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Growth-Environment ▫Win-Win▫ Strategies Through Natural Resource-Based Industries

RAISE Conference

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November 4, 1999
Washington, D.C.

RAISE
RURAL AND AGRICULTURAL INCOMES WITH A SUSTAINABLE ENVIRONMENT

CONTENTS

Conference Overview

Emerging market and transition countries around the world are increasingly willing to come to grips with their longer-term environmental issues while addressing the challenge of stimulating jobs and foreign exchange earnings. Donors must be ready to help their clients meet this challenge with strategies that provide lasting and broad-based growth opportunities while at the same time husbanding and enhancing the natural resource base on which a country's very survival depends.

On November 4, 1999, two centers in USAID's Global Bureau, the Center for Economic Growth and Agricultural Development and the Environment Center, held a one-day workshop in Washington, D.C. to showcase best practices demonstrating that good environmental stewardship makes good business sense and is a winning strategy for development practitioners within and outside USAID. Entitled Growth-Environment "Win-Win" Strategies Through Natural Resource-Based Industries, the conference was organized with the three consortia[1] formed to provide services under the Rural and Agricultural Incomes with a Sustainable Environment (RAISE) IQC program.

The workshop was arranged around three themes and nine best practices briefs selected by USAID from 30 submissions from RAISE partners. Throughout a day combining topical presentations and lively question-and-answer sessions (see Annex A), the workshop examined elements necessary for successful sustainable growth and natural resource management through exploration of the themes:

- *Expanding markets by improving product quality and value* — the case studies of forest management, food safety, and tourism underscore the increasing importance of obtaining industry certification to expanding markets and improving product value
- *Developing an enabling environment in competitive markets* — developing such an environment, based on market-driven private initiative, is seen as the best approach to raise and sustain rural/agricultural incomes. The three case studies highlighted in this session describe programs that develop different phases of the enabling environment.
- *Strengthening community institutions for natural resource management* — case studies from Namibia, sub-Saharan Africa, and the Philippines examine innovative approaches to increasing capacity and empowering grass roots and community organizations and local governments to sustainably manage their resource bases.

In synopsis papers keyed to each session theme, experts review and analzye the best practices presented for each thematic area. Approximately 70 people attended the workshop (see Annex B). The complete best practices briefs for each session are included in Annex C.

The workshop opened with introductory remarks by Alan Hurdus, RAISE co-manager from the Environment Center's Office of Environment and Natural Resources, and the center's director Bill Sugrue; and Chris Brown, RAISE co-manager from the Economic Growth and Agricultural Development Center's Office of Agriculture and Food Security, and the center's director John Lewis. Mr. Brown introduced the workshop's first speaker, Jorge Varela.

[1] The IQC consortia includes Associates in Rural Development Inc., Chemonics International Inc., and Development Alternatives, Inc.

Executive Summary

Two crucial ingredients for successful sustainable growth and natural resource management are: policies and measures favorable to the growth of natural resource-based industries such as tourism, agribusiness, marine and forest exploitation; and community-based approaches to natural resource management.

Some 70 leaders in business, environment, and multilateral development lending met with USAID officials in Washington, D.C. on November 4, 1999 to discuss these elements and to explore how RAISE partner countries are balancing their long-term environmental concerns against the challenge of stimulating economic growth. A joint effort of two of USAID's Global Bureau centers, the workshop was described by key agency sponsors as an effort to break down barriers between traditional boundaries separating issues of the environment, agricultural development, and increasing productivity. It also sought to establish a common ground between those who view agriculture as an economic activity and others who also see it as a natural resource management activity.

USAID organizers expressed the hope that encouraging a view of agriculture as a natural resource management technology in addition to an economic activity would help elevate the importance of environmental integrity in the debate over resource management. This merging of the environment and growth agendas, they said, will help create a long-term commitment to the stability of the resource-based economy on which everyone depends.

What follows are highlights of the keynote presentation, along with the nine case studies and corresponding *best practices synopses*, clustered under three themes.

Keynote Address — The Lack Of Development Planning And Its Consequences For The Gulf Of Fonseca

Honduras' ecosystems are extremely vulnerable due to a lack of planning for development. Jorge Varela, founder and director of the Committee for the Defense and Development of Flora and Fauna of the Gulf of Fonseca (CODDEFFAGOLF), recounted how the watershed has been destroyed by cutting trees for export, domestic consumption of goods, extensive livestock ranching, migratory agriculture, and export agriculture. Shrimp cultivation, which appeared in 1973, brought further destruction of the mangroves and lagoons due to disorderly and rapid expansion of the industry, resulting in contamination of the air and water, spread of disease in wild as well as cultivated shrimp, and the excessive harvesting of larvae, which causes high mortality in the by-catch. This has prevented the shrimp industry from contributing to the sustainable development of the area. Further, the resulting loss of biodiversity, soil, and water resources has produced a high degree of vulnerability to natural phenomena, as vividly demonstrated in October 1998 when Hurricane Mitch flattened homes and beaches, particularly impacting the coastal wetlands.

In the short term, planning for sustainable development must include:

- A declaration of protected areas for the Gulf of Fonseca
- Development of management plans to implement the declaration
- Establishment of a cooperative process involving El Salvador, Honduras, and Nicaragua

Mr. Varela also called on international financial organizations such as USAID to support immediate actions to rebuild and strengthen the country's social framework, reestablish a productive agricultural base, restore Honduras' ecology, and support a moratorium on expansion of the shrimp industry.

Session 1 — Expanding Markets By Improving Product Quality And Value

The following three case studies offer examples of successful integration of high-level standards for environmental sustainability or food safety in rural industries. The practice of attaining *certification* plays a prominent role in each study. Indeed, the intensifying trend in today's economy to globally source products and services from distant, often unknown foreign markets underlines the intrinsic value of obtaining industry certification and its importance as a best practice.

Forest Management Certification: A Step Toward Sustaining Forest Ecosystems. In 1993 the Forest Stewardship Council (FSC) launched a worldwide program to promote independent, market-driven certification of sustainable forest management. Certifiers also audit and issue chain-of-custody certificates to added-value processors and retailers to ensure that any product sold with an FSC label can be traced to a well-managed forest. Certification is an effective incentive and best practice for industry to carry out forest management that is sustainable.

FSC certification is guided by 10 principles and associated criteria that constitute a code of best practices for substantially mitigating the environmental impacts of timber extraction. The USAID-funded sustainable forestry project in Bolivia, BOLFOR, exemplifies how an industry, uniform in its past destructive logging practices, can make major advances toward environmentally and socially sound forest management while gaining access to global markets for certified forest products.

Agri-Processing and Food Safety. Everyone wants food that is safe and affordable. Done well, processing can extend food availability and affordability. Done poorly, processing and improper packaging and handling can produce foods that sicken or kill. This paper examines problems faced by developing countries when they seek to expand their food processing industries and initiate or diversify their export markets through two case studies: the DAI Morocco Agribusiness Promotion project, and the International Executive Service Corps Trade Development Services project.

The primary focus is on successful approaches to gaining access to the U.S. markets, with a secondary focus on gaining entry to EU markets. While both markets are increasingly using principles of traceability for identifying problems in food safety, the U.S. system places primary responsibility on the processor, while the EU still places primary food safety responsibility on national certifying agencies. Global forces have begun to push national systems slowly toward convergence for internationally traded products.

Assessment of Tourism for Sustainable Development in Rural Areas. Tourism is becoming a major world industry. Growing at an unprecedented rate, tourism can have an enormous impact on the earth's natural and social environment. The industry depends on a clean, safe environment as its principal "resource," and thus has a vested interest in preserving the environmental and social resources it relies on.

The International Institute of Tourism Studies at The George Washington University has partnered with several organizations to investigate and implement ways to minimize tourism's negative impact while maximizing its economic benefits to the global economy. In the last few years, a management approach known as Environmental Management Systems (EMS) designed for the travel and tourism

industry has emerged to address this situation. Today, benchmark examples such as the GREEN GLOBE Destination program and the Certification in Sustainable Tourism Program of the Costa Rican Tourism Institute are proving that EMS can help minimize the negative environmental impact of tourism while increasing the economic sustainability of a destination, community, or individual property.

Best Practices Synopsis for Session 1

The case studies in this session illustrate that it is possible to promote economic development in rural and agricultural industries while achieving significant results in environmental conservation and food safety. Following are some best practices gleaned from the case studies:

- *Expanding markets* — Better market information, better consumer information, effective partnerships between the public and the private sectors, and a forward-looking perspective all serve to promote expansion of markets abroad and at home. For example, the forestry case study showed how a certified market for a lesser-known species of wood can help to expand demand where little existed before.
- *Improving product quality* — The success of a rural agricultural industry will stand or fall on product quality. Some key concepts in improving product quality are: 1) Don't reinvent the wheel if it rolls well; 2) Take a systems approach: all industries will benefit from a holistic approach to the process for bringing final outputs to market; 3) Use participatory methods: without them, opportunities for building markets will be lost; and 4) Manage growth to maintain and improve product quality: this means investing time, money, and effort into meeting benchmark quality standards.
- *Improving product value* — Product value is a function of product image and presentation as much as its inherent composition. Improving product value can entail moving up the value-added chain, such as by turning certified lumber into furniture. It can also entail lowering costs, through process improvement or improving sustainability of the underlying natural resource. Some best practices include adopting the goal of sustainability, establishing product differentiation, and developing a strategy.

