have been avoided by using just the DIPs from the two countries. Another point relevant here is that in the original DIP for Washington, there were three objectives (1, 5 & 6), but this was increased in the second year to six[27].

DC-DIPObjective 1: CI has the capacity to develop conservation enterprises based on coffee and cocoa

The challenge here was to appoint suitable new staff and to broaden and deepen their knowledge and understanding, together with that of existing staff in HQ, so that they could anticipate, avoid, or tackle the many difficulties that would inevitably arise when conservation and specialty commodity crop enterprise are brought together in an agroforestry setting. Several constraints around hiring of personnel resulted in a considerable delay and consequent gaps in staffing. The Business and Trade position was not operational until mid-2001, and then only for a relatively brief period, the Project Implementation Manager could not be hired until the end of the first year (October 2001) as a result of a hiring ban (restructuring of CI's Field Support Division), and the Finance and Organisational Development position was not filled because by then CED had appointed a full time enterprise finance manager. There were also changes in existing staff early in the program. Nevertheless, the program worked hard and increased its capacity substantially, to a level where conservation enterprise development has been put on a sound footing.

Deleted DC-Indicator1.1 Proportion (%) of CI's Mexico coffee project budget for FY 2003-2004 dedicated to projects outside the target area

Deleted DC-Indicator 1.2 Proportion (%) of CI's Ghana cocoa program budget for FY 2003-2004 dedicated to projects outside the target communities

These two indicators were deleted following the DIP Review in the first year because they were not sufficiently specific to measure increases in field project capacity. CI did not replace them.

DC-Indicator 1.3 # of CI conservation enterprise projects based on coffee and cocoa production

From a baseline of two projects, Mexico and Ghana, CI was to haved moved to five projects by September 2003. The evaluation mission did not visit Costa Rica, Colombia or Peru to see progress to date, but quite large scale Conservation Coffee projects are apparently going ahead at threatened locations in these countries, with a Project Design Workshop held in

[26] A comprehensive table containing the entire logical framework matrix for the three sites is attached in Annex 7.2. It can be referred to in the course of the following discussion under Section 4.2

[27] Unfortunately, the revised M&E plans presented in the second year which detailed the additional objectives did not include baseline data in several instances. In order to keep the data manageable, the Revised M&E Plan contained only those baseline data where adjustments/corrections needed to be made or where new indicators have been introduced. All other baseline data are duly documented in the April 2001 DIP.

Colombia in July 2001, in Costa Rica in January 2003 and in Peru during the first week of February, 2004.[28]

Deleted DC-Indicator 1.4 Change (# of points) in overall mean DOSA score for CI's Coffee and Cocoa program

The Discussion-Oriented Self Assessment (DOSA) methodology[29] was expected to help in following changes, hopefully improvements, in the performance of staff during the evolution of the project. But, after applying it to evaluate themselves, the Washington team found it to be a rather general tool, that examined many areas which were not directly relevant to, or within the sphere of influence of, the operations of the unit. The DOSA approach was discontinued, because it did not address the performance of discrete units within an organisation at all well. Being a process oriented tool the lack of suitability became obvious only after having run through it / tested it. The DOSA materials don't provide any hint that they are not suited for a single department. However, in the meantime CI has invested in developing a methodology for conducting partner assessments in the field in order to evaluate the capacity of a future partner organization. This instrument uses a combination of external review and self-assessment and will be tested partly in Costa Rica in March 2004.

DC-DIP Objective 2: Participating farmers have access to training in agroforestry and organic methodologies

The requirements and timing of training in Mexico and Ghana differed considerably because agronomic and agroforestry techniques were much better known for organic coffee than for traditional small farmer cocoa and, as it turned out, organic cocoa was not a route that could be taken in Ghana anyway. There was a common challenge for CI Washington with regard to agroforestry training in the two countries, however, in as much as appreciable numbers of farmers would have to be trained to implement best practices for their beneficial effects to be translated into effective biodiversity conservation.

DC-Indicator 2.1 Agricultural technical assistance plan developed and operational in Ghana and Mexico

The agroforestry specialist based in Washington was instrumental in guiding the development of the technical assistance plans by means of a range of activities including visits to the countries for discussions with farmers, local CI staff, and partner organisations combined with literature searches, consultations in the USA, and attendance at a training course in conducting organic inspections. One constraint was that the best practices were still under development, and training had to await their finalisation and field testing. Nevertheless, by the end of the three years plans had been successfully implemented.

DC-Indicator2.2 Combined total number of community level project extension officers in Ghana and Mexico

One unexpected challenge was the difficulty in convincing the CBOs to take on the extension role and provide appropriate candidates from their staff for training as extension officers. Eventually, through the Farmer Field School approach, 35 "promotores" were trained in Mexico and 14 Kuapa staff in Ghana, plus 16 farmers aside from 2 MOFA staff.

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[28] See section 4.3.4.4

[29] Scott Pulizzi, Evan Bloom, Beryl Levinger, Sabrina Atwater and Jean McLeod: DOSA Debriefing Manual. A guide to understanding, interpreting, and using DOSA results. Washington DC, Newton, MA, June - 2000

DC-DIP Objective 3: CBOs have access to capital at competitive rates

DC-Indicator 3.1 Partner CBOs in Mexico have access to capital at interest rates that are X% less than the established rate for that period

Washington's involvement in this objective was highly successful in the first 2 years. The challenge was to find substantial funding to finance the coffee harvest for project farmers, and to ensure that the loans were repaid. In Chiapas, the constraint was not the rate that might be obtained, more whether credit could be obtained at all, especially for CBOs with no track record in managing credit.

In response to this situation, CI designed the Evergreen Credit Fund, which was capitalized with a loan from IFC/GEF. CI introduced the Fund into the Mexico coffee program and developed a partnership with Ecologic Enterprise Ventures, Inc, to provide low-interest loans to the six Mexican cooperatives. Due to the success of the loans made in year one, an additional USD$ 500,000 in financing was loaned and repaid by the cooperatives last year. However, according to the socio-economic survey, financing of coffee production has drastically declined in 2002. The Evergreen Credit Fund could not counteract this situation. In fact, according to the survey, it did not have any impact at all and the fund is practically unknown [30](this information could not be followed up). In December 2003, CI loaned instead of an estimated $1,500,000[31] a mere $234,500 to the cooperatives to finance the 2003/2004 coffee harvest, because of the threatened dropout of 4 cooperatives from the scheme. Over the three years, CI has facilitated the Mexican Cooperatives in obtaining over US$1.3 million in financing for their coffee exports. It is not clear if the target that, as of October 2003, partner CBOs have access to capital at interest rates that are 5% less than the established rate for that period, has been met, but the system is obviously well received.

Old DC-Indicator 3.2 Partner CBO in Ghana access to capital at interest rates less than the established rate for that period

This indicator was revised because Kuapa Kokoo had access to local bank finance (backed by international guarantee). If this could have been established before the planning stage, a more useful indicator might have been employed from the start. CI did have a discussion with Kuapa about an application to the fund but Kuapa didn't pursue it as they then had other sources available; these were not all in place at the outset.

Revised DC-Indicator 3.2 Manufacturing company of Partner CBO able to build market through access to capital

The Day Chocolate Company in UK, partly owned by Kuapa, has been selling Fairtrade chocolate made from Kuapa cocoa beans, largely in the UK. CI made two investments in the company totalling $250,000 to help finance its growth and hopefully to enable Kuapa to increase its market for premium-priced cocoa.

DC-DIP Objective 4: CBOs have increased access to premium coffee and cocoa markets

This objective is dealt with under the report of program effectiveness for Objective 2, Mexico.

DC-Indicator 4.1 Change in number of ongoing clients purchasing coffee from Mexican partner cooperatives

This is a duplicate of Indicator 2.1 in the Mexico section with the difference that the target there is that CBOs have sold coffee to a minimum of 3 clients for more than one year by April

[30] Socio-Economic Monitoring 2002: Household Level Impacts of Conservation Coffee Production. Second year implementation of the participatory monitoring and evaluation program of the Conservation Coffee Project in Chiapas, Mexico. Arthur C.J. van Leeuwen Jaltenango, Chiapas, Mexico and Managua, Nicaragua October 2002, page 43

[31] H. Haase, Sustainability and Financial Independence Analysis for the CC Programm in Chiapas, August 27, 2003, page 9

2003, while here it is to a minimum of two clients only. The latter was achieved but not the former.

DC-Deleted Indicator 4.2 Change in % of CBO product sold to clients at premiums of 15% or more of world price

Stalled liberalisation of the Ghana cocoa market was the reason for deleting this indicator.

DC-Objective 5: CI develops Conservation Coffee and Cocoa standards and they are verified in Mexico and Ghana programs

DC-Indicator 5.1 # of Mexican CBO members verified to meet Conservation Coffee Standards

This objective and indicator are dealt with under Objective 4, Indicator 4.1 for Mexico

DC-Deleted Indicator 5.2 # of Kuapa farmers verified to meet Conservation Cocoa Standards

This indicator was deleted because the objective was a longer process than anticipated, and might, like organic certification, touch sensitive government policy areas. It could not be finished in the timeframe of the PVC project (see also Old Objective 3 of the Ghana section, which was merged with Objective 2).

DC-Objective 6: CI develops M&E system and it is applied in Mexico and Ghana programs

Discussion of the merits of this as an objective was initiated above in the introduction to this section, and is continued below in Section 5 on Program Management. The aim here is to examine the effectiveness of the development work done in HQ on monitoring and evaluation, and how it was applied.

DC-Indicator 6.1 Project level M&E system operational and monitoring achievement of project targets and benchmarks in Ghana and Mexico

The definition of project level M&E was not made clear in the original DIP, particularly in just what would be monitored and to how high a level (performance vs. impact). This indicator 6.1 is very general and leaves the scale of activities open for interpretation. From comments in the first year report (e.g. Mexico Objective 5) it seems it was hoped that farm-based faunal biodiversity data collection could be included, but this was not realised in Mexico and only to a limited extent in Ghana through the habitat and fauna surveys which are mentioned below in section 4.2.1.3. Development of the methodologies for high level biological monitoring (impact monitoring at the level of Conservation Outcomes as it was later to be called) in the two sites was subsequently passed to CI's Center for Applied Biodiversity Science, which developed the commitment during the lifetime of the project to introduce regional outcome monitoring programs. Unfortunately, this realization could not be translated into CI assuming these responsibilities by the appropriate departments at the appropriate levels. Although the individual hired to do this monitoring was transferred to the appropriate department, the fact that CI's monitoring program was yet to be developed, the organization has not yet been able to address this need in El Triunfo to date. However, it seems that this work is now moving forward with the support of USAID and CI's emerging regional structure.

The socio-economic surveys in Mexico and Ghana were separate elements of project M&E, again not specifically identified in the DIP, which were aimed at improving understanding of any relationship between the adoption of Conservation Best Practices for coffee and cocoa production, and the well-being of the farmers. The consultant who carried out the surveys in Mexico faced the challenge that in the first place he had to design for the entire project a detailed conceptual model which did not exist on his arrival. He succeeded fairly well in

developing the parameters of the study, but the logic of linking activities and the ultimate goal of conservation would have benefitted from the preexistence of a sound model[32]. However, he integrated well with HQ and the Chiapas team, and the three annual surveys were carried out successfully, bringing much useful feedback. After the arrival of the advisor, project design and management, when a general monitoring system was eventually designed in headquarters, it was too late to change the survey model (in need of improvement) in order to preserve comparability between the years. However, it is not clear why the consultant who had voiced strong opinions about the project's approach in his first survey, published in December 2001, was not invited to the replanning workshop that took place between June 20-25 2002, the second survey being scheduled for the period between July 27 and September 24, 2002.

CI-Ghana installed an M&E team which, together with HQ, developed the habitat and household surveys. These surveys were compromised in as much as there was uncertainty as to the degree of actual implementation of practices on the ground as distinct from notional adoption, and anyway insufficient time had elapsed between farmer training and survey for certain effects to be apparent. Despite these difficulties, the surveys were a first step that may help in designing future activities.

The major contribution from HQ was the development of a set of project design and management tools, which had been introduced and partially adopted in both sites, more extensively in Mexico than in Ghana. These are discussed more fully in section 5, though it could be said here that if there was any shortcoming with the system as it was used in Mexico it was that, at the process/performance level, lessons learned were often not documented for individual activities rather just aired in project meetings. This lack of narrative might prevent important lessons from being passed on.

DC-Deleted Indicator 6.2 CBO level M&E system operational and monitoring achievement of CBO targets and benchmarks in new project site

In the cases of both Mexico and Ghana, the Original DIP had assumed that the level of organisation already present in the CBOs would allow the rapid development of M&E systems that could feed back information into the planning process, development of best practices etc., but this assumption proved unfounded when CI assessed the existing capacity, and the indicator was dropped.

4.2.1.2 Mexico Site

M-DIP-Objective 1: Cooperatives have the capacity to operate as effective businesses that promote conservation

The provision of organisational strengthening and business training to the CBOs was originally to be conditional on increased participation by cooperatives in reserve management. The related indicator, which concerned increased reporting of park violations, was dropped early because it was deemed to be a poor indicator of farmers respecting the reserve, nor did it capture the full range of activities that cooperatives could do to related to better park management. Also, the reporting mechanism was not very reliable due to limited capacity by the reserve itself, and the reports that were received tended to be motivated by revenge or political motives rather than as a response to real violations. CBOs were to be considered as effective conservation enterprises if their records and project reports confirmed a decrease in membership turnover, growing credit funds, and improved coffee quality.

M-Indicator 1.1 Change in average annual rate of turnover of CBO members participating in the program.

The challenge for CI was that individual cooperatives would be able to stabilise membership by offering the advantages of working with the CI project, and by managing their affairs responsibly. The average annual baseline membership turnover in 2000 was very high at 44%, and this was successfully reduced for program participants to 9.6% in 2001 and 11.7% in 2002, easily passing the mid 2003 target of not more than 29%. The situation over membership in late 2003 following the threatened withdrawal in November/December of four of the cooperatives (i.e. after the end of the PVC grant) remains to be seen but, prior to that, of the 1018 participants a total of 889 remained.

M-Indicator 1.2 Increase in amount of CBO savings (US$) resulting from revolving credit fund (Eterno Verde).

There was a need for CBOs to be thrifty if they were to be a sustainable partner of the Conservation Coffee project. The CBOs achieved savings which originated from their coffee export revenues, and they did that in each year from the start of the project, and ended by passing the target of US$43,000 by more than 10% in the harvest year 2002/3. CI rightly regarded this track record of savings and credit history (all loans to farmers were repaid in full) as a considerable success, and one justifying the project's investment in training for business planning and credit management.

M-Indicator 1.3 Change in yield from dry milling of parchment coffee.

Many factors determine the out turn in the milling process, including the initial quality of the coffee beans (minimal pest attack in the field, only mature beans harvested, careful processing employed, suitable weather conditions for drying, etc.) and the efficiency of the mill machinery and operators. The challenge was to raise the milling yield consistently through improved extension, but this did not happen in the 2000/1 harvest when the yield fell to 64% from the baseline of 66.6%. CI responded by changing to another mill, and restricting the amounts of coffee that each farmer could sell based on cooperative membership, performance on his farm management plan and on a part of his production, so that the introduction of lower quality coffee was blocked. The yield picked up in 2001/2 and ended at 74.4% in 2002/3, amply surpassing the third year target.

Together these indicators undoubtedly reflect an augmented business capacity, but the last part of the objective – the extent to which the cooperatives themselves have improved their promotion of conservation - was not really tested. The only conservation linked element was the farmer's compliance with his farm management plan, which is dealt with more fully under Objective 3. So a question remains as to how committed the CBOs can be to conservation when they do not have a real involvement or say in the Reserve management.

M-DIP Objective 2: Cooperatives realize higher prices through increased access to coffee markets

CI's challenge was to help cooperatives to find increased direct market access, to ensure that participating cooperatives (and surely farmers too!) received a higher price for their Conservation Coffee, and that a bigger proportion of production went as export grade coffee. All this to ensure that a differential could be maintained over the price generally obtained to act as a stimulus for farmers to continue along the conservation line. Due to the efficient brokering relationship of CI with the coffee industry, this part of the program proved to be a great success. However, there are doubts about the validity of this indicator mentioned below (M-Indicator 2.2)

M-Indicator 2.1 Change in the number of ongoing clients purchasing coffee from partner cooperatives

Although a profusion of clients does not necessarily guarantee higher prices, it would give some reassurance that Conservation Coffee is here to stay. In addition to the efforts made from HQ to find new clients, CI worked with the cooperatives in Mexico to maintain the existing clients. From a baseline of two clients there was a temporary increase to three, but Frontier Organic Coffee Company was bought by Green Mountain Coffee Roasters who, with Starbucks Coffee Company, continue as the main clients today. Only one of these accepted in-transition coffee. This is a narrow base from which to operate, and the recent reticence of certain cooperatives to agree to the 2003 CI/Starbucks revised marketing plan through the buying agent AMSA highlights potential difficulties in relation to sustainability.

M-Indicator 2.2 Change (%) in the price paid to cooperative members per lb of parchment coffee

This indicator began as a comparison of the absolute prices paid to cooperative members over time but because of falling world prices adjustments had to be made to the target. The project did reach and just surpass the amended target, but the achievements are perhaps better seen if the comparison used is the superiority of member price over local market price at a given time. In the three years of the project, the average CBO member price for organic coffee exceeded the local price by between 61 and 97%. Even those with in-transition coffee fared considerably better too. However, according to the 2003 socioeconomic survey, farmers perceived a fall in the added value of Conservation Coffee in 2003 because the price for conventional coffee is rising, and some questioned whether the extra effort was worthwhile. There is, however, a factor which puts the general validity of this indicator into doubt: the incentive for the farmer to implement Best Practices is not so much a higher price but a higher income. As Best Practices are likely to affect not only the price but also production costs, the indicator should have been based on net income from the start. The same choice was made in the socio-economic surveys, apparently also due to the convenience of data collection.[33]

M-Indicator 2.3 Change (%) in the quantity of exportable grade coffee sold by CBO members

An increased volume of sales of high grade coffee would reflect more farmers signed up for conservation and therefore greater areas in the buffer zone protected, plus a better standard of living for the farmers. The target of a 200% increase from the baseline of 532,406 lb of green export grade coffee for 1999/2000 was passed by 36% in 2002/3 when cooperative members sold 1,787,363 lb. If the threatened withdrawal of some cooperatives from the CI/Starbucks market in 2003/4 comes true, it will presumably markedly reduce the volume from members for the current harvest, but it seems that there are discussions in progress regarding alternative mechanisms for members who want to sell, but whose cooperative doesn't.

M-DIP Objective 3: Farmers adopt agroforestry and organic agriculture methodologies and conservation techniques

This objective combined the promotion of low impact agricultural practices which would guarantee organic and preferred supplier status with possibilities for stabilising and improving biodiversity, and thus was a central focus of the Coffee Project. There were major successes, with targets exceeded in all four indicators (Annex A). One potential weakness comes from the current uncertainty regarding the future involvement of certain cooperatives and their

[33] The 2003 survey states (page 29): "Como resultado de las tendencias en nivel de cosecha y precio, la rentabilidad de una hectárea de café ha aumentado más para los beneficiarios que para los no-beneficiarios. Una hectárea de Café de Conservación genera un ingreso a promedio de $4,878 en 2001 y $6,754 en 2003 mientras (que) una hectárea de Café Convencional genera en 2001 $4,098 y en 2003 $5,368." Working the numbers it turns out that the so called "rentabilidad" is obtained by multiplying yield (10 quintales) by price (675 pesos/quintal) without considering production costs (see also section 5.1.5.2)

associated farmers, in the face of the revised 2003 purchasing arrangements. Continuing participation in the agroforestry and conservation elements depends on the continuing presence of an extra incentive through the price premium over organic or Fairtrade coffee.

M-Indicator 3.1 The number of farmers that have met Farm Management Plan Targets for two consecutive years.

The Farm Management Plan was intended to identify specific areas where a particular farmer needed to improve his husbandry and coffee processing facilities to reach the required standards for organic coffee, and for preferred supplier coffee in terms of agroforestry and conservation. The major challenge was to carry out and process surveys on all farms in sufficient detail to check all of the many aspects which needed verification and possible improvement. This was done through two visits per year, one in the middle of the year for agronomic practices and the other during the harvest when processing practices could be seen. There were various constraints including transport to remote areas in the wet season, but perhaps the most serious was the time needed to define and validate the survey elements and then to assemble and train the survey team. The first year was a diagnosis process and specific recommendations were made. The second year it was examined what of the recommendations were followed.

The Farm Management Plan system was not ready to be applied formally until the second year, so the revised third year target was that 800 farmers had achieved their plan for at least one year. This was surpassed by 7% and further, 600 farmers recently were reported to have met the targets for two consecutive years (Annex B). Operating the Plan has meant a great deal of additional data collection, processing and storage, but this has been handled appropriately (with one reservation regarding the switch away from Microsoft Access to Excel as the handling software), and the data set is a valuable resource from the agronomic, agroforestry/conservation and GIS viewpoints.

M-Indicator 3.2 The number of farmers applying Beauvaria bassiana as a part of their IPM for Broca.

The ability to manage the broca pest (Coffee Cherry-Boring Beetle) organically can be crucial to good coffee yields, and the original indicator 3.2 was directed at monitoring the overall degree of infestation on the entire hectarage under project farmers. This was found to be over-ambitious and not likely to be cost-efficient, so the indicator was duly revised as above to something more feasible. The target for the third year of the grant, that 600 farmers were spraying the fungus on to their coffee, was surpassed by 12%. The baseline was that zero farmers were using the fungus.

M-Indicator 3.3 The number of native shade trees planted or nurtured from wild seedlings by farmers in their farms.

One feature of appreciable areas of the buffer zone coffee farms (this is seen especially in the "fincas") is that the shade layer is almost monospecific or at best monogeneric with Inga spp planted widely. CI recognised the need to increase the diversity of the shade, and the original indicator dealt with the percentage of farmers' fields that had six or more species of shade tree. However, it was realised that a long time would be needed to see changes in shade tree composition and that botanical identification was too much of a challenge to be worth the investment. As a result, the indicator was revised to apply to young trees only, which could be assessed year by year.

The challenge was to encourage farmers and their workers to recognise and preserve valuable self-sown seedlings or regrowth during weeding with the machete, and also to interest them in sowing seed or planting seedlings or other planting material of species seen as desirable from the biodiversity and coffee perspective and, ideally, that might be useful economically. One

constraint was that there were no native tree nurseries in the region, nor supplies of seed. A further constraint was the recalcitrant germination of some species. CI began promoting shade diversification by using farmers and others to assist in collecting seed and then establishing its own nursery at the Training Centre in Jaltenango, from which approximately 19,000 seedlings of 18 different species were distributed to farmers (Nursery records, 2003). The year 3 target was that 10,000 native shade trees should have been planted or nurtured in the farms, and this was exceeded by 16% according to the latest Farm Diagnosis records. Although the Centre continues to produce seedlings, CI's feeling is that long-term selection and protection in the farms is the preferred option and not a series of smaller community nurseries as originally envisaged. This is appropriate provided suitable saplings are still appearing in sufficient quantity, which may not be the case in the older farms and fincas which have been bereft of forest species for nearly a century in some cases.

M-Indicator 3.4 The number of Mexican CBOs certified organic.

Organic certification has been a useful basis for the development of Conservation Coffee not least because it has conditioned farmers to the need for self-regulation and also for overview of their activities by external verifiers, as well as the CBOs to which they belong. There are relatively few chemical challenges to organic certification where farmers are poor and access to agrochemicals is already restricted, as is the case with coffee farmers in this region. Nevertheless, the benefits of organic certification had to be demonstrated and the main indirect constraint was uncertainty in the CBOs regarding the price obtainable in the market. The baseline was that 126 Mexican CBO members were certified organic as of December 2000, and the target was to have 200 members certified organic by December 2003. This was amply exceeded when the CBO records showed 405 farmers certified at the end of 2003. However, it is not clear how many of these farmers are selling their coffee through the project in the crop year 2003/4, given the threatened withdrawal of some of the cooperatives from the scheme.

M-DIP Objective 4: Farmers are being verified for Conservation Coffee Standards

M-Indicator 4.1 The number of farmers verified to meet Conservation Coffee Standards

The original DIP saw verification for Conservation Coffee Standards as providing clients with a guarantee of product authenticity and social and ecological benefits. These Standards included the development of a set of Conservation Best Practices for coffee production to be promoted by farmers active in the program. Organic certification was to become the 'substrate" or preexisting system with which the verification would be merged with. In this way verification could be done by training inspectors and could use a costly process that the market was paying for as a way to achieve this additional service. It was also a way to engage certification organizations and promote the inclusion of conservation considerations into their standards somewhat validates this hypothesis.

The best practices were developed initially through CI's experience on the ground, and later in partnership with various organisations active in the reserve, such as ECOSUR, CONANP, and FIRA. (ECOSUR first developed some teaching modules financed by CI, then contributed them for free, with FIRA contributing to course costs.) The challenges were to decide which agroecological, conservation and socioeconomic practices to include, how to define them and how to verify their application. Some of the constraints met were inadequacy in the Internal Control Systems for organic certification within some of the cooperatives and a lack of information on certain agronomic aspects relating to maximising production while maintaining biodiversity.

The project did succeed in developing a set of best practices which has been subject to a pilot verification. The target was to have 100 farmers verified to meet Conservation Coffee

Standards by December 2003, and this was readily attained with a total of 248 farmers verified, 236 of them small farmers/members of cooperatives and the remainder finca owners. As in Indicator 3.4, from a sustainability point of view it is important to know how many of the smaller farmers are in cooperatives still selling through the project, and how many outside.

M-DIP Objective 5: Monitoring and Evaluation (M&E) system implemented, informing management decisions and contributing to Conservation Coffee Standards development.

According to the original DIP, the realisation of this objective would facilitate project management, measure socioeconomic impacts, and provide critical data for the development of local Conservation Coffee standards. Presumably M&E was also set up as a separate objective so as to emphasise its importance and to be able to track the costs which are allocated per objective. In reality, if a DIP is designed with appropriate objectives, indicators and targets in the first instance, there should be no need to have a separate system because monitoring is already built-in to the DIP. As an unwanted side-effect, there was some indication from interviews with staff in Mexico and Ghana, particularly the latter, that the separation of M&E as an objective and the allocation of a specific staff member to it, diluted the individual responsibility of other staff members for M&E in other objectives. Consequently, there was a tendency – possibly also due to CI's lack of "program management language" - for the term M&E to be used when referring to one-shot selected activities (impact monitoring through the socioeconomic survey and conservation level biological monitoring) rather than as a necessary continuing control of performance in activities, outputs and objectives. Nevertheless, a strength of the Mexico project was that the staff were aware of the overall system, and used it appropriately.

M-Indicator 5.1 Project level M&E system operational and monitoring achievement of project targets and benchmarks

A detailed socioeconomic survey was designed and successfully carried out at the household level by a consultant for the coffee project across seven communities in the buffer zone in each of the years 2001, 2002 and 2003. This survey had its own separately defined objectives and the main challenge was to identify the impact caused over the years by the Conservation Coffee Project on participating households, comparing project and non-project farmers, for a range of indicators. Among the constraints were the shifting population, the remoteness of the farms and the changing relationships between the cooperatives and the project during the period. Reports in Spanish and English and the full database in Microsoft Access are available. The surveys have been very useful in identifying strengths and weaknesses in the approach. Results of these surveys are reported in section 4.2.2. With regard to the reliability of the data, the evaluators had no opportunity to participate in interviews and to gain insight into the approriateness of the methods employed on the one hand and the interviewers' diligence on the other.

In the wake of headquarter activities under their objective 6 the project developed and used a new Project Design and Management Framework in Mexico from June 2002 because of the difficulties for developing work plans and targets for monitoring project performance from the original DIP. The design side of this is dealt with in more detail in the section on Program Management. Three-year work plans have been produced, and documents are readily available to all staff through the program staff's web-based collaborative workplace Eroom, and both headquarters and Chiapas staff are using it to update documents and exchange files. The position is less advanced in Ghana but the implementation plan will be developed in 2004 as part of the GEF planning grant.

Deleted M-Indicator 5.2: CBO level M&E system operational and monitoring achievement of CBO targets and benchmarks

This indicator was deleted in the second year because CI found it not to be viable in the time frame of the project. It was not replaced or revised in the New Plan for Mexico

M-Indicator 5.3 Conservation Coffee Standards revised to reflect data collected by project and CBO level M&E systems

This indicator should have been changed to acknowledge the deletion of Indicator 5.2 relating to the development of CBO level M&E systems. In the event, the Conservation Best Practices for coffee production and land use management for the project region were produced from a combination of analysis of project data, farmer interviews and expert consultation, without new CBO M&E input.

4.2.1.3 Ghana Site

Old G-DIP Objective 1:Kuapa operates as an effective and efficient business

This objective was changed in 2002 when it had become clear that the liberalisation in the Ghanaian cocoa market hoped for by CI was not going to happen quickly enough, if it happened at all, for it to be relevant to the PVC project, and neither were the possibilities for the production of organic cocoa realizable owing to the government ban. This meant that the selected CBO, Kuapa Kokoo, would not be able to market overseas directly and thereby obtain premiums for Conservation Cocoa. The lack of price incentives for farmers affected definitely Kuapa's effectiveness in terms of the conservation goal, though not necessarily its business efficiency.[34] The insuperable time constraint led to a new objective, and those indicators which had related to the development of premium markets accessed through Kuapa were dropped (Annex 7.2). The emphasis of the project was focused even more on the provision of extension services to farmers, and on the influence Kuapa could have at that level – the local society level.

New G-DIP Objective 1: Kuapa's organisational capacity at the Society level strengthened

An early constraint was that reorganisation in Kuapa of Society Development Officers (later to become Research and Development Unit Officers, RDOs) left it unclear who was available to work with the project, and when. There was also the difficulty that the project team had overestimated the organisational infrastructure of Kuapa in terms of documentation, standard procedures, methodologies etc. and additional capacity building was needed. A third constraint operated at a higher level in as much as the relations between Kuapa HQ in Kumasi and CI deteriorated as a result of CI's inability to meet its financial obligations in the MOU signed with Kuapa. In particular, it could not finance the purchase of a vehicle which Kuapa claimed was essential for its travel to farmer field schools. As a result, Kuapa temporarily suspended its participation in the project until CI facilitated a successful application by Kuapa to the Critical Ecosystem Partnership Fund (CEPF). The difficulties ended in November 2002, and a vehicle finally reached Kuapa in June 2003.

G-Indicator1.1 Annual ranking of society performance using established Kuapa criteria.

The aim here was that through the project the "health" of the Kuapa societies in the four selected communities bordering Kakum would be improved. There was an improvement for Kruwa, which moved up from "intermediate" to join the other three communities that remained "healthy". At the same time, however, the selection of just Kuapa members for the project out of a much larger group at Kruwa caused jealousies that were resolved when selection of members and non-members was managed at a local level through traditional

[34] see section 5.1.5 for this distinction.

authorities. CI now believes that farmers will be mobilised more effectively through building relations with district assemblies and traditional authorities than through Kuapa alone. This adds weight to the argument (van Leeuwen, 2003) that cooperatives are not the ideal vector for CI's messages as they are geographically dispersed and CI does not control the impact on the reserve.

G-Indicator 1.2 Percent change in target societies' annual membership

The use of this indicator has been questioned subsequently by CI, because some farmers joined Kuapa just to participate in the Project, thinking that Kuapa was leading it, and also there were requests from nearby communities for Kuapa to start new societies. Kuapa did not supply official membership figures, but it is estimated that numbers increased by less than the target of 20% growth per year.

G-Indicator 1.5 Premium Kuapa members receive for their cocoa over local prices

The target in year 3 was for Kuapa to be paying 3.5% premium over local prices (price plus year end bonus). It was hoped that additional sales under Fairtrade terms to the Day Chocolate Co would provide this premium, as CI had invested in Day as an alternative marketing strategy. While members also received access to Kuapa's credit union and occasional community development projects, the premium achieved in year 3 was below target. In the DIP Results for DC, Mexico and Ghana attached to the 2003 Annual Report to PVC the premium is reported to be at 2.1% over the government-set internal market price. In the four meetings the evaluators had on December 9-11 in the communities around Kakum, cocoa prices per bag were consistently quoted by community members as being 530,000 Cedis/bag and the premium being 1200 Cedis/bag for the farmer and 500 for the Kuapa Trust Fund which gives a premium of 0.32%.

Revised G-Indicator 1.6 Gender issues included in society-level capacity-building program

The original idea that women would be enlisted to plant trees was dropped because the Year 1 gender survey revealed that they were not interested and rather wanted support to grow vegetables, which was not within the project's mandate.[35] CI's joint analysis with Kuapa revealed the challenge of a poor understanding of gender programs at society and area level - even though Kuapa's gender program started in 1998. CI introduced activities to broaden the understanding of gender within Kuapa including training of the person responsible for gender issues through preparation of fact sheets and appropriate modules for the Society Training Manual developed by Dr Collen Osei.

New G-Indicator 1.7 Society level capacity building materials produced and pilot tested

As mentioned above, Dr Collen Osei was commissioned to work with Kuapa and CI to prepare a Society Training Manual covering a broad range of topics relevant to improving the capacity of the RDOs. One constraint was the temporary withdrawal of participation by Kuapa, which prevented Dr Osei completing the training of RDOs in two sections of the manual, but the manual was produced successfully, largely pilot tested with RDOs, and handed over to Kuapa in electronic and hard copy. By the time of the evaluation it did not seem to have been multiplied and distributed by Kuapa, yet it was said to be useful by the head of the RDU.

[35] Their reluctance might also have been related to the fact (apparently not recognised by HQ) that until recently by law the government owned all "economic" trees (equals timber trees) found on private land and could send in contractors to fell and remove them, causing damage but without recompense. So timber tree planting was not generally undertaken, that is until a few years ago when the law was modified to allow private ownership of plantations, and to give farmers at least a share in timber trees on their land. This whole area needs looking at in relation to biodiversity conservation - in terms of what can be done to foster a tree planting mentality, that has never existed outside of fruit and beverage trees.

New G-Indicator 1.8 Number of RDOs trained

All of the 14 RDOs available for training were duly trained and the target met. Twelve more officers have been trained since the project ended. Kuapa has been expanding its activities in the Kakum area under the CEPF Project, and evidence was seen of the new communities incorporated (hand drawn maps of locations – definitive maps not available in Kuapa or CI apparently), together with written reports on meetings with farmers. A continuing challenge will be to maintain and monitor the quality of extension advice being given to farmers, especially in respect of shade reduction.

G-DIP Objective 2: Project farmers adopt conservation agroforestry practices for cocoa

This very broad objective brought with it several challenges, not least being the task of trying to define conservation practices that could be adopted profitably by smallholder farmers in a short period, while at the same time improving production and either not damaging biodiversity or ideally encouraging it. Then there was the challenge of finding the means to train large numbers of farmers in these practices in such a way that they would go on and adopt them.

A principal initial constraint, that the CI-Kuapa approach was in conflict with the Cocoa Board's objectives for Ghanaian cocoa, became clear following the September 2000 Workshop "Biodiversity Conservation and Cocoa Cultivation" organised by CI. Tensions within the cocoa sector regarding organic certification led to Kuapa being asked by the Cocoa Board to stop any such plans pending the outcome of CRIG's long-term research on certain organic-approved pesticides. CRIG feared that the capsid problem may get out of hand if spraying with conventional insecticides ceased, and there was a wider concern that the introduction of organic certification would tarnish the quality image currently perceived for bulk cocoa production from Ghana. One early success then was that following these difficulties CI Ghana and Washington were able to reaffirm its Conservation Cocoa strategies and clear the air with the Cocoa Board so as to continue working in the sector, and eventually build a partnership with CRIG. However, the stalling of the organic route meant a further constraint in terms of reduced possibilities for price premiums to attract farmers to the Conservation Cocoa route.

Another constraint needing mention is that the long history of subsidised pesticide application against cocoa capsids has left a legacy of dependency on, and a desire to use, chemicals, and also the tendency to look for solutions from the government rather than from within.

Another challenge for CI in implementing Conservation Cocoa best practices was to bring together the various players and encourage them to reach decisions on the practices and how they may be extended to farmers. In the '80s, activities on cocoa had been strongly compartmentalised. CRIG had done research on cocoa, and Cocoa Services Division the extension, but CSD was dissolved subsequently and the extension remit had passed in the '90s to MOFA-ICPM who had not been concerned with cocoa previously.

G-Indicator 2.1 Proportion of farmers adopting recommended conservation agroforestry practices.

In terms of this indicator, the definition of the baseline, the constitution of the target group and the practices to be recommended were all to emerge as part of the Farmer Field School methodology. This approach, which had only been applied previously in Ghana to annual crops, is normally a two step process where the proposed practices are validated with an initial group of farmers during a complete crop cycle, and then expanded by the trained farmers training others in turn. CI convened, in CRIG's HQ at Tafo, a Farmers' Field School Curriculum Development Workshop which was successful eventually in achieving consensus

on a set of farmer and validation trial practices, and on outlines for modules aimed at promoting agroforestry for cocoa farmers.

The Conservation Cocoa best practices were logically separated into two areas: the establishment of new cocoa plantings on abandoned cocoa land, and practices for existing cocoa. There was a time constraint however, because validation, even of the relatively rapid process of establishing new cocoa would only begin to show results two years from start-up, and the effects of certain new management practices, e.g. shade manipulation, might take longer to have a clear effect on yield. CI decided that, because of the tight timeframe for the PVC budget, it would not be possible to do the FFS methodology as a two step process, and took the risk of expanding the training at the same time as doing the validation. The risk was low with validation on the new plantings, which compared sowing seeds "at stake" i.e. directly in the field, with nursery-raised bare root transplants and also with seedlings nurtured in polythene bags. Planting from polybags was known, from previous work in Ghana and elsewhere, to be superior, and this was ably demonstrated in the renovation plots established by the FFS in four communities. These plots which included adequately spaced, improved planting material from CRIG, together with appropriate intercrops (cassava and plantain in particular) and planted Gliricidia shade are already considered a success. The FFS plots certainly encouraged farmers to take more interest in the farm, and many farmers increased their understanding considerably, particularly of pests, diseases and beneficial insects through individual "agro-ecological systems analysis" (AESA) which was taught at the FFS.

The demonstrations on existing cocoa were also considered a success but, as a model, they could be criticised from the conservation point of view in as much as it appeared that the CRIG recommendation for preferred shade density of 15-18 trees per hectare was taken and passed on in a very simplistic way, without really considering the shade (or biodiversity) situation in much detail. Using such a specific range immediately implies shade removal where the density is exceeded, and normally in traditional cocoa this means killing entire trees because shade pruning is not feasible on tall forest trees. CI-Ghana did query with HQ the wisdom of accepting this prescriptive approach, which seemed to guarantee the loss of some biodiversity without the knowledge that yield would be increased. The Habitat Survey also mentions the need for more intensified preparation of trainers in this area of what constitutes appropriate shade. There is virtually no information available on how well traditional cocoa yields under different densities of variable, thinned forest shade in the Kakum area or elsewhere in Ghana. CI's second year report mentions the need for research, but also noted that time was too short to obtain meaningful results during the project[36]. The CRIG recommendations come mainly from an on-station trial planted with a regularly spaced single shade species (Gliricidia, which is not an emergent tree) and well-managed cocoa underneath[37]. CRIG staff did say during the evaluation that they advise a precautionary, conservative approach to shade removal and not the prescriptive approach.

Some of the practices introduced on existing cocoa (chupon removal, pruning, mistletoe removal, removal of diseased black pods, more frequent weeding, shade manipulation and the like) have the potential for improving yield, and nearly all the farmers said that yields had increased, and maybe they had, but no actual data were seen which compared project farms with similar cocoa under continuing traditional management. Year to year variation can easily account for 20% differences in production. In relation to the degree of adoption, CI decided to check just five of the recommended practices: shade diversification (only in newly planted

[36] CRIG has proposed a new shade study, largely of detailed ecophysiology, but CI/CRIG has not found funding, despite two attempts. Perhaps a more applied project for broad scale yield data collection from different shade regimes would have a better chance of being funded, and be of more immediate and direct use in planning and refining cocoa best practices.

[37] Ahenkora, Y., Akrofi, G.S. and Adri, A.K. (1974) The end of the first cocoa shade and manurial experiment at the Cocoa Research Institute of Ghana. Journal of Horticultural Science 49:43-51.

cocoa); role of wildlife in the ecosystem; no conversion of forest to agriculture; nursing of cocoa seedlings; and phytosanitary control of diseases. The target of 30% of the baseline 140 farmers implementing at least 50% of the recommended practices, was passed by August 2003 (40%), according to CI's Household Survey 2003. With respect to the field monitoring of adoption and implementation in that survey, there were several constraints including the remoteness of some of the farms and occasional logistical problems for the survey team. Another basic constraint was that by the time of the final assessment in 2003, only a little over one and a half years had elapsed since the start of FFS preparations, and barely a year since training began. This had been long enough to find out if project farmers had accepted some of the ideas, but the survey mentions that implementation of certain practices depended on the situation of the farmer, for example, only those with abandoned areas on their farms would undertake replanting. It would have been useful to have more detailed results presented in the survey, particularly with regard to which practices were known to have been implemented in the field, versus theoretical adoption. Also, it was not clear what information will continue to be collected on the selected sample farms and from the larger community; certainly the sustainability of the training from the pilot project needs assessing so that lessons learned can feed into the expanded program.

A very important socio-agronomic success for the project appeared not to have been emphasised as such by CI, CRIG, or MOFA, though several farmers seemed to have registered it. This was the fact that because they had been encouraged to visit their farms more frequently[38], farmers had increased the number of harvests and, as a result, apparently their cocoa yields and quality too were improved - as a result of timely pod removal to prevent overmaturity and help reduce losses to black pod disease. Increased harvesting is the most direct way of improving yields in small farmer cocoa that previously was visited just a few times a year.

Deleted G-Indicator 2.2 Proportion (%) of annual target farmers' cocoa harvest classified at society depot as Grade 1 quality

(Indicator deleted december 02 because the project is not able to distinguish the grades of cocoa according to farm practices)

Deleted G-Indicator 2.3 Yield per hectare of dried cocoa beans for target farms

(Indicator deleted December 02 because the increase in yield could only be measured in the long term, not in the project life time.)

New G-Indicator 2.4 Cocoa Conservation Best Practices FFS/ToT Extension Program Training Manual available

There has been partial success in as much as a draft of best practices has been prepared, but further data collection on certain fundamental aspects, such as yield in relation to a range of shade regimes, and a more conservative handling of ideal shade densities, would help to refine recommendations. The Training Manual had yet to be consolidated; at the time of the evaluation there was a collection of fact sheets in the FFS Reports, and a training manual for conservation.

New G-Indicator 2.5 Number of ToT trainees trained in CCBP FFS implementation

The target of 18 ToTs trained was passed with 2 MOFA staff, 2 CI staff, 4 Kuapa staff and 16 farmers trained in the various modules.

[38] "at last", the cocoa extensionists of the '70s and '80s would say

New G-Indicator 2.6 Number of farmers trained in Cocoa Conservation Best Practices

The challenge here was to use the recently trained ToTs to coach Kuapa and non-Kuapa farmers in the various communities. A monitoring constraint mentioned by CI in the first year annual report was the lack of documentation of the FFS process, in particular of levels of participation, content and outcomes of FFS sessions. ICPM thought that the AESA records were sufficient, but CI intended that M&E staff would report on all field level activities subsequently. This issue was not properly resolved when training moved to the expansion phase. Attendance records proved difficult to maintain because of people coming late or leaving early and, at the time of the evaluation, tables showing individual farmer attendance over the entire FFS cycle were lacking or incomplete. Hence CI had to estimate the number of farmers trained, which they did based on an average of 40 members per community in the 8 communities located in the immediate buffer zone of Kakum. This would be an overestimate compared to a count of only those farmers who had completed all FFS modules.

Old G-DIP Objective 3: Conservation Cocoa agroforestry program standards defined and adopted by Kuapa

This was merged with Objective 2 when it seemed possible that the sensitivities around organic certification might also become apparent for cocoa standards, if it seemed they were being imposed on Ghanaian farmers by outside interests.

New G-NIP Objective 3: Political decision-makers at local and national level recognise the value of Conservation Cocoa

Following the difficulties early in the project, CI decided it needed to introduce a policy component into the project so as to consolidate its collaboration with the critical government organisations in the cocoa sector.

New G-Indicator 3.1 Stakeholder Evaluation Workshop conducted

CI organised an end-of-project workshop in Accra in August 2003 which presented and discussed learning from the FFS field trials, defined priorities for future program development and strengthened alliances for implementation of the next phase of the project. The six institutions with which CI collaborated: CRIG, Kuapa Kokoo, MOFA-ICPM, PLEC-UG and IRNR-KNUST sent representatives, and the workshop was successful in drawing attention, through extensive press coverage, to the work done in the first phase.

New G-Indicator 3.2 MOUs signed with key policy institutions formalizing their involvement with project

This was accomplished appropriately with CRIG, MOFA, MOFA-ICPM, Kuapa Kokoo Ltd., PLEC-UG, and IRNR-KNUST and, apart from the interruption mentioned with Kuapa's participation, the arrangements worked well. The targets for signed agreements were met and updated with CRIG, MOFA and PLEC in 2003.

New G-Indicator 3.3 Relevant National and District level policy makers have participated in development of CCBP

The challenge was to involve representatives of district assemblies and others at policy making level from CRIG and MOFA in the FFS, so that they would see for themselves the progress being made, and go on to support Conservation Cocoa in the future. One constraint was that cocoa in Ghana had not been looked at from the conservation point of view before CI's intervention, and the extension service had not long been responsible for cocoa. Nevertheless, CRIG and MOFA fully participated in the FFS, and the District Chief Executive and leaders of other partners visited FFS in the communities at least once and gave their support.

New G-Indicator 3.4 Government disseminates positive information through national fora and media about sustainable cocoa.

The target here was partially met through the broadcasting of a program covering the FFS on National Television, and speeches made by government representatives at workshops and other fora. Press articles have yet to be published.

New G-Indicator 3.5 FFS lessons learned presented to STCP

The Sustainable Tree Crops program, funded by USAID and major chocolate manufacturing companies and involving cocoa as a main component, had been slow to take off in Ghana compared to other countries, and still at the time of the evaluation there was uncertainty in some of the institutions involved as to the objectives and approach being used in the STCP. The challenge for CI was first to establish a dialogue with the STCP, and to this end STCP representatives were invited to the project sites in December 2002, which resulted in their consultant subsequently making a recommendation for collaboration, and they were also invited to the program evaluation workshop. They could not attend, but the regional coordinator and national representative visited CI's offices in Accra in September 2003, and participated in a meeting in Washington in October 2003 that CI jointly organised with the United Nations Development Program and the World Cocoa Foundation to discuss future collaboration. CI has informed STCP that it hopes to develop a joint curriculum and set of Conservation Cocoa best practices in 2004.

DIP G-Objective 4: Project partners apply Adaptive Management Approach

This is an inappropriate objective to include at the project level because objectives do not normally refer to project tools. Rather, M&E are prerequisites and should be evaluated not under objectives reached, but under program management. Also, the wording of the objective is unfortunate, as the indicators refer exclusively to monitoring, but not to evaluation and feedback into the system through decision taking which is the essential feature of adaptive management. The only case where the installation of an M&E system as an objective would be appropriate is where it applies to the CBO, Kuapa Kokoo, yet the indicator relating to this (4.2) was deleted in the second year.

G-Indicator 4.1 Project level monitoring and evaluation (M&E) system operational and monitoring achievement of project targets and benchmarks

As inferred above, this should be a normal part of program management. That notwithstanding, CI noted in the first year PVC Report that difficulties in defining the FFS methodology had delayed the development of the M&E system. Particularly, there was concern from CRIG and MOFA ICPM regarding CI's desire to measure changes in attitudes, productivity and habitat on farm plots other than the demonstration plots. The FFS philosophy relies on farmer interpretation for validation of introduced practices, and for their ultimate adoption. From a project impact point of view CI felt, quite rightly, that it was also necessary, independent of farmer interpretation, to measure other socio-economic and ecological variables in a rigorous quantitative as well as quantitative manner. Perhaps this difference of approach led to the inadequate recording of FFS attendance for example (see New Indicator 2.5 above) which in turn gave rise to uncertainty over how many farmers had been trained, and how complete their training was. Project partners clearly need to be encouraged further to understand and collaborate with CI's need for measurement leading to evaluation.

A project level M&E system was designed, but not implemented widely, so the target of an operational system was not met.

Deleted G-Indicator 4.2 Kuapa level M&E system operational and monitoring achievements of Kuapa targets and benchmarks

This indicator was deleted because CI felt that Kuapa could not introduce a monitoring and evaluation system until farming practices had been defined. Recent reports of work by Kuapa in the 2003 CEPF-funded FFS training in new communities in the Bobi and Kruwa areas confirm that there is potential capacity for adequate monitoring and evaluation already present in some RDOs. As in CI-Ghana itself, this facility for reporting needs fostering through adequate interest in and feedback on reports at various levels in the organisation.

Old G-Indicator 4.3 Conservation Cocoa Agroforestry Program (CCAP) Standards development reflects data collected by project M&E systems

The incorporation of the old Objective 3 referring to cocoa standards into Objective 2 on best practices was done as a result of the possibly sensitive nature of standards development (see above). CI has not suggested yet that it is may be appropriate to reintroduce standards development, and this is a question which will no doubt be addressed in the elaboration of the plans for the second phase.

New G-Indicator 4.3 Conservation Cocoa Agroforestry Program (CCAP) Best Practices development reflects data collected by project M&E systems

The target was to have best practices drafted, with data from the project and Kuapa level M&E systems included, by July 2003. This became unattainable in respect of the Kuapa system because of the deletion of that indicator and supporting activities in the second year. Likewise, the limited development of project level M&E, with the exception of the individual household and habitat surveys, restricted the data available for incorporation. The project has drafted a set of conservation best practices, but these still need validation, particularly in the area of recommendations for shade removal. The basic field data on yield in relation to various shade regimes that are needed to begin resolving the outstanding questions are not being collected, but trees are being ring-barked around Kakum to meet a prescription that may be inappropriate.

New G-Indicator 4.4 Household study provides socio-economic data for measuring impact

The initial challenge here was to persuade other partners (CRIG, MOFA ICPM) that the collection of comparative data for project and non-project farmers outside of the FFS methodology was reasonable and necessary. The partners' opposition seemed to have caused some difficulty for CI, but the partners' views on this were not assessed during the Ghana evaluation visit. Another challenge was to design an adequate sampling procedure given the difficulties of access to remote farms and the need to identify plots that combined the necessary aspects of gender and age of farm and farmer, while being appropriately distributed geographically in relation to the Reserve and FFS Demonstration Plots. One of the constraints was that the comparison of Kuapa and non-Kuapa members, or beneficiary and non-beneficiaries in a community lacking Kuapa, could be complicated by the fact that recipients passed on new knowledge learned at FFS to those not attending (also suspected/found in Mexico). Another constraint recognised by CI was the short time between training and assessments of adoption, and the fact that yield changes might not show up immediately amidst the background noise of year to year variability in production and the relatively crude measures of yield/sales by bag. Not to mention the need for 5-6 months to elapse between improved flowering intensity for example as a result of the reduction of heavy shade, and the harvesting of any extra pods produced

The household survey amassed and reported on a large quantity of useful information and, as far as could be determined without having been able to see all the raw data in Accra, there is yet more to describe because the August 30, 2003 report considers just five best practices for

the adoption assessment, together with socio-economic parameters. If all the questions in the CI questionnaire were asked and answered then there is much work still to be done in analysing all this interesting and potentially useful information. However, in order to determine how sustainable the lessons and adoption have been, it will be necessary to do another survey later on in 2004 of the same farmers where available, repeating at least the main questions, and making sure that the adoption of cultural practices is verified in the field by visits.

New G-Indicator 4.5 Habitat survey provides data for measuring biological impact

There were two main components to the habitat survey: one dealing with faunal density in 100 selected cocoa farms which was carried out by Dr William Oduro of the Kwame Nkrumah University of Science and Technology (KNUST); and the other addressing shade tree density, types and their effects on soil fertility, pests and diseases, weed control, and their changes over time in cocoa farms of different ages. It was clear that these studies could not hope to do more than begin to look at the biological backdrop to cocoa agroforestry around Kakum, and the changes that might be brought about by the Conservation Cocoa project. CI recognised that the short time scale of the PVC project was a serious constraint, compounded by the delays in starting the FFS. A baseline survey was done and data were collected at the end of the first year following the farmer field schools. As with the household survey, the results necessarily deal largely with changes in attitudes to shade, wildlife etc., rather than with the physical and biological effects of the implementation of cocoa best practices. Nevertheless, the habitat survey did focus attention on the need for a much more comprehensive approach to the many unanswered or partially answered questions concerning shade in cocoa, and its relation to cocoa production and biodiversity. The need to utilise farmers' knowledge on desirable versus undesirable tree species was also stressed, together with the need for better training on the appropriate number of shade trees per hectare.

4.2.2 Impact of the program on the main target group, the coffee and cocoa farmers, and the intermediate groups

The information available from which to evaluate the impact on the main target group, the coffee and cocoa farmers in their respective countries, falls into the following classes:

(i) the evaluators' observations on the sample of farmers interviewed or witnessed in meetings, and during visits to their farms,

(ii) the results and perceptions from the CI staff in-country and in HQ,

(iii) the results and perceptions from the CBOs and other partners,

(iv) the results and perceptions published in the socio-economic surveys.

4.2.2.1 Coffee Farmers Mexico

CI's presence

It was plain that CI was a household name for the farmers associated with the project in the seven communities. The project field staff appeared to be well known generally in the buffer zone on the eastern flanks of El Triunfo Reserve, and not only because transport is infrequent in the region. All 857 farmers registering for the program received repeated visits by CI to carry out farm diagnosis, verification of processing methods and compliance with the preferred supplier program, meetings for training and distribution of "tickets"(etiquetas). These visits and the socio-economic surveys have established an important presence, and a forum for interaction with the project of farmers and their families (amounting to approximately 4,500 beneficiaries whose age and sex breakdown was documented in the surveys).

Adoption of agronomic and coffee processing practices

The systematic, organised approach that CI has had to stimulating the adoption, implementation and verification of Conservation Coffeee best practices through management plans has resulted in project farmers improving their own practices to fall in line with nearly all of CI's agronomic and coffee processing requirements on the farm. The database of detailed farm information will be a most valuable resource (once the spreadsheet data are incorporated) testifying to the project's considerable impact in this area and facilitating the verification of standards for the clients. Nevertheless, according to the socio-economic studies and what was seen in the field, the advantages of Conservation Coffee for the environment have not yet been internalised fully – price is still the main, if not, sole motive.

Adoption of coffee conservation practices

As far as those conservation practices relating to activities on the farm itself are concerned, shade diversification, stream side protection, erosion control, water and waste management etc., the verification data showed a very clear beneficial impact from the project and this was confirmed in the field visits to farms.

However, it was not so easy to gauge the farmers' attitudes to conservation outside the confines of the farm, that is whether there really had been a change in the way farmers saw the intact forest, and the buffer zone in general. Many members could repeat the lessons learned in the training sessions about the value of the Reserve, but to what extent they believed in the need to stop expansion into the forest was left unquantified. The findings in the 2003 socio-economic survey suggest that general forest conservation awareness has been achieved, but at the same time there was still, or again, some talk of the need, sometime in the future, to put the remaining forest areas in the farm to agricultural use. To date, there has been no commercial exploitation by project members, forest use has been restricted to obtaining firewood and building timber for local work. Some exploitation has occurred in communities where the project operates, however, and there is a clear need to expand the scheme further within communities to cover more farmers.

Price benefits

The good harvest of 2002 and the higher prices in 2003 were available to project members and non-members alike, so there was an increased feeling of well-being among the coffee farmers generally. Nevertheless, project members through their production of organic coffee received a premium relative to non-members growing conventional coffee. The average prices received by the two groups respectively in Mexican pesos per quintal were 573 versus 515 in 2001, 573 versus 445 in 2002, and 676 versus 576 in 2003 (van Leuuwen, 2003). As was pointed out above (M-Indicator 2.2 and footnote) the validity of this indicator for level of livelihood is doubtful.

Benefits in the Home

Project members showed slightly better conditions of housing and diet and less need to work for others than non-members, which seems indeed to hint at greater net family income year by year.

4.2.2.2 Cocoa Farmers in Ghana

Project presence

CI staff visited 110 farmers in the eight communities for sampling in the Habitat and Household Surveys at least two to three times during the project. There was no systematic recording of basic farm details for example of overall farm size, presence/size of abandoned

areas, type of shade, current yields etc. from the other 200 or so farmers who became involved in the project through the FFS, but there were community visits by those involved in the development of the FFS curriculum (CI, CRIG, MOFA, Kuapa) and there were the FFS sessions themselves given by the same group. No precise figures are available for the overall number of beneficiaries attending the FFS, but age and sex breakdown information was collected for the 110 beneficiary and non-beneficiary households sampled in the Household survey.

Adoption of cocoa agronomic practices

The household surveys registered a mixture of "notional adoption" and apparently some actual implementation by the 55 farmers sampled after the relatively short exposure to the training and the brief period in which adoption could be assessed, but there was no systematic field monitoring of these or the remaining farmers. The impression gained was that the communal replanting exercise would lead to adoption of virtually all the recommended best practices for restoring degraded lands to production, by the so far unquantified number who had land to restore, and that the interest generated had led to consideration at least of the practices recommended for existing cocoa, including more frequent visits and harvests, and thereby better production.

Adoption of cocoa conservation practices

The communal replanting of cocoa encouraged farmers to nurture forest tree saplings and to plant a tree species with an acceptable cocoa shade and conservation profile (*Gliricidia sepium*), but, as indicated above, there were no data presented on the number of project farmers applying these practices on their own land, so the impact remains unverified. Similarly, it was not clear how many farmers had adopted the prescriptive recommendation for 15-18 trees to be left per hectare on their own farms, but this approach, in the absence of information on cocoa yield under a range of shade types and densities, certainly put at risk the biodiversity offered by the emergent trees which are still found in some areas. *Low* impact here may have turned out to be more favourable than *high*. There was evidence fom the surveys that there was a greater recognition of conservation issues in project farmers, but this was distinctly patchy, and for some the loss of use of the forest (no lianas for "sponge", no snails, no medicinal plants) would not be compensated for by small increases in the income from cocoa. This was forcefully expressed by a woman partipant in the meeting with the community of Kruwa on December 9, 2003.

Price and yield benefits

The small price premium paid by Kuapa Kokoo (according to the source between 2,3% and 0,32%) derives from Kuapa's commitments to pay a fair price to its members and it was available to all members with adequately *processed* cocoa irrespective of whether they had adopted best *growing* practices or not. In other words, Kuapa maintained its pre-existing payment arrangements with producers, and the project had no impact on those. When the premium is pooled, there is no impact on price variability and on production incentives at the farmer level. A further benefit to project farmers could come through increased yield as a result of better management, including more frequent harvesting, and the perception by the farmers was that this had indeed resulted. Yield information for project and non-project farmers was not recorded in the surveys, however, apparently because CI felt there was insufficient time for longer term effects to become manifest during the PVC financed phase of the project (but if records are not started how can changes be followed?).

Benefits in the Home

There were no records of changes in well-being reported in the household survey, though baseline data were collected in order to identify appropriate indicators. There is a remark

about different ability to put aside savings between participants and non-participants, but this seems to be a one off.

4.2.2.3 Intermediate Groups, Mexico Project

Cooperatives, Industry, Business Service Providers, Credit Providers and Government all acted as intermediaries between CI and the main target group, the farmers. In the case of the cooperatives, one important beneficial impact from CI came through the introduction of business plans which, though not focused beyond a single year and not used often as guidelines in the course of the year, have helped combat corruption.Also farmers have been made aware of their rights through courses. At the industry level, the very valuable interest from the Starbucks Coffee Company in the project in Mexico and elsewhere was fostered through continuing dialogue and a visit to Chiapas by senior Starbucks representatives. To date Starbucks has contributed a total sum of US$1.5 million to Conservation Coffee initiatives as a result of the project. The project's impact on Business Service Providers (ECOSUR), Credit Providers (FIRA) and the Government (RETRIBI) has been largely through the bringing together, as a result of workshops and the like, of different parties who previously might not have collaborated or been aware of each others roles in the sector.

4.2.2.4 Intermediate Groups, Ghana Project

The main impact of the project on the Kuapa Kokoo cooperative was the introduction of the RDO training manual which has provided a framework and purpose to the RDOs, the mainstay of Kuapa's activities in the field at the society level. A further impact has been the contribution of new agronomic training to its RDOs and farmer leaders, which addresses some of their major production problems. CI's financial support for the marketing of Fairtrade cocoa through the Day Chocolate Company, of which Kuapa Kokoo is a shareholder, has supported the growth of this industrial intermediary. As in Mexico, the project has helped to bring together players such as service providers (MOFA ICPM) and Government (CRIG) with a concomitant cross-fertilisation of experience and ideas, highly relevant to the furtherance of the cocoa agroforestry conservation scheme.

4.2.3 Impact on the Capacity of CI's Operations at HQ and in the Field to Deliver Sustainable Services

Washington DC

The Conservation Enterprise Department in HQ was the hub for the Coffee and Cocoa Program throughout the PVC Project, and considerable capacity development took place there, particularly through those working in the project from the early days. These included the head of the CED, the Coffee Project Coordinator, the Advisor on Agricultural Practices, and the Advisor on Project Design and Management. The last two were new appointments that brought additional experience into CI, that would be valuable in providing sustainable projects and sustainable services. A Manager of Business and Trade was also appointed within CED, and when he left his responsibilities were transferred to CED's enterprise development advisor. During the life of the program restructuring in CI altered the focus from implementation to strategy, staffing plans changed and certain expertise, for example credit, trade support and market development, was built up in departments other than CED, but interchange with the coffee project has continued.

Mexico

The project at Jaltenango brought in new staff, some of whom received training in areas such as surveys, organic certification and verification, coffee processing, business planning, information technology and extension methodology, not to mention the selling of the

conservation message. Although there has been turnover at the local coordinator level, the project has established a strong core group able to deliver sustainable services.

Ghana

CI-Ghana has the responsibility for several projects including Conservation Cocoa. Two appointments were made through the project which increased capacity considerably, namely the Agro-Forestry Officer and the M&E Officer who are still both working on Conservation Cocoa.

4.2.4 Unintended Impacts

4.2.4.1 Mexico

- Land belonging to the community Capitan Luis Vidal was located within the nuclear zone of El Triunfo Reserve and after various incursions by farmers the Reserve Authorities began to take steps to sanction them. But a change of heart after intervention by the project led to the Reserve granting an exchange with land outside the nuclear zone to solve the problem. Relations between the Reserve and CI had been distinctly cool early in the project.
- Starbucks Coffee Company was more committed than expected to the CI cause.
- The local coffee trading system had improved much more than expected in response to CI's scheme with Conservation Coffee.
- AMSA had consolidated their bases in Chiapas with a view to reaching the producer, because they saw something positive in the project.
- There had been a domino effect spreading from project to non-project farmers following CI's persuasion of project farmers to stop discarding coffee processing waste into streams and rivers.
- Medium and large growers had approached CI, interested in joining the scheme.

- One negative unintended impact as far as CI-Jaltenango was concerned, was the loss of qualified staff as they bettered themselves. This is difficult to avoid, especially when the project office is in a quiet, relatively remote, rural town with few facilities, and the prospects for a career in conservation enterprise are not yet strong.
- The main negative impact from the project recently must be the threatened withdrawal of several of the cooperatives from the Starbucks Preferred Supplier Program because of changes to the marketing system. It is not clear whether a slower rate of introduction would have given more chance of the changes being accepted.

4.2.4.2 Ghana

- Non-project farmers have quickly copied project farmers and adopted certain cocoa best practices, such as raising improved cocoa seedlings in polythene bags.
- Setting a prescriptive shade tree density (15-18 trees/ha) may have put some large emergent shade trees unnecessarily at risk. Evaluation of the relationship between cocoa production and shade in traditional cocoa is urgently needed.

4.2.5 Major Factors Affecting Implementation

- Implementation proceeded best when the objective and activities were clear and well-researched but not overelaborated, attainable in the time available, and backed by a strong mandate from the partners and HQ.

- Implementation went ill when the objective or activities were diffuse or poorly defined; overambitious in scale, scope or timing; and one or more partners were not on board because of disagreement over this issue or for other reasons.
- Both in Mexico and Ghana, overestimation of the organisational preparedeness and receptiveness of the CBOs led to delayed or denied implementation.
- Similarly, CI and Starbucks seemed to underestimate the time needed to introduce reform aimed at transparency, and also the new agreement for coffee sales.

4.2.6 Efficacy of Main Strategies

In Mexico, the main strategy might be summarised as the documentation and monitoring of all farms in the project, and verification of compliance with agronomic and conservation related best practices, in order for the farmer to be able to sell coffee at a premium through his cooperative. The farmer side worked well, as long as cooperatives were collaborating with the project. The strategy for getting cooperatives on board to take over extension, tighten up on their transparency and accept indirect export through a single route was less successful for a variety of reasons.

In Ghana, the main strategy was less robust because it lacked a clear price incentive, project presence was restricted to sampled farms, that is there was no diagnosis or verification on the majority of farms, and benefits in terms of yield could not be demonstrated.

4.2.7 Mid-course corrections and their effects

There was no mid-term review in this project of only three years duration; the first and second year annual reports to PVC were well received apparently. A PVC Officer made a very short visit to Ghana in July 2002, and expressed some concerns about the delays arising from stalled liberalisation and also regarding data safekeeping and accessibility. A visit to Mexico in February/March 2003 reported satisfactory progress in most aspects, though there was concern regarding the lack of preparedeness in the cooperatives to administer and finance their own extension officers for verification and other duties.

The major mid-course corrections were the change of objective 1 in Ghana from business development for independent export operations by Kuapa to building capacity in Conservation Cocoa practices through the farmer field schools. This was a logical move that made the best out of the situation. The Mexico project changed course after about a year of operations when it became clear that the cooperatives did not meet expectations with regard to conveying the conservation messages and the Conservation Coffee practices in an effective way. Another major shift was the introduction of a completely overhauled set of project design and management tools that benefitted the project as much as it is an asset for the replication of agroforestry efforts in other areas.

4.3 Cross-Cutting Issues

4.3.1 Partnerships

One of CI's major achievements in this program was, apart from their brokering role between the program and the industry, building in-country partnerships with institutions that could contribute to the research and introduction of Conservation Best Practices, marketing and credit.

4.3.1.1 Partners in Mexico

The main active partners in Mexico were

- El Colegio de la Frontera Sur (ECOSUR) and Universidad Autónoma de Chiapas (UNACH), academic institutions that participate in capacity building in subjects concerning the Conservation Best Practices.
- Comisión Nacional de Areas Naturales Protegidas (CONANP), the Administrator of the Reserve "El Triunfo" (REBITRI) that contributes to environmental education through courses in the framework of the Escuelas de Campo y Experimentación para Agricultores (ECEA), who from February 2002 had been offering courses in the Conservation Coffee Training Center in Jaltenango.
- Fondo Acción of Banco de Mexico (BANAMEX) who offer credit for cooperatives, and finance technical assistance to cooperatives.
- Fideicomisos Instituidos en Relación con la Agricultura (FIRA) of BANAMEX who cooperate also in credit and technical assistance.
- SAGARPA through the Junta Local de Sanidad Vegetal provide farmers with material for biological pest management (Beauvaria bassiana).
- The agricultural cooperatives (6 in 2003) who promote the adoption of Conservation Best Practices among their members, market their member coffee produced under CBP and offer credit to these members.

These partnerships in principle turned out to be very successful. The key elements that contributed to this success were the (1) high interest of farmers to benefit from the marketing scheme introduced by CI's brokering activities, that created a corresponding demand for technical services and (2) the "matching pressure" exercised by the grant agreement which made any contribution in kind by a partner the more desirable. However, the decision makers in the cooperatives, due to poor transparency and reduced influence of the "owners", that is, the members, disturbed the success story at the end of 2003 when 4 of the 6 organisations threatenend to opt out. A lot of organisational development is still required to make their performance more predictable. The fact, that cooperative boards change every three years represents a chance for improvement, but adds, of course, an element of instability.

In connection with the establishment of the Conservation Coffee best practices in a workshop in May 2003, a proposal was developed to found a Conservation Coffee Network (Red de Café de Conservación) to further exchange experiences with the present and a number of future partners in a "learning community" and to make the Conservation Coffee Best Practices to be the accepted standard in the entire region around the El Triunfo Reserve.

4.3.1.2 Partners in Ghana

The main local partner in Ghana was Kuapa Kokoo Ltd, the trading branch of the largest farmer association in the country with 450 local groups (societies) and some 30.000 farmers at the time. Later, another five institutions joined CI and became very important in the implementation of the project:

1) The Cocoa Research Institute of Ghana (CRIG) to prepare and deliver the technical information on cocoa agronomy;
2) the National Integrated Crop and Pest Management program (ICPM) of the Ministry of Food and Agriculture (MOFA), to prepare and deliver topics teaching methodology and extension strategies;
3) MOFA's Agricultural Extension Agents to participate in and later facilitate the training programs;
4) PLEC-UG: People Land Management and Ecosystem Conservation, a project in the University of Ghana, to prepare conservation modules for the training program;

5) IRNR-KNUST: the Institute of Renewable and Natural Resources in the Kwame Nkrumah University of Science and Technology in Kumasi to undertake a study on faunal assemblages in the target communities.

4.3.2 Gender, New Tools, Guidance or Standards,

4.3.2.1 Gender

In the DIP Review, one contributor suggested there was a risk of CI's agroforestry initiatives becoming men-specific projects, and recommended that CI hire two highly experienced social science experts in gender and agriculture, knowledgeable in the culture-area and ecology to implement appropriate studies of farm women's roles for the purpose of designing gender mitigating activities. This was not taken up, perhaps in part because the baseline studies showed considerable participation by women in discussions at farm level, which was repeated when the FFS began. CI viewed the project principally as one of agroforestry and environment, not of rural development, and was probably wise not to embark on the uncertain road of attempting to change social values in relatively closed societies. In Ghana, following indicator 1.6, gender issues were included in the society-level capacity-building program in the form of fact sheets and appropriate modules for the Society Training Manual.

4.3.2.2 New Tools, Guidance or Standards Mexico

CI's project design and management approach for Mexico, which is seen as a new tool by CI, is dealt with in section 5, Program Management. Another approach new to CI's Conservation Enterprise Development was the combination of farm diagnosis, application of Conservation Coffee best practices, farm plans and their verification, all in a geographical information system that facilitated speedy analysis and visualisation of the results. Unfortunately, the database structure was not updated immediately as the project evolved and the combination tool was not used to the full as a consequence. Nevertheless, progress was made during the third year socio-economic survey with incorporating second and third year data and the situation now needs reviewing to determine if the approach, which seems to have much potential, does indeed merit broader application. The September 2003 Generic Monitoring Protocol[39] still referred to Excel rather than Access as the medium for data storage and analysis.

Conservation Coffee Best Practices were developed successfully and these now constitute important guidance in the field for coffee production and land use management in the El Triunfo region and beyond. If there was a difference between Best Practices and Conservation Coffee Standards early in the project, the distinction is less clear now, but the merit of the practices/standards is without question.

4.3.2.3 New Tools, Guidance or Standards Ghana

Conservation Cocoa Best Practices were developed for new plantings and are currently under validation, but it is confidently expected that they will be effective and merit broader distribution and application. Best Practices for existing cocoa are not yet defined entirely, and will depend on an improved understanding of the complicated area of suitable and unsuitable shade species, appropriate densities etc.