Session 2 — Developing An Enabling Environment In Competitive Markets

The three case studies examined in this session assume that the best way to raise and sustain rural and agricultural incomes in the long run is to base income growth and sustainability on market-driven private initiative. Developing an "enabling environment" for competitive markets is seen as the best approach to developing and promoting this initiative. Each case provides a unique and different perspective on creating or cultivating this "enabling" environment.

Best Practices in Agro-Sector Policy Analysis. Agricultural policy makers are constantly called on to make judgements that will affect the livelihoods of vast numbers of rural households and firms, as well as countless consumers in their sectors. Due to resource constraints, these judgements are often made with little practical knowledge of how the agricultural sector actually functions and how it is likely to respond under changed policy conditions. Without such practical insights, political expediency is likely to hold sway over economic analysis, as competing interests prevail upon policy makers to decide in their respective favors.

AIRD's case study presents experiences in conducting agro-sector policy analysis work under difficult political-economy settings. Haiti, for instance, lacked public sector institutions capable of supporting private initiatives. In Romania, much like the rest of Eastern Europe, the private sector faced constant

fluctuations in relative prices due to high inflation rates as the country transitioned from a command to a market economy. In Mexico, the government was reluctant to move forward with liberalization efforts, fearing the impact of U.S. imports on local producers of the country's most important agricultural commodity — white maize. In all three cases, AIRD applied its policy analysis approaches and tools developed over the last 20 years to allow analysts to construct indicators of market structure and behavior. The application of these models provide important lessons for conducting effective agricultural policy analysis in difficult settings.

The Country Competitiveness Initiative. J.E. Austin Associates, Inc. carried out an intensive exercise in Uganda to develop a USAID prototype to help private and public sector leaders identify and implement effective steps to achieve greater competitiveness. The "competitiveness exercise" encouraged businesses to move from commodity-based strategies based on comparative advantages to strategies based on competitive business strategies. It focused the basis for economic growth on the competitive performance of businesses and business clusters.

Five sectors (coffee, fish, flowers, manufacturing, and tourism) were selected for analysis and were led through intensive competitiveness exercises. One result of the exercise is that private firms have demonstrated strong demand for competitiveness tools and strategies at the firm and industry level. In addition, competitiveness has become a conceptual and practical filter for both government and business actions. It has offered a new basis for understanding industry and economic growth. Follow-on competitiveness activities were subsequently organized, and competitiveness principles are now being incorporated into donor assistance.

BOLINVEST: Leveraging and Promoting Private Sector Investment in Natural Resource-Based Industries (NRBIs). The BOLINVEST project, which began operations in November of 1989 under the direction of the Carana Corporation, was designed to promote and leverage investment incentives for private sector investment in NRBIs, and to build institutional capacity to make the effort sustainable. Initially an export promotion initiative, the project was designed to provide technical assistance indirectly to local exporters through local business chambers in Bolivia's three main cities. A key project element was to strengthen the chambers to enhance delivery of export-related services.

Over six years, BOLINVEST evolved from an elementary, limited-scope organization to a complex trade and investment promotion institution with offices in several South American, North American, and European cities. Today, BOLINVEST (now known as Fundación BOLINVEST) continues to exist as a stand-alone, not-for-profit organization, although with a reduced level of funding and activity. The project led directly to substantial increases in exports and direct foreign investment, increased employment opportunities and higher incomes for both rural and urban low-income communities, and a sustainable organization. It benefited both large and small firms as well as producer associations and cooperatives, and promoted a new focus on adding value to NRBI products.

Best Practices Synopsis for Session 2

The three experiences summarized in this workshop provide unique perspectives on creating or cultivating an "enabling" environment. From each, best practices can be distilled and broadly grouped under *policy environment*, *business strategy*, and *institutional structure*s, all of which are necessary to build a truly enabling environment for competitive markets.
In establishing a conducive *policy environment*, for example, it will be necessary to ensure macroeconomic stability. Macroeconomic variables — interest rates, exchange rates, and the rate of taxation — can profoundly affect the profitability of investments. Unless these variables are predictable, private investors are not likely to invest their resources in an economy. Next, in the area of

business strategy, "competitiveness exercises" can serve as a mechanism for launching strategic thinking and empowering the business sector. If carefully designed and implemented, this process provides a natural lead-in to demand-driven implementation. Finally, in the area of *institutional structures*, one best practice highlights the importance of commitment from counterpart institutions and host governments. Implementation problems frequently arise due to lack of commitment from counterpart institutions.

Session 3 — Strengthening Community Institutions For Natural Resource Management

The three case studies presented in this session make the case that for natural resource management initiatives to succeed and operate as sustainable enterprises, the community institutions responsible for planning and managing these resources must be involved and strengthened. Each paper offers innovative approaches to increase the capacity of community institutions and empower local groups to sustainably manage their resource base.

Using Tourism to Sustain Community-Based Conservation: Experience from Namibia. This paper examines the Living in a Finite Environment (LIFE) project in Namibia, which supports the country's community-based natural resource management (CBNRM) program through grant funding and technical assistance to help build sustainable community-based conservation organizations. The case study looks at the LIFE project's efforts to link tourism and conservation, and how tourism is used to help build sustainable community-based conservation organizations. To build such organizations, termed conservancies in Namibia, LIFE helps communities attract tourism investment through equitable joint venture partnerships and gain skills to account for and productively manage funds for the benefit of their communities. It also helps communities acquire the knowledge and skills needed to sustainably manage the natural resources on which tourism depends.

Begun in 1993, LIFE has generated some concrete results, including helping establish four communal conservancies. By 2005, the number of conservancies is expected to reach 24. Within a year of their establishment, Namibia's existing conservancies began generating profit for local communities. Some key best practices that have enabled the project to move forward are ensuring an enabling policy environment, linkages with government, collaboration with the private sector, and development of community organizations to help increase local skills and promote sustainability.

The African On-Farm Productivity Enhancement Program. Success with a predecessor seed project led Winrock International and the Center for PVO/University Collaboration in Development to launch a new seed program in 1992 with an emphasis on soil fertility and crop management. The new On-Farm Productivity Enhancement Program (OFPEP) grew rapidly. Within each participating country, a small staff of local nationals works with and through NGOs, farmers associations, community-based organizations, and local extension workers to establish participatory relationships with farmers. Under its request-driven approach, farmers, with help from OFPEP and implementing partners, use participatory rural appraisal techniques to identify problems and potential solutions.

Impacts have far exceeded expectations. Since the project's inception, participating farmers have reduced or eliminated the "hungry season," providing households with food for an additional three to four months. Farmers also have surpluses of seeds to sell. Women producers have increased their technology capacity and thus their esteem and prestige in the villages. There is an increased awareness of gender issues and changes in traditional roles. More than 160 local groups have demonstrated their capacity to organize themselves and work for their own resources. Some 50,000 farmers have benefited from training; of these, 68 percent are women, and the number is rising.

Local Governance and Participatory Natural Resource Management: USAID's GOLD Project in the Philippines. USAID's Governance and Local Democracy project, implemented in the wake of a sweeping decentralization effort in the Philippines, is designed to help provinces, cities, and municipalities manage their natural resources. This devolving of authority for agricultural extension and environmental planning to the local level is a major departure from more conventional resource management systems premised on centralized command-and-control formulas. GOLD responded by developing a "toolbox" of participatory techniques and technical assistance such as strategic planning workshops and multisectoral working groups to help local governments address urban land-use, communal forest, coastal resource management, and agricultural development challenges.

GOLD has had a measurable impact on environmental management in the Philippines. Annual public opinion measures of satisfaction with local government services steadily rose over each of three periods, and approximately 90 local government partners used one or more of the tools related to the environment. Sixty percent of the 2,500 facilitators trained by GOLD used facilitation methods after training without further assistance from the project. Finally, GOLD has demonstrated that local governments have basic capacities to identify environmental issues, organize community solutions, commit local revenues, and sustain local actions.

Best Practices Synopsis for Session 3

Development practitioners need to be cautious about what they call best practices: although there are many "good" practices that can be identified in any given case, whether they constitute a "best" practice must be determined using a comparative approach so researchers can truly see how the practices compare across all the cases and whether they are replicable. An analysis of the LIFE, OFPEP, and GOLD projects revealed a wealth of information specific to each as well as some important cross-cutting issues. But to be able to truly arrive at best practices, information needs to be viewed through the lens of a conceptual framework to systematically explore the variety of information in the case studies.

The "human ecosystems model" is a useful conceptual framework for comparing best practices across the three case studies, though certainly not the only one. The model describes critical resources involved in human ecosystems much like those described in the three case studies. Using the resource of "capital" from this model as the lens for comparing the three studies, the analysis found that a variety of forms of capital were tapped or built during implementation of the GOLD, OFPEP, and LIFE projects. Still, drawing specific conclusions was problematic; the author noted that although the case studies may be individually useful and provide substantial contributions to knowledge, together they may not add as much to the discussion of best practices as they otherwise might because of the lack of comparability of the findings.

The Lack of Development Planning And Its Consequences For The Gulf Of Fonseca

Transcript of the keynote address by Jorge Varela, founder and director of the Committee for the Defense and Development of the Flora and Fauna of the Gulf of Fonseca (CODDEFFAGOLF)

I am here today to talk about conditions in the Gulf of Fonseca. While the facts are specific to my country, Honduras, I have seen the same problems elsewhere in Central and South America, the Caribbean and Asia, and now in Africa. I have observed that we misunderstand the relationship between development and economic growth. Money from international financial organizations has gone to promote economic growth, but the role of development is misunderstood. Why? Maybe we can talk about that this morning.