The application of the Farmer Field School approach to extension for cocoa farmers was novel as it had only been used for annual crops previously. It was not entirely effective in cocoa, however, because the slow crop growth and long period for changes to become visible meant that it could not be applied as originally designed with validation first and training following. It was reasonably successful with new plantings where results are seen in two

[39] Generic Monitoring Protocol LK 31sep03.xls

years. In existing cocoa, however, validation was necessarily incomplete given the time-scale and training was effectively carried out simultaneously with what validation was possible. Although the system was not as effective as the original, farmers were enthused by the training to visit their farms more frequently and follow crop growth and problems more closely, and that was a considerable achievement well worth propagating.

4.3.3 Advocacy

The Conservation Coffee and Cocoa Program model advocates for best practices in coffee and cocoa production and conservation of biodiversity. It also advocates for bringing farmers a fair living wage. Advocacy has been a part of the program in headquarters, in Mexico and Ghana, and elsewhere, at both policy and program levels. In the USA, in-house advocacy in CI HQ was seen as necessary at both levels, while outside a lot of effort went in to maintaining established relationships with coffee companies such as Starbucks and Green Mountain, and also into looking for others who might be interested in Conservation Coffee and Cocoa. The efforts were successful in continuing to promote the program with established users, while new markets are still being sought.

The policy environment was strengthened in Mexico through the advocacy of coffee best practices which help to stabilise land-use in the buffer zone, but certain government agricultural policies remain deleterious to El Triunfo Reserve. Advocacy of the program promoted it well in the region at various levels, and the efforts by CI to establish the coffee conservation network will be repaid if the network can influence government policy. The PVC Mexico visit report (2003) mentions the need for advocacy in problem agronomic areas where CI was not able to engage fully, e.g. broca infestation coming from abandoned farms, and this remains appropriate.

In Ghana, advocacy has been particularly important for the development of the program, following the rocky start on the organic cocoa road, and Cocobod's and CRIG's uncertainty over low technology, Conservation Cocoa as a possibility for Ghana. CI prevailed, such that policy was strengthened nationally, and the concept of environmentally and socially sustainable cocoa was promoted well both in the Kakum area, and as a model for wider distribution in Ghana through the GEF and STC Projects.

4.3.4 Sustainability and Scale-Up

4.3.4.1 The sustainability model of the CCCP

Once the behavioral change of coffee and cocoa farmers which would produce the conservation outcome is achieved – as currently in Mexico for around 1000 farmers and in Ghana for at least a part of those 400 farmers or so addressed by the program – the question is, if the adopted conservation best practices will be maintained in the long term.

The sustainability concept – continuation of activities after the end of technical assistance and outside funding – has a technical, institutional, social/cultural, environmental and financial dimension.

Technically and, for this program, also *environmentally*, the program has introduced cultivation practices for coffee and cocoa which are based on previous experience and experience during the intervention itself. Most of them have been tested in the field and found viable and sustainable in the future although many questions have still to be validated, particularly regarding the shade/yield/pest and disease interrelationships.

The coverage (some 1400 farmers with perhaps 5000 ha altogether in both sites) is, of course, still by far insufficient to speak of any significant contribution to biodiversity conservation.

At the milestone/outcome level, in both sites, the approach via cooperatives and not geographically selected communities limited the technical/environmental sustainability of the conservation effort. In Mexico, as mentioned above, problems such as deforestation, contamination of streams and rivers, and the Broca infection from neighboring coffee plantations can not be attacked as successfully as with a community approach which would also be a better basis for the planned corridors between the nuclei. In Ghana the Kakum Park was only touched on the southeastern and northwestern side and, as a systematic continuation to protect the entire boundary was not foreseen in the remaining stretc.hes, remains open to possible elimination of the buffer zone.

Institutionally, the program hinges on farmers' organisation which have not and or not yet proven fit for certain tasks, and on CI's country offices and headquarters which already in the past were stretc.hed in staff and financial means. They were supposed to end their intensive intervention at the end of the grant period and another institutional setup was to be established (see the sections on Mexico and Ghana).

Socially and culturally, the conservation concept is not well established yet in the sites and needs further nurturing to avoid an eventual decay. Socio-political-cultural sustainability in the long term depends on the extent to which the protection of biodiversity aquires a high value in the mind set of decision makers on the political level and the level of CBOs and farmers. In the Mexico site, the last socio-economic survey shows that after the initial "shock and awe effect" of the project, farmers who committed themselves entering the program to conserve the intact forest found on their farms are starting again to talk about clearing forest on their plots (although not in the reserve)[40]. In Ghana, although CI has acquired tremendous merits in getting high level political and research institutions like CRIG and MOFA on board, lacking funds for a vehicle was enough for the main partner Kuapa to suspend cooperation for some time. Commitment to conservation which would motivate the partner to extra efforts in the program was apparently not high among the management of the organization at that time.

Financially, the CCCP was planned with the goal of long-term self-sufficiency in mind. Sustainability was defined from a Business Development Services point of view as the long-term availability of services in the business service market through unsubsidised, commercial channels[41]. Financial sustainability is the basis of the technical and institutional sustainability mentioned above. The grant-funded foreign assistance was to provide initial support only; it would eventually be phased out and would have to be replaced by revenues generated through increased business opportunities. The development of agricultural and trade expertise was to provide the partners with the institutional capacity required to produce and sell coffee on the international market, which would secure long-term funding of their activities.

This scheme was thought out from the start in 1998, slightly modified over the years until the proposal of 2000. At that time organic certification was still the core part of the strategy in both sites and in both projects the results were assumed to be achieved within the 3-year grant period, and would then be followed by the replication of the described supposedly successful operations in other areas.

Although both projects have met a great part of the specific numeric targets set in the DIP of 2001, however, in January 2004, both do not stand on their own feet yet. *They have essentially missed to achieve institutional, social/cultural and financially sustainability in the targeted time and still need further support and investment.*

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[40] A. van Leeuwen, Monitoreo Socio-Económico 2003, Impacto de Café de Conservacion a Nivel Familia. Tercer año de implementacion del programa participativo de monitoreo y evaluación para el proyecto de Café de Conservación, Chiapas, Mexico, page 31, 43, 44

[41] see Alexandra O. Miehlbradt and Mary McVay (ILO): Developing Commercial Markets for Business Development Services, Turin September 2003, page 45

No contingency plans, such as designing an alternative longer-term time frame for this project, were formulated for this eventuality at its start. Future plans referred to replication in other sites only[42]. In the beginning and during most of the implementation period, expectations were, as conversations on the sites and in Washington conveyed, that, if the goals were not met, additional funds would be made available to complete unfinished business.

However, the fact that, at the moment, the CCC Program Mexico and Ghana is not sustainable yet, is due to over-optimistic targets rather than a general failure to implement established plans. NGOs, pressured to convince donors to provide funds, often present too short timeframes for their projects, so the planners of CCCP do not stand alone here.[43] The challenge is to avoid this in the future.

4.3.4.2 Sustainability of the Mexico project

4.3.4.2.1 The Mexico project is not sustainable at this point in time

As long as market incentives for farmers are available, Conservation Coffee will remain attractive. However, the further introduction and maintenance of standards requires a secure financial basis to sustain the chosen extension methodologies. In Mexico, the revenues from coffee marketing of the four cooperatives the project worked with at the time of the proposal were expected to be high enough to cover operational costs in 3 years and to build up a credit fund. The projections in the 1999 proposal were backed up by numbers quoted from internal papers[44]. Once CI staff could be replaced by the specially trained members or *promotores*, the cooperatives' training costs would be sustained by annual membership dues which would also cover exchange visits, marketing materials and market updates. The training center would become self-sufficient by selling coffee and shade tree seedlings, beneficial organisms and by collecting fees for its training courses. CI's ongoing marketing and trade assistance to the cooperatives would be sustained by small royalties paid by market partners. Credit services would be funded by interest payments and funds raised by members' contributions from export sales.

However, the introduction and institutionalisation of Conservation Coffee Best Practices in the field and the establishment of efficient export services will take longer than the planned 3-year grant period. Some of the cooperatives and their extension staff – especially those who took/take part in the project's training courses – show ownership of the extension methodology and the conservation content of the training sessions, have internalised the extension methodology and have integrated it into their respective institutional framework. The political and institutional environment for continuation of the service delivery and the continuation of the practices is very much improved compared to the situation a few years ago when CI still "competed" with IDESMAC and its GEF-funded project. However, training and extension service providers are likely to stop delivery, as the activities cannot be continued in the future through the partner organisations', that is, the cooperatives', own sources of funding. If CI's interventions were *terminated* now – which is not the intention - , the project in Mexico would inevitably fold. Continuation of CI's support is critical.

A Sustainability and Financial Independence Study was finished in July 2003 and came to the following conclusions[45]:

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[42] The PVC Annual report of 2003 which was written after the evaluator's visits to Washington and the sites, does not contain, apart from general strategic lines, a specific plan for the follow up in Mexico and Ghana, although the Scope of Work for the evaluation had announced it would be available by the time of the evaluation (3.d] footnote 5)

[43] One of the evaluators in 2003 participated in an evaluation during which he had the opportunity to look at about 250 grant applications of NGOs for rural development projects to the European Commission where very short time frames were a general feature.

[44] see footnotes 4-6 and 20 of the proposal 2000. These data were not attached to the document and not available to the evaluators.

[45] H. Haase, Sustainability and Financial Independence Analysis for the CC Programm in Chiapas, August 27, 2003, page 3

- The Jaltenango office can be *financially independent only by June 2006* with an additional donor investment of US$ 1.4 million over a three-year period, provided farmers are charged the prices recommended by the study.
- The sustainability of the project depends on the *demand* of the program's clients for more Conservation Coffee and, likewise *program growth* through new farmers to achieve economies of scale.
- The Jaltenango office has the realistic *potential of impacting* 15,000 -hectares of coffee and facilitating the export of nearly 400 containers (15 million lbs) of Conservation Coffee each year.
- The proposed strategy to achieve financial sustainability requires the adoption of (i) a new five-year model, (ii) a new farmer profile, and (iii) a new commercialisation scheme.
- All Conservation Coffee Best Practice goals per new farmer can be accomplished in the five-year transfer period with the adoption of the new Farmer Profile.
- Farmers can expect an average increase of $ 21 Mexican pesos above an inflation-adjusted Mexican minimum wage during the five-year transfer period and, upon graduation, a wage equivalent increase of up to four times the minimum wage which would support the farmers' ability to pay for the services
- CI institutional support and better integration of the program into CI's Mesoamerica program is fundamental in achieving the project's goals.
- Integration of local stakeholders depends largely on institutional support to facilitate the development of these relationships.
- Development of local capacity to perform key Conservation Coffee Best Practices services is feasible and economically viable.

These judgments are based on the situation in July 2003. In the meantime additional problems have called them further into question:

Four cooperatives of a total of six threatened to opt out of the marketing scheme at the end of 2003 (though some of them, as of January 2004, are considering coming back) when the client Starbucks demanded that direct exports by the cooperatives be stopped and external marketing be organised through Agroindustrias Unidas de Mexico (AMSA) to which the cooperatives were to sell from the 2003/04 harvest onwards. Starbucks wanted to improve on the reliability of deliveries (80% of deliveries had been not on time). The cooperatives, in turn, resisted the sale of parchment coffee to AMSA, as cooperative staff lost access to funds originating from second quality coffee (desmanche). They would rather continue direct marketing through their cooperative association Comercializadora Mexicana de Productos Agroecológicos S.A. (COMPRAS) and not, as they expressed it, return to a relationship of dependency (from their perspective - of exploitation) on a "coyote", that is, a traditional exploitative coffee assembler.

As the project's financial self-sufficiency is based on the rapid expansion of production and sale of high-price specialty coffee to distribute the costs of services over a larger sales volume, the cooperatives' reaction constitutes a serious setback. If the "renegade" cooperatives fail to sell at premium prices the Mexican branch of the program is in danger of falling apart. It cannot be left alone yet, even if all the cooperatives decided to re-join the scheme.

In this context it is also worrying to see that farmers' consciousness of the importance of conservation in 2003 has fallen back to the levels of 2001 as no courses on that subject were given by the project nor the cooperatives in 2003. If the numbers are not statistical noise this

would demonstrate how quickly farmers' participation declines when their solidarity with the scheme is so closely dependent on financial benefits.

Another critical factor for sustainability is the very narrow market with just one client (Starbucks). CI had sought to provide each cooperative with at least two clients, but the large amount of in-transition coffee during the implementation period of the best practices in each farm is not in high demand by specialty market coffee clients. The project's future hinges on the stability of Starbucks' commitment to conservation .

4.3.4.2.2 The way forward in Mexico

At the time of the evaluation in November 2003, the current thinking of project staff about the future of the project presented to the evaluators corresponded to the strategy laid out to USAID in CI's and Starbucks' invitation to join their "Conservation Coffee Alliance [46] and comprised the following lines of action:

- Conservation International in the future would continue *capacity building of service providers* for the control and evaluation of management plans and would train and graduate extensionists for the FFS. CI would build capacity in procedures of certification and preferential buyer programs and promote the Conservation Coffee Network through workshops, meetings, communication and fund raising.
- CI would assist the cooperatives *not as directly as before* but through service providers, except support in business planning to promote economic transparency. From now on CI would *validate* the CCBP, *facilitate* cooperatives' negotiations with service providers and clients, *monitor* export and payment processes, *mediate* in conflicts between the cooperatives and service providers, *evaluate* their performance and *inform* farmers and service providers about the risks involved.
- An *independent local organisation* ("despacho local") would be established to use the newly-developed tools and services in the ongoing promotion of Conservation Coffee in El Triunfo and other regions of Mexico. The new service would be *available to small as well as to medium and large farms.* All service providers in the field would link their activities in agricultural production projects with the business plans of the cooperatives.
- The cooperatives would in future have to be *accredited* as service providers for the promotion of Conservation Best Practices to members and non-members and for marketing and credit operations. The cooperatives would take over the evaluation of their members'compliance with the CCBP. Their extensionists would train farmers in the CCBP and control of coffee quality. Cooperatives would *strengthen the Reserve* Management in their Management Plan.
- ECOSUR and the University were to continue their engagement in participatory field *research*, in the courses on Conservation Coffee Best Practices for *promotores* in communities and in the evaluation of Farmer Field Schools (ECEAs).
- *Extension work*, including participatory research, would be carried out in the framework of farmer field schools (ECEAs) by the 40 promotores who have been trained. More promotores would be trained by ECOSUR in different fields and accredited by the Ministry of Education.
- [illegible] planning and evaluation would be carried out by service providers with the

- Export services would also be provided by specialised institutions, as cooperatives had proven not sufficiently efficient to meet clients' expectations.
- The Park Administration (REBITRI/CONANP) would incorporate the activities of the Conservation Coffee Project into their management plan and would engage in joint management of the resources with the cooperatives.
- The financial institutions such as Fondo Acción and FIRA (Banco de Mexico) would continue to cooperate with the project in financing capacity building in extension, and offering credit to performing cooperatives and individual farmers.
- Government institutions such as SAGARPA would continue to assist in Integrated Pest Management through the Junta Local de Sanidad Vegetal, especially in surveys about broca, its control and the sale of products.
- Farmers would continue to participate in extension courses and in participatory research. In future they would contribute new ideas with regard to the CCBP and they pay all the services of extension, evaluation and verification they benefit from.

However, whereas the Alliance in the beginning of 2003 still remained over-optimistic, expecting a project growth to the level of 5,000 small-scale farmers applying the Conservation Coffee best practices on more than 15,000 hectares "over the next three (sic!) years", no timeframe or tangible plans were put forward by the team for solving the sustainability problems of the project.

4.3.4.3 Sustainability of the Ghana project

4.3.4.3.1 The Ghana project is not sustainable either at this point in time

As in Mexico, increasing sales and the corresponding revenues were supposed to sustain the services of the farmer organisation Kuapa to implement sustainable cocoa practices. The program was to generate three sources of income for Kuapa:

1) dues from farmer members,
2) revenues from increased sales, especially direct exports, and
3) premiums from the sale of organically certified cocoa.

These revenues would be used to support Kuapa's extension activities, contribute to marketing costs and be reinvested in management training and capacity development. Monitoring activities were to be incorporated into Conservation Cocoa standards verification supported by certification fees. Kuapa would pay the ongoing marketing assistance provided by CI with royalties from the licensing of consumer chocolate products. Profits generated by its ownership in The Day Chocolate Company would finance Twin's support of Kuapa's business operations[47].

However, the entire Business Development concept failed in this site because the external market was not liberalised, Kuapa could not export directly and the premium prices for organic cocoa did not accrue. What Kuapa had to offer to farmers was reduced to a continuation of its Fairtrade premium only which, distributed among all farmers, amounted to an increment of less than one half of a percent of the sales price[48]. Without the momentum of the Mexican branch which could count on price incentives on top of yield increases through the application of Conservation Coffee practices, the Ghana project thus was reduced to a training scheme and advocacy program for the introduction of practices for Conservation Cocoa. Interviews with farmers and project surveys show that the attraction of Conservation Cocoa for farmers consists, in contrast to Mexico, mainly in higher yield. The question is, if

[47] Proposal 2000, Mexico, D20; Ghana D20
[48] according to the Program's 2003 report to PVC the amount is 2.3%, still insignificant. See section 4.2.1.3, G-Indicator 1.5

this, over time, will be sufficient to guarantee adherence to the scheme without being topped up by a substantial price premium.

The extension of the program in Kakum and other communities around it after the end of the grant period, was left to Kuapa and MOFA who are expected to sustain the project. CI, in December 2003, was planning to present a new project to UNDP for GEF funding in which the provisional learning would be applied to the biologically priority south-west of Ghana. They recognised that the CEPF funds, supposed to finance an expansion to 2000 farmers over the next 3 years, were not sufficient to cover all communities around the park. Kuapa, on the other hand, apparently expected CI to take the initiative for continuation.[49]

After the grant period technical staff, according to the original plan, were to work with other KKL cocoa societies and be financed by the organic premiums on certified cocoa exports. As in Mexico, the activities are unlikely to be continued in the future through the partner organisations', that is, Kuapa's, own sources of funding, although the Kuapa staff directly concerned with FFS training have well internalised and integrated the methodology into their institutional framework. It was noted that the sustainability of the training program also depends on financially motivating farmer ToT trainees to continue their work. With support funds failing, the program would be stalled.

Kuapa currently continues activities with the support of the Critical Ecosystems Partnership Fund (CEPF). These CEPF funds allow a continuation of the scheme in 80 communities around the 8 original communities in Kakum. The CEPF funding provided the counterpart to USAID funding necessary to enable CI to fulfill its 2002 agreement with Kuapa and made additional funds available for Kuapa to maintain project activities after the PVC project ended[50].

The project has not yet aquired the momentum to continue on its own without support. Moreover, the commitment of the partner Kuapa, let alone the farmers, to the conservation goal, without the tangible benefits that accrue in Mexico, is not evident. The sustainability of the program in Ghana is doubtful with respect to the 8 original communities as well as to an expansion in the rest of the buffer zone, and it cannot be taken for granted that all of the achievements of the project can be safeguarded over the long term as the 2003 report to PVC claims.

The political and overall institutional environment in the Ghanaian cocoa sector is not conducive to the introduction of the originally envisaged Business Development Services model. Under the present circumstances it is unlikely that the external market will be liberalised in the short and medium term. If conservation of the Kakum Area is to be achieved, substantial support over a number of years is critical, as the introduction of a business-based extension model is difficult due to the absence of a specialty market as in coffee with incentives over and above both the organic and Fairtrade premiums.

4.3.4.3.2 The way forward in Ghana

Already in July 2002 PVC on a local visit to the project had expressed concern about the lack of achievement of critical targets and that farmers would need continued support after the end of the grant period. [51] PVC in their Project Monitoring Report of July 2002 suggested that CI consider requesting a revision of original project objectives, or alternatively request an extension to try to meet the original objectives. Objective 1 was revised in December 2002, but an extension was not requested.

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[49] Conversation with the Managing Director Mr. Ohemeng-Tinyase on December 15, 2003

[50] CI seemingly believes that the approach in Ghana was already "rolled out", because the 2003 annual report to PVC classifies the prolongation of capacity building at Kuapa as an "unintended benefit". Third Year Annual Report (October 1, 2002- December 31, 2003), page 16

[51] Lori Pommerenke, AAAS Fellow: *PVC Project Monitoring Report for Conservation International*, 25-27 July 2002

The future general strategy of cocoa interventions in Ghana was formulated in a Workshop in August 2003 with participation of CI Washington, CI Ghana, the Cocoa Reseach Institute of Ghana (CRIG), the Ministry of Food and Agriculture (MOFA/ICPM), the Regional Director of Agriculture, Kuapa Kokoo, the University of Ghana, the National Cocoa & Coffee Association, and Wildlife Division. The specific purpose of the workshop was to define priorities for program development and to strengthen alliances for the implementation of the next phase of the project.

Kuapa Kokoo's Managing Director reiterated his resolve to continue the training program that had been initiated and highlighted the benefits of the project to Kuapa as an institution and to their farmers. The essential conclusions of the participants for the way forward were:

- The *Farmer Field Schools should be scaled up* to cover a minimum of two thousand (2000) farmers within three years. Efforts should be made by the partnership to sustain the existing pilot farms and farmers to reap the ultimate benefits.
- The FFS approach should be *extended to the southwestern portion of Ghana*'s tropical rainforest, a part of the Upper Guinean Hotspot which is being threatened with the adoption of sun-cocoa growing practices. A minimum of 2000 farmers for a three-year period should be covered there.
- Various partners should also take the initiative to *prepare project proposals to source funds* for specific FFS projects, in collaboration with CI.
- MOFA should take advantage of the collaborative FFS program to *engage the team* to provide extension services to cocoa farmers.
- The *Sustainable Tree Crops Program* (STCP) should endeavor to work in close collaboration with FFS partnership to avoid conflicts and work at cross-purposes.

Apart from these documentary sources, no more specific plans for the continuation of work in the Kakum area were presented during the evaluation. The future activities that were mentioned referred to the GEF-funded Western Region project only. However, the continuation of funding from Ricoh in 2004 will enable some continuity and contact with communities to be maintained in the Kakum area.

4.3.4.4 Replication of the project's approach elsewhere

Following up the replication plans outlined in the 1999 proposal, in October 2002 a peer learning workshop focusing on the agricultural aspects of the program was conducted in the Mexican project site (Jaltenango) with participants from CI-Perú (Proyecto Café Orgánico Alto Tambopata), CI-Costa Rica (Proyecto AMISCONDE), CI-México (Proyecto Café Chiapas), the Biosphere Reserve El Triunfo, the Colegio de la Frontera Sur (ECOSUR), and CI-Washington. Invited representatives from Colombia could not attend. The workshop was to exchange experiences in the different projects and create a shared vision about the way forward to design a "strategy model", replicable in other coffee growing areas. In November 2002 these projects were outlined in more detail in a proposal to Starbucks for a new cooperation agreement[52] and later in February 2003 in the proposal to USAID for the "Conservation Coffee Alliance" mentioned earlier.

In addition to the lines of action explained above for Mexico, CI want to replicate their conservation agroforestry approach in Costa Rica, Panama and Peru.

In *Costa Rica* the Alliance would undertake, with 2,500 or more farmers on about 25,000 hectares of coffee, the following:

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[52] Starbucks and Conservation International: Achieving New Scale in Coffee and Conservation. A proposal to Starbucks Coffee Company, November 2002. A new (third) Memorandum of Understanding with Starbucks was signed in August 2003

- Formulating a local set of best practices for Conservation Coffee for the Amistad Biosphere Reserve;
- expanding the agricultural training program to include coffee cultivation techniques; working through the local officers of the Ministry of Food and Agriculture, the Alliance would train local extension officers as best practices community promoters;
- introducing a system of integrated farm management planning and review that uses the community-based promoters to establish and evaluate participating farmers' annual targets;
- increasing farmers' access to capital, to make low interest loans available to the farmer cooperatives and strengthen the existing community's credit funds;
- establishing channels for participating farmers to access new market opportunities that can be linked to their adoption of the best practices for Conservation Coffee;
- evaluating project performance and impacts to provide measures of project success.

In *Panama,* the initiative involves 2,000 farmers and 10,000 hectares and is comprised of the following major components:

- Defining local best practices for Conservation Coffee for La Amistad Biosphere Reserve within Panama;
- establishing an agricultural training program;
- creating a comprehensive farm management plan and evaluation system that employs specially trained cooperative members;
- providing farmers with the access to credit, and
- developing systems to provide market access for farmers who are adopting the Conservation Coffee best practices.

In *Peru,* the Alliance is currently working with 1200 farmers on 3,400 hectares of coffee fields on:

- Developing local best practices for Conservation Coffee for the Sandia Valley;
- expanding the agricultural training program working with the local chapters of the cooperative in training farmers who have excelled in applying the conservation best practices as community promoters;
- coordinating the farm planning and evaluation process to include the Conservation Coffee best practices;
- improving access to credit and diversifying the sources of finance available to the participating farmers;
- developing reliable channels for accessing market opportunities so participating farmers have several options for selling their coffee.

In *Colombia* CI is already working with 168 farmers on approximately 2,500 acres of coffee and the Colombian Coffee Federation in the Department of Valle de Cauca to conserve the cloud forest of the Serranía de las Paraguas . Aside from that, CI is exploring the possibility of a future conservation coffee project in *Northern Sumatra* and the CCCP has started providing technical assistance to the CI country program for the assessment and design process

4.4 Lessons Learned and Recommendations for Program Effectiveness

4.4.1 Lessons learned

The following statements are drawn from recent project documents and represent CI's present vision of the experience gained within the three year period of the PVC grant. They refer, consequently, to items which, at the planning stage of the project, had been assumed differently or had not, or in a different way, been taken into account. Items, including fundamentally important ones, that belonged to the strategy from the beginning – and are not lessons learned during the program - , are not mentioned in this context.

These lessons have been internalised by CI and its partners, and are articulated for instance by the Project Design and Management System. They are supported by the evaluators and constitute a body of experience on which the future continuations/replications of the CC program will be based. The statements are grouped by "Key Result" according to the Conceptual Model for the Conservation Coffee/Cocoa Program. Some additional recommendations from the evaluators are given in section 4.4.2 below.

1. Relevant stakeholders institutionalize Conservation Coffee/Cocoa Standards and Conservation Best Practices

- Any intervention in the coffee and cocoa sectors needs to be well aligned with national policies so as to avoid disturbances when launching the project. In order to acquire a realistic understanding of the national and local policy environment, a thorough context assessment has to be performed in the planning stage.
- Policies for the coffee sector and target regional institutions must be compatible with the best practices so farmers do not receive contradictory messages or disincentives. This is the case when subsidies and other government actions conflict with the efforts to make farmers adopt conservation best practices.
- The introduction of environmental awareness and the importance of agroforestry and biodiversity-friendly production practices into the mindset of private and public stakeholders such as Government agencies, NGOs, cooperatives and potential private service providers is a long term process and cannot be fully achieved in three years.
- Intervention strategies to promote the institutionalisation of Best Practices are best developed via a network of stakeholders such as the Conservation Coffee Network in Mexico, or the informal "Cocoa Network" built around the Kakum project in Ghana.

2. Extension Service Providers promote and evaluate the adoption of CBP

Selection of partners/service providers

- At the planning stage a thorough assessment of technical capacities, motivation, interests and political influence of potential partners should be conducted to select those that respond to farmers' needs.
- Cooperatives as service providers have to be or become transparent, democratic organisations to ensure that the project's benefits reach the farmers.
- Clear agreements regarding the scope of work and responsibilities of each partner have to be in place prior to the start of any project activities.
- Cooperatives cannot be effective service providers unless the relationship between their social and business objectives is clear.

Extension systems and Best Practices

- The change of traditional cultivation practices is a long-term process (see evaluators' remark on this item in recommendations).
- In terms of conservation outcomes, a community approach has advantages over partnership with cooperatives for technical as well as social reasons. These advantages must be balanced against those of partnering with producer organisations.
- The practices required of farmers must be both scientifically sound and economically attractive if they are to be adopted. They should be based on the local context and defined with the full and active participation of local farmers.
- The adoption of best practices by farmers requires high quality services which are well adapted to local conditions and use participative research methods.
- Existing extension systems generally have to be strengthened first before they can effectively promote conservation practices.
- Receipt of benefits and services must be linked to farmer performance in adopting the conservation best practices through ongoing farm planning and evaluation by extension officers, combined with regular independent audits.
- Ongoing training of farmers in the conservation best practices is required if they are to truly understand and properly use these new agricultural techniques and methodologies.
- Farmer Field Schools in their configuration in Mexico as well as in Ghana have proven successful. However, potential for improvement of their cost-efficiency has not been fully exploited.*3. Providers of commercialisation services support farmers who adopt CBP in accessing market opportunities*

Market for services

- Farmers should have a variety of opportunities to access services and benefits necessary and conducive to adopting conservation coffee best practices in a competitive service market.
- The degree of democratic control of farmers over decision making in their organisation is decisive in determining the extent to which benefits are being passed on to them.

Cost recovery

- Appropriate cost recovery mechanisms are critical for the sustainability of services and set standards for farmers to evaluate the quality of services they receive.
- Service fees must be based on realistic cost analyses.
- Fees should be phased in as soon as the value of services is starting to be perceived by clients.

Export services

- Cooperatives are not efficient exporters. Sustainability depends on the use of professionals in the field (see evaluators' remark on this item in recommendations).

Business Planning

- Business Planning can identify fraud and mismanagement and connect credit applications to real needs.
- Business plans take a long time until they are accepted and used as an instrument for monitoring and decision making.

4. Financial institutions provide access to capital for CBP farmers and to service providers

- Irregular Government subsidised credit distorts the market and leads to farmers organisations' building up of debts.
- Secure financing allows cooperatives to grow and stimulates savings.
- Credit needs to be part of an integrated package.

5. Coffee industry provides reliable market opportunities for farmers who adopt CBP

- Bridging the gap between producers and buyers is a fundamental first step in developing long-term, mutually beneficial relationships.
- Coffee quality and consistency is the most critical factor and driver in promoting ecological, economic and social sustainability.
- Full transparency in the supply chain is critical to ensuring economic benefits are being transferred to producers. (See evaluators' remark on this item in recommendations.)
- Consumers can be influenced to make powerful purchasing decisions if they have sufficient information.
- Private-sector partners have the ability to reach an extensive audience and can build awareness of the critical issues related to coffee/cocoa areas and biodiversity conservation.
- The success of "Shade Grown Mexico" demonstrates that in-store promotions and media campaigns can increase sales, but not necessarily sustain them. Innovative, multifaceted promotions are essential to the products' long-term success.
- Quality can be achieved by efficient feedback of technical expertise and market information through the entire marketing chain.

4.4.2 Evaluators' recommendations for CI and partner organisations with regard to progam effectiveness

4.4.2.1 Recommendations for DC

- That CI continues to support Agroforestry Enterprise Development appropriate to forest conservation, as exemplified by the Coffee and Cocoa programs, in locations where commodity crops are already growing over substantial areas of buffer zones.
- That commodity crop enterprise development support is seen by CI as a long term process, of at least 10-15 years duration, because of the need to change long held patterns of behaviour, and because of the innate long term nature of tree crop cycles and habitat restitution.
- That CI accepts that investment will be considerable over at least the first five years, until some stability is achieved in the perception of shade grown as a valuable concept.
- That CI encourages its partners to take a long term view too, and to have patience, especially with respect to the speed with which new schemes are introduced, for example changes to the purchasing chain.
- That any development of a new, all-encompassing database scheme at CI Headquarters for storing project information, does not delay or inhibit best use being made of the large quantities of data already collected, for example in Mexico.
- That for future projects involving large-scale data collection, relevant staff at headquarters are trained – in addition to those in-country - in the use of the chosen

database program (be it a commercial product like Microsoft Access or a bespoke CI program); that the system designed is appropriate for the type of information envisaged and, as far as possible, has sufficient flexibility to accept likely changes or new developments in the program; and that the costs of designing and servicing databases are budgeted for.

4.4.2.2 Recommendations for the Mexico project

The Mexico project has a series of proven tools and procedures at their disposal:

1) a set of CC Best Practices;
2) the training of farmers as informal extension agents;
3) farmer field schools for the extension of practices;
4) validation of practices in farmers' fields (participatory research);
5) evaluation of farm plans as a means to secure the conservation effect and to verify compliance with CCBP more easily and cheaply;
6) sound information system for farm monitoring, including a GIS to relate farms to the Reserve
7) linkage of groups of farmers with clients securing a guaranteed market with attractive prices;
8) export operations via specialised enterprises instead of direct export;
9) credit mechanisms.

The evaluators commend the Mexican component for these achievements, especially for

- the decision to take CI's intervention back to facilitating the expansion of conservation services markets rather than providing these services directly
- the transfer of their technical services to an independent for-profit organisation
- the expansion of the target group to medium and large farmers and
- the implication of the cooperatives in management of the Reserve

However, these plans can only succeed if the following conditions are met:

- Support for the ongoing activities is continued for at least another 3-4 years.
- Currently, the number one requirement to gain the necessary momentum for sustainability is scaling up. The parameters are laid out in the EMDAP study, but the model and its assumptions from July 2003 have to be verified and updated.
- A realistic continually updated plan of operations and thorough monitoring of the growth path and the set financial targets have to be put in place. Fees for services of commercial or suppliers at profitable prices as proposed in the EMDAP study is the most direct route to sustainability and should be maintained.
- The support of the project by CI's regional structure is essential. Forceful and swift decision making is required, delegated as much as possible to the local project level.
- In the short term, export services should be provided by an experienced institution (such as AMSA at the moment). However, in the long term, cooperatives should again be given this opportunity for which further training will be necessary.
- Under the section on market opportunities above (4.4.1, section 5), CI proposes that full transparency in the supply chain is critical to ensuring that economic benefits are being transferred to producers. A rider could be added here to the effect that openness should apply equally up the chain (millers, exporters, roasters) as well as down through the cooperatives. Also in the area of bridging the gap between producers and buyers, some

consideration should be given to the amount of time to be allowed for transparency to be attained, and for new marketing schemes to be introduced, bearing in mind the differences in pace and degree of sophistication of the southern cooperatives and the northern business cultures.

- Feedback from CABS, Washington, is essential in determining the way forward, in collaboration with the Reserve and other partners, on biological monitoring and its relation to enthusing producers and their families about biodiversity.

4.4.2.3 Recommendations for the Ghana project

As the 2003 report to PVC states, "the rural cocoa farming communities in Ghana abound in trainable talents, which can be tapped to sustain a farmers' extension training program. While the approach requires a substantial investment in the start-up phase, once it is rolled out through trained farmer leaders and extension agents, it can cost-effectively reach large numbers of farmers. "

The Ghana project has, as the Mexico project, acquired a lot of experience during the 3 years of the grant period but it cannot be considered "rolled out". It has to its credit, among others,

(1) an outline of Conservation Cocoa Best Practices;

(2) experience in training of farmers as informal extension agents;

(3) the farmer field schools for the extension of practices; and

(4) the validation process of practices in farmers' fields (participatory research).