Lack of Planning for Development

Lack of planning for development has led to the destruction of the watershed throughout Honduras, in particular watersheds that drain toward the Gulf of Fonseca. The watershed has been destroyed by cutting trees for export, domestic consumption of goods, extensive livestock ranching, migratory agriculture, and export agriculture. The resulting loss of biodiversity, soil, and water resources has produced a high degree of vulnerability to natural phenomena and resulted in migration to cities and the coasts, and to other countries.

For 30 years, the people displaced from the mountains and valleys — including investors — have looked to coastal marine resources as a source of income. Forests or swamps create a muddy habitat ideally suited to organisms such as mollusks and crabs. These ecosystems provide food and protection to fish and shrimp, and offer shelter to reptiles, birds, and mammals. Mangrove forests, with their abundance of foliage year round, absorb huge quantities of carbon dioxide and produce oxygen, thus contributing to the lessening of global warming.

Other ecosystems called “playones” have great ecological, social, and commercial value. Playones, flat, saltpetrous, arid lands with little or no vegetation during the dry periods, in the rainy season are changed into productive lagoons that provide subsistence to thousands of peasants and fishermen, and native and migratory birds. They provide marine species with an appropriate habitat for living out the cycles of their lives.

Human communities on the coast have used this biodiversity for food, income, and primary energy and shelter. In earlier times, the pressure on natural resources tended to be sustainable: practices were more modest, allowing for regeneration of the resources. More recently, due to a lack of planning for development, demographic growth and industrial practices are threatening the biological equilibrium of the Gulf wetlands. Examples include the cultivation of cotton in the 1970s and 1980s, leading to mass use of pesticides such as DDT; production of salt by “cooking” with large quantities of firewood; and the extraction of mangrove bark leading to destruction of thousands of trees.

Emergence of Shrimp Cultivation

In 1973, a new industry appeared in the coastal wetlands: the cultivation of shrimp on a semi-intensive level. This activity, backed by international financial institutions such as USAID and the World Bank, was first established in the playones and lagoons, and later in the mangrove forests. It expanded in a disorderly and uncontrolled way, producing in waters and in the shrimp farms themselves a phenomenon known as eutrophication, whereby a body of water becomes enriched in dissolved nutrients that stimulate the growth of aquatic plant life, usually resulting in the depletion of dissolved oxygen. It also resulted in the spread of disease in cultivated as well as wild shrimp, and the sacrifice of the accompanying fauna or "by-catch" that is captured along with the wild shrimp postlarvae and that are used to supply the astronomical requirements of the shrimp farms.

Although shrimp farming has experienced significant growth — from 80 hectares of coastal wetlands in cultivation in 1972 to 16,000 hectares in 1998 — productivity has not always kept pace (see box). The growth has resulted from placing more hectares in operation, use of chemical inputs, and improved cultivation techniques aimed at improving production. Only when the environment is preserved can aquaculture be truly profitable and therefore sustainable. Industry must plan for development or face its own demise and the reality that its practices are producing social ills.

Growth of Shrimp Cultivation

Between 1973 and 1989, the industry grew from 80 to 5,000 hectares of wetlands in cultivation.

In 1989, exports of shrimp tails, expected to reach 9 million pounds, came to only 5 million pounds, with productivity at a low 980 pounds per hectare. One shrimp producer attributed the lower yield to a small supply of wild postlarvae that year, though others laid the blame on a shrimp disease called "La Gaviota" (the seagull).

Between 1990 and 1995, the industry grew to 12,000 hectares in cultivation. In 1993, exports reached 20 million pounds; productivity was at a record high of some 2,160 pounds per hectare. The following year, hectares in use grew by 2,000 over the previous year, but exports declined to 18 million pounds. In 1995, the industry placed another 1,000 hectares into operation, but exports continued to decline, falling to 15 million pounds. This time the decline in exports was attributed to the Virus of Taura, which appeared in 1994.

In 1998, hectares of wetland in operation reached 16,000, but exports barely reached 18 million pounds, a decline in productivity to 1,130 pound per hectare.

In 1999, the Virus of the White Stain, a native of Asia, appeared in the Gulf. Some are predicting that exports will be off by 30 percent, with Ecuador expected to be hit even harder. Concerns about the imminent arrival of the yellow cabias and increased pollution are also expected to impact the productivity of shrimp farming.

CODDEFFAGOLF Established

Unhappy fisherman acted out against the destruction of the mangroves, lagoons, and biological diversity. They blamed the decline in the take of commercial species on the excessive harvesting of larvae, which causes high mortality in the by-catch. Fisherman were also angry because they were losing access to the mangrove swamps, lagoons, estuaries, and the Gulf, resulting in lost access to their sources of food, energy, and income.

Between October 1992 and May 1998, nine fishermen were found shot to death in the mangrove swamps and estuaries near the shrimp farms, allegedly by shrimp farm guards on the orders of managers or owners. The deaths were never investigated and remain unpunished. Protests and demonstrations against the farms, and in cities across the country, ensued. Fishermen felt that once again they were being forced out of their livelihood.

In 1988, the Committee for the Defense and Development of the Flora and Fauna of the Gulf of Fonseca (el ComitJ para la Defensa y Desarollo de las Flora y Fauna del Golfo de Fonseca [CODDEFFAGOLF]) was established to protest the impact of the shrimp industry on the environment and the resultant economic impoverishment of local communities.

CODDEFFAGOLF carried out activities in environmental education, sustainable agricultural production, family agriculture, and salt production using solar energy, including shrimp production at the artisanal level. At the national level, it helped establish the general law of the environment and implementing regulations.

CODDEFFAGOLF Activities

The committee is cofounder of the Tri-National Civil Association of the Gulf of Fonseca, a group of NGOs fighting for the development of the Gulf, and cofounder of the International Shrimp Action Network, ISA-Net, a group of NGOs around the world opposed to expansion of the industry of non-sustainable cultivation of shrimp.

In September 1998, CODDEFFAGOLF and the Shrimp Producers Association (ANDAH) proposed designating the Gulf a protected area. Approved by the Executive Branch, the proposal has languished in the legislature since October 1999. On July 10, 1999, seven of the 10 areas proposed for protected status were designated as Ramsar Sites. Mr. Varela said he would seek U.S. support for declaring the Gulf of Fonseca a protected area.

Heightened Ecological Vulnerability

Due to the lack of planning for development of the shrimp industry and excessive production stimuli, the industry itself has been unable to work toward its sustainable development, thus contributing to the environmental deterioration of the Gulf of Fonseca. The Gulf is now ecologically vulnerable to natural phenomena, as vividly demonstrated in October 1998 when Hurricane Mitch flattened homes and beaches, wreaking widespread destruction.

Shrimp farms on the bank of the Choluteca River were affected by Mitch, as were some artisanal installations. But the largest shrimp farms suffered little damage because the playones, which had become natural lagoons, served as a buffer against the force of the water. Some shrimp farms were protected by the mangrove swamps; others were lucky enough to be harvested before the hurricane.

Hardest hit were the coastal wetlands, the artisanal fisherman, and the Gulf itself. Huge quantities of trash, trees, wood, and cars piled up against the mangroves. Thousands of tons of sediment covered the lagoons and estuaries and are spread throughout the entire Gulf.

Many fisherman lost their lives, homes, means of transportation and communication, and sources of food. Scores of plastic and metal containers containing pesticide remain submerged; when corroded, they will release their contents into the aquatic environment. Hundreds of estuaries of mangrove were destroyed along with the biological diversity that depends on them.

Summary and Recommendations

Honduras' ecosystems are extremely vulnerable due to the lack of planning for development. To effect real change, programs sponsored by international financial organizations such as USAID must incorporate environmental concerns and popular participation. As long as economic and technical assistance is closely tied to national oligarchies and ignores local communities, there will be no development and poverty will increase.

In the short term, planning for sustainable development must include the following actions:

- Declaration of protected areas for the Gulf of Fonseca. This would serve as a strategic tool to protect private investment and lessen negative environmental and social impacts.

- Development of management plans for implementing the declaration, and for the recovery of the watershed.

- Execution of an integrated management plan for coastal resources through a cooperative agreement between El Salvador, Honduras, and Nicaragua.

Immediate Recommendations

Finance activities to:

- *Reestablish the social base* — improve rural housing, potable water, aqueducts, sewer lines, and access roads.

- *Reestablish a productive agricultural base* — support commercial fishing, aquaculture, and solar production of salt; sustainable agriculture on slopes; family orchards; and domestic livestock production. Target industrial activities such as management of water, waste, and other contaminants produced by the shrimp and agro-industries.

- *Restore the ecology* — extract sediment from clogged lagoons and estuaries, remove pesticide containers, clean trash from mangrove sites, remove trees obstructing fishing, and develop a program of environmental protection.

Finally, CODDEFFAGOLF is seeking support for a moratorium on the expansion of the shrimp industry while stabilizing existing production capacity and improving production technology from an environmental standpoint.

Q&A Discussion

Q. Why did USAID, the World Bank, and others promote shrimp farming so heavily in the 1970s, and when did these two organizations acknowledge the environmental consequences and change their posture? What kind and quality of planning is required? Who should be involved in that planning? Finally, how do we get countries with a common ecological base or a common economic challenge to work together across borders?

Jorge Varela. Study and measurement must precede action. For example, in Brazil, the World Bank is working to improve the agricultural industry, but I'm not sure that we know the impact on the environment and the local community, so we must first measure. The shrimp farm is prejudicial to water. Therefore, we need to look at water quality in the laboratory. We know that shrimp farming brings a lot of disease, so to develop the best response, we must first do things like improve laboratory testing.