In view of the lack of monetary incentives for farmers and Kuapa it is necessary

- *that CI regain the initiative in this project* which seems to have been transferred to Kuapa after the end of the grant period;
- to hire a full-time project coordinator with a finance and business background with full decision power and operational independence within the framework of his terms of reference;
- to undertake a sustainability study as it was done in Mexico that would analyse different models of financing including other than full fees for services,
- to seriously consider the possibility of putting particular emphasis on support for new plantings on abandoned cocoa fields and biodiversity nurturing therein, while reigning back shade reduction in existing cocoa until more information is collected on shade versus yield relationships; other best practices for existing cocoa would be maintained, with special attention to frequent harvesting, the guaranteed yield enhancer;
- that any future collaboration with the Sustainable Tree Crops Program bear in mind the preceding recommendation, that emphasis be put on new plantings on abandoned cocoa fields wherever possible, with increased biodiversity as a component;
- that the conservative and flexible approach shown by CRIG regarding appropriate shade tree density should be reflected in the messages given to trainers and farmers;
- to take up again the initiative in the area of desirable and undesirable shade tree types, and in formulating, with CRIG, Washington and the producers, the direction for urgently needed, essential research on Conservation Cocoa agroforestry;
- although in 4.4.1.2 CI states that the change of traditional cultivation practices is a long term process, the enthusiasm which CI reports in Ghana on behalf of farmers for the adoption of new planting methods and increased harvesting frequency is really noticeable. Thus, the recommendation here is not to rule out the possibility of rapid change just on the grounds of tradition;

- to integrate monitoring into the current activities of all staff, especially where CI has overall reporting responsibility in activities involving partners;
- that database and GIS capability is improved, including registration of all farms and producers involved in FFS, and their monitoring for yield, shade, cocoa condition including area of degraded cocoa available;
- that brokering between the chocolate industry and Kuapa and/or other farmer associations be reinitiated to obtain organic/fairtrade/Conservation Cocoa premiums and negotiate with the Cocoa Board how these premiums can be made available to farmers and Kuapa in the context of the present marketing structure.

5. Program Management

5.1 The Conservation Coffee and Cocoa program's general approach to project design and management

5.1.1 Principles of project design and adaptive management

The core part of the CCC program and its activities as a means to achieve conservation of biodiversity refers to agricultural development. Principles of planning and implementation of agricultural development projects that have emerged over several decades in the past are a useful frame of reference for the evaluation of the CCC program's design and management.

The principles standing out for their importance in the present context among the multitude of planning and implementation systems in this field are: involving stakeholders, performing a detailed situation analysis, ensuring a logical intervention strategy, planning for sustainability and for learning and adaptation.[53] The most useful tool that incorporates these principles is the Logical Framework Analysis and its associated participatory planning process, employed by many major development agencies, research institutions and many conservation organisations including IUCN and CI's donor USAID/PVC[54]. The 1999 proposal refers to it as its basis, too.[55] However, the methodology was not properly applied.

The conservation community widely uses "adaptive management" techniques. Adapative management implies an iterative process to systematically test assumptions in order to adapt and learn. It is about continually improving management policies and practices by learning from the outcomes of operational programs.[56] Co-authors Salafsky, Margoluis, Redford and Robinson list the skills required for an organisation able to do effective and, therefore, successful conservation distinguishing five fundamental functional roles that a project team

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[53] For one of many useful guidelines see International Fund for Agricultural Development (IFAD): A Guide for Project M&E, Rome 2002

[54] A quick, non-exhaustive Web search showed the following organisations applying Logical Framework Analysis in one form or the other: Asian Development Bank (ADB), Australian Agency for International Development , BOND UK, United Nations International Labor Organization (ILO), Canadian International Development Agency, Consultative Group on International Agricultural Research (CGIAR), Danish Development Agency (DANIDA), Department for International Development (DFID) UK, European Commission, German Society for Technical Cooperation (GTZ), Interamerican Development Bank (IDB), International Fund for Agricultural Development (IFAD), International Monetary Fund (IMF), International Service for National Agricultural Research (ISNAR), International Union for the Conservation of Nature (IUCN), New Zealand Agency for International Development , Norwegian Agency for Development Cooperation (NORAD), Regional Environment Center for Central and Eastern Europe, SNV Netherlands Development Organisation, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), United Nations Development Program (UNDP), United Nations Environmental Program (UNEP), United Nations Population Fund (UNFPA), World Bank (IBRD), World Conservation Monitoring Center, World Wide Fund for Nature (WWF). and others.

[55] "Over the past four years CI has invested increasingly in monitoring and evaluation in order to ensure that its programs are effectively promoting biodiversity conservation. CI's Monitoring and Evaluation (M&E) Program has been developing an institutional program management system based on the logical framework methodology and other monitoring techniques", C16.

[56] Nick Salafsky, Richard Margoluis, and Kent H. Redford; Lee, K: Adaptive Management: A Tool for Conservation Practitioners ,1993. Salafsky, N., Margoluis, R., Redford, K.H. ,Robinson, J.: Improving the Practice of Conservation, A Conceptual Framework and Research Agenda for Conservation Science, NY 2002

(or organisation or alliance) needs to fill to undertake effective adaptive management[57]. These are: design, management, monitoring, analysis, and communications.

5.1.2 Basic assumptions failed

The initial failure in planning consisted in getting a part of important assumptions wrong. One of the main assumption was that cooperatives would relatively easily function as the main conveyor belt for the messages and techniques the program wanted to send to and employ with farmers. The potential difficulties with the cooperative partners were underestimated due to an insufficiently thorough context assessment and too rigid a mental model, in short, the absence of a suitable planning methodology.

In *Mexico,* cooperatives as the planned main performer of activities turned out to be controlled by their technical staff with different interests, little trusted by clients, with fraud by part of the boards and/or the technical staff, high membership turnover, high internal and external debt, business plans on paper, no business outlook and mentality.

As for the extension services to farmers, the project originally relied on the cooperatives technical staff. However, capacity turned out to be limited, with farmers getting infrequent and irregular advice, incomplete course content not synchronised with operations in the field, and focussed on organic certification. In consequence, conservation techniques were incorrectly applied, pests not efficiently dealt with, coffee quality threatened to remain low and the conservation message to be insufficiently conveyed.

CI, as a consequence, had to, with strong resistance from the cooperative technical staff, address the farmers directly through a modular extension program offered by CI and ECOSUR in communities, with visits to farmers plots to improve conservation practices and knowledge about the reserve and conservation in general.

For the monitoring of farmers' management plans to guarantee Conservation Coffee standards and quality control, the project had also relied on the internal control system of the cooperatives. It turned out that their information systems were defective, with "ghost members", unrealistic production projections, introduction of coffee of dubious origin into the marketing chain of the cooperative ("coyotes"), little focus on the requirements for Conservation Coffee, and farmers left in the dark about their rights and obligations.

Thus, farm planning and evaluation also had to be taken over directly by CI, diagnosing farmers and visiting their plots twice per year, performing evaluation, controlling wet coffee processing, and estimating harvest volume and credit needs.

CI's BDS intervention approach - training the cooperatives as "service provider" – had quickly failed.

However, the important subsequent shifts in the approach did not lead to abandoning the cooperatives as such. Training of their staff in the mentioned areas continued and the Business Planning course was carried out as planned. However, as justified as it was, the direct involvement led to high costs for CI through additional staff and management needs, conflicts with the technical staff of the cooperatives and it led to confusion of farmers about the roles of CI and their organisations.

The problems did not end there: as explained above several times, in November 2003 four of the six partner cooperatives threatened to opt out of the CI scheme because the client Starbucks' requirement to sell the product, under the same conditions, to a national buying agent it appointed, instead of the cooperatives exporting directly to them as in previous years, went against their institutional and other interests. By January 2004 some of them seem to

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[57] N.Salafsky, R.Margoluis, K.H. Redford, J.G. Robinson : Improving the Practice of Conservation, A Conceptual Framework and Research Agenda for Conservation Science, Conservation Biology, December 2002, page 10

consider re-engaging, but any reduction in sales by the cooperatives will result in a delay of the Mexico project's threshold of profitability. Interestingly, one of the two Mexican cooperatives who did not vacillate in their support of the project was the indigenously based organisation Comon Yaj Nop Tic in which interests of the Board and members seem to be more integrated, perhaps also due to the fact that these cooperatives do not have any technical staff[58].

In *Ghana*, events were similarly dramatic in the beginning. There, a small organic pilot project had been under way from 1997/98 which grew into the Conservation Cocoa Agroforestry project. The list of criteria for the selection of the specific country and program sites in the proposal 1999 (Mexico-Chiapas, Kakum Park-Ghana), quoted above, stipulated that projects had to conform to CI objectives and those of the local USAID mission, but the Government's strategy is not even mentioned. This backfired soon after in mid 2000, when work on the project, shortly before the inception of the grant period, ground to a temporary halt. The Government blocked CI's plans for organic cocoa and of direct export by the Kuapa cooperative[59]. As a consequence, the planned capacity building of the local partner had to be restricted to the development and application of the Kuapa Reference Manual and the Farmer Field Schools.

No credit program was implemented, the foreseen incentive system based on quality and price differentiation became inoperative in the face of the non-dismantling of the Cocoaboard , the export capacity development was no longer relevant and the partner Kuapa Kokoo suspended cooperation temporarily for some months due to quarrels about financing a vehicle and did not fulfill its reporting obligations. A more carefully negotiated agreement and delaying funding until the agreement was signed would probably have strengthened the partnership.

Remarkable in this context is that wrong assumptions were made as well with regard to CI itself. The 1997 proposal had included staff positions on the level of CI-Chiapas: an agricultural specialist to support the technical assistance and M&E components and a specialist in coffee quality and trade to assure that coffee meets contract specifications. Local staff would report to the CI-Chiapas program director. But the regional structure failed to commit to the coffee project. This placed an unexpected heavy burden on the local team, especially in terms of fund raising which would have been one of the tasks of the CI-Chiapas office and diminished the team's overall effectiveness. Ironically, cooperation could be more readily secured from Mexican Government institutions than from CI's own regional office. The project thus had to be steered in its day-to-day operations directly by CED from Washington DC. It has remained somewhat enigmatic to the evaluators as to what could keep the Mexican CI office for over two years from providing supervisory support to the work in the El Triunfo site.

5.1.3 The absence of a suitable planning methodology in the beginning

So, in both project sites a whole string of assumptions had failed. The evaluators are quick to acknowledge the speed and the rigor with which the mentioned adjustments were made and this constitutes a merit in itself. The current planning process used by the program team is, as we will see, now on its way to grow into an excellent tool. However, for the benefit of readers not so familiar with the problems the team has faced and overcome, it is worthwhile analysing the root of these difficulties in some detail.

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[58] Some indigenously based organizations in Mexico like ISMAM have had remarkable success due to a hybrid form of organizational structure that combines aspects of traditional Mayan Indian community democracy with the characteristics of a modern corporation. Nigh, R.. "Organic Agriculture and Globalization: A Maya Associative Corporation in Chiapas, Mexico." *Human Organization*, 56 (1997), 427-436, quoted in L.T. Raynolds: Poverty Alleviation Through Participation in Fair Trade Coffee Networks, Fort Collins, March 2002, page 6

[59] Ghana cocoa traders wanted organic cocoa and and moved Kuapa to grow organic coffee with their farmers. This flew in the face of the government and CRIG and provoked the ban of organic cocoa. It seems that CI built on expectations that Government would allow Kuapa to export up to 30% of the crop directly.

In principle, as far as planning was concerned, the program was "entitled" to start from a very low level, because the creation of this capacity was precisely one of the major objectives of the Washington component to be achieved by the end of the implementation period in 2003. However, in the beginning much more use could have been made, with little cost, of the broad experience of development organisations outside the conservation community or other conservation organizations such as IUCN.

In consequence, the program could have achieved even more of its remarkable results (explained above in detail, see section 4.2) if some additional and different questions had been asked in the beginning. The program would have then, in some important areas, proposed more realistic tools and would have been planned for a more realistic length of time and or more easily achievable objectives. Sustainability and exit strategy would not have been the problems with which CI is presently struggling.

Employing a "second generation" Logical Framework Analysis with its strong involvement of local stakeholders and intensive participatory approach would have brought more insight into the real conditions at the sites. A more systematic stakeholder analysis could have provided answers to questions such as[60]: What is the organisation's agenda ? What is the organisation's contribution to the problem? What is the organisation's contribution to the solution? How well does the organisation represent its stake (credibility issue, level of representation, power base)? Is the organisation prepared to negotiate with other stakeholders in order to build consensus? What do we need from this organisation? What can be offered to this organisation?[61]

It would have clarified, for example, the Government of Ghana's stance on liberalisation and organic cocoa, or the configuration of power and decision making within the Mexican cooperatives. Crises like the quarrels about the marketing scheme in 2003 are, as experience in rural development projects shows, common, and a more systematic participatory reconstruction of the underlying social and behavioral program logic in "if-then...and..." propositions and the analysis of why which actors are assumed to do what to make the program a success[62] would have prevented the planners from believing that in two or three years the cooperatives would thrive as successful businesses.

The report on the first socio-economic baseline survey in *Mexico* in 2001 notes this absence of an explicit participatory approach and complains that the survey itself had to stand in "as an agent of the project to involve people more actively, to improve their understanding of the project, and to transfer and clarify the ideas and proposal once again."[63]

As for *Ghana*, the proposal 1999 was alledgedly[64] the result of several years of discussion, strategy development and the joint implementation of a pilot organic program. However, planning had gone ahead without committing the Government and its institutions (CRIG and Cocoa Board), the approval of which was essential, firmly to the project strategy. Instead of preparing the stage sufficiently during the activities of the previous organic cocoa project, trying to get them on board was left to the implementation phase as one of the activities under

[60] ESCAP: Guidelines on Strategic Management and Planning of the Energy Sector. UN 2002, page 49 ; SNV (Netherland's Development Organisation): Strategic Environmental Analysis, page 31 sigs;

[61] CI Strategy Handbook, Chapter VI, page 14: "A good understanding of the structure, mandates, policies, capacities and pertinent legislation of the institutions which govern resource use and create and manage protected areas is obviously indispensable".

[62] F. Leeuw: Assumptional Analysis, Log Frame Analysis and other methods of reconstructing and evaluation program logic, passim

[63] Arthur C.J. van Leeuwen: Socio-Economic Study of Household Level Impacts of Conservation-Coffee Production, Chiapas, Mexico. Jaltenango, Chiapas, México and Bluefields, Nicaragua,December 2001, page 40

[64] Section D19 Local Partnership development

objective 3, although the proposal explicitly states that "Cocobod support of organic certification is important to the eventual export of certified product"[65].

Reconstructing their mental maps in the form of an "objectives tree", the program designers would have been warned of critical areas before, instead of frantically iterating adaptive management cycles during implementation, changing horses in full gallop. To make the hidden assumptions explicit, a simple and efficient procedure could have been the construction of a detailed cause-effect diagram asking not only "IF... THEN...", but expanded "IF... AND... THEN..."-questions, looking for additional assumptions (boundary conditions) that might inhibit or hamper (or favour) the project once it was underway. (See Figure 1)[66]. Unfortunately, on the USAID/PVC logical framework matrix form the once standard fourth column on assumptions had been eliminated and the proposal outline did not provide for a corresponding chapter either, so the planners were not encouraged to concentrate on this. Also, in a systematically applied Logical Framework Approach with a high degree of participation and contributions from stakeholders, hidden assumptions, of course, come easier to light than when establishing the Framework Matrix as a desk job.

The agroforestry program (and other smaller CI-projects before), overlapped considerably with general rural development projects in which the development community had aquired vast experience and excellent project planning procedures during the last 40 years. For the outsider it is difficult to discern why CI, a decade after its foundation and numerous activities in the field of NTFPs, still operated without a proper planning tool for this ambitious project.

One reason might be CI's priority setting dilemma at the time of planning (1998/2000) to either dedicate institutional capacity to the "upper layers" of their objectives tree, that is, the definition of targets in biodiversity conservation, intervention levels (species, protected areas, landscapes/corridors)[67] and regionalisation efforts through Centers for Biodiversity Conservation (CBCs), or to the "lower layers" of project planning and performance monitoring, an organisational need that had begun to be felt about the time when the preparatory activities in Ghana and Mexico for the CCCP started.

From 1996 work had been going on in CI to establish monitoring systems (impact and performance) which subsequently – and logically - had developed over the years into a set of planning and decision tools, largely shaped along the lines of the Logical Framework Approach, propped up with other planning tools, published in 2001 as CI's "Strategic Management Approach" (SMA). However, the system failed to be introduced as CI's standard for planning and monitoring and was shelved, apparently because it did not address the "higher" conservation outcomes sufficiently.

The development of the CCCP shows how the intricacies and difficulties of project planning and implementation at the field level were underestimated. The achievement of objectives that largely depend on individual and/or social behavioral patterns cannot be predicted with the same degree of certainty as in deterministic models of the natural sciences. Although far from perfect, the majority of the SMA procedures, ready for application at the time, if it had been absorbed by staff and encouraged by management, would have helped the program's planners to fully understand the social, economic and political drivers behind threats and opportunities for conservation in both sites, and to launch their journey into the "biological, social, economic, and institutional lowlands of conservation practice"[68] in a more realistic

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[65] Logframe Matrix and sections D 17,and 23. Objective 3: Ghanaian Government supports implementation of cocoa agroforestry practices that benefit conservation, activity 3.1: Initiate (sic!) dialogue with key government institutions and individuals and identify areas of project collaboration and expansion.

[66] Figure 1 depicts the cause-effect links for the original strategic model, not for the Ghana case where it is not the price but the gain in productivity which drives the farmers

[67] Conservation International: "Zero Biodiversity Loss", Washington February 2002, passim

[68] N.Salafsky, R.Margoluis, K.H. Redford, J.G. Robinson : Improving the Practice of Conservation, A Conceptual Framework and Research Agenda for Conservation Science, Conservation Biology, December 2002

way. As of today, the general lines, although without the necessary detail, have indeed begun to be taken up in CI's manuals such as the Manual on Business Planning for Environmental Enterprises and CI's Strategy Handbook that is currently in elaboration[69].

In 1999/2000 however, not familiar with tried and tested procedures such as modern versions of the Logical Framework Analysis with its different steps, the planners had to make their way through the compulsory USAID Logical Framework Matrix form, relying on implicit assumptions or assumptions that had not been sufficiently scrutinsed and thus led to the formulation of objectives and activities unsupported by the situation on the ground.

5.1.4 Adaptive Planning as a substitute ?

After all, was not there the conservation community's "adaptive management approach" to deal with difficulties during project implementation ? "Because there is only limited knowledge concerning the role of diversified agricultural systems in biodiversity conservation," states the DIP, "CI will employ an adaptive management approach that will identify best practices and lessons learned for the specific cultural, social, political, and ecological conditions of the target area."[70]

If in the course of a project intended targets or the employed methods or activities prove inappropriate or unfeasible in the real context, they have to be changed. This is for the good of the project, but the number of such "iterations" should, of course, be kept to a minimum. Adaptive management should not be a "random trial-and-error process. Instead, it involves first thinking about the situation at your project site, developing a specific set of assumptions about what is occurring and what actions you might be able to use to affect these events."[71] This can be best achieved with a series of proven, systematic tools such as LFA.

As a consequence of this failure, the results of the program were not achieved on the desirable least-cost path.[72]

However, in spite of all these drawbacks in the beginning, the project team in headquarters and in the field, once the project had started, quickly and with dedication and common sense caught up with reality and built the necessary capacity in difficult conditions. In a way, they pulled themselves out of the swamp by their bootstraps, *learning and immediately applying* a series of lessons, especially answering to the need of a new project design and management system. The adaptive management approach was definitely not lost on *them*. At the end of this program which is defined as a pilot phase, a full set of planning instruments has been developed, introduced in the re-planning workshop in June 2002 in Mexico and subsequently field tested there (see section 5.3 below).

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[69] Strategy Handbook, Draft October 17, 2003, chapter VI. CI's Manual Business Planning for Environmental Enterprises, published in 2003, stresses the importance of Policy Analysis in the process of assessing the opportunity for (conservation) enterprise development, see page 9

[70] Agroforestry-based Enterprise Development as a Biodiversity Conservation Intervention in Mexico and Ghana, Detailed Implementation Plan, April 10, 2001, page 49

[71] Salafsky, N., Margoluis, R., Redford, K.H. ,Robinson, J.: Improving the Practice of Conservation. A Conceptual Framework and Research Agenda for Conservation Science, NY 2002, p[age 13: "Instead of merely trying different actions, practitioners first think about the conditions and threats at their project site. They then develop a specific set of goals, objectives, and activities that outline what tools they will use to address the threats".

[72] Interestingly, the Mexico project's "adapating out" and "adapting in" of objectives did not elicit any comment from PVC on the quality of planning of the original proposal. See PVC Matching Grant Monitoring Trip Report, Mexico, 22 Februay-12 March 2003

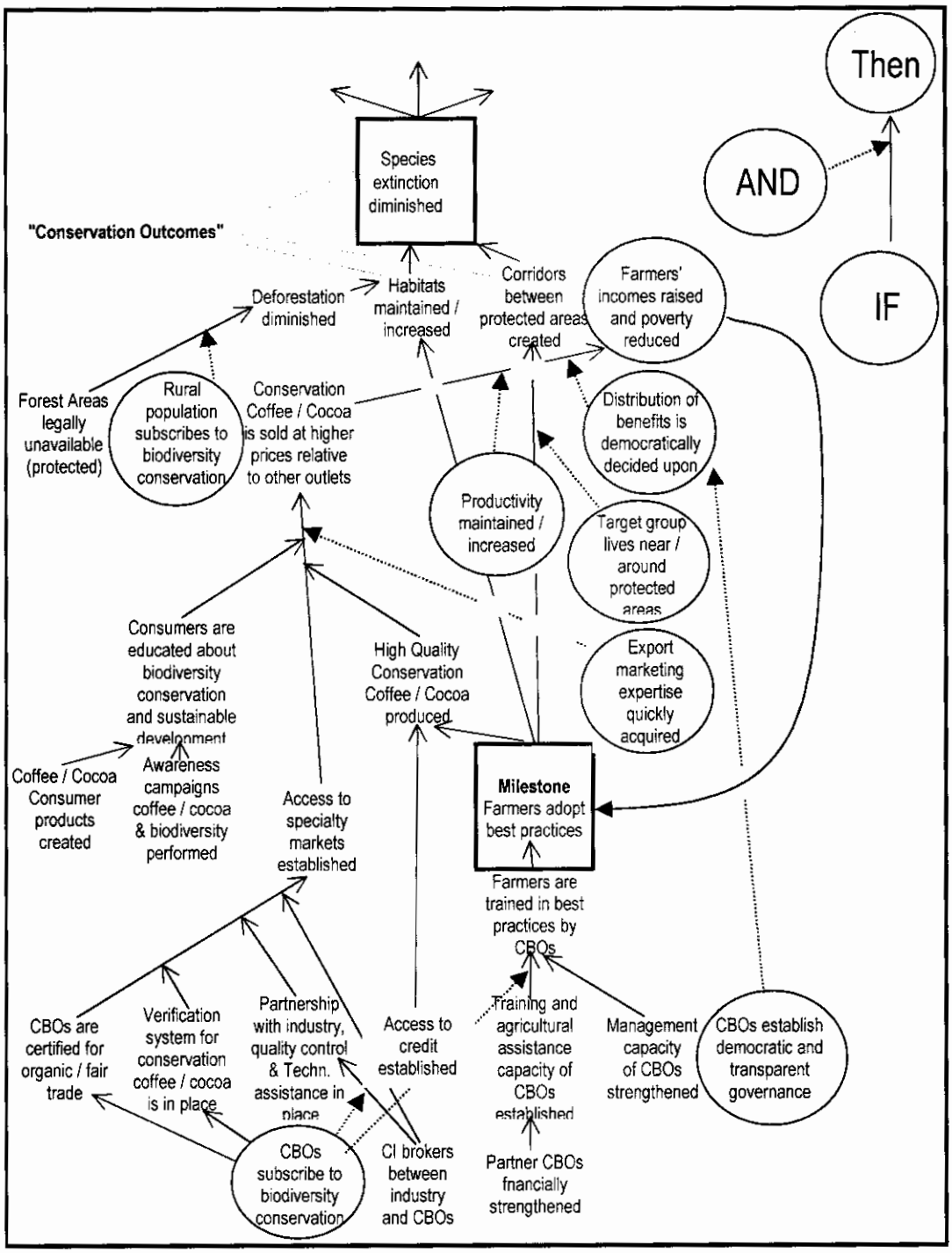

Figure 1: The "IF... AND..., THEN..." Objectives Tree and some critical "AND..." conditions

5.1.5 Cost-effectiveness of the program

The DIP of April 2001 held out a prospect of "developing activities that will better draw upon the institution's extensive capacity in economics by collaborating more closely with CI's Resource Economic Program".

Several activities in this respect have been undertaken, however, more could have been done taking into account the different ways in which economics can contribute to appraisal and decision making.

In this respect it is useful to clarify the concepts of effectiveness and efficiency. *Effectiveness* measures the extent to which the project has attained its purpose and is expressed by the ratio: result achieved / result planned. Section 4.2.1 above (Major successes, challenges and constraints in achieving each objective at the three sites) argues in terms of effectiveness, which answers the question "are we doing *the right thing* - the right measures - to achieve the goal ?" Or in the words of CI's Strategy Handbook: "Is our strategy making a difference where we are working ?"[73]

Efficiency establishes a relation between the results achieved and the amount of resources used. It can be expressed by the ratio: output achieved / input applied, and answers the question "are we doing the thing *right* ?", or: is it cheap or expensive what we have achieved? "Cost-effectiveness" means, in fact, efficiency; it is a misnomer, although widely used.

Both concepts are often carelessly substituted for one another. The DIP is a pertinent example for the lack of differentiation: the Mexican cooperatives, according to objective 1. were "to operate as effective businesses that promote conservation", whereas Kuapa in Ghana was "to operate as an effective *and efficient* business" (original objective 1), in both sites the partners were supposed to do exactly the same.

Whereas effectiveness – the degree to which goals are achieved - has dominated thinking, discussion and activities of the program staff throughout and, in many areas, with remarkable success, too little work has been dedicated to the *efficiency* aspects of the program in its different parts, for example the Farmer Field Schools, and as a whole. During the elaboration of the proposal 1999 an attempt at financial viability was made, but restricted to the provision of services. A state-of-the-art feasibility study that included, apart from the financial sustainability of service providers, a financial and economic analysis of the project as a whole to justify the investment, was not done.

One of the reasons might have been that the Business Development model normally assumes that the cost of *establishing* the market for services is subsidised and that only the costs of delivering *on-going services* are borne by the market[74]. Another reason could be that this program was considered a pilot program with a predominantly organisational and technical focus. Also, the timeframe of the CCC Program was, in spite of much experience gathered in the preceding years, so tight that most of the attention went to the technical and institutional, that is, effectiveness aspects, leaving little time for establishing and monitoring its financial and economic efficiency.

More attention should have been given early in the program – and should be given in the future - to financial and economic analysis, as

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[73] CI Strategy Handbook, October 17 Draft, page 15

[74] Alexandra O. Miehlbradt and Mary McVay (ILO): Developing Commercial Markets for Business Development Services. Turin September 2003, page 46

- an informed selection of conservation strategies and tools for sustainable conservation action of any kind requires knowledge about the amounts and the ratio of their respective benefits and costs, including investment;
- the financial self-sufficiency of CBOs determines their sustainability;
- public investors demand financial and economic justification of projects from the point of view of the society as a whole;
- private investors from the business community which contribute an important part of the funds think and proceed with an economic rationale and would certainly appreciate economic reasoning.

CI as an institution did make efforts in the field of applied environmental economics.

It has contributed to the development of a GIS based analysis tool (TAMARIN) [75] that assists planning teams to design scenarios for corridor construction and to evaluate these in terms of their economic consequences. TAMARIN shapes and selects projects (corridors) according to several parameters one of which is opportunity cost of land which reflects the economic benefits of the crops grown on it, such as coffee or cocoa. Environmental benefits enter in the form of an Environmental Benefit Index, however, they are not quantified in monetary terms and not set against costs. TAMARIN is, therefore, a *unit cost approach*, usually called "cost-effectiveness analysis" – again a misnomer as it deals with efficiency - , in which the investment decision is based on the comparison to alternative scenarios or other projects. It is often not easy to find a suitable standard of comparison apart from alternatives in the same region. Although costs are referred to area (hectares), environmental benefits might be different like apples and oranges.[76]

Without going to the length of a TAMARIN analysis a first step to economic reasoning could be to calculate unit costs per beneficiary farmer or per hectare and to compare this value to other coffee or cocoa agroforestry programs in other areas.[77]

A more convincing appraisal method is Cost-Benefit Analysis (CBA). Coffee and cocoa are important economic activities which create tangible (monetary) revenues, that offset not only the cost of production of cocoa or coffee for farmers but might possibly also, from the point of view of the society as a whole, cover the cost of the conservation effort, such as the investment for the introduction and initial support of the necessary services. Additionally, certain conservation benefits such as the creation/protection of carbon sinks, ecotourism opportunities, avoided dam siltation etc. could be converted into tangible economic benefits. CBA renders various profitability criteria (Net Present Value, Benefit/Cost Ratio, Internal Rate of Return) which might appeal especially to the business community from which a considerable part of funds for conservation is being raised and who think in economic terms. A project for the conservation of biodiversity that is economically profitable on the milestone level does not need to be justified in terms of ethical, "philanthropic", or social considerations

[75] World Bank Research Group, CI/CAB et al.: Toolbox of Applied Metrics and Analysis of Regional Incentives (TAMARIN), December 2003.

[76] There is also a tool under the name of Rapid Assessment of Conservation Economics (RACE) which might be connected to TAMARIN, it might even be the same. Despite some efforts only a very general description could be obtained from CI: "a ...RACE is specifically designed to identify the best strategies for achieving corridor milestones in an expert-based and participatory manner... Typical outputs of a RACE are spatial analysis on current and future threats – business as usual analysis – based on integrated socio-economic data and spatial analysis, analysis of the incentives and constraints driving the behavior of stakeholders and decision-makers, recommendations on the suite of conservation interventions necessary to deliver corridor milestones and assessments of likely social, cultural and economic impacts."

[77] A quick (and dirty) attempt can be made: leaving the US$ 659,243 for capacity building in DC aside, US$ 645,925 in Mexico plus US$ 412,195 in Ghana for a total of about 1300 farmers*5 (family size)=6500 beneficiaries unit costs in the CCCP amount to 163 US$/beneficiary. This is a range often observed in rural development projects (the evaluation of 34 NGO-applications for EC funds in 2003, undertaken by one of the evaluators, resulted in unit costs averaging around 200 Euros/beneficiary). This comparison, of course, is not valid, as the benefits of these projects are of a very different kind and cannot be compared. Additionally, of course, costs and number of farmers or hectares have to be spread over a number of years as they occur in reality and both time series have to be discounted to arrive at their value at present.

such as inter-generational distribution and others. If the program focusses on small farms as in the case of the CCCP, it contributes also to poverty reduction, the main goal of rural development and is attractive to development donors. A successful CCC operation, therefore, economically speaking, achieves conservation as a "by-product"or with an "easement value" of zero[78].

The time frame of the evaluation prevented such analysis and with it a definite judgement on the efficiency of the program. The only thing that can be safely said is that, due to the deficient planning procedures at the beginning, a part of the available resources were spent for costly "adaptive management" operations, although their amount remains uncertain.

5.1.5.1 Attempts at economics in Ghana

For Ghana, the Proposal 1999 had stated the need for additional data on farmers' costs to determine farm profitability and the ability to support extension services without the benefit of an organic premium.

The nearest the Ghana component came to economic reasoning was in February 2001, when the project tried to establish the competitive position of cocoa with respect to other crops in a workshop[79], based on the review of literature moderated by expert opinion, in order to better understand farm level decision making on land uses surrounding the Kakum protected natural forest. Net Present Values were calculated over a cash flow period of 20 (25?) years for the following alternatives:

- cocoa planted in newly cleared forest;
- cocoa replanted on land formerly under cocoa;
- oil palm planted on land formerly under cocoa (oil palm becoming the dominant large-scale land use to the west of Kakum).

Unfortunately, the impact of 'biodiversity-friendly' versus traditional management practices was not addressed due to sensitivities over acceptable management practices (organic cocoa) still existing at that time. Moreover, as just a single crop and not the entire farming system was focussed, no data were generated that could inform about farmers' ability and willingness to pay for services. It would also have been useful to include revenues from logging of remaining farm forest areas into such models.

The results suggest, - as was to be expected from what farmers did/do in real life -, that the financial return to cocoa in the area around Kakum was highest for planting on *newly cleared land* and that *replanting* cocoa was unprofitable (negative NPV), due to higher labour costs (weeding) and lower yields (lower soil fertility and higher pest/ disease incidence). Both alternatives, however, proved still more favourable than cocoa with *chemical inputs* (due to their high price) and than *oil palm* production. Under a share cropping agreement (abunu) the NPV for replanted cocoa was positive which is not so in the base case, although cocoa on newly cleared land again turned out to be the winner.

Given that land clearing is undesirable in the program's context and forest land for clearing is hardly available anyway, the viability of cocoa compared to oil palm and food crops depends on how cocoa yields can be raised or costs reduced through different management practices (including non-organic inputs). It is recognised in the report that the margin of error of the

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[78] The easement value represents an estimate of the opportunity costs to the landowner if their land were included in the conservation corridor, a compensation payment for forgone benefits from financially profitable use. See World Bank Research Group, CI CAB et al.: Toolbox of Applied Metrics and Analysis of Regional Incentives (TAMARIN), December 2003

[79] Biodiversity conservation and cocoa farming, Socio-Economic Workshop, 30 January - 1 February, 2001, Accra, Ghana, Draft. Apparently, a comparison of the financial costs and benefits of replanting an existing aging cocoa farm with opening of a new cocoa farm in previously uncultivated forest, and the conversion of the farm to an alternative crop (oil palm ?) was carried out. From this Socio-economic Monitoring and Impact Assessment Workshop in February 2001 only an unfinished draft could be obtained, no documents with the alledged calculations could be found due to time constraints.

results is high, and it is suggested that every effort should be made to get more accurate data during the course of the project. The team did, however, never get around to do that or have it been done.

In March 2001, a baseline study was undertaken to map out the socio-economic factors affecting the cocoa farms around the Kakum National Park[80] . As above, apart from cocoa production costs, no data at farm level were gathered that could inform about farmers' ability and willingness to pay for services.

In mid-2001 CI and Kuapa staff undertook a gender-focussed assessment of alternative economic activities of the Conservation Cocoa Agroforestry Program in the Kakum Conservation Area.[81] This qualitative interview-based study did not produce any numeric data which could have been used to compare the relative profitability of crops and traditional production methods with Conservation Cocoa.

In August 2003, a survey of the project's impacts on households was reported[82]. The introduction stresses the changes to be expected by the project's activities: cost of production, profitability, attitude towards the environment, adoption of the production practices, and change in productivity. Disappointingly, no data whatsoever are presented on cost of production and profitability of farm operations.

Thus, in Ghana, unfortunately, the main economic issue – attractiveness of Conservation Cocoa as opposed to other crops in the framework of the whole farm - remained essentially unresolved. Also the question: Can extension services be supported without the benefit of an organic premium ? remained unanswered .

5.1.5.2 Attempts at economic analysis in Mexico

In Mexico the situation is much better. The project dealt with economic analysis in two ways:

(1) an estimate, albeit unsatisfactory, of the project's economic impact on farm households was made in the Socio-Economic Surveys, and

(2) the financial sustainability and financial independence of the project was analysed in the framework of a study financed by USAID's Institute of International Education's Emerging Markets Development Advisors Program (EMDAP) program. An economic, as opposed to financial, Cost Benefit Analysis of the project as a whole, however, was not undertaken.

The results of the Socio-Economic Surveys 2002 and 2003 are unsatisfactory in this field, as the quoted "profitability" ("rentabilidad") data refer, in fact, to gross revenues, that is, production costs are not considered[83]. The surveys do not tell to which degree conservation management practices, for example labour intensive practices and shade management, influence economic outcomes and how Conservation Cocoa fares in comparison to less biologically friendly production schemes.

However, the ten-months EMDAP study by Harris Haase on the sustainability and financial independence of the CC Program in Chiapas, *went to the heart of the sustainability problem.* Triggered by the need to determine the price of services CI was to charge the cooperatives, it focussed on the fundamental question, whether or not the program's service provider model under the proposal's assumptions and in the conditions of the Chiapas project was financially feasible – it turned out that it was not. The EMDAP study is, in general, of excellent quality and its drawback is that it was contracted too late. It should have been done at the very

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[80] Center for the Development of People (CEDEP): Impacting the Cocoa Industry in Bobi, Kruwa, Abeka, Nkwanta/Antokrom and Nuanua (Kakum Conservation Area) using Participatory Rapid Appraisal, Kumasi March 2001

[81] Report on the Assessment of Alternative Economic Activities of the Conservation Cocoa Agroforestry Program in the Kakum Conservation Area, Accra, August 2001

[82] Yaw B. Osei-Owusu: Household Survey 2003. Household Level Impacts of Conservation Cocoa-Agroforestry Project, August 30, 2003

[83] see Section 4.2.1.2, M-Indicator 2.2, footnote

beginning so that the assumptions of the model could have been taken over into the plan of operations. They would have constituted a much safer basis and would have barred over-optimistic targets.