Q. Why have the artificial laboratories not worked harder to produce the postlarvae that would take the pressure off the natural setting and the by-catch problems?

Mr. Varela. Honduras has about 14 laboratories, but the demand for postlarvae is very high. Some shrimp farmers believe that wild postlarvae are cheaper and stronger than that produced in the nursery.

Q. By taking the larvae from the Gulf environment, a practice not done in the United States, Honduras is "exchanging" commercial fishing for shrimp fishing. Shrimp farming is unpopular in south Texas because of the associated water quality problems, release of non-native species into the local environment, and the fear that viruses as well as "white spot" and other diseases can be transmitted to natural populations. When larvae are taken from the natural environment, then the local population becomes depleted for commercial fishing. In this "exchange" of resources, there is a greater impact on commercial fishermen because commercial fishing has more jobs at stake. Aquaculture has low job capacity for the local community. Thus, this exchange does not provide any benefit in jobs or in production.

Mr. Varela. Between 1973 and 1995, about 90 percent of the larvae came from the sea. Today, about 50 percent comes from the sea. I agree that this is very prejudicial to the marine microorganism that lives out one cycle of his life along the coast.

Q. A partnership needs to be created between the forces of the environment and of economic growth. Although the region being discussed is the poorest in Honduras, agricultural development has helped change economic conditions in the country. More than 20,000 jobs have been created in this region, especially among shrimp producers and sugar cane producers. Tremendous wealth is being created in a very depressed area.

Mr. Varela. I agree, but we don't believe that the shrimp farmer is the only factor in economic growth. It is true that we have more economic growth than before, but continuing with current practices will only result in greater destruction and more poverty in the end. If we are going to continue to expand, we must at the same time improve mitigation to diminish negative impacts to the local community and the environment. We have proposed a declaration of protected areas for the Gulf of Fonseca to ensure orderly redevelopment. We are also proposing that the three countries join to develop an integrated management plan for the Gulf's watershed.

Q. What kind of coordination is taking place among the organizations around the Gulf? Are the USAID missions talking to each other about these issues?

Mr. Varela. Our proposal to gain protected area status for the Gulf of Fonseca has the backing of municipal officials and mayors, and the Shrimp Producers Association (ANDAH). In 1994, CODDEFFAGOLF and other NGOs from El Salvador and Nicaragua joined with us to create the international association of NGOs in the Gulf of Fonseca. Also in 1997, the mayors of Honduras, El Salvador, and Nicaragua, and the mayor of the Gulf of Fonseca joined to form an association of mayors, although now this group has separated.

Q. If you want to stop both the harvesting of the native larvae and the conversion of mangroves to shrimp farms, what other economic uses can you propose for the mangroves? What alternative income sources can you see other than growing melons, sugar cane, and shrimp farming? If we are going to stop the conversion of environmental resources to short-term economic gain, shouldn't there be an opportunity to make a long-term economic gain from the resource?

Mr. Varela. For the mangrove forests, we can apply forest management and employ strict conservation. We can plan for development of other sources of food or forests. Regarding melon growing and other modern agricultural technologies, we must improve insurance against pesticides and improve organic agriculture. We don't want to destroy the forest because we have so little of it.

Harry Rea, USAID. Many larger farms, even in Honduras, get most of their postlarvae from hatcheries. The AID Mission in Nicaragua is supporting a proposal for a recirculating system for shrimp in Nicaragua. AID has not funded anything in terms of development of shrimp farms in 20 years. Rather, recently AID has been trying to address the environmental impacts of shrimp. AID's coastal resources management project has an ongoing activity to develop the best mangrove practices for shrimp farmers. This is being done with growers associations in Honduras, Nicaragua, and the Gulf of Fonseca. Another AID program in agriculture collaborative research support was involved in the environmental aspects of shrimp production. Now, as a result of that activity and working with ANDAH, a water quality and pathology laboratory was established and environmental aspects of the Gulf were being monitored with a grant from the University of Texas. Since the early 1990s, AID's Global Bureau has been actively looking at the environmental aspects of shrimp cultivation in the Gulf of Fonseca. The Mission in Honduras has been supportive of this activity, as has Nicaragua.

Mr. Varela. I know that ANDAH is improving mitigation efforts with sugar. I am worried for Brazil and Mexico, so I urge you to use your experience with improved technology in the laboratory, and with water quality and recirculating systems, to help improve agricultural practices around the world.

Session 1.
Expanding Markets By Improving Product Quality And Value

USAID and RAISE partners have been helping developing nations improve their access to lucrative U.S. and European markets through sustainable forest management certification for timber and non-timber forest products, improved food quality and safety standards, and sustainable and community-based ecotourism activities.

Moderated by Scott Wayne, North American coordinator for the World Tourism and Travel Council, this session examined three case studies in these industries: the Forest Management Trust's forest certification program, agri-processing and food safety in Morocco, and assessment of tourism for sustainable development in rural areas. As summarized on the following pages, the papers explored how programs have attracted consumers to buy products from natural resource-based industries of the developing world.

At the conclusion of the summaries, Daniel Plunkett, senior economist at Associates for International Resources and Development, examines the best practices and lessons learned from each of the three case studies. In his synopsis paper, Mr. Plunkett notes that each case study demonstrated how attaining certification has become increasingly necessary in order to expand markets by improving product quality and value.

Forest Management Certification: A Step Toward Sustaining Forest Ecosystems

Summary of a presentation by Joshua C. Dickinson, Ph.D., Forest Management Trust

Forest management certification is a powerful tool and best practice in the global process of forest ecosystem conservation. Launched by the Forest Stewardship Council (FSC) in 1993, certification holds promise for maintaining ecosystem structure and function in biodiversity. Certification ensures that people who live in and around the forest will reap the benefits of forest management, and that it will be more profitable to manage a certified forest than to convert it to crop land.

FSC certification is an independent, voluntary, and market-driven process designed to mitigate the environmental impacts of timber extraction. Processors, retailers, and concessionaires who become certified participate in a system that ensures that any product sold with an FSC label can be traced to a well-managed forest. FSC certification has experienced exponential growth. In 1997, approximately 7 million hectares of forests were certified around the world. By the middle of the year 2000, that figure is expected to surpass 20 million hectares worldwide.

FSC certification began around the same time that AID launched a forest management project to save biodiversity through management. USAID's Bolivia Sustainable Forestry project (BOLFOR) took shape under a flexible and realistic design and performance process that enabled project designers to incorporate certification and build in the economic, market-driven emphasis it embodies. BOLFOR has been hugely successful: Bolivia has the largest area of commercial forest production certified in the world. By 2000, it is expected to have 1.4 million hectares of forest under certification.

Impacts of Certification as a Best Practice

Certification of good forest management has allowed AID to promote economic development while achieving conservation goals. World conservation strategy calls for bringing 10 percent of the world's ecosystems under protection. Certification is way to bring the other 90 percent under some form of protection while generating significant income and reserving the resource for future use.

Certification also drives good policy. Adherents agree to follow certain principles — the forest operation will obey relevant laws, for example. This means laws need to be compatible with good management. In turn, government is assured that certified operations are obeying the law. The first thing BOLFOR did was to develop a forest law that was compatible with certification. In this chain of cause and effect, forest operators move toward certification as they recognize it is to their advantage in the marketplace. This, in turn, facilitates policy reform as the private sector supports the policy changes that will facilitate certification.

Forest management certification also has helped restore forestry's good name. The forest industry was vilified following the destructive forest management practices of 50 years ago. Since certification, the World Wildlife Fund, which supported boycotts 15 years ago, and other major NGOs now support the practice. NGO support is also starting to broaden. The retailer Home Depot recently declared that it will stop cutting old growth forests in the northwest and will follow third-party certification, eventually selling only products that are certified. Other companies are also starting to follow suit.

Certification promotes equity of benefits not only for large corporate entities, but also for indigenous communities and municipalities. To ensure equity, communities must have secure tenure to the

resource, NGOs must organize their capacity to work and manage forests and sell products, and a robust private sector must be in place to serve as a market.

BOLFOR laid the groundwork for widespread participation by enterprises looking to capitalize on the advantages certification offers in the marketplace. On the heels of this work, the Amazonian Center for Sustainable Forest Enterprise has been created to help broaden participation in BOLFOR's benefits. The center will work with Bolivian companies on deficiencies in business structure and management, financing constraints, and developing partnerships between business and communities. Funding will come from commissions and the sale of services to the Bolivian timber and value-added processing industry, as well as grants and contracts from multi- and bilateral donors. The WWW has committed $150,000 to start helping communities and work on joint ventures between the community and private sector.

Q&A Discussion

Q. What is the funding and ownership arrangement for the Amazonian Center, the institution created after the Bolivia forestry project? Is it a donor-driven institution, government institution, community, or private sector institution?

Joshua Dickinson. The U.S. Forest Service, via USAID, is providing a couple of hundred thousand dollars of initial seed money as base funding. We will generate at least half of our funding from participating businesses that benefit through both commissions and consulting fees. We have a commitment of approximately $150,000 a year from the World Wildlife Fund. We have also received $100,000 from the MacArthur Foundation to start up the center, and plan to go to the foundation community and to the foundations of businesses such as Ikea Furniture Exporter. The Home Depot gives out about $50 million a year in grants related to social and environmental issues. We will also look for broad donor funding. We are developing a proposal to the Multilateral Investment Fund of the Inter-American Development Bank. It is easier to find funding for the community side, but without success on the industrial side, communities will not make it unless they have a partner that can help them get to market.