5.2 Management Approach Ghana / Quality and Status of Detailed Implementation Plan (DIP)

5.2.1 Clarity and adequacy of the objectives, indicators, baseline studies and activities

The Ghana Detailed Implementation Plan as conceived in the beginning ran aground immediately due to the errors in some main assumptions.

Objective 1: "Kuapa operates as an effective and efficient business" became obsolete as the political and legal prerequisites for Kuapa's operation as an independent exporter did not come about. With it, the entire Business Development Services concept with its financial self-sufficiency goal for service providers failed and the project's operations had to be restricted to capacity building in the agricultural field.

Objective 3: "Conservation Cocoa Agroforestry Program (CCAP) Standards defined and adopted by Kuapa" turned out to be overly ambitious due to a misinterpretation of the readiness of the Government' and important institutions in the sector to adopt organic cocoa farming in general, and could not be completed in the project's timeframe. So objective 3 was reduced to the contents of one of its sub-objectives, by which the project would try to convince "political decision makers at local and national level (to) recognize the value of Conservation Cocoa".

The inclusion of objective 4 that, in fact, refers to a *management tool*, is, as pointed out above[84], methodologically out of place. Moreover, although its formulation: "Project partners apply adaptive management approach" was taken up as a popular term in the conservation community, it was not logically thought through, as the indicators refer only to one half of the management cycle, the learning part. The other half, application of the learnt, is missing. This objective was not changed and meant simply that monitoring systems should be in place.

The level of detail of the cause-effect logic was insufficient and did not allow to derive sub-objectives and outputs and the corresponding activities to achieve them.

A series of indicators disappeared along with the objective, other disappeared or were changed when they turned out to be inappropriate[85], that is, they did not measure what they were supposed to, were not complete (not "SMART" enough), or too expensive to apply.

As for baseline studies, an addition to the CEDEP report mentioned above was carried out by the project sometime in 2001 (survey period not given) which provided useful reference information on 100 or so farms for the habitat survey including shade density and type, desirable or undesirable species according to the farmer, soil types, weediness, pests and diseases, cocoa height and stem measurements for a range of cocoa ages. Further information collected (at the same time?) as a base for the household survey covered attitudes to Kakum, biodiversity conservation, performance of the Kuapa RDU, and current agronomic practices amongst others. As the databases for the survey information were not seen, it is not clear whether all the detailed categories of information listed in the blank forms were in fact recorded. The household survey reports on just a fraction of the questions proposed. One

[84] See section 4.2 introduction and 4.2.1.3. DIP objective 4.

[85] See details in Annex 7.2 Original PVC Objectives, Indicators and Adjustments during the implementation period of the CCC Program. See also section 4.2.1

fundamental omission in subsequent reports was that for cocoa yield year by year for each farm. There was indecision about how to record yield, and it appears this was not resolved.

The activities/tasks planned for achieving the surviving and new objectives were clear and adequate in the main, though real difficulty would have been experienced in accomplishing to a single time schedule those comprising elements with different time scales on them, especially when some extended to 3 or more years minimum. This applies particularly to the validation of Conservation Cocoa best practices, where it was assumed that complicated practices such as shade manipulation, which may take years to have an effect if it is through ring-barking, would be validated in a little over a year, concurrently with relatively simple comparisons like polybag planting versus bare-root planting. The grouping together of the best practices for validation, obscured important agronomic realities and clouded the package.

5.2.2 The DIP's utility as a management tool for CI, their partners and PVC

It is evident that the Ghana DIP, under these circumstances, was initially less useful as a management tool for CI, their partners, and PVC, than it could have been. As in Mexico, objectives that became obsolete or unattainable, had to be "adapted out", others "adapted in".

However, the program team in DC had, in the time between the submission of the proposal (December 1999) and the DIP (April 2001), become aware of the need to increase technical expertise and infrastructure in the area of project management as a result of a Discussion-Oriented Organisational Self-Assessment (DOSA).

This insight led, eventually, to the decision to bring on an individual with project management expertise who developed a new "Project Design and Management System" that was introduced with success in Mexico and was the basis for the system that is currently used for the replication of the program in other coffee growing areas. Attempts were made in mid 2002 to introduce it in Ghana too, but adoption was only partial[86].

5.3 Management Approach Mexico / New Project Management System

5.3.1 Developing and adopting a different management approach

One year after the start of the program, in October 2001, the position of a Project Implementation Manager was filled and work started on the development of what was called a "New Project Management Approach" but which was, from the beginning, rather a full fledged project *design and* management system.

As a part of the activities under objective 1 ("CI has the capacity to develop conservation enterprises based on coffee and cocoa") and objective 6 ("CI develops M&E system and it is applied in Mexico and Ghana programs") the program team analysed on the one hand the difficulties of managing a coffee and cocoa intervention within CI's institutional context, and, on the other, the deficiencies of the Detailed Implementation Plan that had been submitted to and approved by USAID/PVC shortly before.[87]

Institutionally, there was – after the stall of the SMA – no approved project management approach within CI, a lack of a consistent planning terminology, no formalised design process, no implementation plans and monitoring system and no defined procedures of adjusting the project to a changing environment, diffuse roles without clear mandate of CI departments, regional offices and the advisors of the CCCP, too little authority of local coordinators at the field level and a high insecurity of funding exacerbated by the lack of annual workplans.

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[86] See Ghana Framework Output LK12may02

[87] Mind Map presentation by the program team, Washington November 2003

The New Project Management Approach was supposed to substitute these haphazard, non-standardised ad hoc approaches to planning and implementation which had been characterising CI's procedures up to this time in some areas and which had been at the root of the Coffee and Cocoa program's problems described above.

With respect to the *DIP of April 2001* the program team perceived the following deficiencies which the New Project Management Approach was supposed to correct:

- The *objectives*' hierarchy was not sufficiently detailed from bottom to top to articulate the different parts and cause-effect layers of the strategy, not differentiating between farmers and service providers in the logical chain; jumping directly from the objective level to the goal level (conservation of biological diversity in threatened tropical Ecosystems); objectives for DC overlapped with those of the project sites Mexico and Ghana, and some of their wording was unclear;
- some *indicators* were missing (output level), or not relevant , not specific to the objective it was supposed to measure, or not efficient (too expensive to follow up);
- *activities* were not updated;
- *roles and responsibilities* were not sufficiently articulated;
- the *boundaries* of the project in time, scope and budget were unclear.
- Stakeholders, especially direct *project partners*, were not involved in the project design.

So the system had to have a functional and consistent logical interface to CI's evolving system of designing and managing conservation strategies[88] on the one hand and to satisfy the need of headquarter and field staff for a tool to put these strategies into practice, on the other. It was also to tie project planning and monitoring of performance and impact into one system. The New Project Management Approach thus filled the gap that had been left by the previously stranded "Strategic Management Approch", however, being strictly geared to coffee and cocoa interventions, it was, on the face of it, less ambitious than its predecessor.

Looking at these two problem sets and at the tools available outside CI, the conclusion is that the "New Project Management Approach" was not so new with respect to the tools it implemented, - after all, there had been the SMA and the planning systems of other development and also other conservation organisations before - but new to CI. The DIP hat not been so much an "old" system as opposed to a new one, but simply the result of an inadequate implementation of an otherwise well established and proven design process available outside CI.

Leaning strongly on outside sources the program caught up remarkably quickly. Within nine months a basic new framework was developed, presented in a workshop to the Mexican field staff, introduced to a practice test there – though only partially in Ghana - until the end of the grant period. By the end of year three, a complete set of project management tools had been designed that served the Mexican project well and set a standard for the Ghana component.

What became to be the Project Design and Management System consists of the *Conceptual Model*, the *Project Management Framework* and the *Project Design, Management and Learning Cycle* (PDMLC), not only stressing the design component, but also the element of "adaptive management", the learning component. It combines detailed guidance of the process of designing new projects with practical management and performance and impact measurement tools. The system stands out for its comprehensiveness on the one hand and its practicability on the other. It constitutes a good basis for the cocoa and coffee program replication strategy, as long as it is kept open for further improvement (see 5.3.3).

[88] Conservation International: "Zero Biodiversity Loss", Washington February 2002 and subsequent drafts

The PDMLC in its newest configuration consists of a linear set of events which only at the Start-up workshop at its end turns into a cycle of annual review and planning workshops. The main steps (see Figure 2) are

1) Conservation Strategy Articulation
2) Context assessment;
3) Stakeholder Analysis;
4) The Project Design Workshop;
5) Partner consultation;
6) Development of Best Practices
7) Feasibility appraisal
8) Baseline Study
9) Fundraising
10) Hiring of staff, and
11) the Startup Workshop.

Certain of the steps are described in great detail in guidelines. The system starts with a series of design steps and collaborative planning events with, as the 2003 report to PVC claims, "comprehensive stakeholder participation" – which had indeed been absent from the DIP planning process. It culminates in the Start-up Workshop where all project partners finally agree upon the project design, the objectives, indicators and targets to monitor.

The Project Management Framework as part of the Project Management System uses 6 management tools:

1) The hierarchy of objectives (logical framework matrix);
2) the risk planning matrix;
3) the description of indicators ;
4) the table of indicators and targets;
5) the implementation plan, and
6) the resource allocation table.

The system corresponds, in principle, to the LFAs used in other organisations. Historically, the first 4 tools, in the LFAs of the 1980s onwards (Objective Oriented Project Planning), were comprised in just one sheet, the logical framework matrix, with a second sheet containing the implementation plan detailing responsibilities, time frames and resources.

Some of these 6 management tools offer definite advantages over their predecessors due to the high level of detail and the rigor of the logic:

- the risk planning matrix does not simply state the risk but forces the planner to think about ways how to deal with them;
- the description of the indicators table demands an explicit formulation of the evaluation question, that is, what the indicator is supposed to measure and its definition;
- the table of indicators quotes an explicit, dated baseline value, and sets not only the target at the end of the project but also intermediate targets which facilitate monitoring;

The Project Design, Management and Learning Cycle

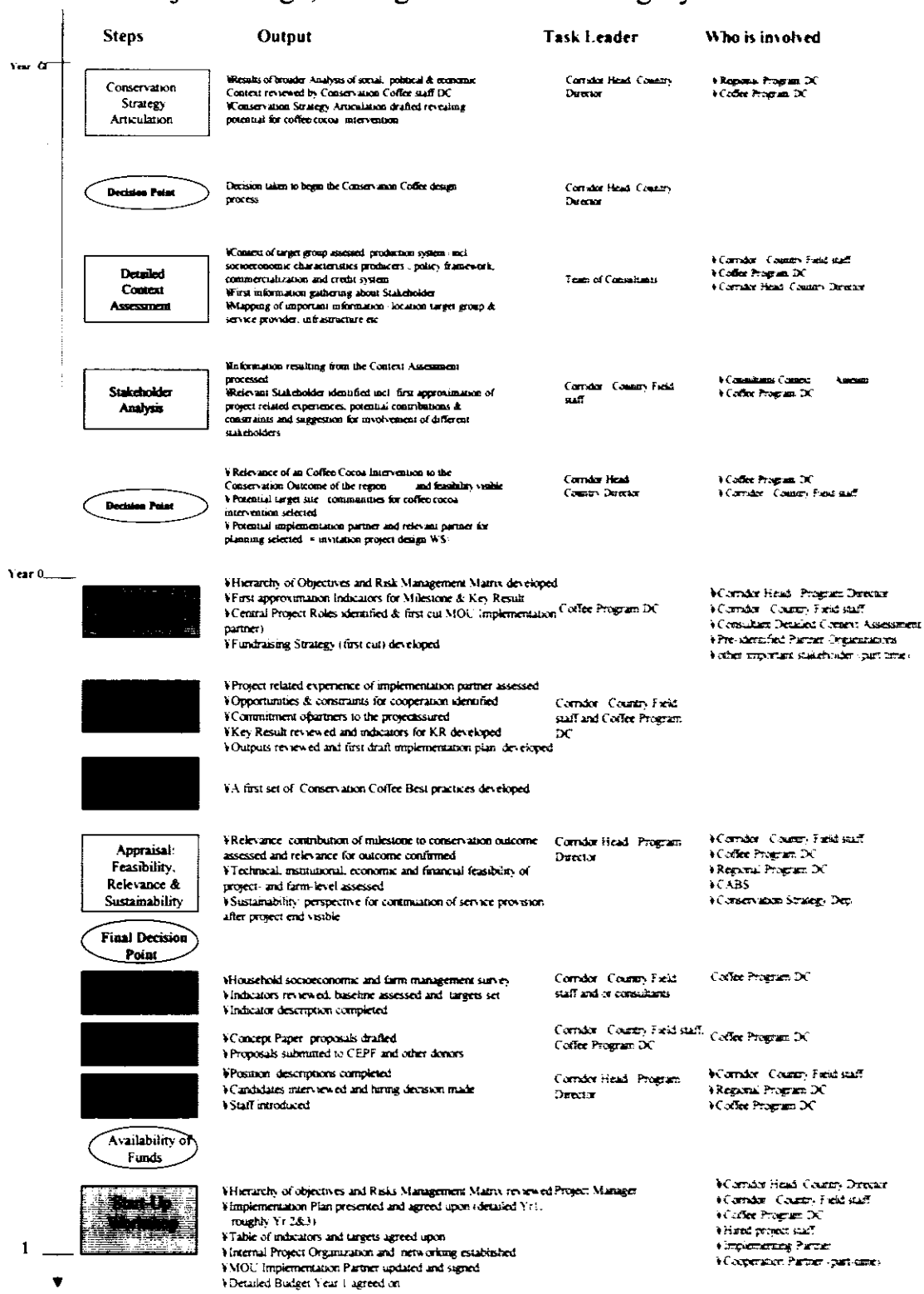

Figure 2: The Project Design, Management and Learning Cycle
(The time frame for the entire process has lately been reduced from two years as above to about one year)

- Costing ties naturally into the management system by objectives/subobjectives (Key Result/result in CI-language) and permits an allocation of funds to specific areas of activities, quite important in the NGO context where donor funds are often restricted to specific purposes.

Mexican field staff at the time of evaluation were found to be familiar with the system and most staff seemed to use it skillfully. The reporting system, however, was felt to be cumbersome. It had died down in the last phase of the project. In the meantime, a new version has been developed to overcome the limitations.

The PDMLC has been successfully put to use in January/February 2004 in the new coffee intervention in Peru, has been partially applied in Costa Rica and Colombia and will be applied in the other envisaged sites where the multi-stakeholder design process is about to start over the next six months (Panama and Colombia, Western Region in Ghana).

After the completion of the Project Design, Management and Learning Cycle for coffee and cocoa interventions the new capacity will be used for the replication of the program in others of the mentioned sites. The created tool is – with some adjustments (see section 5.3.3) – by no means restricted to coffee and cocoa interventions but can support any kind of project management activity and should be made use of. In the coming decentralised institutional environment of CI (CBCs) the maintenance of standards and procedures will be an ever more demanding task. It would make much sense to transfer this planning and design capacity from the technically focussed CED to the Regional and Corridor Strategies Department to bolster Conservation Planning support in the immediate neighbourhood of Outcomes Monitoring and Project and Conservation Economics in order to build a project management culture within CI that other conservation and development institutions have had for a long time and which CI will need in the future.

5.3.3 Some critical questions concerning the Project Design, Management and Learning Cycle

5.3.3.1 Reality shaped after the model ?

One of the things that comes to mind when looking at the PDMLC is the absence of a formally defined "problem analysis" which is the entry step of the Logical Framework Approach in most of its current configurations. The PDMLC starts with the conservation strategy articulation by CI Country Program which launches a Conservation Coffee intervention as a conservation strategy for the target region. The first major activity is a context analysis. However, what is the guide for the consultants or researchers ? What do they look for, what do they include, what do they focus on?

Undoubtedly, the analysists will look at factors that are linked to the "core problem" biodiversity loss, the solution of which is at the center of CI's mission. However, in order not to lose themselves in possibly unrelated detail or miss out important items, they should, in order to guide their analysis, develop a problem tree of a rather high degree of detail. This problem set would later be converted to an objectives set from which the strategy is chosen.

This is the *inductive* way of building a theory (strategy).

The PDMLC – such as it is understood by the evaluators through presentations by and conversations with, the project team and the analysed documentation, proceeds the other way around in a *deductive* way. The strategy is determined beforehand, accepted as valid and condensed into the "Conceptual Model Conservation Coffee Intervention"[89]. It postulates 5

[89] See Annex 7.6

objectives, or "Key Results" which correspond to 5 main problems which a coffee cocoa intervention has to solve:

1) absence of conservation friendly cultivation standards,
2) farmers employing exploitative cultivation practices
3) extension services with the wrong packages,
4) too little or too expensive credit, and
5) limited market outlets at low prices.

Is this model correct and exhaustive ?

Undoubtedly, the model has been inductively derived from observed factors that affect biodiversity in a more or less direct way.

Also, the model builders will argue, a model is, epistemologically speaking, a hypothesis to be tested. As long as it stands up to this challenge, it is valid.

However, there is the risk that the model does not capture reality fully - "in the end, the only complete model of a cat is a cat"[90]. A social environment is different from a controlled lab situation and based on stochastic processes and there is a real danger that the designers cover reality over with their model. In this case, scarce resources are wasted in an expensive social experiment. This was precisely what happened with the DIP in 2000 that was designed on the basis of a mental model or set of assumptions a number of which eventually proved wrong.

The question here is about the weight, induction and deduction should have in project design. The recommendation is to strengthen the inductive element of the design process beginning afresh every time. Starting from the threat to biodiversity as the pre-decided core problem, a problem analysis for each specific site should be built up using the coffee model as a reference system only with an open number of "key problems", which would then lead to a site specific strategy.[91] The result might turn out to be 100% the 5-key-result strategy of the Conservation Coffee/Cocoa program. It might also be that the model has to be improved upon.

5.3.3.2 How does the logic of the Conceptual Model tie in with the logic applied on Outcome level ?

The Conceptual Model Conservation Coffee (CMCC) Intervention in its "lower" cause-effect layers (input-ouput) follows the Logical Framework. The Milestone-Outcome layer is based on a Pressure-State-Response (PSR) framework, adopted by the Convention on Biological Diversity and employed by CI in the context of monitoring at the biodiversity outcome level.[92] Both blocks of logic interface through the "milestone" behavioral change.

The existence of the two models within in CI stems from the different methodological traditions in environmental scientific research and environmental policy (CI's mission) on the one hand and in development project planning and implementation on the other. Both frameworks use, on the face of it, different causal models. The Pressure-State-Response (PSR) framework is a *circular* causal model: Human social, political and economic activitiy ("pressure") causes the quality and quantity, or "state", of the environment, to change. On the basis of a given set of norms and values, Society reacts ("responds") to these changes through

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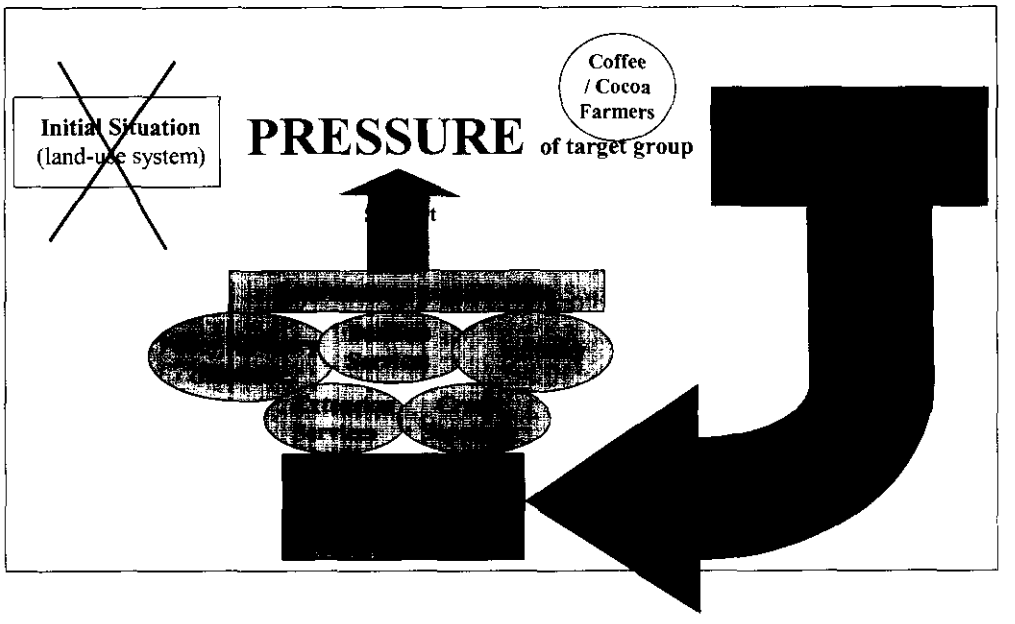
[90] R. Anthony Hodge, Peter Hardi, David V.J. Bell: Seeing Change through the Lens of Sustainability. Background Paper for the Workshop "Beyond Delusion: Science and Policy Dialogue on Designing Effective Indicators of Sustainable Development" The International Institute For Sustainable Development Costa Rica, 6-9 May 1999, p. 11

[91] See in this context Economic and Social Commission for Asia and the Pacific (ESCAP): Guidelines on the Strategic Planning and Management of the Energy Sector. ESCAP publication ENRD 1999 1, United Nations, New York, 1999, page 10: Strategic Planning and Management "is not a blueprint: as national objectives, circumstances, levels of development, degrees of institutionalization, financial possibilities and other conditions vary from country to country, so does the SPM Strategic Environmental Planning approach need to vary.".

[92] CI Strategy Handbook, Draft October 17, page10

environmental, economic and policy measures, which are supposed to reduce, prevent or mitigate undesirable change or, respectively, produce positive environmental results (see Figure 3). The main purpose of the system is to structure sets of indicators for environmental reporting, linking physical indicators of change with socio-economic indicators of pressure and political/institutional indicators of response This logic appeals through its intuitive simplicity and clarity.

Figure 3: Pressure-State-Response in the context of the Conceptual Model



In turn, the CMCC's logical framework is a based on a *two-stage linear unidirectional* causal relationships (from bottom = cause to top = effect). It abstracts from relationships between the "causes" and between the "effects" at the same level and also neglects in each of its two stages recursive "effect-cause" relationships. The first stage ("problem analysis") corresponds to the "pressures" (negative causes) and "state" (negative effects) definitions of the PSR framework. The clearly separated second stage ("objectives analysis") in LFA matches the "response" part of PSR and deals with positive causes (responses) that are projected to lead to positive effects (improved state). The main purpose of LFA is to define and prioritise objectives and activities for project interventions and provide a monitoring tool.

However, combining both stages of LFA results in an equally "circular" causal model and indicators are the core elements of both systems. So, eventually, PSR and LFA come to the same results. The question is which of the systems is more suitable for the practical purposes of project implementation as required in a Conservation Coffee and Cocoa intervention.

The PSR model serves mainly as a framework for indicator development for reporting on and monitoring of, environmental issues rather than intervention. Even for reporting, the simple model proved too limited and has been, from its conception in 1970, developing into the

Driving forces-Pressure-State-Impact-Response (DPSIR) model that added cause and effect layers to depict reality more closely.[93]

For project planning and implementation, the CCCP's *Project Management Framework* and the *Project Design, Management and Learning Cycle* (PDMLC) as outlined above, is much more elaborate and applicable, and it meets the monitoring systems of PSR with the possibility to include a detailed set of indicators.

Given the advantages of the Project Management Framework and the PDMLC for project implementation on the one hand and the strong position of the PSR methodology in conservation on the other, both systems are likely to cohabit for a long time in the future. The recommendation is to make their differences explicit and to apply both tools in those areas where they perform best.

5.3.3.3 Where and when do economics come in ?

The UN Conference on Environment and Development in 1992 rightly deplored the inadequate feedback capacity in decision-making processes because of their emphasis on purely economic, instead of environmental concerns[94]. Accepting this, however, should not turn the tables totally. The reasons for the need for more attention to economic questions in the CCCP have been laid out above (section 5.1.5), little of it is found in the PDMLC.

Any changes or innovations introduced by a future Conservation Coffee project need to be perceived and interpreted by each individual producer as an opportunity to improve the well being of his household system. Therefore, the first part of the Context Assessment centers attention on gaining a thorough understanding of the coffee producer's household and farming system. The context assessment guidelines, however, just mention gross farm income, household income for the region and its main source without stipulating the details of the required farming systems analysis, because, according to the footnote, a detailed socio-economic analysis is part of the baseline study which will only be undertaken once the final target group has been identified.

This appears to be much too late. The third part of the context assessment is already supposed to offer justifications for feasibility and relevance of the project. The context assessment exercise amounts at least to a pre-feasibility study where key conclusions for the design of a future Conservation Coffee project are drawn. As the Mexico case – and also Ghana – has shown, economic incentives to farmers to adopt conservation best practices are essential. How can these be determined if nothing solid is known about their baseline conditions ?

The second crucial point in the framework of the Business Development Services approach is the self-sufficiency of service providers. How can farmer's ability and willingness to pay for extension services be determined ? Data from the farming systems analysis and a market analysis are indispensable to create a basis for the sustainability and financial independence study which is already required at this early stage to formulate recommendations for the design of a future project such as strategies, investment and time of implementation.

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[93] The most widely accepted indicator framework is the "Driving forces-Pressure-State-Impact-Response model" which defines five indicator categories:

- D Driving forces are underlying factors influencing a variety of relevant variables (e.g. number of cars per inhabitant)
- P Pressure indicators describe the variables which directly cause environmental problems (e.g. CO2 emissions)
- S State indicators show the current condition of the environment (e.g. the global mean temperature)
- I Impact indicators describe the ultimate effects of changes of state (e.g. number of people starving due to climate-change induced crop losses)
- R Response indicators demonstrate the efforts of society (i.e. politicians, decision-makers) to solve the problems (e.g. the percentage of cars with catalytic converters)

See European Statistical Laboratory, Sustainable Development and Policy Performance Indices, Jochen Jesinghaus: Indicators for Decision Making, 1999, p.4 (http://esl.jrc.it/envind/idm/idm_e_.htm)

[94] R. Anthony Hodge, Peter Hardi, David V.J. Bell: op.cit., p. 2

Some questions such as How viable is their business? Are the organisations likely to continue their services? do go into the right direction, but no explicit mention is made of this essential analysis.

The Baseline study which, according to Figure 2, renders the data on farm management, is undertaken much too late after time point Year –1 (Conservation Strategy Articulation), when the Project Design Workshop has already taken place and, most importantly, when financial and economic feasibility, relevance and sustainability on project and farm level have supposedly been appraised. But there is no data base yet at this time.

This sequence should be rearranged, most appropriately by converting the "internal" stakeholder analysis half a year earlier into a participatory event to allow the necessary surveys to take place in the same period, that is, one year before the presently envisaged point in time. The selection of the final target group is not necessary yet, provided that the data are representative for the universe from which this group will be selected. Otherwise, several alternative could be worked out.

5.3.3.4 "Comprehensive stakeholder participation" or still top-down approach ?

Despite the claim of comprehensive stakeholder participation in the 2003 report to PVC and what had supposedly been learned from previous NTFP projects[95], the main stakeholders, especially the farmers, are implicated into the planning process of the PDMLC at a surprisingly late stage. For one of the consultants for the context assessment the guidelines require experience in conducting consultative approaches with rural communities, so perhaps some kind of participatory appraisal is foreseen, but the guidelines do not mention anything specific.

The stakeholder analysis is described as an *internal* planning tool that is undertaken by CI staff *without* the participation of representatives of the respective stakeholder groups. It is based on the findings derived from the context assessment and the Country program's existing knowledge and experience with the stakeholders. Only later in the process during the Design Workshop of, say 5 days do stakeholders have a chance to add their views and perceptions to an already "official version" (sic !) of the Stakeholder Analysis (with critical statements having been removed !). For Project Cycle Management of a rural development project, this is unusual.

And it is not effective either. The workshop is designed, among other goals, to provide CI with greater insights about the stakeholders, their experience in the related fields, their style of working and cooperation and what potential role they could assume in the project. Its purpose is also to gain political consensus within the group of stakeholders and assure their buy-in to the strategy of the project. So the question arises: Why so late ? Would it not be better for CI's insights as well as stakeholders' ownership of the project to draw them in earlier in the process ? Would Kuapa and/or the Mexican cooperatives have been such a disappointment in certain areas if their value set had been explored more thoroughly, that is, earlier and more often?

5.4 Other Management Issues

5.4.1 Financial Management

Overall, requests and transfer of funds and accounts were the only parts of the Mexico component of the CCCP that were integrated into the regional structure (Mesoamerica).

The table's last column gives an impression of the weight of the different budget lines. AID-financed salaries amount to about a quarter of total cost, with a peak in 2002 when the DC

[95] see section 3.4

team was at its full strength. No information was gathered about the composition of PVO cost.

CI successfully met their match requirement as demonstrated in Standard Form 269A submitted in September 2003. Of total outlays of 3,377,213.72, the recipient's share was 1,737,708.78 (= 51.5%), the federal share 1,639,504.94 (= 48.5%). CI was able to reach and slightly surpass the $1,717,054 match requirement. Throughout the three years, fundraising sources were spread out amongst the following donor sectors: foundations, multilateral and bi-lateral Development Agencies, corporations, CI unrestricted funding and in-kind contributions.

Future coffee and cocoa interventions cost estimations can profit from the very useful cost allocation table by objective from the new Project Management System which facilitates matching.

5.4.2 Monitoring and Evaluation System

CI's monitoring and evaluation system was more complicated than is usual, say for a food aid project, in part because activities were carried out at many levels (farmer, crop, agroforestry, biodiversity, reserve, CBO, coffee marketing) and also as a result of evolution of the management approach during the program. In addition, the act of setting up "Development of project level M&E systems" as objectives in the Implementation Plans (which the evaluators consider to be unnecessary) may have led, especially in Ghana, to the blurring of responsibilities for reporting, and perhaps too for data custodianship, both within CI and between CI and its partners. This notwithstanding, it has to be stressed that the monitoring systems established were in the main appropriate and well operated, and supplied accurate, reliable and timely performance data.

The overall system aimed to comprise four main elements:

- monitoring and evaluation of DIP objectives and indicators for reporting to PVC
- detailed performance level monitoring at farm and CBO level
- special impact studies in Mexico (annual socio-economic surveys) and Ghana (habitat, household and fauna surveys)
- biological impact monitoring from CI HQ.

Monitoring and evaluation of DIP/NIP objectives

Reports to PVC were based on the DIP as modified in year 2 of the project. Staff in Ghana worked to that DIP, while those in Mexico worked with the New Management Approach with its updated implementation plan, with its Key Results etc., some of which differed from the objectives in the modifed DIP. The Coffee Program Coordinator "translated" the results from the New to the Modified DIP so that, once they had changed to the New IP, staff in Mexico (unlike the evaluators) were not exposed to confusingly similar objectives key results that at first sight seemed to differ mainly in their numbering.

In September 2003 a new more detailed format of performance monitoring with a considerable analytical rigor has been developed. Indicators are not only defined qualitywise according to the usual rules (QQTTP or SMART) but it is systematically worked out what they are supposed to measure ("evaluation question"), by whom and for what purpose they are used, their frequency of collection, the source of information, the method of processing and interpretation, and of storage. For the actual recording of values, a separate table is used which contains the dated baseline value and the planned and actual values by year with the respective indication of percentage change.

Table 1: SUMMARY (GHANA, MEXICO AND WASHINGTON)

Final Financial Report – Planned vs. Actual Expenditures September 1, 2000 through December, 2003					
	Budget (Life of Project)	Actual Expenditures (Inception Through December, 2003)	Balance Remaining	Percentage Spent	Percentage of actual total
I. PROGRAM MANAGEMENT – AID					
a) Salaries/ Personnel	$640,328	$665,925	($25,597)	104%	19.3%
DC Fiscal Year 2001		**$135,648**			
DC Fiscal Year 2002		**$242,061**			
DC Fiscal Year 2003		**$ 27,109**			
b) Fringe Benefits	$152,359	$194,699	($42,340)	128%	5.6%
c) Travel, Transportation, & Per Diem	$128,340	$125,692	$2,648	98%	3.6%
d) Subcontracts	$70,271	$55,921	$14,350	80%	1.6%
e) Other Direct Costs	$120,631	$115,689	$4,942	96%	3.3%
SUBTOTAL	$1,111,929	$1,157,926	($45,997)	104%	33.5%
II. PROCUREMENT – AID					
a) Consultations	$126,500	$155,082	($28,582)	123%	4.5%
b) Supplies	$146,293	$83,371	$62,922	57%	2.4%
SUBTOTAL	$272,793	$238,453	$34,340	87%	6.9%
III. TOTAL DIRECT COSTS – AID	$1,384,722	$1,396,379	($11,657)	101%	40.4%
III. TOTAL DIRECT COSTS – PVO	$1,384,722	$1,402,509	($17,787)	101%	40.6%
IV. TOTAL INDIRECT COSTS – AID	$332,333	$320,676	$11,657	96%	9.3%
V. TOTAL INDIRECT COSTS – PVO	$332,333	$335,199	($2,866)	101%	9.7%
TOTAL COSTS	$3,434,110	$3,454,763	($20,653)	101%	

Budget Notes: 1. AID costs are broken down by category, whereas PVO counterpart is summed in the bottom, yellow portion of this report. 2. The total PVO counterpart funding was successfully met and slightly higher than the original PVO budget, resulting in a slightly higher total spending.

Farm Level

In *Mexico*, every project farmer was visited for an initial diagnosis during which large quantities of information were collected, and then he joined in at least two verification visits per year thereafter. These data were collected, stored in the computer, backed-up and analysed well, by project staff in Jaltenango. GIS components were added by the M&E coordinator based in Tuxtla, who had supervised the training of the Jaltenango in using the database. The original idea was that the cooperatives would take over this monitoring, but this had not happened by the end of 2003. Random checks during the evaluation on farm characteristics (Vazquez family farms, Montecristo) versus recording sheet data versus computer records showed excellent concordance, and spot trawls of the spreadsheets revealed very few anomalies.

One reservation is in regard to the switch from the designed Microsoft Access database to Microsoft Excel in the second and third years, which resulted in a loss of analytical capability. Apparently, the switch happened because of changes and additions to the data collected as the methodology evolved, which could not be incorporated in a timely way by project staff. This could have been rectified periodically by the original designer, but this option was not sought by HQ apparently, despite Jaltenango staff being satisfied with Access. Some of the information was transferred during the updates by the designer in the third year socio-economic study.

In *Ghana*, there were no organic certification and marketing possibilities, and as a result there were no farmers signed up to have their farms diagnosed and their implementation of best practices verified in their own fields. After the initial baseline surveys, the only data collected at the farm level, apart from the AESA records on the demonstration replanting trials, were from the habitat and household surveys described below. Given the sparcity of yield data from shaded traditional cocoa farms, it would have been valuable to follow up each of those attending the FFS for farm basics (area of productive and abandoned cocoa, yield, shade type and density, frequency of harvests).

CBO Level

The project hoped to establish CBO level M&E systems in both countries, the need for this having been confirmed by CI's initial surveys of each cooperative's technical capacity and services, but for various reasons little progress was made and the indicator was dropped from the Washington plan. The CBOs did increase their capacity nevertheless, by seeing the utility of the detailed data in Mexico in organic certification, and by reporting on their own FFS expansion in the case of Kuapa.

Special Surveys

In *Mexico*, the annual socio-economic surveys 2001-2003 were apparently well executed. The evaluators had no opportunity to observe interviewers and interviewees in the field and have, therefore, no base to estimate the amount of statistical "noise" in the answers. The surveys gave very useful and timely reporting on the farmer's views of the Conservation Coffee project - information which CI needs for future planning in Mexico and elsewhere, and many appropriate recommendations are included too, both for improving the project and any future surveys. The database for the surveys is part of the relational database set up for farmer diagnosis and verification.

In *Ghana*, there were several surveys including the early CEDEP survey (report, March 2001), apparently a CI baseline (sometime in 2001/2?) for the Habitat Survey and the Household Survey (both reported in August 2003), and the Fauna Survey carried out by IRNR-KNUST (report, 2003). The CEDEP report gives useful background information derived from a PRA, some of which could be used for baseline determination. In the case of

the Habitat Survey, evaluation was difficult because the results (purely electronic records on just a single computer) were inaccessible, and only the final report was available. That includes some useful information especially with regard to preferred shade tree species, but there are other conclusions which must be premature given the time scale of the survey. Some of the electronic (are these backed up?) Household Survey files were seen, representing a less detailed survey in 2002 when the methodology was developing, and a more detailed final year survey. Insufficient time had elapsed for some of the best practices to have been validated, let alone adopted by the farmers, and both surveys appear to deal largely with *notional adoption*. The Fauna Survey is seen as a beginning in this complex area, which is considered further in the following section.

Biological Monitoring

At the beginning, it was hoped that farmers and extension staff from the cooperatives would be involved in monitoring changes in biodiversity, and this information would be incorporated into the overall database. This did not happen to any extent, except with shade diversification in Mexico where data were collected on nurtured species for each project farmer. In Ghana, the Fauna Survey was commissioned as another, exploratory approach, but effectively the task of this high level biological monitoring for both countries was passed mid-project to CI staff in the Center for Applied Biodiversity Science in Washington DC, where the methodology is still under development.

5.4.3 Information Systems

5.4.3.1 Hardware and Software

The program did not directly increase in-country partners' access to information technologies either in Mexico or Ghana because no hard or software or IT training were supplied to partners, as far as the evaluators are aware.

An indirect effect was possible for cooperatives in Mexico as a result of the demonstration of the utility of the farm diagnosis and verification database, and likewise for partners such as REBITRI and ECOSUR who were exposed to the combination of that database with a GIS to provide useful project-based maps. In Ghana, there seems to have been less exposure of in-country partners to the possibilities of GIS, presumably in part because CI-Ghana had not taken ownership of GIS information, beyond that from GPSs, in contrast to CI-Chiapas, Tuxtla.

CI-Jaltenango seems to have shared program information and learning appropriately in its own office, in Chiapas, and above. In Accra, the system seems to have been more compartmentalised within CI, such that certain project files and documents remained within sections, sometimes with insufficient back up or accessibility (e.g. the Habitat Survey).

The program staff's web-based collaborative workplace Eroom to update documents and exchange files to which also the evaluators had access during their assignment is fully used only in Washington. The Mexico project had some difficulties of access due to unreliable and slow telephone connections, and infrastructure in Ghana makes the system that needs a certain minimum transfer speed to be practicable, almost unusable.

Another concern was that individual professional staff did not have independent access to the Internet, and therefore were restricted in their interaction with CI HQ and Mexico and the rest of the world. In both Mexico and Ghana, poor infrastructure (power cuts, bad transmissions, low transmission speeds) limits information transfer, and HQ needs to bear this in mind, given the relentless (and some would say often needless) upgrades in complexity forced by the US computer industry.

5.4.3.2 Reporting

Much of the day-to-day reporting, both in-country and with HQ, was verbal with frequent meetings in-country to relay and discuss information, progress and plans. Written narrative reports were prepared against implementation plans in some areas and for certain periods, but the coverage was incomplete, sometimes because of pressure of work, or because the manager felt the reports were not contributing much relative to the time needed to do them, and discontinued them. Managers reported in writing to the program directors in HQ, who in turn prepared the PVC Annual Reports, which followed PVC's guidelines in the main. The reports to PVC were not seen by all staff in Ghana, and there were feelings expressed that there could be more sharing of reports in general, including those from Kuapa on their FFS expansion around Kakum. Another comment from Accra was that sometimes feedback was lacking on the reports that were sent to Washington. Again, pressure of work at both ends came in to play here.

One frustration for the evaluators, and others interested in understanding the evolution of the project, is that significant elements of the Implementation Plan remain unreported in this year or that and, critically, in the Final Report. An example of this from Ghana would be under Output 2.5 "Conservation Best Practices refinement and impacts investigated by Research Institutes", Activity "Coordinate Field Research with FFS Validation Trials". The Implementation Plans could be used as an annex to report successes/problems by the addition of a comments column, and thereby give a rapid overview of detailed accomplishments.

5.4.4 Staffing and Supervision

5.4.4.1 Staffing in DC

According to the original plans of the 1999 Proposal, the successful implementation of the program required that CI build its capacity in the following areas: administration; business and financial planning; credit and financing; marketing and trade, product quality control; monitoring and evaluation; organic agricultural methodologies; organic certification; and community based natural resource management. This capacity was supposed to be built through the creation of an Agroforestry Program *field support team* that would provide technical expertise and capacity to CI's field program staff and partner CBOs. Planned were:

1) *A Business and Trade Support Coordinator* with experience in marketing, communications, and commodity trading, for supporting the local partners in trade and export logistic, market analysis, quality control and contract negotiations;
2) *a M&E and Scientific Research Manager* with experience in biological monitoring, who will work with CI's country programs, departments, and partner organisations to design and implement the program's biological monitoring and evaluation system and manage related long-term scientific research activities;
3) *a Certification, Standards and Agricultural Assistance Coordinator* with expertise in alternative agricultural extension program, organic certification and agricultural economics, who will support CBOs with certification, field staff on the development of agricultural assistance activities and industry on standards development; and
4) *an Institutional Development and Finance Coordinator* with a background in small-producer economics and cooperative development, responsible for providing organisational development, institutional strengthening and trade support services.

Each coordinator would be matched with a counterpart in Mexico and Ghana to whom they would be responsible for providing any requested technical support, and report to the Director of the Cocoa Program and the Director of the Coffee Program, who, in turn, reported to the Head of the Conservation Enterprise Department.

In the period between the submission of the proposal and the submission of the DIP a capacity assessment with the DOSA methodology was carried out that came to somewhat different results from those in the proposal. The required posts were now:

1) Manager for Monitoring and Evaluation (filled January 2001),
2) Manager Business and Trade (May 2001),
3) Coordinator for Agricultural Assistance (January 2001),
4) Manager for Credit and Finance, (vacant) and
5) Manager for Project Implementation (vacant).

To the credit of the team that underwent the DOSA exercise they determined a special need with respect to Project Implementation Manager for the planned development of a project design and implementation methodology .

The proposal was accepted by USAID/PVC, but for the next six months nobody could be hired to fill the two vacant post because CI Management had slapped a ban on hiring. By the time this ban was lifted and a suitable person found, October 2001 had arrived.

In the meantime the institutional environment had changed. CI had started to undertake a process of restructuring that involved building regional capacity to gradually replace technical support functions located in the headquarters and also begun to invest in DC beyond the program in key growth areas. As a result, the Finance and Organisational Development post was assumed by a new enterprise finance position in CED and the Manager for Monitoring and Evaluation moved to a new position in the Field Support Divison. The Manager for Business and Trade left and his work was absorbed by the enterprise development advisor. The first Cocoa Program director (October 2001) moved to a new position in CELB and the second cocoa director left as well (July 2002). Because by then it was two thirds of the way through the project the post of cocoa director was taken over by the Head of the Conservation Enterprise Department and has been administered by him since.

Thus, the Washington support team was reduced to about half its planned size. The way in which they coped with the difficulties of the Mexico branch with CI's regional framework, with the need for fundraising and managing the Mexico project directly from Washington instead of the CI-Chiapas office, and with the heavy workload of the head of department cum cocoa director, was commendable, and more so taking into account the initial bouncing of plans in both projects and, in spite of this, the good results of the program at its end.

In spite of the shortage of staff, capacity in DC was built in agriculture, marketing, fundraising, in project design and management, and in budgeting. Due to the situation of centralised external marketing in Ghana, little effort was made after initial moves to insist on establishing similarly strong ties to the chocolate industry as they exist with the coffee roasters. It is a different, and apparently a more difficult market, but it is definitely worth another trial. Solutions will have to be found how to transfer benefits for cocoa growers additional to the Fairtrade premiums through the Cocoa Board's marketing firewall to the farmers. At the moment there is no capacity for this activity in the team.

5.4.4.2 Staffing in the field

Similar processes developed in the field:

In *Mexico* the project lost, after an initial change of the coordinator, the successor as well. A new person was hired who developed into a very capable head of the local team, - he attended to the evaluators - , who will, however, leave in the first half of 2004. The initial restructuring of the local management required additional support from the Washington-based team, which had to divert time and resources to tool development, fund-raising and the designing of new

projects. Management style in Jaltenango is open, tasks are delegated with full responsibility to staff.

The office is structured in one department for technical assistance services, that is, training of trainers in Best Practices (Coordinación de Servicios de Capacitación y Acreditación de MPCC), one for extension services and field evaluation of Best Practices (Coordinación de Servicios de Promoción y Evaluación de MPCC), one for marketing and finance (Coordinación Comercial y Financiera) and administration. CI in the project location was and is, as in Washington, very dedicated, capable, but too small in number and correspondingly overworked.

The partner cooperatives of the project were differently, but sufficiently, staffed, all of them having project trained farmer field school extensionists of best practices in their areas.

The staff in *Ghana* at full operation numbered 5 persons: the project manager (agroforestry officer), one monitoring and evaluation officer, one survey officer and two field assistants, all under the Deputy Director Projects and Country Director. At the end of the grant period staff had been reduced to essentially two persons, the agroforestry officer and the M&E officer.

Thus, as in Mexico, staff numbers in Ghana were short and the people dedicated, but overworked. The impression was that neither the CI Country Director nor his deputy involved themselves in the cocoa project and, in this respect, the situation in Ghana was similar to Mexico. It was, however, different in that in Jaltenango the project manager and department heads had full responsibility and decision power in their respective domains, whereas in Accra it seems that productivity and dedication of staff could be higher if more decision power were delegated. The attitude of staff seemed to be not a proactive, but a reserved one, waiting to be asked rather than taking initiatives themselves, a situation often observed in organisations with more rigidly structured hierarchies.

As for the partner organisation, Kuapa cooperated with the project through its Research and Development Unit in Kumasi. There were 2 headquarter staff and, at the end, 12 additional Research and Development officers trained through the project.

5.4.5 PVC Program Management

USAID/PVCs oversight of the program was based on CI's regular reporting and direct contacts in Washington. PVC staff went to each project site once during the grant period of three years.

The first visit was to the *Ghana* site on 25-27 July 2002[96]. This monitoring visit was scheduled near the end of the second year of the project's three-year grant period. Initial planning anticipated a 4-5 day visit that would include cocoa field sites as well as meetings with CI staff and staff from Kuapa Kokoo and/or CRIG. The actual visit was 3 days; one planned day was cut from the visit due to illness of the visitor, and the CI Ghana staff notified just prior to departure of the PVC monitor for Ghana that she would not be meeting with Kuapa staff due to time conflicts with the Kuapa annual meeting being held in Kumasi.

Thus the PVC monitor was only able to observe two stakeholder groups and talk to CI staff. As the report states, she was not given the opportunity to visit Kuapa offices or observe their extension agents at work in the field, and adequately assess institutional partner enthusiasm (CRIG and Kaupa staff) for participation in project activities. She was also not able to directly assess the monitoring and evaluation systems of the project (the same happened to the final evaluators !). The PVC monitor had the impression – as had the final evaluators - that farmers will be in need of a continued supply of technical assistance and up-to-date cocoa production

[96] see Lori Pommerenke, AAAS Fellow: PVC Project Monitoring Report for Conservation International, 25-27 July 2002

information long after the end of project. The plans for providing such assistance were not made clear to her, a familiar situation for the evaluators as well.

Given that certain elements of the cocoa project were at least six months to one year behind schedule, the monitor realistically recommended that CI should consider requesting a revision of original project objectives, or alternatively, request an extension to try to meet the original objectives. This was obviously not doneprimarily because CI, according to their explication, did not feel it would solve the problem but also because such a move would prevent CI from applying again to PVC in 2003, which at that stage it intended to do. It is not clear to the evaluators how much of a discussion between PVC and CI about these observations took place after the visit.

The second visit was to *Mexico* in the period of 22 Februay-12 March 2003[97], of which 3 days were dedicated to the Chiapas project. According to the report, the trip, although short too, rendered a clearer understanding of the challenges confronting grantees and the local participating non-governmental organisations. It served to facilitate needed dialogue and exchange of ideas between grantees and PVC.

The report highlights the weak internal structure of coffee cooperatives and the need for internal controls, greater accountability and transparency.

Also in Mexico, the PVC monitor states that more time is needed to achieve the original objectives, especially the transfer of analytic and marketing capacity to cooperatives, and that, fortunately, CI will continue program operations after the MG ends and may, in time, be able to accomplish this transfer.

5.5 Lessons Learned and Recommendations for Program Management

Project design and adaptive management

- A suitable planning methodology for project design and management in the beginning is essential for a smooth running and the eventual success of a program.
- Learning and immediately reacting to challenges with common sense can rescue a program from a difficult situation and make the best of it.
- The planning methodology should observe a prudent balance between inductive time consuming construction of problem trees and strategies, and deductively applying a readymade conceptual model that might not fit reality.
- With the newly acquired program design and management capacity CI has filled an essential gap. The capacity should be put to use in the institution where adequate and the gap must not be allowed to open again.
- Stakeholder participation at a very early stage of the planning process and their continuous involvement is essential for the suitability of the strategy and the ownership by participants.

Economics

- An informed selection of conservation strategies and tools for sustainable conservation action of any kind requires knowledge about the amounts and the ratio of their respective benefits and costs, including investment.
- Scaling up cannot be left merely to the availability of funds but must be guided by a Sustainability and Financial Independence Study such as the one undertaken in Mexico that offers a basis for the waypoints to navigate to during the scaling up process.

[97] see Lori Pommerenke, PVC Matching Grant Monitoring Trip Report Mexico, 22 Februay-12 March 2003.

- Important decision points can pass and opportunities might irreversibly be lost resulting in continuous dependency of a program from a nurturing donor without an economic roadmap.

Monitoring

- Monitoring is everybody's daily job, not the domain of a specialist who does this work for the others.
- Monitoring systems have to be designed in a way that they, while capturing the essential processes and events appeal to the user: monitoring must be fun !
- Socio-economic impact monitoring is a valuable tool if its results are fed back into daily program management and program replication and are not inaccessably locked away.

Data Management

- Attention should be paid at an early stage to data base design to accommodate future needs. Staff should be trained in the system once started.

6. Evaluation Methodology

The evaluation was carried out by an economist, Dr. Winfried Zettelmeyer, team leader, and an agronomist and plant pathologist, Dr. Alan C. Maddison, with partly overlapping experience. The tasks in the evaluation were divided according to skills and working experience, the economist's attention focussing on the program's approach, institutional and economic sustainability and the new management approach, the agronomist pathologist focussing on the program's effectiveness in the field and the involved agronomic questions, on cross-cutting issues and on monitoring.

The evaluation was excellently prepared by CI staff in Washington, organising a week's stay at headquarters to brief the evaluation team on the program's strategy, infrastructure, achievements, problems, future plans, and the visits to the project sites in Mexico and Ghana.

The evaluators were granted access to "Eroom", area CED/Agroforestry, where they could not only access a vast amount of project information that had been uploaded for them, but also, during the field visits and report writing, observe on-going work and draw on information just being generated.

The team collected further hard and soft-copied information from the project offices in Mexico and Ghana and engaged in a series of meetings and conversations with CI and partner organisation's and cooperating institutions staff and farmers during visits to their fields. These are documented in Annex 7.4

Although CI had classed the information according to their scope, project site and subject, and had tried to prioritize it, its sheer amount was difficult to absorb in the time given (see the most important documents and files in Annex 7.5). It would, in hindsight, have been better to allow for at least ten days of preparation before coming to headquarters and to the field. However, this difficulty was essentially overcome by extending the report writing period for three weeks.

Field staff were generally open, helpful and cooperative, although there was a marked difference between the proactive attitude of the Mexican staff, offering the evaluators a whole series of systematic presentations at arrival, and the Ghana team that, probably due to a different organisational culture, after an initial general presentation, left the initiative to the evaluators to spell out their information needs to which they then readily and in detail attended. Lack of experience was possibly also at the root of the difficulties to get a closer look at the primary monitoring data.

7. Annexes

Annex 7.0 The final Scope of Work (SOW)

Final Evaluation
PVC Matching Grant

Conservation International

"Agroforestry-based Enterprise Development
as a Biodiversity Conservation Intervention
in Mexico and Ghana"

Grant Number FAO-A-00-00-00012-00

Scope of Work (SOW)

August 2003

I. Introduction

The following document represents the Scope of Work (SOW) for the final evaluation of the USAID/ PVC Matching Grant "Agroforestry-based Enterprise Development as a Biodiversity Conservation Intervention in Mexico and Ghana," Award Number FAO-A-00-00-00012-00. The grant originally covered the period from October 1st 2000 to September 30th 2003. However, as of last year of implementation a no-cost extension until December 31st of 2003 has been requested by the PVO.

The SOW has been developed based on the document "Evaluation guidelines for Matching Grants to be evaluated in 2003" released by USAID / PVC in May 200398. According to these guidelines the SOW describes

- The evaluation's program context;
- Evaluation objectives;
- Evaluation questions (that include PVC's questions and the PVO's questions);
- Budget and timeline for the evaluation;
- Evaluation methodology for answering the questions;
- Roles of evaluators and other stakeholders;
- Evaluation report format; and
- Strategies for debriefing, sharing and using the information.

II. Program Context

The goal of the grant provided by USAID's PVC Matching Grant Program is the *conservation of biodiversity in threatened tropical ecosystems*. Its purpose is to *build the capacity of CI and its local CBO partners* to promote low impact agriculture and conservation among small-scale coffee and cocoa farmers. The strategic objectives are to:

- Build the capacity of local CBO partners to operate as effective businesses.
- Increase CBO access to markets to provide farmers with greater earnings.
- Train farmers in the use of low impact agricultural techniques.
- Develop credit mechanisms that provide farmers with capital at competitive rates.
- Develop Conservation Cocoa and Coffee Guidelines and Best Practices; and
- Create a monitoring and evaluation system that both informs management decisions and examines the role of diversified agriculture in conservation efforts

To achieve these objectives, the program takes an approach that involves an integrated field support program for conservation enterprises based on diversified coffee and cocoa production to provide farmer organisations with the tools and capacity to train their members in organic and agroforestry techniques, and to generate incentives for adopting them. This approach involves: *strengthening organisations* by increasing their management expertise; *credit access and internal capital generation* to finance exports; *agricultural assistance* in pest control, soil conservation, field diversification and processing; *certification assistance* in obtaining organic and/or Fairtrade status; *market access* to enable farmers to sell their products in the marketplace through *private sector partnerships* which provide technical assistance, quality control feedback and create long-term demand for farmers' products; the development of *consumer products* that feature farmers' coffee and cocoa and foster consumer demand; *media outreach* to raise awareness about these products and the importance of biodiversity; formulation of *Conservation Coffee and Cocoa guidelines* that promote farmer-owned enterprises as a conservation tool; and *monitoring and evaluation* to

[98] In the following this document is being referred to as "USAID Evaluation Guidelines".

measure the social, economic and ecological impact of the approach and further knowledge of the contribution of diversified agriculture to biodiversity conservation.

The grant focuses on developing CI's capacity to undertake this approach in those of CI's regions of concentration (Biodiversity Hotspots) where cocoa and/or coffee cultivation presents both a threat to and an opportunity for conservation. The project is developing this approach by pilot testing the associated tools and methodologies in Mexico and Ghana, where CI has established partnerships with coffee and cocoa farmer organisations. In Mexico, the project now involves six cooperatives and over 1000 farmers living in the "buffer zone" of the El Triunfo Biosphere Reserve in Chiapas. In Ghana, CI's efforts involve a major organisation of cocoa farmers active in the communities adjacent to the Kakum Conservation Area (KCA) in the Central Region. In both sites CI seeks to strengthen the capacity of these producer organisations to be effective providers of services to farmers. In Mexico, the project has focused on cooperatives providing marketing, credit and extension services to member farmers. In the case of Ghana, where the cocoa market has not been liberalised, the project has focused on the provision of technical assistance in agricultural production. In both regions the beneficiaries are farmers with small landholdings (5.5 hectares in Ghana and 3 hectares in Mexico) for whom coffee or cocoa represents a significant percentage of household income.

For 2003, the replication of this approach is planned for four new project sites in Mesoamerica and the Andes, namely Colombia, Peru, Panama and Costa Rica.

III. Purpose and objectives of the Evaluation

The purpose of the evaluation is determined by the three audience groups: (1) USAID PVC/ Matching Grant Scheme, (2) CI Coffee and Cocoa Program at the headquarters and (3) the two involved CI country programs, Ghana and Mexico. It is important to recognize that each group has its own unique view on:

- what the information provided by the evaluation will be used for; and
- what it seeks to learn through the evaluation.

The perspective of USAID is articulated in the USAID Evaluation Guideline cited above. The perspectives of the two different CI audiences (CI Coffee and Cocoa Program at the headquarters and Country programs) on the purpose of the evaluation and the use of the information have been gathered through a consultative process involving members of both groups prior to the development of the detailed SOW.

Altogether, the following synthesis presents the view of these three audiences:

Purpose and objectives of the evaluation

Being at the end of the Coffee and Cocoa Program's initial pilot experience in Mexico and Ghana, the **overall purpose of the final evaluation** is to analyze CI's first experiences with its Coffee and Cocoa Program, and to identify key lessons learned, patterns and emerging issues before actually replicating the approach in new project sites.

According to the USAID Evaluation Guidelines the evaluation should be structured in two parts, the first part assessing the effectiveness of the Program and the second part focusing on program management. Within the **first part**, the evaluation's **objective** relates to the performance of the two projects and CI's progress towards its stated objectives. By comparing

baseline data with end of project data it focuses on evaluating what went well but also identifying and analyzing areas where the two pilot projects were less successful. This includes finding out whether the overall model and approach as well as the activities implemented in both sites were effective, the developed partnerships productive and the operations sustainable. It also involves analyzing the environment in which the two project sites are operating and identifying factors that are conducive or hindering to the approach.

Whereas the first part is looking at the results the **objective of the second part** of the evaluation relates to the processes, which have been employed. This is where CI's management processes and organisational structures are examined and their appropriateness are determined. This section of the evaluation is about CI's program management capacity and ultimately, the evaluation should answer the question: to what extent has the grant enabled CI to improve its institutional capacity for promoting Conservation Coffee and Cocoa interventions?

IV. Detailed Evaluation Questions

This paragraph outlines the detailed evaluation questions that the three groups of audience (USAID PVC/MG, CI Coffee and Cocoa Program headquarters and the two involved CI country programs) wish to have answered at the end of the evaluation. Whereas USAID proposes a set of standard questions that are meant for consolidating evaluation findings across all PVC grantee programs, the questions identified by CI are reflecting the nature of CI's approach for promoting biodiversity conservation through low impact agricultural techniques in more specific. In order to identify the source of each question, the questions raised by CI (at both levels, the headquarters and the two involved country programs) are marked in italic letters and those raised by USAID are in regular font.

A) Program Effectiveness

The assessment of the Program's effectiveness should be undertaken by looking at three angles: assessing the Program's overall approach, examining the achievement of the Program's objectives and discussing cross-cutting issues such as partnerships, adopted tools and sustainability. Concluding this chapter the evaluation should provide lessons learned regarding the effectiveness of the program and general recommendations for the future.

1. Program Model or Approach

Briefly describe the Conservation Coffee and Cocoa Program's approach and its hypotheses. Determine if the hypotheses and assumptions under-pinning the program model were sound given the external context of the two project sites. Key questions are:

- Which assumptions have held true, which have failed?
- *What makes the approach unique? (in general and in those two particular project sites) Where is CI's major comparative advantage employing this approach? Are there any other organisations working with a similar approach in the region? Who are potential collaborators, who are more likely to be perceived as competitors?*
- *Discuss any opportunities for simplification of the approach. Is there any potential for achieving similar conservation impacts at a broader scale without an intensive site-*

level engagement? What mechanism could be draw upon to reach out to farmers more effectively and encourage a change of their farming practices towards conservation?

2. Achievement of Objectives

This is where the Program's main achievements and the progress towards each major objective as defined in the Detailed Implementation Plan (DIP) are being evaluated at all three levels: CI Headquarters, Mexico and Ghana. Assess progress towards each main objective as well as describe significant unexpected impacts. Provide evidence, criteria for judgment and cite data sources.

- Identify major successes, challenges and constraints in achieving each objective. Include a chart that summarizes the program's successes and weaknesses employing the format in Annex A. Attach a summary of the program's DIP results status using template given in Annex B;
- Discuss the impact of the program on the main target group, the coffee and cocoa farmers in Mexico and Ghana; 99
- Assess the impact of the program on strengthening the capacity of CI's operations at HQ and in the field to deliver sustainable services;
- Discuss any unintended impacts to date - positive or negative
- *Identify major factors that affected the implementation positively and thus contributed to achieving the objectives and factors that affected the progress negatively.*
- Assess if the main strategies and activities employed to achieve the results were effective. Have the strategies and activities been effective in achieving end of project (EOP) targets? Identify any changes made during implementation.100
- Did CI conduct a mid-term evaluation or data review? Was program implementation on-track? Were mid-course corrections made and what are the effects of these changes?

3. Cross-Cutting Issues

a) Partnerships

The establishment of in-country partnerships is an integral part of the program's approach. Partners include actors such as producer organisations, providers of extension services, research institutes and various governmental actors.101 In this section the status and outcomes of CI's partnerships with these local organisations is to be assessed. Key questions are:

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[99] *The original project framework as presented in the DIP did not distinguish between main target group whose behavior has the most direct influence on biodiversity and whose behavioral change thus constitutes the key focus of the project and organizations who act as intermediaries between CI and the target group. As part of the learning process and refinement of its strategy the Coffee and Cocoa program has now identified the coffee and cocoa farmers as their main target group and actors like Cooperatives, Industry, Business Service Providers, Credit Providers, Government as intermediary organizations who actually make up the interface between CI and the target group.*

[100] CI has communicated all changes in strategy through its annual reporting to PVC. For an overview of the changes please refer to the table "Revised M&E Plan" which was attached to the second year annual report.

[101] *The evaluation should include the following partner organizations in this examination: Mexico: Producer Organizations (two to three of the six participants), ECOSUR (local research and education institution), Reserve Management (CONAP); Ghana: CRIG (Cocoa Research Institute), MOFA (Ministry of Food and Agriculture) and Kuapa (large-sized Producer Organization)*

- Assess the effectiveness of CI's approach to building in-country partnerships. Identify the key elements that contributed to success. *How well did the assigned roles match the capacity and commitment of CI's partner organisations?*
- Discuss if these partnerships are mutually satisfactory and beneficial. Identify and discuss major constraints to developing durable and productive partnerships;
- Identify local partners and cite changes in local partners' institutional capacities that occurred as a result of the program partnerships. Identify what activities were most instrumental in strengthening local partners; 102
- Cite changes in CI's institutional capacities, as a result of learning from in-country partners;
- Identify outcomes of program links with any coalitions, networks or associations;
- Attach Partnerships Table (see template in Annex C)

b) New Tools, Guidance Or Standards

Identify if new tools/guidance, approaches, or program standards were developed under this program:

- Assess if these tools, approaches etc. were effective and merit broader distribution or application.

c) Advocacy

Determine if the program has engaged in policy or program advocacy:

- Describe the advocacy efforts and assess if they contributed to strengthening the policy environment or promoted the program in any way;

d) Sustainability and Scale-Up

Sustainability is generally understood as the extent to which activities related to the objectives of the project will or will not continue after technical assistance and funding ends. However, in the case of this evaluation it is worthwhile mentioning that the ending of the PVC grant does not mean that CI terminate its engagement in the two project sites. In the contrary, based on the findings of the evaluation CI will review its strategy in the two project sites and design a new or adjusted intervention. This being said, assessing the sustainability thus is limited to estimating trends for each project site and to point out key factors that either support sustainability or affect the likeliness of a continuation of project activities negatively. Besides looking at the existing sites this subchapter also addresses the question of scaling up. This is where CI's plans for scaling-up and replicating the approach in other project sites are discussed.

Key questions guiding the assessment are:

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[102] Due to the absence of formal and/or meaningful baseline data on the capacity of partner institutions the identification of changes in their capacity need to be based on interviewing a few key individuals within the partner organization and gathering their judgement.

- Magnitude of the program: size of beneficiary population by age and sex;
- Progress made by the program toward achieving sustainability and if CI is planning to measure post-grant sustainability; *Discuss the sustainability model developed in Mexico; how likely is the model to function? What are its key assumptions?*[103]
- Discuss the progress the program is making toward diversifying resources, for example building alliances with in-country business organisations.
- *What are aspects of the program that are likely to continue in the future through the partner organisation's own sources of funding? What incentives are available for farmers and other partners to sustain the project's objectives in the future? How likely is that farmers will continue cultivating their fields using the promoted best practices? If it is not likely, what critical activities need to happen for that to occur? What assistance from CI is would be critical in the near future?*
- *How well did the chosen extension methodologies address sustainability? Are the extension service providers likely to sustain the delivery of their services once the program's funding has stopped? Do they have prospect new funds? Do they show ownership of the extension methodology and the conservation content of the training sessions? How well have they internalised the extension methodology and integrated into their respective institutional framework? How conducive is the political and overall institutional environment for continuation of the service delivery and the continuation of the practices?*
- *Progress and potential for scale-up or replication; has the approach been scaled-up in the project area or replicated elsewhere in country or in other countries? Have selected components been adopted elsewhere? What are mid-term projections in terms of replication in other countries and scaling-up (how many countries, number of farmers to be reached etc.)?*

4. Lessons Learned and Program Recommendations

Outline the main lessons learned from the MG program that would be applicable beyond the program sites. Provide recommendations for CI, partner organisations and USAID.

- *Provide recommendations for CI related to the strategy of scaling up and replicating the program approach in new regions.*
- *When formulating recommendations for Ghana it is useful to expand the view by including the effects of other cocoa sector related initiatives such as the STCP initiative (Sustainable Tree Crop Program). In the case of Mexico, this should include recommendations concerning the project's relationship with the Management of the Reserve El Triunfo and the potential for synergies.*

B) Program Management

The grant aims at developing CI's capacity for implementing Conservation Coffee and Cocoa interventions. As part of this and as articulated under the Washington section in Objective 1, the grant should enable CI to create a project management system customised to CI's Coffee and Cocoa Program. The system, which has been developed, includes a Project Management

[103] The sustainability model is in development and will be available by the time of the evaluation.

Framework, which is a discrete set of project management tools that clearly determine the scope of the project, its boundaries and roles and responsibilities of all involved actors. It has been introduced to the Chiapas project site and will be used for future Coffee and Cocoa Project sites. With elements of this new Framework differing significantly from the format of the original detailed implementation plan (DIP) the introduction of the new Project Management Framework in Mexico replaced the DIP as an internal project management tool. Today, the DIP is only utilised for reporting purposes to USAID.

For the purpose of the Final Evaluation CI suggests basing the evaluation of the Mexican project site on the new Management Framework, whereas Ghana (which is still operating on the DIP) should be evaluated based on the DIP. For this reason, the Program Management chapter starts with a sub-chapter about the Management Approach adopted in Ghana and a sub-chapter about the Management Approach utilised in Mexico. The following sub-chapters are the same as proposed by the USAID Evaluation Guidelines. The chapter concludes by highlighting key lessons learned on program management.

1. Management Approach Ghana / Quality and Status of Detailed Implementation Plan (DIP)

- Discuss the quality of the DIP, i.e. the clarity and adequacy of the objectives, indicators, baseline studies and activities.
- Comment on the utility of the DIP as a management tool for CI, their partners and PVC.
- In the context of the program model and the changing country situation, is the overall approach to program management flexible, appropriate and adequate?
- Is the program cost effective and timely in converting inputs into outputs and outcomes?

2. Management Approach Mexico / New Project Management System

With the new Project Management System having been introduced in June 2002 this sub-chapter focuses on the experiences with this system during its first year of utilisation. Key questions to be answered are:

- *What were the main reasons for developing and adopting a different management approach? Why was the DIP seen as an insufficient management tool? Are there elements of the DIP that have been kept?*
- *How familiar is the field staff with the new Management Framework as introduced in June 2002? How well do they buy-in into overall project design (hierarchy of objectives), the implementation plan, the M&E Matrix and M&E activity plan?*
- *How useful does CI staff perceive the new system? Has it improved management?*
- *Where does this system need to be improved and/or supplemented?*

3. Other Management Issues

a) Financial Management

- Are adequate financial control systems in place?
- Is CI leveraging additional resources (beyond the match)?
- *Have institutional fundraising capacities being fostered? How strongly was the field staff engaged in fundraising? How well have they succeeded?*

b) Monitoring and Evaluation (M&E) System

Evaluating the M&E-systems includes the following key questions:

- Does the M&E system supply accurate, reliable and timely performance data?
- How effective are the steps (if any) taken to institutionalize M&E at CI's Headquarters?
- Assess if the partner organisations have increased their capacity to monitor and evaluate their work, document program achievements, and use data for decision-making and program advocacy.
- Has the program undertaken to date, any special studies to assess program operations or impact? Comment on the quality and utility of these studies.
- Assess CI and partner use of data to make management decisions.
- What more could be done to improve the M&E systems and use data for decision-making, learning and program advocacy?
- Verify data pertaining to a random sample of indicators.

c) Information Systems

- Has the program increased in-country partners' access to information technologies?
- What steps have been taken by CI and its partners to share program information and learning?

d) Staffing and Supervision

- Do CI and partner organisations have an adequate number of staff with relevant expertise for supervising/backstopping the program?

e) PVC Program Management

- Assess USAID / PVC's oversight and backstopping of the cooperative agreement.

4. Program Management Lessons Learned and Recommendations

Discuss the program management lessons learned and present recommendations to CI, in-country partners and PVC. The recommendations for CI should focus in particular on issues related to the strategy of scaling up and replicating the program approach in new regions.

V. Evaluation Methodology

The analytical framework of the evaluation is determined through the detailed evaluation questions as described in chapter IV. This is where the focus of the evaluation is set and defined what the evaluation is supposed to answer. For the data collection the evaluation will draw on a combination of qualitative evaluation techniques, which are applied in a complementary and cross-validating way.

Overall, the evaluation combines three methodologies for assessing the changes induced by the project. One is comparing the indicators and achieved results with the baseline data. This is where an explicit before-after comparison methodology is being employed. Second, subjective impressions and perceptions are being sought, from the target group as well as from project and partner staff and other key resource persons, about the project's changes and impact as they perceive them. Third, bringing in technical expertise from a team of outside consultants with comprehensive experience in agricultural extension services and the coffee commodity market complements the effectiveness of those two methodologies. The evaluation team will compare CI's approach with other internationally known models seeking to establish alternative markets chains for the commercialisation of products harvested in a sustainable manner. While analyzing the mechanism chosen for providing extension services, those are compared with systems used elsewhere and with internationally discussed best practices. Additionally, based on their expertise and multiple site experience they will review the program's approach to institutional strengthening and project management techniques and provide valuable recommendations.

The evaluation is structured in three main components: (1) the content analysis of documents, (2) the interaction with staff from CI, partner organisations and additional resource persons and (3) the interaction with the target group, the coffee and cocoa producers in the two project sites.

The **documents** to be analysed are the Grant Agreement, the Detailed Implementation Plan, annual reports produced for PVC, workshop documentations and internal monitoring reports. These documents will be compiled by CI HQ staff in preparation for the evaluation and will constitute the evaluation team's main introduction to the program.