Agri-Processing And Food Safety

Summary of a presentation by Donald S. Humpal, Development Alternatives, Inc., presented by Paul Guenette, Development Alternatives, Inc.

Consumers in the United States and the European Union (EU) — the world's two largest blocks of food importers — are increasingly worried about the safety of their food. To address these concerns, steps are being taken worldwide to consolidate and harmonize rules for food safety and labeling. Meanwhile, such measures are stymieing efforts by developing countries to expand their food processing industries and diversify their export markets.

Developing country processors need to learn how to comply with import regulations and a dizzying array of issues surrounding food safety — for example, how do you determine when food is defined as "safe" — to avoid costly rejections of their products. One issue facing exporters is that importing countries have different food safety standards for the same products and packaging. Thus, European regulations require ingredient labeling, but Europe's definitions and disclosure requirements for ingredients, additives, and colorants are different from those in the United States.

Export markets also have different regulatory approaches. The EU requires that all food imported from a foreign processor be certified by an agency in the country of origin. The EU can inspect the regulatory process used and decertify the agency if its process is found deficient. In contrast, the United States requires that each processor meet U.S. standards. No U.S. agency can delegate authority to a national service to inspect food and ensure its safety.

Issues in Designing Food Safety Programs

New issues that have arisen since the Uruguay round of negotiations of the General Agreement on Tariffs and Trade in 1994 complicate the matter further for exporters. Some highlights include:

- The World Trade Organization (WTO) has sided with the U.S. in a dispute with the EU over the use of cattle growth hormone to promote meat production efficiency. U.S. studies showed that the hormone did not endanger human health. The EU has rejected the U.S. health studies and has forbidden entry of beef from animals receiving this hormone.

- Many developing country processors cannot meet the requirements of the Hazard Analysis and Critical Control Points (HACCP) approach to improving food safety. A science-based method to food processing, HACCP has replaced the traditional command-and-control approach and has increased the cost of consultants, personnel, record keeping, and training among food processors.

- International Standards Organization (ISO) requirements for exports to the EU are costly, and certification is time-consuming. The EU favors ISO 9000 certification for exporters to the EU. Food processors, governed under ISO 9002, have found that it takes two to three years and significant cost to put in place good manufacturing practices and implement an HACCP plan before ISO 9000 certification is possible.

- Harmonization and equivalency processes require significant national public investment for enforcement agencies, certification and inspection procedures, and laboratories.

- Advances in food analysis technology for microbes have producers and national authorities grappling with the increasing sensitivity of tests. With tests for pesticide residues that can detect parts per billion, and in some cases parts per trillion, the zero tolerance levels keep falling and can suddenly turn a “safe” product into an “unsafe” one.

- The spread of antibiotics around the world as well as their misuse has led to the development of bacteria that are resistant to antibiotics (E-coli O157:H7). The extra precautions in food processing that are subsequently necessary are driving up costs.

Agri-Processors: The Case in Morocco

A food safety program funded by USAID under the Morocco Agribusiness Promotion project (MAPP) highlights some of the practical problems facing exporters. For instance, products can be delayed or refused entry into a country for reasons ranging from improper documentation to catastrophic damage during transit. If the product cannot meet entry requirements or the case is not contested, the product can be refused entry. The product may be destroyed or reexported at the importer’s cost.

In Morocco, firms were having trouble complying with FDA requirements. Indeed, 42 Moroccan food exporters were on FDA’s automatic detention list, meaning any product shipped to the United States was automatically stopped and then questioned.

The reason for the detention was that many Moroccan processing plants did not have a required special registration number or had not filed a process with the FDA before exporting. Most Moroccan canning companies produce foods requiring special handling to avoid bacterium that produces the botulism toxin. One procedure required all processors to register with the United States as food canning establishments (FCE) and receive a number. A firm that did not register was automatically detained. Each FCE also had to file a “schedule process,” a form that describes the product, the type of can container, what processing it has gone through, and steps and procedures to ensure that botulism bacteria and other diseases are killed during the process.

MAPP helped improve Morocco’s ability to comply with U.S. food safety law in three ways. First, with Morocco’s agency for export inspection, MAPP helped demystify U.S. regulations by training inspectors and lab personnel, improving laboratory instrumentation and management, and revising Morocco’s administrative code to adopt U.S. food safety principles for products destined for the U.S. market. Next, industry and public inspector training helped demonstrate that Moroccan processors had the capacity to meet FDA rules, and that the public sector had the commitment to back training to meet U.S. requirements. Finally, the project emphasized a private sector approach to working with Moroccan agri-processors on the development of scheduled processes.

Lessons Learned

One measure of the project’s success is that all 42 firms were removed from FDA’s automatic detention list. Lessons learned from the project include:

- Make sure that the firms themselves pay for training and the advice they receive. This enables the firms to identify the costs and benefits of making changes and treat it as a business decision.
- Basic changes are often the most difficult. For example, personal hygiene programs that required changes in the design and management of lavatories, changing rooms, and hand washing faced cultural problems in implementing the changes.

- The improved quality required for export, such as increasing transparency, often opened niches in Moroccan domestic markets. National consumer interests were also advanced.

Q&A Discussion

Q. You have described a very hands-on , factory-level approach. What can governments do at the policy level to help create a more sustainable environment for other industries in their processing and in adopting these standards?

Paul Guenette. The policy role of government is to build a partnership between the private and the public sector. Governments must perform the public sector functions of inspection; certification can either be done by the government or the private sector. Governments need to act cooperatively to make a private sector program work. Generally, a government first must get out of the business, after which the private sector negotiates with the government about its proper role. A good policy environment is essential for motivating the private sector. Once the policy environment is appropriate, then it becomes possible to change the context of the dialogue. The public-private relationship often starts out as antagonistic. Bringing the voices together in a constructive discussion takes time. It can take three years just to make the environment appropriate, and another three years to transfer the business savvy, such as how to respond to market forces and invest in improved packaging.

Q. What is the role of industry associations? What role should they play?

Mr. Guenette. There are big differences between organizations. A USAID agri-business project in Kenya comparable to MAPP was oriented more toward associations and indigenous business organizations than MAPP. The manufacturers association, for example, included a food and beverage group. Affiliation with the right association can greatly aid a program's sustainability because it becomes the appropriate avenue for channeling information. On the other hand, in a multipurpose organization, such as a national export agency, marketing is more difficult because this type of organization must respond to a broader array of information needs.

Q. In the United States, organic certification is becoming a big deal. We often assume that organic foods are somehow gentler environmentally than traditionally intensive industrial agricultural production of the same commodities. Yet we know that production of organic products can have the same soil erosion and irrigation and monocropping and loss of genetic diversity problems even without the chemicals associated with concentrated industrial production. Similarly, a certified piece of timber may be grown in a sustainable context, which is then processed intensively with insecticide for pressure treating of lumber. If we are serious about environmental issues, we need to expand our concept of certification. What is your response to this?

Mr. Guenette. The Europeans have taken the lead on these "respecting the environment" issues, and Americans are starting to follow with the green movement. African countries that export to Europe have responded with codes of practice reflecting the market requirement for good agricultural practices. The idea of "respecting the environment" is a pillar in the codes of practice that have sprung up in Uganda, Kenya, and now in Zambia. Good, sustainable, environmental agricultural practices are being incorporated because that was the message from the marketplace. Once rules and guidelines are in place, an independent outside authority can be set up to certify that it is being done.

Assessment Of Tourism For Sustainable Development In Rural Areas

Summary of a presentation by Donald E. Hawkins, Ph.D., Chairman, International Institute of Tourism at The George Washington University

With worldwide travel and tourism poised for explosive growth — projections are for 1.6 billion arrivals by 2020, with tourist spending of US$2 trillion by the same year — the threat of negative environmental and social impacts looms large. Only public-private partnerships will be able to form the cooperative management arrangements needed to help sustainably develop the sector.

Governments worldwide have recognized these challenges. In 1992, a set of principles governing tourism development known as Agenda 21 was adopted at the Earth Summit in Rio de Janeiro. Agenda 21, together with the UN Commission on Sustainable Development, have focused worldwide attention on tourism development and the problem of integrating economic analysis and development outcomes with environmental protection concerns.

The numbers tell the story of the economic impact of travel tourism as the world's No. 1 industry: with a capital investment of about $733 billion, and employment of 192 million workers worldwide, travel tourism represents about 11.7 percent of the world's GDP. Because tourism depends on a clean and safe environment as its principal resource, the projected growth underscores the importance of properly managing and preserving this critical resource. Research shows that industry is concerned with both environmental issues and the impact of its actions on its image. At the same time, work remains to increase the awareness of environmental issues among industry.

A survey by George Washington University (GW) showed that industry is just starting to recognize the importance of acting in an environmentally responsible manner. Only 18 percent of respondents said they felt it was presently very important to their customers that they and their suppliers are environmentally responsible in their operations. When asked the same question about their customers' concerns five years from now, the number more than doubled to 40 percent.

GW Survey of Industry

The George Washington University's International Institute of Tourism Studies conducted a survey of the tourism industry and reports the following findings:

- Quality, safety, and the environment are the three most important factors to be considered when choosing a destination for a travel and tourism product.
- Seventy percent of the industries surveyed worldwide were unaware of the standards outlined in Agenda 21.
- Fifty-one percent felt that the environmental quality was essential to the delivery of their products.
- Almost half of industry respondents agreed that being affiliated with an environmental program such as Green Globe is good publicity.

To help translate initiatives for minimizing tourism's negative effects into practical, real-world plans, a management approach called "environmental management systems" (EMS) has begun to be adapted to the development of actual tourism destinations. The idea behind EMS in travel tourism is that an organization will be able to exercise control over its environment by collecting and coordinating information about the things that affect it.

Benchmark Examples of EMS

A few programs are proving that EMS can help minimize the negative environmental impact of tourism while increasing the economic sustainability of a destination, community, or individual property. For example, Green Globe (GG), a worldwide environmental management and marketing program for the travel and tourism industry, helps travel and tourism businesses make practical

improvements in environmental responsibility. GW is collaborating with Green Globe to involve colleges and universities in training and demonstration projects to help advance EMS in the industry.

GG sponsors a "destination" and a certification program, which have attracted broad support from worldwide tourism programs and governing bodies. To become a GG "destination," sponsors and GG assess the current state of the tourism situation; through strategic planning, community collaboration, and workshops they figure out where they want to be; and lastly, they develop an action plan to get there. Destinations that have been given Green Globe status include the Island of Jersey in the UK; the Cape areas of South Africa; three sites in the Philippines; and a new site called Bethlehem 2000, which will be the first Green Globe destination in the Middle East.

GG's hotel certification efforts have also met with success. In one case — a program of audits in Jamaica funded by USAID — hotels are certified as they change their practices and carry out recommendations made by an environmental audit of their operations. For example, one property took the suggestion in an audit for moderating water use and will reap the subsequent cost savings in lower water bills. Benefits were found to accrue quickly: about 36 percent of all of the improvements needed to conserve water or energy were able to be completed within two months, with most of the additional costs recovered in one year.

To capitalize on lessons learned, GW is helping develop an EMS training curriculum reflecting best practices. Pilot programs in Puerto Rico and Hawaii will involve on-site customized work and focus on coastal tourism EMS. GW will offer training through an interactive distance education system called Prometheus, which will allow courses to be delivered directly at the local level.

Q&A Discussion

Q. Local, particularly poor, indigenous people, can be overlooked in the march of tourism development. Within this program and in ecotourism, how are you dealing with this issue?

Donald Hawkins. A World Bank project in Honduras is grappling with a property rights claims issue involving a law that would allow foreigners to buy land in Honduras and nullify the land claims of many indigenous groups. The Bank has responded by initiating collaborative activities, including creating an "indigenous people's participation plan." Participation means involvement in planning and decisionmaking that brings all stakeholders and potential beneficiaries into the process. In addition, we have created the "tourism product innovation marketplace" whereby money is put aside for disadvantaged people. A blue ribbon panel will award small grants — $1,000 to $2,000 — for best ideas. We are also planning a $1 million fund for matching grants. Indigenous people are the stewards of the resources of interest to tourists, and often they are in remote areas and difficult to access. Indigenous people are the ideal candidates to become tour guides, outfitters, small ecolodge operators, and developers in these areas. The link with agriculture is also important because these lands traditionally have been used for agri-business. It may be possible to take an agricultural product, such as jellies or jams, and sell them to tourists.

Q. In Honduras in October, protesters clashed with police over an upcoming change in Honduras' constitution that will benefit the tourism industry. What kind of planning on behalf of participation of indigenous people is taking place, and what guarantee of their rights is being made as this constitutional change occurs?

Mr. Hawkins. The constitutional amendment is on hold. This issue is so important that we have convened a panel of lawyers familiar with laws in Central America, particularly Honduras, to look at

remedies aside from the constitutional amendment. In Honduras, foreigners have been buying lands behind the scenes. No single organization speaks for all indigenous people in Honduras, so we have to find other established organizations to represent indigenous interests as well as to get out into the local communities and talk to the people. Another roadblock to indigenous participation in Honduras is that the park system is run by underfunded NGOs. How do we bring NGOs into modern concession policies, increase entrance fees and user fees, and find ways for indigenous people to have rights and benefits? I'm pleased to report that the Bank staff is creating a tourism strategy due to the recent explosion of tourism-related projects.

Q. What is the next step for the tourism industry regarding quality and certification, and what kind of issues will it tackle? Are brown issues — pollution — an appropriate emphasis for Green Globe programs? Will a "Blue Globe" certification standard address the problem of ships that dump waste in the Caribbean? What about other forms of certification?

Mr. Hawkins. The Coastal Marine Program in Europe is a "Blue Flag" program that can be linked to Green Globe. In the United States and Honduras, we are linking Green Globe with green product certification. In the United States, the green seal and the Green Globe work hand in glove. We are interested in the whole supply chain, the hotel and its relationship to the environment. We are extending the Green Globe program to tour operations, marine ecotourism such as scuba diving, cruise operations, aviation, airport operations, as well as on-board environmental systems for airplanes. We are also beginning to look at Green Globe guidelines for parks and protected areas, and focusing on the concessionaires. Consumers will decide where the emphasis should be based on their market choices, i.e., selecting a certain hotel because of their commitment to the environment and to the protection and conservation of the cultural and natural resources.

Q. To what degree are hotels and cruise lines trying to achieve standardized safety for tourists?

Mr. Hawkins. Eventually, we need to link the Blue Flag and the Green Globe programs with environmental health, which in turn will have a strong linkage with agriculture. Food inspection improperly done can lead to illness. In the end, we are striving with our "green" operations to ensure that consumers are comfortable with their choices. Much of this has to do with educating tourists. Some tourists seek a "U.S. experience" in a foreign country, but more and more tourists want to respect the culture of their host country, make a difference, and get more involved.

Session 1 Synopsis
Expanding Markets By Improving Product Quality And Value

Prepared by Daniel Plunkett, Senior Economist, Associates for International Resources and Development

USAID and RAISE partners have been helping developing nations improve their access to the lucrative markets of the United States and Europe through improved food quality and safety standards, sustainable forest management certification for timber and non-timber forest products, and sustainable and community-based ecotourism activities. Such programs have attracted consumers to buy products from natural resource-based industries of the developing world.

This session reviews the best practices and lessons learned from three case studies:

- The Forest Management Trust's forest certification program: USAID and FMT
- Agri-processing and food safety in Morocco: USAID and DAI
- Assessment of tourism for sustainable development in rural areas: World Bank and GW

These case studies offer examples of successful integration of high-level standards for environmental sustainability or food safety in rural industries with viable economic profiles. The act of attaining *certification* plays a prominent role in these three studies. If participants in this RAISE session come away with one conclusion, it should be that *recourse to an appropriate certification body is increasingly necessary in order to expand markets by improving product quality and value*. The intensifying trend in today's economy to globally source products and services from distant, often-unknown foreign markets underlines the intrinsic economic value of obtaining industry certification. The studies show that it is possible to promote economic development in rural and agricultural industries while achieving significant results in environmental conservation or food safety.

Best Practices for Expanding Markets

The expansion of markets is the tangible end result when the quality and value of a product or service have been improved. There are many ways to expand markets, but key elements to achieving this are market information, consumer information, public/private partnerships, and adopting a forward-looking perspective.

Market information. To expand markets, it is not enough simply to have a product or service available with no idea about foreign market demand. Knowing the foreign consumer's tastes and preferences is a critical method for penetrating, holding onto, and expanding foreign markets.

Market information can take many forms and be derived from many places. For example, the knowledge that travel and tourism are growing at an unprecedented rate and now make up the world's largest industry can reinforce the arguments for investments and improvements in tourism infrastructure. With more detailed market information — such as the type of vacation package usually offered in a particular country, or a furniture industry's preferences for sawn wood dimensions, design quality, or finish characteristics — the supplier will be better able to meet the consumer's demand specifications.

Programs to bring buyers and sellers together are an effective way of communicating market information, e.g., trade shows and trade missions. A suitable business structure must be in place to

capitalize on the gathered market information, with a well-organized industry association. One example of how an industry can organize to expand markets is the representation of the Chamber of Exporters and of the National Forestry Chamber on the USAID-sponsored Amazonian Center for Sustainable Forest Enterprises.

As an industry begins to succeed, competitors will emerge and attempt to undercut or even denigrate the reputation of an industry — this is a feature of competitive markets. Market information on the competing suppliers of a product or service can help "set the market" and inform producers about market trends so they can best position themselves to expand markets.

Market information includes the *product standards* necessary for foreign market access. Product standards must match the export market's specifications, rather than simply being supply-driven.

The USAID Agribusiness Promotion Project in Morocco (MAPP) included a food safety program to improve the reliability of commercial exchange and expand markets. For packaged and processed foods, different regulatory approaches in major importing markets can create problems for exporters in developing countries. Knowledge of the regulations themselves can be difficult to obtain or to keep updated. But the DAI study makes clear that delegating responsibility for this knowledge to an import broker (in the target market) is insufficient for long-term market expansion. Some exporting nations have hired private food safety and quality control specialists to manage and train the national staff in standards and procedures for exporting to the EU and the United States. On-site training by regulatory staff from the target market was found to be innovative and effective.

Market information may yield the conclusion that specific expertise is lacking in a potential exporting country. For instance, to gain access to developed country markets, such as the United States, it is necessary to develop suitable process control authority bodies and procedures. Success may be the result of identifying a sufficient level of demand for these services and demonstrating the commercial value to exporting companies.

Consumer information. Related to market information is the need to provide information for consumers. Consumers of a product or service cannot be expected to know all of the admirable details characterizing a rural industry in a far-away place. Developing information for consumers (in effect, those buying the product or service) to be displayed on the product itself, or in accompanying displays, is an excellent method of consumer education and notification of a product's positive qualities. Consumer information is a means of reassuring the consumer that the supplier has sufficient market information to meet his or her tastes and preferences.