For the **interaction with CI staff, partner organisations and additional resource persons** the evaluation team will prepare interview topics and a standardised set of questions prior to the meetings. Assigned staff from CI HQ will support the team in planning the content and issues that these briefings and conversations should address. These interview topics will be circulated prior to interviews, so that CI and partner staff have an opportunity to collect and organize that information prior to interactive sessions. In the beginning of these sessions CI and partner staff are offered the opportunity to make a presentation on the outlined topics and more general or background issues. Overall, the interactive sessions are held using a standardised but open-ended interview technique so as to allow maximum flexibility and adaptability in answering the questions and yet assure a comparison between sites, organisations and individuals. More in-depth discussion, analysis and exchange meetings are certainly worthwhile, but should be viewed as secondary to the accomplishment of this goal.

Without eliminating spontaneity, these conversations will be encouraged once the first round of information gathering has been completed and additional data is considered necessary to validate and deepen findings.

For collecting evaluation information at the level of the **target group**, the coffee and cocoa producers, a group assessment type of methodology will be applied. The evaluation team will organize a number of short focus group meetings with farmers in different communities, each of them involving 6-10 producers. These focus groups will work from a predefined set of 4 to 5 evaluation questions around:

- Farmers understanding of what the project was trying to achieve
- How consistent these objectives were with their own objectives
- How effective the program was at linking its incentives to these objectives
- Whether or not farmers perceived the program's incentives as sufficient to off-set the costs of adopting the best practices
- What constraints did they encounter in implementing the recommended practices.

The purpose of these meetings is to gain an understanding of the target group's perception of the project, of their reaction, learning and potential behavioral changes induced by the project activities. Comparing the results achieved in different communities will allow cross-validating the findings. The evaluation team will be assisted in the preparation of these questions by CI staff.

For the Mexico project site, the focus group meetings will be combined with the participatory community workshops, which are included in Year Three's Socio-Economic Study. The socio-economic study has been developed as an annual monitoring tool for capturing farmer's feedback, critical factors in their well-being, their overall environmental behavior as well as gathering information about the effectiveness and sustainability of the program approach. As part of the data collection methodology community workshops are held in seven communities involving tools for community mapping, brainstorming and priority listing. Combining the community workshops with the final evaluation will mean that this year's workshops will also involve a session for addressing the predefined set of evaluation questions from the final evaluation's focus group methodology. The main reason for combining the two events is a practical one, making sure that the target group's time investment and effort is not overstretc.hed. Moreover, since the framework of the socio-economic study is by itself already intended as a tool for capturing the project's impacts related to the target group, performing the last year's study in close linkage with the final evaluation will be the most efficient use of time and resources.

It is worth raising one specific issue in relation to the evaluation of the program's achievement of its objectives. The Coffee and Cocoa Program – which as a program within CI strives to contribute directly to the organisation's "Biodiversity Outcomes" (or long-term conservation goals) – views a change in farmers' production and land use management practices as the program's most important impact. All of the other objectives of the program, as stated in the DIP, can to a certain degree be seen as contributing towards creating the environment necessary for farmers to transition to a more biodiversity friendly approach to farming.[104] In the DIP, the farmer's behavioral change is captured in the Mexico section by

[104] See also footnote 2 above.

Objective 3 (*Farmers adopt agroforestry and organic agricultural methodologies and conservation techniques*) and in the Ghana section in Objective 2 (*Project farmers adopt conservation agroforestry practices for cocoa*). In order to reflect this thinking the program's new management framework, introduced in Mexico in 2002, elevates this key change in farmer behavior to the higher "Purpose" level objective *(Farmers around El Triunfo have adopted the Conservation Coffee Best Practices)*. The other objectives from the DIP have become "Key Results" defining the necessary conditions and environment for sustaining and nurturing the changes of farmer's behavior.

As the program moves into replication in new sites, CI is interested in establishing a consistent, comparable tool for measuring this purpose level impact across sites. While CI recognizes that behavior changes at the farm level generally occur over a longer time period than the three years covered by the DIP grant period, CI proposes to pilot test a baseline and evaluation survey instrument designed to measure such changes in farm management practices. So, for the Mexico project site CI proposes to implement this farmer practices survey instrument as part of the final evaluation in addition to the farmer focus group meetings (community workshops). The survey is the very first data collection step and the results should be available prior to the arrival of the external evaluation team.

The survey will use a scored index questionnaire to explore five key factors related to farmers' adoption of the best practices. These include the following questions:

- What was the relevance of the best practices given the specific context and conditions of the farm?
- What is the relative priority for the farmer with respect to each of these categories of practices?
- What is the farmer currently doing in relation to each best practice category?
- To what degree does what the farmer is currently doing reflect an adoption and or an active endorsement of the validity of the best practices?
- What have been the principle barriers to adoption of each best practice?

The survey will be implemented by the team hired for the socio-economic study. The methodology will involve selecting a representative sample of 50 participating farmers, having the team's promoters visit each farm to complete the survey, and the subsequent processing of the data by the socioeconomic survey consultant. A summary report of the results will be produced which highlights a set of potential key questions to be followed up on in the evaluation focus group. This report will be available prior to the evaluation team's trip to the project site.

Implementing this survey just prior to the PVC evaluation will not only improve and deepen the evaluation team's understanding of the farmer's resulting behavior, but also permits CI to a) establish a new baseline for the next phase of the project b) have a good set of data for comparing this site with new sites and 3) produce a refined baseline study instrument ready for implementation in these new sites. However, because of the short project history, the results of this survey should only be seen as a first "snap shot" or overview of the early and most visible trends in farmers' adoption or modification of their land use practices.

VI. Roles of Evaluators and other Stakeholders and Timeline

A team of external evaluators, selected based on the criteria laid out in the USAID Evaluation Guidelines (page 12) and approved by the PVC program officer, will head the final evaluation

of the grant. CI-DC staff and CI project staff in the field will support the evaluation team. In DC, the person coordinating and overseeing the evaluation is the Advisor of Project Design and Management, Linda Klare-Repnik. In Ghana, the key support person is CI's local project manager, Gyampah Amoako-Gyedu. In addition a local Cocoa Sector Specialist will be hired to complement the evaluation team assuring an in-depth understanding of the specifics of the Ghanaian cocoa sector. For the Mexico project site, support will be provided by the acting coordinator of the project, and by the consultant for the socio-economic study, Arthur van Leuween.

The evaluation is planned to take place between the months of October and December. A rough schedule is presented in form of a gantt chart in the annex D. However, the final and detailed schedule will be agreed upon between all parties at the team-planning meeting.

The steps outlined in the following table are intended to guide the overall evaluation process. This table shows the sites, the activity and the main actors involved.

Final Evaluation: Process

Site	Activity	Actors
	Preparation	
DC	Pre-evaluation review of available baseline and other data and compilation of documents	Linda Klare-Repnik (Advisor Project Design and Management)
Mexico	Pre-evaluation review of available baseline and other data and compilation of documents	Project Manager
Ghana	Pre-evaluation review of available baseline and other data and compilation of documents	Gyampah Amoako-Gyedu (Project Manager)
Evaluation		
DC	Introduction external evaluator to the program and Evaluation DC	Evaluator[105], Coffee& Cocoa Program DC: Edward Millard (Senior Director CED), Matthew Quinlan (Director Conservation Coffee), Linda Klare-Repnik (Advisor Project Design and Management), Todd Hamner (Advisor Agricultural Practices)
	Content analysis of documents	Evaluator
	Development interview topics and a standardised set of questions	Evaluator, Linda Klare-Repnik (Support)

[105] (External) *Evaluator* stands for external evaluation team.

	Interactive Session / Interview with members of the Coffee & Cocoa Program DC	Evaluator, Coffee & Cocoa Program DC
	Preparation field evaluation	Evaluator, Linda Klare-Repnik (Support)
	Presentation detailed methodology field evaluation	Evaluator, Matthew Quinlan, Linda Klare-Repnik
Mexico	Survey (prior to trip of external evaluator)	Arthur van Leuween, Todd Hamner (support development survey tool)
	Briefing Country Program	Evaluator, Ignacio March (Regional Program Director CI)
	Briefing Project Manager	Evaluator, Project Manager
	Interviews with project staff, partner organisations and other key stakeholders in Jaltenango	Evaluator, Project Manager, Gabriel Nava (Agricultural Coordinator), Lazaro Escalante Lopez (Agricultural Technician), Manuel Morales (Biological Monitoring)
	Community Workshops with target group / focus groups (in cooperation with the socio-economic study)	Evaluator, Arthur van Leuween
	Discussion findings with Project Manager	Evaluator, Project Manager
Ghana	Briefing Country Program	Evaluator, Okyeame Ampadu-Agyei (Country Director CI-Ghana), Ghana Cocoa Sector Specialist
	Accra: Interviews with project staff, partner organisation and other key stakeholder	Evaluator, Cocoa Sector Specialist, David Kpelle (Deputy Director), Gyampah Amoako-Gyedu (Project Manager), Yaw Osei-Wuso (Manager M&E)
	Project area: Interview with traditional rulers, opinion leaders and Kuapa Society Executives	Evaluator, Cocoa Sector Specialist, Gyampah Amoako-Gyedu
	Interaction with target group: Focus groups in the communities Bobi, Abeka Nkwanta, Antokrum, Kruwa	Evaluator, Cocoa Sector Specialist, Gyampah Amoako-Gyedu
	Discussion of findings with Country Program	Evaluator, Cocoa Sector Specialist, Okeyame Ampadu-Agyei
DC	Gathering additional data DC	Evaluator

	Interviews with selected CI staff from the following units: RCS (Regional and Corridor Strategies), Regional Programs, PPA (People and Protected Areas Department), Finance, CELB (Center for Environmental Leadership in Business), DAR (Donor Agency Relations)	Evaluator, precise list to be established at beginning of mission
	Workshop Coffee & Cocoa Program, presentation preliminary findings	Evaluator, Coffee& Cocoa Program DC
	Data analysis and drafting Evaluation report	Evaluator
	Circulating draft report to PVC, CI field and partners	Linda Klare-Repnik
	Review and discussion of draft	Coffee& Cocoa Program DC
	Revision draft in response to comments/suggestions	Evaluator
	Submission revised version final report to PVC, CI field and partners	Linda Klare-Repnik
Follow-Up		
DC	Evaluation debriefing meeting with CI HQ (time TBD)	Evaluator, Coffee& Cocoa Program DC
Mexico	Evaluation debriefing meeting with CI field and partners	Facilitated by CI DC staff
Ghana	Evaluation debriefing meeting with CI field and partners	Facilitated by CI DC staff

VII. Budget

The budget developed for the implementation of the Final Evaluation is presented in Appendix E.

VIII. Evaluation Report

The evaluation report should be written using a 12-point font for the report's narrative sections and a 10-point font for any tables or charts. Cross-referencing should be used judiciously to minimize duplication and redundancy. The evaluation report should follow the structure as outlined in the table below.

PVC's approval of the evaluation report will be based on the evaluation quality standards cited in the USAID Guidelines (see "Evaluation Quality Standards," p. 5). The dates for completing the different steps for gathering the data and for the analysis, documentation and discussion are outlined in form of a tentative work plan (gantt chart) in Annex D.

Chapter	Title	Explanation	Responsi-ble
1	Evaluation Profile Sheet	- PVO name and Cooperative Agreement number; - Country program sites and names of principal partners; - Duration of Grant (Month/Year); - Beneficiary Populations (by age/sex); - PVC-PVO match totals ($) and PVC-PVO match funds disbursed to date ($); - Date DIP was first approved by PVC and changes made to DIP; - Evaluation Start Date (start implementing SOW) and End Date (submission of final report to PVC).	CI
2	Summary Of Conclusions and Recommendations		Evaluator
3	Program Background	Provide a summary description of the program to be evaluated: - Brief history of the MG program; - Rationale for the program; - Situation on the ground and status of interventions at the beginning of the program and relevant baseline data; - What the program seeks to achieve; - Principal partners; - Current implementation status; and - Briefly comment on CI's overall development plans.	Evaluator
4	Detailed Evaluation Questions	Address the evaluation questions in the sequence presented in the chapter IV ("Detailed Evaluation Questions").	Evaluator
5	Evaluation Methodology	• Describe the evaluation team members roles and responsibilities; •• Outline the methods of data collection and analysis to be used and indicate why these methods have been selected; •• Briefly state constraints of these data collection methods as well as data limitations	Evaluator

	Annex	The list of attachments for the final evaluation report include: - The final SOW - DIP Matrix and Results Status Table (see USAID Evaluation Guidelines/Annex B for template) - Partnerships Table (see USAID Evaluation Guidelines/Annex C) - List of sites visited and persons/groups interviewed - List of documents analysed	Evaluator

IX. Strategies for debriefing, sharing and using the information

With Mexico and Ghana being the first pilot experiences of CI's Coffee and Cocoa Program for rolling out the Conservation Coffee and Cocoa approach, the information provided by the evaluation – in particular the identified key lessons learned, patterns and emerging issues – is expected to serve as critical input not only for the further development of the two sites themselves but also for the future replication of the Conservation Coffee and Cocoa approach in other regions.

As outlined in the "Final Evaluation: Process" table in chapter VI, a debriefing meeting will be held after submitting the final version of the evaluation report to PVC to review the main findings and discuss any implications on the two sites Mexico and Ghana as well as the learning which can be applied to the new Conservation Coffee sites Peru, Panama, Costa Rica and Colombia. The evaluation team will be involved in this interactive session so as to tap into their expertise and tacit knowledge and make use the learning they have acquired during the evaluation as effectively as possible.

With respect to the interaction with the two sites Mexico and Ghana, a debriefing meeting will be held in each of these sites, which will be facilitated by DC Coffee and Cocoa Program staff. For practical and financial reasons these meetings will not count on an involvement of the evaluation team.

In addition to these immediate debriefings key lessons learned will be shared and disseminated within the broader institutional make-up of CI and within the broader conservation community to advance organisational learning and to foster critical analysis around the Conservation Coffee and Cocoa approach. Furthermore, the information provided by the evaluation will be used for writing reports to the various stakeholders of the three respective audiences.

Annex 7.1 Program's Strengths and Weaknesses (SOW Annex A)

ANNEX A1 PROGRAM'S STRENGTHS AND WEAKNESSES, WASHINGTON DC

- in relation to progress made in meeting targets and achieving results

Mexico Program Objectives	Strengths	Weaknesses
1. CI has the capacity to develop conservation enterprises based on coffee and cocoa	• CI HQ Program staff looked for and assimilated field, commercial, social, and political experience of coffee and cocoa in relation to conservation • Team continuity in later years, and tenacity throughout	• Assumptions (especially regarding stakeholders) not sufficiently scrutinised in Logical Framework Matrix leading to wrong/short-lived objectives and activities • Changes in CI HQ strategy left program only partially supported • Team discontinuity in early years
2. Participating farmers have access to training in agroforestry and organic methodologies	• Appropriate training identified and organised for community level extension officers in Mexico and Ghana. Target exceeded • Training Centre established in Mexico	• Organic cocoa methodologies not appropriate as training areas in Ghana during Project because of delayed liberalization • Native tree agroforestry with cocoa not well known
3. CBOs have access to capital at competitive rates	• Commercial awareness resulted in successful credit arrangements for coffee CBOs from various sources, adapting over the years	• CBOs not matched by CBOs commitment to
4. CBOs have increased access to premium coffee and cocoa markets	• CI HQ have looked hard to find more clients for shade coffee and cocoa, while still maintaining existing clients	• Not anticipated that Ghana government would rule out the organic route and direct export by cooperatives • Premium markets are restricted in size
5. CI develops Conservation Coffee and Cocoa standards and they are verified in Mexico and Ghana programs	• The program collaborated well with other institutions in developing Conservation Coffee Principles • Coffee Best Practices defined well, robust verification systems established and used in Mexico	• Unrealistic initial belief, given existing cocoa agroforestry knowledge, that cocoa standards could be finalised and verified during the three-year Project

6. CI develops M&E system and it is applied in Mexico and Ghana programs	• Considerable effort invested in developing a generally applicable planning/ implementation model • Socio-economic studies valuable in Mexico and Ghana	• Separation of Project level M&E as an objective in its own right was not necessary, and deflected attention from monitoring of DIP objectives to some extent • Household and habitat surveys in Ghana ended with project – sustainability, little feedback from HQ

ANNEX A2 – PROGRAM'S STRENGTHS AND WEAKNESSES, MEXICO

- in relation to progress made in meeting targets and achieving results

Mexico Program Objectives	Strengths	Weaknesses
1. Cooperatives have the capacity to operate as effective businesses that promote conservation	• Program moved promptly to develop or reinforce activities where cooperatives lacked capacity or transparency	• The short-time scale of the project, and the desire from Starbucks for rapid changes in the marketing chain and the cooperatives part in it, put the enterprise at risk • Transparency monitoring caused problems in cooperatives
2. Cooperatives realize higher prices through increased access to coffee markets	• CI worked hard to set up the infrastructure needed to secure access to the Starbucks Preferred Supplier Program	• Not clear whether the shade coffee market is sufficient to accommodate the expansion considered necessary to make the Chiapas coffee project and others being developed, sustainable
3. Farmers adopt agroforestry and organic agricultural methodologies and conservation techniques	• Targets exceeded for nurturing native trees, biological control of CCBB, use of farm management plans based on conservation, and numbers of producers certified organic	• Use of agroforestry and conservation techniques accepted while price incentive present, continued use uncertain if incentive absent, or severely reduced
4. Farmers are being verified for Conservation Coffee Standards	• Appropriate conservation coffee best practices and verification systems developed, installed and used • Targets exceeded for farmers meeting standards	• The reluctance of the cooperatives to accept additional roles in the monitoring and verification system poses a question for sustainability

ANNEX A3 – PROGRAM'S STRENGTHS AND WEAKNESSES, GHANA

- in relation to progress made in meeting targets and achieving results

Ghana Program Objectives	Strengths	Weaknesses
1. Kuapa operates as an effective and efficient business	• CI identified certain aspects of Kuapa's structure that needed reinforcing for it to operate more effectively, and took steps to accomplish this	• CI failed to generate match funding to fulfil its commitments to Kuapa, and the latter suspended collaboration temporarily • Sustainability not yet assured
2. Project farmers adopt conservation agroforestry practices for cocoa	• CI was able to bring together institutions (CRIG particularly) and organizations that had not been collaborating previously to provide the basis for developing cocoa best practices, and for passing these on through FFS/ToT	• Risk of unnecessary removal of native shade not avoided yet • Conservation agroforestry practices for cocoa not well known in terms of shade versus yield, desirable native species and their biology, etc. • Records of adoption need confirming and continuing, but no system in place
3. OLD: Conservation Cocoa Agroforestry Program Standards defined and adopted by Kuapa NEW: Political decision makers at local and national level recognize the value of conservation cocoa	• CI Ghana has been able to establish relationships with government and others that have resulted in better recognition for sustainable cocoa	• Over-ambitious objective selected initially, timescale underestimated, had to be combined with Objective 2

Annex 7.2 Results Status Table (SoW Annex B)

Original and modified PVC Objectives & Indicators, DC section of the DIP

	DIP Objective		Indicators	Baseline	Target Year 3	Adjustments as per 2nd year report	Status Year 3	Verification means *(Verified Y/N)*	Comments CI *//Evaluators' comments in italics*
1	CI has the capacity to develop conservation enterprises based on coffee and cocoa	DEL 1.1	Proportion (%) of CI's Mexico coffee project budget for FY 2003-2004 dedicated to projects outside the target area	100% of CI's Mexico coffee project budget for FY 2000-2001 dedicated to project inside the target area	15% of CI's Mexico coffee project budget for FY 2003-2004 dedicated to project outside the target area	Indicator deleted as communicated in First Annual Report			
		DEL 1.2	Proportion (%) of CI's Ghana cocoa program budget for FY 2003-2004 dedicated to projects outside the target communities	100% of CI's Ghana cocoa project budget for FY 2000-2001 dedicated to project inside the target communities	15% of CI's Ghana cocoa project budget for FY 2003-2004 dedicated to project outside the target communities	Indicator deleted as communicated in First Annual Report			
		1.3	# of CI conservation enterprise projects based on coffee and cocoa production	As of October 2001, the only CI conservation enterprises based on coffee and cocoa are in Mexico and Ghana	2 new CI conservation enterprise projects based on coffee and cocoa production are being implemented around protected areas by September 2003		Colombia and Peru	Project Design Documentation	
		DEL 1.4	Change (# of points) in overall mean DOSA score for CI's Coffee and Cocoa program	The Coffee and Cocoa Program's DOSA overall mean score is 66 as of February 2001	The Coffee and Cocoa Program's DOSA mean score for the Organizational Learning capacity area is 66 by February 2003	Indicator abandoned			The indicator was abandoned due to lack of applicability of DOSA as an assessment instrument for the scale of a program within an organization
2	Participating farmers have access to training in agroforestry and organic methodologies	2.1	Agricultural technical assistance plan developed and operational in Ghana and Mexico		Agricultural technical assistance is being provided to project participants in Ghana and Mexico by September 2003		One team member CCC Program assigned with providing support to the field on Agricultural technical assistance	Organigrams CED	Target met
		2.2	Combined total # of community level project extension officers in Ghana and Mexico		There is a combined total of 23 community level project extension officers in August 2003 in Ghana (12) and Mexico (11)		Mexico 35 candidates trained Ghana 4 Kuapa staff & 16 farmers trained	Project Records Mexico and Ghana	Target surpassed
3	CBOs have access to capital at competitive rates	3.1	Partner CBOs in Mexico has access to capital at interest rates that are X% less than the established rate for that period		As of October 2003, partner CBOs in Mexico have access to capital at interest rates that are 5% less than the established rate for that period		During 2003-2004 coffee cycle CI has provided a loan of $234,500 to two cooperatives in cooperation with CI's Mexican private sector partner Ecologic Enterprise Ventures, Inc	Records Verde Ventura	For cooperatives in Chiapas the critical constraint is access to finance and not the difference to the market rate
		OLD 3.2	Partner CBO in Ghana has access to capital at interest rates less than the established rate for that period			Approach was changed because Kuapa has access to local bank finance (backed by international guarantee). Whereas the Day Chocolate Company in UK required finance to grow its business and thereby provide more demand for Kuapa's cocoa			
		REV 3.2	Manufacturing company of Partner CBO able to build market through access to capital			See above			
4	CBOs have increased access to premium coffee and cocoa markets	4.1	Change in # of ongoing clients purchasing coffee from Mexican partner cooperatives	CBOs have sold coffee to 2 clients for more than 1 year by April 2000	a minimum of 2 clients *(This differs from target in Mexico DIP)*	The sale of Frontier to Green Mountain resulted in a consolidation of two clients. The number of clients purchasing for more than two years has therefore been reduced to 2 clients for two years (original target 3)	2 clients (Starbucks and GMCR)	Project Records Mexico	Target met
		DEL 4.2	Change in % of CBO product sold to clients at premiums of 15% or more of world price			Indicator deleted because of delays in liberalization process			
5	CI develops Conservation Coffee and Cocoa standards and they are verified in Mexico and Ghana programs	5.1	# of Mexican CBO members verified to meet Conservation Coffee Standards	Draft Conservation Coffee Standards global framework being developed as of March 2001	100 Mexican CBO members have been verified to meet Local Conservation Coffee Standards by November 2003		248 farmers verified. 236 of them are small farmers / members of cooperatives and 12 finca	Report external verifier Jan 04	surpassed target by 148% (248 100/100)
		DEL 5.2	# of Kuapa farmers verified to meet Conservation Cocoa Standards	No Conservation Cocoa Standards have been developed as of March 2001	25 Kuapa farmers have been verified to meet Local Conservation Cocoa Standards by September 2003	Indicator deleted because the elaboration of conservation cocoa standards is a longer process and won't be completed within the project's timeframe (see chapter IV for rationale)			

	DIP Objective	Indicators		Baseline	Target Year 3	Adjustments as per 2nd year report	Status Year 3	Verification means *(Verified Y/N)*	Comments CI */Evaluators' comments in italics*
6	CI develops M&E system and it is applied in Mexico and Ghana programs	6.1	Project level M&E system operational and monitoring achievement of project targets and benchmarks in Ghana and Mexico	Project level M&E system has been proposed for Mexico and Ghana as of March 2001	Project level M&E system operational and data collected incorporated into Mexico and Ghana project work plans for FY 2003/2004		Table of Indicators and Targets up to date and available to the project team in eRoom; implemetation plan 04 for Mexico available	eRoom	The implementation plan in Ghana will be developed in 04 as part of the GEF planning grant.
		DEL 6.2	CBO level M&E system operational and monitoring achievement of CBO targets and benchmarks in new project site	CBP level M&E system yet to be proposed	CBO level M&E system operational and data collected incorporated into CBOs' business plans for FY 2003/2004	indicator deleted because turned out not to be viable in the time-frame of the project			

Original PVC Objectives & Indicators, Mexico Section of the DIP

	DIP Objective	Indicators		Baseline	Target Yr 3	Adjustments as per 2nd year report	Status Year 3	Verification means, *Verified (Y/N)*	Comments CI *(Evaluators' comments in italics)*
1	Cooperatives have the capacity to operate as effective businesses that promote conservation	OLD 1.1	Change (%) in average annual rate of CBO membership turnover	44%	The average annual rate of turnover of CBO members is 29% or below in 2003	Indicator changed because the original indicator which measured the turnover in CBO membership wasn't specific enough for verifying the project's success related to this objective given that there are many other reasons for leaving or joining one of the CBO in Chiapas CI is partnering with.			
		REV 1.1	Change (%) in average annual rate of turnover of CBO members participating in the program	44%	The average annual rate of turnover of CBO members participating in the program is 29% or below in 2003	None	11.69%	Records cooperatives (Padron oficial)	Surpassed target by 59.7%
		1.2	Increase in amount of CBO savings (US$) resulting from revolving credit fund (Eterno-Verde)	US$0	US$ 43,000 in CBO savings resulting from revolving credit fund (Eterno-Verde) by July, 2003	None	US$47,579	Records Conservation Enterprise Fund	Surpassed target by 10.6 %
		1.3	Change (%) in yield from dry milling of parchment coffee	66.64%	During crop year 2002-2003 the average yield of the dry milling of parchment coffee will be 68%	None	74.39%	Milling reports and receipts milling process	Surpassed target by 9.4%
2	Cooperatives realize higher prices through increased access to coffee markets	2.1	Change in # of ongoing clients purchasing coffee from partner cooperatives	CBOs have sold coffee to 2 clients for more than 1 year by April 2000	CBOs have sold coffee to a minimum of 3 clients for more than 1 year by April 2003	The sale of Frontier to Green Mountain resulted in a consolidation of two clients. The number of clients purchasing for more than two years has therefore been reduced to 2 clients for two years. (original target: 3)	1.33	Contracts between Cooperatives and Clients and Business Plans of cooperatives	The cooperatives had between 1 and 2 clients. The average is 1.33 clients per cooperative.
		2.2	Change (%) in the price paid to cooperative members per Lb of "parchment" coffee	US$0.79 per pound	US$0.70 per pound (originally US$0.85)		0.73 US$ /lb	Receipts coffee delivery, Business Plans of cooperatives	Surpassed target by 4.3%
		2.3	Change (%) in quantity of exportable grade coffee sold by CBO members	532,406 lb of green (milled) export grade coffee sold in crop years 1999/2000	200% increase in quantity of exportable grade coffee sold in 2003-2004 crop year compared to 1999-2000 crop year	None	236%	Receipts from coffee delivery, contracts between cooperatives and clients	Surpassed target by 18%
3	Farmers adopt agroforestry and organic agricultural methodologies and conservation techniques	3.1	# of Farmers that have met Farm Management Plan targets for 2 consecutive years	0 Farmers	800 Farmers that have met targets for at least 1 year	The original target was for 100 farmers to have completed a management plan for 2 years. Year 1 there was no formal management, rather general management recommendations. In May-June 2003 second year Management Plans were evaluated. At the end of the project, farmers will be half way through their second management plan.	857	Producers' business plans, project's M&E archive *(Y)*	Surpassed target by 7.1% *It is reported that 600 farmers have completed their management plan in the second year too*

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	DIP Objective		Indicators	Baseline	Target Year 3	Adjustments as per 2nd year report	Status Year 3	Verification means *(Verified Y/N)*	Comments CI */Evaluators' comments in italics*
		OLD 3.2	Change (%) in the total hectares with an insect ("Broca") infestation rate of 5% or greater	32% of the total hectares have an insect ("Broca") infestation rate of 5% or greater as of October 2000	22% of the total hectares have an insect ("Broca") infestation rate of 5% or greater as of September 2003	It was not cost effective to measure the impact of the program's IPM activities on the infestation rate of broca. The number of farmers using the biological control practice provided a more feasible performance based indicator			
		REV 3.2	(#) of farmers applying *Beauveria bassiana* as a part of their IPM for Broca		600 farmers applying *Beauveria bassiana*	As above	673	Farm Management Plans *(Y)*	Surpassed target by 12.2%
		OLD 3.3	Percentage (%) of the farmers' fields that have six (6) or more species of shade trees	49%	80%	Measurements of shade levels and composition will be implemented during the farm diagnosis at five year intervals (due to the timeframe over which forest composition changes and can be measured). While this indicator remains a key measure of success over the long-term, it is necessary to include a medium term performance indicator in the interim			
		REV 3.3	# of native shade trees planted or nurtured from wild seedling by farmers in their farms		10,000 native shade trees planted or nurtured from wild seedlings	None	11,641	Farm diagnosis records *(Y)*	Surpassed target by 16.4%
		3.4	# Mexican CBO members certified organic	126 Mexican CBO members are certified organic as of December 2000	200 Mexican CBO members are certified organic by December 2003	None	405 farmers	Organic Certification Records of Coops *(N)*	Surpassed target by 102.5%
4	Farmers are being verified for Conservation Coffee Standards	4.1	# of farmers verified to meet Conservation Coffee Standards	0 Farmers	100 farmers verified to meet Conservation Coffee Standards by December 2003	None	248 farmers verified. 236 small farmers / members of cooperatives and 12 fincas	Report external verifier Jan 04 *(N)*	Surpassed target by148%
5	Monitoring and evaluation system implemented, informing management decisions and contributing to Conservation Coffee Standards development	5.1	Project level M&E system operational and monitoring achievement of project targets and benchmarks	Project level M&E system proposed	Project level M&E system operational and data collected incorporated into project work plan for FY 2003/2004	None	Table of Indicators and Targets up to date, implementation plan 04 available	Project Management eRoom, *(Y)* *Paper and electronic copies of data available*	Met
		DEL 5.2	CBO level M&E system operational and monitoring achievement of CBO targets and benchmarks	CBO level M&E system set to be proposed	CBO level M&E system operational and data collected is incorporated into CBO's business plans for 2003-2004 harvest	Indicator deleted because turned out not to be viable in the time frame of the project			
		5.3	Conservation Coffee Standards revised to reflect data collected by project and CBO level M&E systems	Draft of Global Framework for Conservation Coffee proposed	Local Conservation Coffee Standards have been drafted and include data from project and CBO level M&E systems by July 2003	None	draft local standards available	Project Management eRoom *(Y)*	Met

Original and modified PVC Objectives & Indicators, Ghana Section of the DIP

	DIP Objective		Indicators	Baseline	Target Yr 3	Adjustments as per 2nd year report	Status Yr 3	Verification Means *(Verified Y/N)*	Comments CI *(Evaluators comments in italics)*
OLD 1	Kuapa operates as an effective and efficient business		As Below			*Objective changed in light of stalled liberalization of the cocoa market indicators still applied*			
NEW 1	Kuapa's organizational capacity at the Society level strengthened (revised objective dec 02)	1.1	Annual ranking of society performance using established Kuapa criteria	Bobs, Antobrum and Aboka Nkwanta are 'Healthy' Krowa is 'Intermediate'	Maximum increase over baseline of 6 points for Healthy Societies, minimum 15 points for Krowa (Intermediate)	None	Krowa has moved from intermediate to healthy society	Kuapa assessment criteria *(N)*	It was Krowa that convinced CI of the need to work with traditional authorities to reach non members of Kuapa as well as with Kuapa societies. The Kuapa society in Krowa is quite small and selecting it as a beneficiary caused jealousies among other farmers that were resolved when selection was managed at a local level
		1.2	Percent (%) change in target societies annual membership	10% increase in the average society annual membership from year 99/00 to 00/01	25% increase in the average target society annual membership over baseline (20% growth per year)	None	Kuapa has not supplied official membership figures but societies estimated to have increased by a smaller amount than target	Interview with society executives *(N)*	Caution needed in interpreting membership numbers. When the project started, the perception that Kuapa was leading it led to some farmers joining in order to participate. This is a further reason not to limit activities to one farmer association because it may distort membership. In a similar manner, the pressure from near by communities for Kuapa to begin a society was quite high
		DEL 1.3	Percent of target farmer total production sold to Kuapa	Average 60% of members cocoa sold to Kuapa	Average 90% of members cocoa sold to Kuapa	Indicator deleted because project has not worked on increasing Kuapa commercial capacity			

	DIP Objective		Indicators	Baseline	Target Year 3	Adjustments as per 2nd year report	Status Year 3	Verification means *(Verified Y/N)*	Comments CI */Evaluators' comments in italics*
		DEL 1 4	Operating cost per bag for target societies/areas	24,962 cedis (7,000 cedis/$)	14% reduction from baseline	indicator deleted because project has no influence on Kuapa management decisions since liberalization has not proceeded as foreseen			
		1.5	Premium Kuapa members receive for their cocoa over local prices	Kuapa pays members 0.5% premium over local prices (price plus year-end bonus)	Kuapa pays members 3.5% premium over local prices	Premium received by farmers relates to additional sales under fair trade terms to the Day Chocolate Co, in which CI has invested as an alternative marketing strategy.	Kuapa pays its members a small premium above the government-set internal market price	Kuapa records *(Y)*	Below target - 2.1% over market price per bag goes back into the community either as initial payment or bonus Members also receive benefits of community development projects and access to Kuapa's credit union
		OLD 1 6	Total number of women involved in women's income projects in target societies	29 women involved in womens income projects	120% increase (30% growth per year) in number of women over baseline	Indicator has been changed (as communicated in First Year Annual Report) and substituted by a new indicator reflecting the new approach			
		REV 1 6	Gender issues included in society-level capacity-building program	Not available	Capacity building materials produced, including gender issues	as above	Gender issues incorporated into capacity building materials developed by Dr Osei	Reference Manual for Kuapa *(Y, but see below)*	New Target met - The original idea that women would be enlisted to plant trees was dropped when the Year 1 gender survey revealed that they were not interested and rather wanted support to grow vegetables, which was not within the project's mandate
		NEW 1 7	Society level capacity building materials produced and pilot tested	Not available	Capacity building materials for society available	new indicator May 02	Documentation of a Reference manual for Kuapa was completed in May 2002	Reference Manual for Kuapa *(Y electronic version, but only one hard copy available - in Kuapa HQ)*	Target met for production, *but pilot testing depended on reproduction and distribution of the manual which had not been done*
		NEW 1 8	# of RDO's (Research and Development Unit Officer) trained	14 untrained RDOs available for training	14 RDO's trained	new indicator May 02	All 14 RDOs available then were trained	FFS reports *(Y)*	Target met - At the time of training Kuapa had only 14 RDOs, the number has increased in the meantime to 26
2	Project farmers adopt conservation agroforestry practices for cocoa	2 1	Proportion (%) of farmers adopting recommended conservation agroforestry practices	140 farmers 5 recommended practices	30% of target farmers have implemented at least 50% recommended practices on their farms by August 2003	Baseline was defined during project implementation with the constitution of the target group and the participatory identification of the practices being part of the FFS methodology.	40% of farmers have implemented at least 50% recommended practices	Visits and interviews with the 110 farms selected by the project / M&E archive *(Y, but archive only has Report, database not in DC)*	Target surpassed. It was decided to limit the monitoring program to 5 elements: shade diversification; understanding the role of wildlife in the ecosystem, lack of conversion of forest to agriculture, nursing of cocoa seeds and phytosanitary control of black pod and swollen shoot virus. *Most important practice for yield increase, frequency of harvesting, not included in survey*
		DEL 2 2	Proportion (%) of annual target farmers' cocoa harvest classified at society depot as Grade 1 quality	Societies do not have quality checks other than of bean size and bag weight	An average of 95% of target farmers' annual harvest is classified as Grade 1 in the year 2003	Indicator deleted december 02 because the project is not able to distinguish the grades of cocoa according to farm practices			*It would have been useful to begin to collect yield data from target farms in view of the dearth of information on production, especially in relation to shade amount*
		DEL 2.3	Yield per hectare of dried cocoa beans for target farms	Average of 240 kg dried cocoa beans per hectare	5% increase in yield per hectare for target farmers, 10% increase on demonstration farms by August 2003	Indicator deleted December 02 because the increase in yield could only be measured in the long term, not in the project life time.			
		NEW 2 4	Cocoa Conservation Best Practices (CCBP) ToT/FFS Extension Program Training Manual available	Training Manual proposed	Final copy of FFS/TOT Extension Program Training Manual	new indicator May 02	Training manual for conservation is available and fact sheets of other agronomic issues are in FFS reports.	FFS reports *(Y,)*	Target met - CI contributed to the conservation issues only and has archived these, other aspects of training managed by project partners only exist in reports. *Lack of consolidated manual may hinder future training.*
		NEW 2.5	# of ToT trainees trained in CCBP FFS implementation	0 ToTs trained	18 Trainees trained	new indicator May 02	24 Trainees trained	FFS reports *(Y)*	Target surpassed - 2 MOFA Staff, 2 CI Staff, 4 Kuapa staff & 16 farmers were trained as trainers
		NEW 2 6	# of farmers trained in Cocoa conservation best practices	0 farmers trained	200 farmers trained in the FFS	new indicator May 02	350 farmers trained	Project's M&E archive *(Partial verification only, lack of appropriate attendance records in archive)*	Target surpassed, based on the estimation of nine communities with an average of 40 members per community. *Interviews in field indicated irregular and sometimes low attendance at FFS so this may be an overestimate*
	OLD 3	Conservation Cocoa Agroforestry Program (CCAP) Standards defined and adopted by Kuapa	DEL 3 1	Existence of a set of Conservation Cocoa Agroforestry Program Standards	No standards exist	Final set of Conservation Cocoa Agroforestry Program Standards adopted by Kuapa by August 2003	objective 3 merged with objective 2 because the elaboration of conservation cocoa standards is a longer process and won't be completed within the project's timeframe (see chapter IV 2nd yr report)			