A product bearing the stamp of a known certification body is certainly a plus for the consumer in considering whether to purchase. As described in all three case studies, certified products provide a "window of opportunity" to expand markets. Product certification can provide an automatic *billet d'entrée* to foreign markets, so long as the certification body is recognized as ensuring comparable or equivalent standards to those prevailing in the target market.

The forestry case study brings up the example of how a certified market for lesser-known species of wood can help to expand demand where little existed before. Certification provides consumers with a point-of-purchase opportunity to vote with their dollars in favor of sustainable environmental management and economic development. Organizers of ecotourism packages are bound to focus more and more on operations that have received the relevant certification, as it provides assurance that even in a far-away place, things are being done right.

For food products, consumer information touches even more closely on nutritional content and public health, i.e., food safety. To expand markets, exporters must satisfy the first line of defense for consumers — the food safety regulators at the border — who need to see specific sorts of consumer information to guarantee the principle of *traceability* for food products. Importing countries have different food safety standards for the same product, for the same type of packaging, for the same health concern, and for the same process. The U.S. regulations on nutritional labeling for packaged and processed food differs in certain ways from the EU regulations, highlighting the importance of appropriately addressing the question of consumer information to expand markets.

Public/private sector partnerships. The private sector is ultimately responsible for providing the product or service to be sold by the rural or agricultural industry. Environmental concerns tend to be secondary, and tend to be addressed in the context of the bottom line. The public sector is usually responsible for the functions that result in preservation of the natural environment (waste management, land use planning, transportation infrastructure, biodiversity conservation). Therefore, integration of public decisionmakers into projects can help expand markets by permitting sufficient lead time for legislative and regulatory action to address constraints.

A public-private partnership allows ambitious goals to be defined. The forestry case study speaks of "courage" being needed on the part of USAID in taking the viewpoint that *communities* need not be the sole focus, but rather that communities can benefit more from sound economic decisions affecting their rural industries.

To ensure food safety, public inspectors and private agri-processors need to cooperate to strengthen the regulatory and process management systems. The USAID project in Morocco brought together industry personnel and regulatory officials in short courses on food safety procedures. Although there were initial fears regarding this joint format, the consensus afterwards was that it allowed the public and private actors to "work through and arrive at a common understanding of the principles and practices" of the U.S. food safety standards. By getting the local institutions to buy into the process, such as through establishment of an FDA-approved process control training program in Morocco's leading agricultural university, the local human resource base for export competitiveness is upgraded.

Forward-looking perspectives. In expanding markets, an industry must inevitably adopt a forward-looking perspective to determine how to advance from the current situation to the desired point in the future.

Impact analysis can help an industry understand how its activities affect the local environment and vice versa. This permits the industry to effect the necessary changes to ensure economic viability and environmental sustainability. The tourism study recommends looking at the *aggregate impact* (transportation, accommodations, and tour operations) imposed on the environment by the activity. Such a comprehensive viewpoint requires cooperation among many economic operators. Examining each step in the "value chain" can reveal the weak links. Strengthening these links is an excellent way to ensure the reliability of supply for the future: if one link fails, dependent links may find themselves isolated and not viable.

Positioning in the market is critical for expanding markets. Bolivia has now brought the largest area of tropical forest in the world under certified management, staking out its natural resource as a key export earner not just now, but for a long time to come. A forward-looking perspective can identify that the associated industries must adjust as well, e.g., identifying the needs for processing facilities if an increase in certified lumber production is expected.

When planning investments, it is necessary to foresee possible changes in the regulatory environment, such as how the sanitary/phytosanitary regulations of the WTO will affect the food industry. Further, it is necessary to anticipate the plant hygiene requirements for foreign markets to avoid higher costs from retrofitting. The DAI case study noted that it takes about two years of preparation to successfully establish the Better Process Control School.

Better market information, better consumer information, effective partnership between the public and the private sectors, and a forward-looking perspective all serve to promote expansion of markets. Frequently, in organizing and working together to improve product or service standards for an export market, the industry will find expanded markets not just abroad but at home as well. That is, rather than simply expanding foreign market demand, attention to quality and value also serve to expand domestic market demand.

Best Practices for Improving Product Quality

Gone are the days when markets were driven simply by the availability of a product, regardless of product quality. Due to heightened global competition, driven by technological advances and nearly instantaneous communications, today only good-quality products stand a decent chance of expanding their market.

Don't reinvent the wheel (if it rolls well). There are efficiencies to be gained from following established examples for the form and function of sustainable rural development activities, whether in tourism, forestry, or agribusiness. High-quality products and services from one respected supplier quickly become *benchmarks* that set the expected world standard, and command a higher price.

Not that there needs to be uniformity in a product or service — in fact, the unique qualities of a product or destination often are highly valued in consumers' demand functions. Nevertheless, it is clear that, whether on certification standards and procedures or in adopting an Environmental Management System, best practices developed elsewhere are of functional use in these industry case studies.

For once, developing countries may see a slight advantage due to the absence of well-developed national legislation. If national legislation is developed in line with the norms of international agreements or standards bodies, this obviates the need to adapt existing rules. Where national standards legislation already exists, as was the case in Morocco, it was deemed too technically difficult to adopt the FDA rules for exporting products to the United States (due to the complexity of the legalese and dense technical content). Local authorities decided to develop FDA-style regulations in a way more compatible with existing Moroccan regulations.

A systems approach. Some rural and agricultural industries are extractive (forestry) and others intrusive (tourism), while some involve the transformation of raw materials (food processing). But all of these will benefit from taking a holistic view of the process by which the final output is brought to market. In many ways, there are lessons to be learned from Quality Management Systems, which seek to ensure consistent performance in meeting specified standards. Some important aspects involve transparency in production processes and consideration of the externalities (environmental and economic) imposed by a particular activity.

Information figures into a systems approach, as well, because participants (or producers or service providers) must be engaged in an ongoing process of education regarding the goals and best practices

of their industry. Methods of communication in rural industries must be tailored to the level of technology available locally.

A systems approach can involve posing and answering questions with a 360-degree vantage point. "Why do tourists wish to visit a rural locale? What impact does bringing them there have on the rural locale?" The purpose of adopting the concept of Environmental Management Systems (EMS) in the tourism industry is to minimize the negative environmental impact of tourism while increasing the economic sustainability of a destination, community, or individual property. As noted in the GW case study: "The implementation of an EMS represents the basis by which an organization can exercise control over its impact on the environment by systematically gathering and coordinating knowledge about those impacts."

Training and technical assistance can focus on aspects of the production and distribution systems that are often overlooked, but which can have a large impact "along the way." Examples of this are in the comprehensive approach to management in the forestry case study, which cites "inventory, management planning, reduced logging impact, equipment operation and utilization of lesser known species."

The DAI case study offers several examples of how systems approaches are increasingly necessary to guarantee product quality. The HACCP (Hazard Analysis and Critical Control Points) system for ensuring food safety falls under this rubric, with initial applications in the fish products industry. The development of process control authorities is another example of how the entire production chain must be examined, and sometimes even the inspecting body itself must be created! A primary result from USAID's project, and the Moroccans' own committed efforts, was to increase the Moroccan agency's understanding of FDA requirements and improve FDA confidence in the Moroccan's commitment to enforcement. At the U.S. border, the packaged or processed food was seen *a priori* as a high-quality product and granted swifter entry into the United States.

Participatory methods. Improving quality requires the commitment and dedication of all who provide inputs to the final product or service. This holds implications for management and labor practices within a firm, the public/private interface, and relations with the local community. Although capitalism is above all driven by the profit motive, sustainability of that economic viability depends on fair treatment of all those participating or affected by the process. Indeed, it involves opening decisionmaking to give all parties a voice, and better yet, a vote.

Planning decisions adopted at the local level should involve local citizens and governmental bodies. In contrast to managers or entrepreneurs, local groups may lack adequate links to business expertise, technology, financing, and market access. Building equal opportunity for women into economic development activities is one of the surest ways to build markets.

The forestry case study notes the good practice of specifying in the certification process the requirement for fair dealings with peasant and indigenous communities. Certification, which theoretically can be revoked, provides assurance that peoples who inhabit or work in the forest participate in the long-term benefits of forest management.

Focusing on the leadership development process can help transfer skills and anchor a project in the local community. As always, local "ownership" will help guarantee the continuation of a project beyond the lifecycle of USAID funding.

On food safety questions, a participatory approach could be considered to be development of the knowledge of applicable food safety regulations in target markets. The DAI case study makes clear that relying upon import brokers to handle FDA or USDA issues (in exporting to the United States) precludes the long-term transfer of that capacity to the exporting country. The establishment of an FDA-approved Better Process Control School in Morocco is a prime example of transferring the necessary technical skills to the exporting country for that specific function.

Managing growth. Managing the growth path of a rural or agricultural industry requires attention to maintaining and improving product quality. As industries expand, it is essential that new entrants to the market do not result in a lessening of product quality. There will be a natural inclination for "free riders" to take advantage of the success of the industry. The participatory methods must allow for expanding membership while maintaining high quality standards, not always an easy task.

Managing growth means investing time, money, and effort into meeting the benchmark product quality standards. Adherence to sophisticated food safety regulations can be time-consuming and costly, but to achieve market expansion, it is absolutely necessary to take these steps. The DAI case study estimates that a food processor must be exporting dozens of containers per year to spread the costs of regulatory compliance. As mentioned previously, meeting export market standards can improve the domestic market performance of many companies. They must be flexible enough to manage growth at home and abroad.