	DIP Objective	Indicators		Baseline	Target Year 3	Adjustments as per 2nd year report	Status Year 3	Verification means *(Verified Y/N)*	Comments CI /*Evaluators' comments in italics*
		DEL 3.2	# of Kuapa target farmers verified to meet Conservation Cocoa Agroforestry Program Standards	No farmers verified to meet CCAP Standards	25 Kuapa target farmers have been verified to meet CCAP Standards by December 2003	objective 3 merged with objective 2			
NEW 3	Political decision makers at local and national level recognize the value of Conservation Cocoa	NEW 3.1	Stakeholder Evaluation Workshop conducted	Workshop with Stakeholders proposed	Stakeholder Evaluation Workshop Mid 2003	new component and indicator May 02	Workshop held in August 2003 which received extensive press coverage	Workshop report *(Y)*	process targets met
		NEW 3.2	MOUs signed with key policy institutions formalizing their involvement with project	Agreements proposed with CRIG, MOFA, & PLEC	agreement signed with CRIG,MOFA & PLEC	new component and indicator May 02	Updated agreement signed with CRIG, MOFA & PLEC	Project's M&E archive *(Y)*	Process target met
		NEW 3.3	Relevant National and District level policy makers have participated in development of CCBP	Participation proposed	1 District Assembly officer in project area and representatives of CRIG and MOFA participate in FFS	new component and indicator May 02	District Chief Executive and Leaders of other partners visited at least once. CRIG & MOFA fully participated	FFS Report *(Y)*	Target met
		NEW 3.4	Government disseminates positive information through national fora and media about sustainable cocoa	Information from Government on sustainable cocoa proposed	1 broadcast, 2 press articles and 2 speeches	new component and indicator May 02	1 broadcast and two speeches were made	Project media file *(N)*	FFS program was shown on the national TV and speeches are available in file
		NEW 3.5	FFS Lesson learned presented to STCP	Meeting proposed with STCP	Meeting held for formal presentation of FFS learnings to STCP program	new component and indicator May 02	STCP invited to program evaluation workshop but unable to attend, instead STCP representatives visited CI Ghana in Sep 03 & participated in workshop in DC Oct 03	File note *(N)*	Target met
4	Project partners apply adaptive management approach	4.1	Project level monitoring and evaluation (M&E) system operational and monitoring achievement of project targets and benchmarks	Project level M&E system proposed	Project level M&E system operational and data collected incorporated into project work plan for FY 2003/2004	None	Project level M&E system initiated, data collected will be incorporated into new project work plan	Project Management archive in eRoom *(Y but survey databases not available)*	Below target. The second phase of the project will be planned through a multistakeholder planning process which is scheduled for early 2004 when funding from the GEF is anticipated to come through
		DEL 4.2	Kuapa level M&E system operational and monitoring achievements of Kuapa targets and benchmarks	M&E system yet to be proposed for Kuapa	Kuapa level M&E system operational and data collected is incorporated into business plans for 2003/2004 harvest	Indicator deleted because Kuapa cannot introduce m&e system until farming practices defined			
		OLD 4.3	Conservation Cocoa Agroforestry Program (CCAP) Standards development reflects data collected by project M&E systems	Conservation Cocoa Agroforestry Program (CCAP) Standards not yet drafted	Kuapa CCAP Standards have been drafted and include data from project and Kuapa level M&E systems by July 2003	Conservation Cocoa Standards development has been replaced by best practices development			
		NEW 4.3	Conservation Cocoa Agroforestry Program (CCAP) Best Practices development reflects data collected by project M&E systems	Conservation Cocoa Agroforestry Program (CCAP) Best Practices not yet drafted	Kuapa CCAP Best Practices have been drafted and include data from project and Kuapa level M&E systems by July 2003	As above	Draft Conservation Best Practices produced	Available on the computer *(Y)*	CI plans to synthesize Best Practices together with STCP and other stakeholders for widespread implementation by Kuapa and non Kuapa farmers. *Clarification of the recommendations surrounding shade removal are urgently needed for people already trained and those to be trained*
		NEW 4.4	Household study provides socio economic data for measuring impact	Household study proposed	Household study available	new indicator May 02	Household study available	Project's M&E archive *(Y but Report only. Database not present in DC at time of evaluation)*	Process targets met. *Further annual studies needed to assess adoption*
		NEW 4.5	Habitat survey provides data for measuring biological impact	Habitat survey proposed	Habitat survey available	new indicator May 02	Habitat survey available	Project's M&E archive *(Y but Report only. Database not present in DC at time of evaluation)*	

Annex 7.3 Partnerships Table (SOW Annex C)

Summary of the status and outcomes of the main partnerships operated in each MG program country

Partner Type	Name of Organisation	Organisation Type	Agreement Type	Role/Main Responsibilities	Funds received from PVO (% of total income)	Quality and Outcomes of Partnership
Mexico						
Primary in-country partners receiving PVO MG Funds	ECOSUR	Research and Education College	MoU	Design of training modules and training of extension workers, advice on bological control, conservation best practices		Partnership of consistently good quality, resulting in completion of the training of extension workers, improved biological control of broca.
Main partners of primary partners also receiving MG funds	none					
Other key partners who do not receive MG funds	CESMACH	Long-established Cooperative for coffee producers	MoU	Umbrella organisation for coffee farmers/marketing coffee, providing extension services		Reasonable initially, but detiorated with increases in pressure from CI for transparency, provision of additional services, acceptance of new marketing route, and also increased costs for CI's services to the coop
	ICEAAC	Younger Cooperative	MoU	Umbrella organisation for coffee farmers/marketing coffee, providing extension services		Reasonable throughout, though starting from a lower level in terms of experience compared to CESMACH. Still selling to Starbucks

	Comon Yaj nop Tic	Younger Cooperative	MoU	Umbrella organisation for coffee farmers/marketing coffee, providing extension services		Reasonable throughout, though starting from a lower level in terms of experience compared to CESMACH. Still selling to Starbucks
	REBITRI - CONANP	Reserve Management	MoU	Reserve Management, liaison over environmental education for farmers and extension trainees, geographic aspects, Conservation Coffee best practices		Difficult initially, fully collaborating by end, join in CI farmer and other workshops, looking to incorporate CCBP in Reserve Management Plan
	FIRA	Finance for training, transfer of technology	MoU	Assisting with joint meetings for CI, ECOSUR, CONANP		
Partner Type	Name of Organisation	Organisation Type	Agreement Type	Role/Main Responsibilities	Funds received from PVO (% of total income)	Quality and Outcomes of Partnership

Ghana						
Primary in-country partners receiving PVO MG Funds	Kuapa Kokoo Ltd	Cooperative	MoU	Umbrella organisation for cocoa farmers/marketing Fairtrade cocoa, providing other services including extension and training at FFS	?	Kuapa's capacity less than expected, withdrew temporarily mid-term, latterly collaboration improved through CEPF stimulus; RDOs active in field with own FFS program
	CRIG	Government Commodity Crop Research Institute	MoU	Review of baseline situation. Advice on cocoa agronomy for development and validation of Conservation Cocoa best practices, training role at FFS	?	CRIG's initial reservations overcome by CI, to give a profitable partnership regarding best practices and training
	MOFA ICPM	Government body providing ICPM advice, extension training	MoU	Implementation of the Training of Trainers program in Farmer Field Schools, with CRIG, CI, Kuapa	?	Generally productive partnership resulting in successful training of trainers and farmers
Main partners of primary partners also receiving MG funds						
Other key partners who do not receive MG funds						

Annex 7.4 List of sites visited and persons/groups interviewed

Date Novem-ber 2003	Site	Contact
11	Washington DC	Edward Millard, CI-DC, Senior Director, Conservation Enterprise Department (Program Team) Matthew Quinlan, CI-DC, Senior Advisor Conservation Coffee (Program Team) Linda Klare-Repnik, CI-DC, Advisor Project Design and Management (Program Team) Todd Hamner, CI-DC, Advisor Agricultural Practices (Program Team) Katie Kelly, CI-DC, Associate, Conservation Enterprise (Program Team) Fred Boltz, CI-DC, Senior Director, People and Protected Areas Department
12		Lori Pommerenke, Technical Advisor, USAID/DCHA/PVC
13		John Buchanan, CI-DC, former Director Conservation Cocoa Program, CELB Angela R. Prosek, CI-DC, Manager, Corporate Partnerships, CELB Efrain Niembro, CI-DC, Mexico and Central America Program, Former Manager for Operations in Mexico-City Abbe Reis , CI-DC, Former Director of Finance
14		David Gambill, CI-DC, Director, US Agency Relations
16	Tuxtla/Mexico	Ignacio March Mifsut, CI-Chiapas, Coordinator Program Selva Maya
17	Jaltenango/ Mexico	Santiago Arguello, CI-Jaltenango, Project Manager (Project Team) Gabriel Nava, CI-Jaltenango, Coordinador Servicios de Acreditación y Replicación (Project Team) Lazaro Escalente, CI-Jaltenango, Coordinador de Servicios de Extensión y Evaluación en campo (Project Team) Fausto Grajales, CI-Jaltenango, Sub-Coordinador Servicios de Extensión y Acreditación (Project Team) Jovani Ramos, CI-Jaltenango, Administration (Project Team)
18		Arthur van Leeuwen, Consultant Socio-economic study
19		Colonia Nueva Colombia, Visit of coffee farm
20		Manuel Morales, CI--Jaltenango, Coordinator Monitoring & Evaluation (Tuxtla)

		(Project Team)
21		Uriel Ramirez, Reserva de la Biosfera El Triunfo, Jaltenango Gilberto Hipólito González Escalante, Presidente Comité Ejecutivo ICEAAC, SSS, Indígenas y Campesinos Ecológicos de Ángel Albino Corzo Hugo Lares Sierra, Asesor General, FTV, SC, (Fondo de Inversión y Contingencia para el Desarrollo Rural, FINCA Triunfo Verde, S.C.) Sixto Bonilla, Coordinador General, Reynaldo Lopez Garcia, Presidente Comité Ejecutivo, CESMACH , SC. Campesinos Ecológicos de la Sierra Madre de Chiapas Carlos Velasco Lopez, CESMACH (Project Team)
22		Montechristo, visit of coffee farm
24	Tuxtla/Mexico Villaflores	Roberto Escalante Lopez, Director de la Reserva de la Biosfera El Triunfo Juan Carlos Castro, Subdirector de la Reserva de la Biosfera El Triunfo Enrique Edelmann, Regional Manager Agroindustrias Unidas de Mexico AMSA José Filiberto Martinez Bocanegra,Agente FIRA
25	Jaltenango/ Mexico	Roberto Hernández Liebano, Presidente Comité Ejecutivo, Cooperative Comon Yaj Nop Tic, and 80 members Teresa Castillejos, Consultant Comercialisation & Finance
26		(Project Team) (Fausto Grajales) Conservation Coffee Training Center (Centro de Capacitación), Escuelas de Campo y Experimentación para Agricultores Roberto Marín Estrada, Jaltenango,Chiapas, Warehouse Manager AMSA (Arthur van Leeuwen, Consultant Socio-economic study)
27	Tuxtla/Mexico	(Jovani Ramos, CI-Jaltenango, Administration) Emilio Osorio Ortiz, Ejecutivo Cadena Café Estado de Chiapas, Fondo Acción/BANAMEX Beatriz Campo, Fondo Acción/BANAMEX Mao Yamamoto Nagango, Fondo Acción/BANAMEX
28		Eduardo A. Esteve, Agroindustrias Unidas de Mexico AMSA, Mexico,D.F Cyrille Jannet, Director Comercial AMSA, Mexico,D.F

Decem-ber 2003		
8	Accra/ Ghana	Okyeame Ampadu-Agyei, CI-Accra, Country Director
		David Kpelle, CI-Accra, Deputy Director-Projects, Review Project Reports
		Gyampah Amoako-Gyedu, CI-Accra, Agro-Forestry Officer, Project Manager
		Yaw Osei-Owusu, CI-Accra, Monitoring and Evaluation Officer
		Emmanuel Owusu, CI-Accra, Director of Finance
		(Edward Millard, CI-DC, Senior Director, Conservation Enterprise Department)
		Jessica Donovan, CI-DC, Project Coordinator West Africa Program
9		Paa Kwezi Entsie, Integrated Pest Management ICPM, Ministry of Agriculture
	Kruwa, Nyambebu, Damtse	Meeting with Community members
10	Bobi, Camp	Meeting with Community members
	Abeka Nkwanta, Somnyamed -kodu	Meeting with Community members
11	Antokrom, Afiasco	Meeting with Community members
12	Kakum National Park	Park Visit
15	Kumasi	Ohemeng Tenyas, Managing Director Kuapa
		Charles Afari Mintah, Research and Development Officer Kuapa
16	Tafo	Dr. Kwabena Osei-Bonsu, Principal Agronomist, Cocoa Research Insdtitute of Ghana CRIG
		Dr. Laud Ollenu, Deputy Executive Director, Cocoa Research Institute of Ghana CRIG
		A. Afrifa, Soil Scientist, CRIG
		George Asante, Agroeconomist CRIG
17	Accra	Prof. Afreh-Nuamah, ICPM Coordinator, Ministry of Food and Agriculture
		(Emmanuel Owusu, CI-Accra, Director of Finance)

January 2004	Washington DC	
5		(Project Team, Jessica Donovan)
6		Jennifer Morris, CI-DC, Manager, Verde Ventures Fund Adriana Madrigal, CI-DC, Investment Officer, Verde Ventures Fd. (Project Team, Efrain Niembro) Alejandro Robles, CI-DC, Vice President, Mexico and Central America Program Nigel Asquith, CI-DC, Director, Conservation Policy
7		(Project Team) Olivier Langrand, CI-DC, Vice President, Africa and Madagascar Division, (Jessica Donovan, CI-DC, Project Coord. West Africa) (John Buchanan, CI-DC, former Director Conservation Cocoa Program, CELB)
8		Justin Ward, CI-DC, Senior Director, Agriculture, Forestry and Fisheries, CELB (Alejandro Robles, CI-DC, Vice President, Mexico and Central America Program) Elizabeth T. Kennedy, CI-DC, Director, Outcome Monitoring, Conservation Strategies Department, formerly in charge of the CC Program's M&E Claude Gascon, CI-DC, Senior Vice President Regional Programs (Matthew Quinlan, CI-DC, Senior Advisor Conservation Coffee)
9		Keith Alger, CI-DC, Vice President, Conservation Strategy Dptmt
12		Amy Skozclas, CI-DC, Former Senior Director, Corporate Partnerships, CELB, Jill Gorsky, Former agroforestry program coordinator finances (telephone conversation San Francisco) (Linda Klare-Repnik, CI, Advisor Project Design and Management)
13		(Edward Millard, CI-DC, Senior Director, Conservation Enterprise Department) David Knox, CI-DC Manager Africa-Eurasia, Conservation Outcomes, Conservation Synthesis Department, Center for Applied Biodiversity Science Thomas Brooks, CI-DC Senior Director, Conservation Synthesis Department, Center for Applied Biodiversity Science Armando Laborde, former coordinator Chiapas Coffee Project (Program Team) Debriefing

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Annex 7.6 Successes, Challenges and Constraints

Table . Principal Successes, Challenges and Constraints in the Washington DC Conservation Coffee and Cocoa Project

WASHINGTON DC	
DIP Objective 1: CI has the capacity to develop conservation enterprises based on coffee and cocoa	
Successes	**Challenges & Constraints**
Tools and experience were developed by staff at HQ to promote projects for biodiversity conservation among coffee farmers in Mexico and cocoa farmers in Ghana. Approach already being extended to coffee farmers in Colombia and Peru	Staff changes and gaps at HQ and in-country caused difficulties, as did restructuring at HQ. Coffee, and particularly cocoa, agroforestry systems and socio-economic environments only partially understood and documented at the beginning of the project partly because of deficient project planning procedures and a lack of the participatory approach
DIP Objective 2: Participating farmers have access to training in agroforestry and organic methodologies	
Successes	**Challenges & Constraints**
Staff in HQ travelled to the countries and participated in the settting up of training for community extension workers in organic coffee and agroforestry in Mexico (35 trained), and cocoa agroforestry in Ghana (16 trained).	**In Mexico, the cooperatives were not prepared to provide the extension service. In Ghana, Kuapa did not engage in capacity building because there was, and still is, uncertainty regarding liberalization of the market, and doubts over organic cocoa. Further, few Kuapa staff participated in FFS/ToT because of the impasse at the time between CI and Kuapa over vehicle purchase**
DIP Objective 3: CBOs have access to capital at competitive rates	
Successes	**Challenges & Constraints**
CI facilitated over US$1.3 million in credit to the Mexican Cooperatives for purchases for their coffee exports over the three year period, much of it in collaboration with Ecologic Enterprises Ventures Inc. Complete repayment by the cooperatives in the first two years helped applications for further credit, and attracted FondoAccion (a socially responsible lending institution in Mexico) in association with Banamex, S.A.	The need for capital for the CBOs existed only in Mexico, where loans enabled farmers to harvest their coffee without having to commit to sell to local intermediaries at lower prices, rather they could sell through the cooperatives for a premium. However, according to the socio-economic survey, in 2002 the project's Evergreen Credit Fund apparently did not have much of an impact as it proved to be practically unknown to famers. In Ghana local bank finance was available to Kuapa. However, CI did participate indirectly in Ghana by investing in marketing development with the Day Chocolate Company, of which Kuapa is a shareholder.

DIP Objective 4: CBOs have increased access to premium Coffee and Cocoa Markets	
Successes	Challenges & Constraints
Six CBOs in Mexico were able to sell coffee at a premium to Starbucks Coffee Company and Green Mountain Coffee Roasters. Sales of "Fair-Trade" certified cocoa beans increased. In year three the farmers participating in the cooperatives received an average of US$ 0.73 per pound of unprocessed coffee sold through the program. This is 97% more than average local price of US$0.37. Producers of organic coffee received US$ 0.81 per pound, which equals 119% above local price. Producers of "in-transition coffee" received US$ 0.65, which is 76% more per pound than the local price. In terms of the project's performance matrix, the project surpassed its adjusted year three target (US$ 0.70 per pound) by 4.3%.	In searching for a wider client base, CI found that certain potential clients would not accept in-transition coffee, while for others the amount of shade grown coffee available was insufficent. On existing contracts, difficulties in delivering directly in time between the main client, Starbucks and individual cooperatives gave rise to a new marketing system for the 2003/4 harvest using the local mill AMSA as a buying agent and exporter, but this relatively abrupt change was not accepted by four of the cooperatives and they threatened to withdraw. The lack of liberalisation in Ghana meant that the possibilities of increasing access to premiums were thwarted.
DIP Objective 5: CI develops Conservation Standards and they are verified in Mexico and Ghana	
Successes	Challenges & Constraints
CI collaborated with various institutions and organisations to develop an overarching set of Conservation Principles for Coffee in 2001, that would be widely applicable. Local level Conservation Coffee Best Practices were worked out between CI HQ, Starbucks and the Chiapas Project, and independently verified in a pilot scheme with 250 farmers in 2003. Cocoa Best Practices have been drafted for Kakum, but are not yet finalised.	"Standards" found to be too rigid, so thought of more as "guidelines". The introduction into the Green Coffee Purchasing Guidelines of aspects effectively criticising the structure and transparency of some Mexican CBOs has worsened their collaboration with CI. The definition of guidelines for cocoa under forest shade depends on further data collection and long-term research, and likewise Cocoa Best Practices need futher evaluation.
DIP Objective 6: CI develops M&E system and it is applied in Mexico and Ghana Programs	
Successes	Challenges & Constraints
CI instigated various separate surveys for monitoring Project impact, such as the socioeconomic survey in Mexico, and the household and habitat surveys in Ghana. These gave valuable insight into the social and environmental effects of the Project. At the same time, a new project design and management system was developed at HQ on the basis of the coffee and cocoa experience, with the aim of being able to apply it to all new projects of a similar nature.	One challenge for HQ was to make sure that the two levels of monitoring and evaluation (separate impact surveys and the new performance monitoring system) with two different sets of objectives and indicators (original PVC-DIP and new project management framework) would mesh well and not lead to gaps in the information collected, stored and reported.

Table . Successes, Challenges and Constraints in the Mexico Conservation Coffee Project, DIP Objective 1

MEXICO		
DIP Objective 1: Cooperatives have the capacity to operate as effective businesses that promote conservation		
	Successes	**Challenges & Constraints**
1 2000/3	Cooperatives were provided access to low interest loans over the three years of the project, and loans were repaid in full.	Challenge was to replace credit supply through "coyotes" at high cost, with credit at reasonable rates but with formal obligations to be met for coffee supply and repayment
2 2001/3	Cooperatives were trained in business planning and credit management, with training consolidated through the production of business plans and credit applications, and a business training manual; coffee marketing courses	Cooperatives varied considerably in their organizational and business capacity, and often lacked experience in critical "staff"; transparency not easily introduced where key players receive no salary; relatively short time-scale for changes to occur
3 2000/3	Cooperatives generated internal capital from their coffee export revenues, thereby building track records of savings and credit history	Sparse history of saving as a culture among cooperatives
4 2000/3	Turnover in membership, annual rate successfully reduced	Low levels of loyalty to cooperatives because of unclear benefits; scandals and rumours causing changes in perception of a certain cooperative's value within a community. Recent difficulties with the revised Starbucks buying system

Table . Successes, Challenges and Constraints in the Mexico Conservation Coffee Project, DIP Objective 2

MEXICO		
DIP Objective 2: Cooperatives realize higher prices through increased access to coffee markets		
	Successes	**Challenges & Constraints**
1 2000/3	CI maintained agreements throughout with two important coffee roasters to purchase appreciable volumes of shade grown coffee from the project, at premium prices	Large importers, even those already sponsoring conservation, are sensitive to blips in supply and variable coffee quality, and buying departments want rapid and guaranteed improvements from year to year – which resulted in abrupt changes to the selling chain which some cooperatives threatened not to go along with
2 2000/3	Farmers received considerably more for their coffee than the local price each year, and could sell a reasonable amount of their harvest at these prices	The challenge was to guarantee quality and timely supply from cooperatives who apparently had relatively little understanding of the exigencies of milling and shipping schedules
3 2000/3	Recognition of need for Coffee quality, and the quality itself increased by project's efforts in training	Majority of farmers don't drink coffee and were barely aware of what could cause bad quality

Table . Successes, Challenges and Constraints in the Mexico Conservation Coffee Project, DIP Objective 3

MEXICO		
DIP Objective 3: Farmers adopt agroforestry and organic methodologies and conservation techniques		
	Successes	**Challenges & Constraints**
1 2000/1	Agricultural technical assistance team with 4 agronomists established, and tasks allocated	Shortage of experienced and motivated technicians willing to work in isolated communities in South West Mexico
2 2000/1	Farm diagnosis process developed based on Conservation Principles for Coffee Production, tested and implemented in each coffee field of participating farmers	Design and validation of sampling methodology appropriate to shade grown coffee and conservation objectives. Redraft of overambitious method for broca infestation survey and for that already surpassed in shade diversification. Difficult access to remote villages and hillside farms
3 2000/1	Establishment of biological control laboratory and associated IPM progam. Production and distribution of doses of *Beauvaria bassiana* for broca control; training of farmers and extension workers in its use; liaison with ECOSUR	Lack of adequate infrastructure for and experience of culturing fungi and managing parasitoids. Need for quality control on production, difficulty of financing a year-round operation
4 2001	Relocation of Agricultural Training Centre, Jaltenango	Lack of an adequate water supply led to the need to search for and negotiate another site for the Centre
5 2001/2	Agricultural Training Centre, Jaltenango built and made operational demonstrating various conservation practices and producing native tree seedlings; classroom available for training	Native tree seeds difficult to obtain in quantity; recalcitrant germination in many species.
6 2001/2	New farms received Initial Diagnosis, and GPS information obtained for all farms; model farms selected as training sites	Appropriate organisation, storage and analysis of data and integration with the GIS information. Second year information was not integrated directly with that in the database because of changes and additions to variables recorded. Instead spreadsheets were used for storage, which reduced ease of analysis.
7 2002	1014 farmers in fifteen communities received a course on conservation coffee, best practices, and El Triunfo Reserve. A further 549 attended courses in 19 communities for on-farm quality control and later, on fermented Bokashi fertiliser. Social issues (housing, clean water, minimum wage) relating to contracted seasonal labor addressed	Farmers in general initially had very little understanding of biodiversity conservation in relation to coffee growing, nor of appropriate management for coffee pulp solid wastes, liquid wastes or of reducing water usage. They did however have suggestions to be elicited on preferred tree species for different uses within their farm.
8 2002	Technical capacity of partner cooperatives evaluated, together with the service provider market in the region and producers' requirements for Technical Assistance	Cooperatives not used to being evaluated as to their capacities, including technical expertise and clarity of objectives regarding the services they offer; new cooperatives lack experience and technical capacity.
9 2002	Farm Management Plans elaborated and agreed for 1088 coffee fields, producers participated in choosing additional optional good practices	Producers had to agree to several key practices when signing up for the Management Plans including: no forest clearing, maintenance of buffer zones around streams, no coffee pulp in streams, wells for infiltration of

MEXICO		
DIP Objective 3: Farmers adopt agroforestry and organic methodologies and conservation techniques		
	Successes	**Challenges & Constraints**
		liquid wastes, traditional good coffee management.
10 2003	Points system for compliance with Starbucks Green Purchasing Guidelines used to evaluate Management Plans, and more than 600 farmers met plans for second year	Other elements needing compliance, such as the difficult ones of transparency in cooperative finances, members' control of the cooperative officials, and autonomy in the marketing chain can upset relations between cooperatives and the Project and indirectly jeopardise progress in the areas of organic certification, agroforestry and conservation

Table . Successes, Challenges and Constraints in the Mexico Conservation Coffee Project, DIP Objective 4

MEXICO		
DIP Objective 4: Farmers are being verified for Conservation Coffee Standards		
	Successes	**Challenges & Constraints**
1 2000/1	The establishment of the Field Diagnosis Survey mentioned in Objective 3 formed a platform for the development of local standards based on the Conservation Principles for Coffee Production	Consultative process to develop global principles, increased emphasis on farmer participation and greater involvement of partner organizations took longer than anticipated causing a season's delay in implementation
2 2002	Internal Control Systems of cooperatives assessed for Organic Certification, and steps taken to improve or establish systems as appropriate; CI field data made available; courses given on ICS	New cooperatives have no experience of ICS requirements

Table . Successes, Challenges and Constraints in the Mexico Conservation Coffee Project, DIP Objective 5

MEXICO		
DIP Objective 5: Monitoring and Evaluation System implemented, informing decisions and contributing to Conservation Coffee Standards		
	Successes	**Challenges & Constraints**
1 2000/1	Database created for ecological, agricultural and socioeconomic data; information entered from the Diagnostic Field Survey including GPS coordinates, field characteristics, yield	Creation of a database system that can be learned and used reasonably readily by in-country personnel and relevant staff in Washington. No attempt was made to adapt the database structure to accept changes and additions in the Field Diagnosis data collected in years 2 and 3
2 2000/1	Map with refined set of priority areas for project expansion developed based on vegetation maps and Reserve management data	Difficulty in obtaining funding to establish a faunal biodiversity collection system resulting in absence of information on distribution of fauna in the buffer zone
3 2001/2/3	Socio-economic surveys successfully carried out at the household level in each year 2001, 2002 and 2003 to assess project impact and learn more of economic and social context of project region. Data incorporated into database and reports produced in Spanish and English.	Mobility of farmers both geographically and between cooperatives; problems in relationship between CI and cooperatives over marketing

Table . Successes, Challenges and Constraints in the Ghana Conservation Cocoa Project, DIP Objective 1

GHANA		
DIP Objective 1: Kuapa's organizational capacity at the Society level strengthened (revised objective dec 02)		
	Successes	**Challenges & Constraints**
1 2000/1	CI commissioned an evaluation of Kuapa's organization and business practices, including at society level, to identify weak areas	Kuapa is a large organization with widespread components
2 2000/1	CI and partner staff including Kuapa trained in Participatory Rural Appraisal methods, for obtaining baseline data	
3 2000/3	Gender issues studied within Kuapa and recommendations made	Understanding of and concern about gender issues generally not great.
4 2001/3	CI commissioned a consultant to produce and test a capacity building curriculum for a Kuapa manual to train RDOs; 14 RDOs trained, almost complete manual available.	Temporary interruption to cooperation from Kuapa led to some gaps in the manual. Manual still needs to be taken up and used by Kuapa itself.
5 2001/3	CI invested in the Day Chocolate Co as an alternative marketing strategy, aiming at additional sales of fair trade cocoa to support small premiums for Kuapa farmers	Stalling of market liberalization prevented Kuapa from taking advantage of appreciable premiums likely from organic cocoa

Table . Successes, Challenges and Constraints in the Ghana Conservation Cocoa Project, DIP Objective 2

GHANA		
DIP Objective 2: Project Farmers adopt conservation agroforestry practices for cocoa		
	Successes	**Challenges & Constraints**
1 2000	Workshop held in Accra to bring together main players (CI, CRIG, MOFA, NICPM, Kuapa Kokoo, FAO, Univ of Ghana) and to establish working groups for a continuing dialogue on Cocoa Cultivation and Biodiversity Conservation	Bringing together government and other bodies that have not interacted, or have been antagonistic. Activities on cocoa in Ghana strongly compartmentalised, and not previously involving MOFA and NICPM. Relation between cocoa research, general extension and biodiversity conservation lacking.
2 2001/2	FFS Curriculum Development Workshop held at CRIG Tafo Res. Station and consensus achieved on a set of validation trial and farmer practices, plus training modules for promoting agroforestry for cocoa farmers. PLEC also involved in latter.	Practices for managing cocoa as recommended by CRIG previously based on technical approach including considerable use of agrochemicals. Reduced subsidies meant change in possibilities for farmers. Information on optimal cocoa production in relation to forest shade lacking, and shade versus yield research is long-term.
3 2002/3	FFS Program launched end of Year 1, with modules prepared and training started in June 2002 and completed May 2003. Validation trials were deployed in identified demonstration farms, and monthly training of trainers carried out, in eight communities. Trained farmers passed on their learning to others in their villages.	Normal "validation before training of trainers" changed, because of short time scale, to simultaneous validation and training with attendant risks of wrong messages. Program associated with Kuapa members alone at beginning, later changed to include non-Kuapa farmers. Kuapa RDOs not participating initially because of CI's failure to meet promise to supply a vehicle. Some farmers expect additional benefits for participating in training
4 2002/3	Agreement reached on a range of basic best practices for existing and newly planted shade grown cocoa including harvesting frequency, maintenance pruning including mistletoe removal, black pod control, capsid avoidance, shade moderation, polybag planting of improved CRIG hybrids	Insufficient is known about certain aspects of forest shaded cocoa production for certain practices to be defined closely - further data collection and research needed on yield in relation to differing types and densities of shade; on preferred shade tree species from cocoa compatibility and biodiversity viewpoints. Funding not yet obtained for CRIG-CI collaborative project proposal on shade.
5 2003	Participating farmers report higher yields through applying practices, those replanting enthused by new techniques and general feeling engendered that it is possible to rehabilitate old cocoa farms, instead of clearing forest for new farms	There is a distinct risk that unnecessary removal of shade and biodiversity could result from application of blanket recommendations of 15-18 shade trees per hectare. There is a wide range in shade densities and types, with very little known about variability in yield response; this should be quantified. Mechanism for maintaining enthusiasm needs pursuing, both in new plantings and in adoption of practices in existing cocoa. Government ownership of economic forest trees on private land only recently relaxed, and only in certain respects, so farmers only just beginning to change from previous reluctance to plant or nurture forest trees.

Table . Successes, Challenges and Constraints in the Ghana Conservation Cocoa Project, DIP Objectives 3 &4

GHANA		
DIP Old Objective 3: Conservation cocoa agroforestry program standards defined and adopted by Kuapa – Merged with Objective 2		
NIP New Objective 3: Political decision-makers at local and national level recognise the value of Conservation Coffee		
	Successes	**Challenges & Constraints**
1 2001/3	CI signed updated agreements with key policy institutions including CRIG, MOFA, & PLEC formalizing involvement with project	Lack of previous working relationships between the institutions – need to overcome uncertainty regarding collaboration
2 2001/3	Relevant policy leaders visited Kakum Project area; CRIG and MOFA fully participated in FFS and development of Conservation Cocoa Best Practices	Relatively high initial cost of participation of expert trainers
3 2003	Program evaluation workshop held with participating organisations to consider FFS field trials, future program development and to strengthen alliances for next phase of expansion (to include the West African STCP)	STCP was delayed in getting off the ground in Ghana. STCP representatives did not attend workshop, but did meet with CI later
4 2003	Government disseminated postive information through national media about sustainable cocoa	Government (Cocobod and CRIG) had initial doubts regarding the wisdom of supporting the idea of sustainable cocoa
DIP Objective 4: Project partners apply Adaptive Management Approach		
	Successes	**Challenges & Constraints**
1 2000	Draft Conservation Cocoa Best Practices produced	CCBPs were drafted, but with little feedback from Kuapa Kokoo. The interruptions to collaboration between CI and Kuapa (caused by CI's inability to supply a vehicle) meant that a Kuapa level M&E system was not established in time to feed into Cocoa Best Practices. Project Level M&E as an objective was inappropriate because M&E is already a prerequisite to good project management.
2 2001/3	Habitat Survey produced	The survey tackled a complicated and little researched agroforestry system, with relatively scarce resources for data collection and follow up.
3 2001/3	Household Survey produced	The short time scale from project initiation (in terms of FFS) to closure meant that a survey of adoption rates, behavioural changes and the like was unlikely to be realistic.