Public and private planners should realize that associated businesses can spring up around a competitive exporting industry. For example, the Moroccan food safety project spurred the development of local supply industries and supporting services (industrial cleansers and sanitation equipment, metal detectors, laboratory services, process establishment expertise).

The success of a rural or agricultural industry will stand or fall on product quality. Some key concepts in improving product quality include benchmarking quality standards, taking a holistic view of the process, practicing inclusive decision-making, and managing the growth path. Improving product quality is a never-ending exercise that requires vision, critical self-examination, and reaching out to find established examples elsewhere. Innovators breed competitors, but competition leads to better-quality products.

Best Practices for Improving Product Value

Product value is a function of product image and presentation as much as its inherent composition. Improving product value can entail moving up the value-added chain, such as by turning certified lumber into furniture. It can also entail lowering costs, through process improvement or improving sustainability of the underlying natural resource.

Sustainability. Short-sighted exploitation will degrade the environmental assets of rural communities, rendering the activity unprofitable in a brief time frame. Improving the value of rural and agricultural products and services requires the ability to spread the investment costs over a long-term time horizon. Sustainability is a goal that requires patience and "can only be verified generations hence." The lesson for USAID projects is to promote sustainable approaches that lead to the greatest long-term economic *and* environmental benefits.

The tourism and forestry case studies offer examples of how the certification process improves the value of the tourist services or wood products. Certification is based on adoption of a sustainable approach by those in the sector. Certification increases consumer demand and thus improves the

product value. Moreover, because the sustainable approach does not damage the natural resource base of the industry, the costs of production should be less variable from one year to the next. The explicit requirement to seek certification to receive USAID project funding is considered a successful element in the Bolivia forestry case study.

Regarding food safety programs, sustainability should be seen rather in terms of the institutional links that are needed. Without sufficient care to ensure that processed and packaged food clears customs, products can be delayed or refused entry, resulting in costly waste. Being able to cost-effectively comply with food safety import regulations on shipment after shipment adds reliability to the process, improving the value of the product by reducing the costs incurred from noncompliance.

Product differentiation. Developing a distinct product identity that matches the current trends of consumer opinion is the essence of market development. From one year to the next, certain buzzwords will attract consumer interest, rendering them more positively disposed to purchasing. In tourism, one can speak of "green" tourism or ecotourism whereby the consumer desires to visit a spot where sustainable methods are in practice. In the U.S. market today, "exotic" connotes positive images, whether in reference to an unusual location, a little-known species of wood, or a seldom-seen tropical fruit. Obtaining certification by an appropriate body for these products adds value to them, for certified products usually command a price premium in the market.

Making use of certification procedures can lend that cachet and "provide credible and objective assurance to inbound markets." The three case studies highlight the importance of minimizing the transaction costs of certification relative to the market access benefits.

The costs of certification can be reduced if the certifier is part of an international network, for example the SmartWood network of certifiers. This lowers costs because the local certifier need not spend greatly to arrive at suitable, duly-tested certification requirements and procedures. The local certifier can thus focus efforts toward the actual *procedures* of certification rather than development of the norm or standard.

One easy way to establish product differentiation is to draw on the "natural strengths" of a community. For example, tropical forests filled with lesser-known species of wood may at first seem like a disadvantage because there is little foreign demand. However, creative thinking can lead to development of new product markets, often with substantial value-added components. Certification that the wood was produced under environmentally sustainable conditions once again can provide that market access, with the rare nature of the species contributing to product differentiation.

The value of natural features is less readily apparent when it comes to discussing adherence to food safety regulations. In fact, the variability in raw material arriving at processing plants, although perhaps a natural feature of a rural or agricultural industry in a poor country, is a hindrance to attaining suitable conformity with the standards. Thus, there is a constant balance to be struck between product differentiation and attaining international acceptability.

Strategy. To improve the value of the product or service, the product's current competitive situation (whether a destination, lumber, or a processed food product) must be defined, and there must be a vision of how that product can be transformed. Improving the value of a product requires a bright idea and a plan for how to implement it.

Examination and assessment by external organizations can provide valuable insight into the relative competitiveness of an industry. Costs can be reduced if plan development is combined with plant

audits. The timing of a facilities or operational process audit can be arranged so that it can help fulfill the requirements for certification. Although these assessments are not cost-free, the positive economic gains from undertaking such an exercise can far outweigh the cost. Furthermore, the fact that the assessment requires a fee can amplify the message to be learned from its conclusions, so it is taken more seriously.

The DAI study found that in Morocco, plant operators frequently underestimated the complexity, costs, and additional liability of moving up the value-added chain from bulk commodities to consumer-ready products. Foreseeing ways to add value to the product is only part of the equation; assessing the relative costs and benefits of doing so is equally important.

Often, associated industries can improve the value of their own products or services by closer integration of production or marketing strategies. One example of this is the advent of "chain-of-custody" certification for industries situated downstream from the certified forestry business.

Strategy development could reasonably follow from building a "lessons learned" component into the project. This may involve a research element or simply a mechanism forming an integral part of the project's implementation. Periodic evaluation of the product's competitive position and tracking developments among competitors are a must as well.

In a long-term view, sustainability improves the value of a product by preserving the underlying natural resource base for future use. Product differentiation can be facilitated by obtaining certification. Making use of the natural features of a region or a regional product can help readily establish product differentiation. Moving up the value-added chain of processing should form part of a coherent planning strategy so as to weigh costs versus benefits.

Issues for Further Exploration and Discussion

- How are industry goals and guidelines linked with international agreements? For example, the World Travel and Tourism Council, the World Tourism Organization, and the Earth Council were able to "translate" the 1992 Rio Summit's Agenda 21 into suitable guidelines for travel and tourism. International agreements on poverty reduction, gender equality, and other areas are shaping the concept of *sustainability* in the world of the future.

- What are the benefits of a Design and Performance (DAP) contract in permitting the achievement of longer-term results to be built into a project? If USAID must compete the design task, the performance contract, and then re-compete the project extension, how does that affect the overall impact of the project?

- Sustainability is a long-term goal that requires patience. Can results-oriented systems, usually constrained within an annual or short-term budget horizon, adequately address sustainability?

- Certification of good practices is certainly desirable for any industry vulnerable to criticism for environmental damage. But some certification bodies are more reputable than others. How can managers in rural industries in poor countries pick and choose among certification bodies, so as not to waste time and money complying with a body whose "stamp of approval" really won't yield anything? How many firms have truly benefited from undergoing the rigorous requirements of the process for ISO 9000 certification?

- The Environmental Management System (EMS) and Quality Management System (QMS) entail a thorough documentation of operational and process controls, and quantifiable performance targets. In rural areas in poor countries, full adoption of these systems may prove unwieldy for the limited management budgets and capacity of small firms and micro-enterprises. Is there some form of “EMS-lite” that can be adapted to bring these positive elements to bear in a more manageable form?

- The Bolivia forest project successfully sponsored 63 meetings between local lumber producers and buyers from North America and Europe. What are the boundary areas in project implementation in funding trips by U.S. (and even more so, non-U.S.) buyers? Is there the risk of criticism for providing “corporate welfare”?

- One of the collateral benefits of improving quality and value for export markets is that domestic consumers also benefit. A better product or service will expand domestic market demand. Are there opportunities to be seized from this phenomenon? Should export promotion activities also take account of domestic sales in gauging project performance by trade flows?

Session 2.
Developing An Enabling Environment In Competitive Markets

Expanding and sustaining natural resource-based industries requires developing and sequencing policy and institutional changes. These begin with assessing the competitiveness of possible agroenterprises in the face of new rules of the game under the World Trade Organization and more stringent quality and environmental control standards. Next follows analysis of internal production and market conditions and how they would respond to internal and external shocks, such as structural adjustment programs. Finally, consideration has to be given to the institutions that will finance investments in the sector to sustain production.

Moderated by Jerry Brown from the USAID Africa Bureau's Office of Sustainable Development, the three case studies highlighted in this session — best practices in agro-sector policy analysis, business competitiveness in Uganda and other countries, and the Bolivia Investment Fund project — describe programs that develop different phases of the enabling environment.

This section concludes with a synopsis of best practices based on the three experiences prepared by Jeffrey Metzel, senior economist with Associates for International Resources and Development. Mr. Metzel groups the best practices under policy environment, business strategy, and institutional structures, all of which he argues are necessary to build a truly enabling environment for competitive markets.

Best Practices In Agro-Sector Policy Analysis

Summary of a presentation by B. Lynn Salinger, Senior Economist and Senior Vice-President for External Affairs, Associates for International Resources and Development (AIRD)

The definition of agricultural policy analysis has changed over the past 20 years, moving far beyond macroeconomic variables such as exchange rates, trade openness, and market prices. Its focus has shifted from analyzing agricultural sectors, to grasping structural adjustment programs, to understanding the complex relationships between production, agricultural processing, and nontraditional exports.

Today, agro-sector policy analysis is no longer based on mere cost analysis, but also incorporates qualitative factors such as competitiveness, as well as institutional, political, and economic conditions at the national, regional, and global levels. Sound analysis of the impact of policy change on the agricultural sector must also take into account factors such as regional trade integration and poverty alleviation.

Although the private sector is expected to take the lead in promoting sustainable agricultural development, policy environments in many developing countries tend to stifle private initiative despite more than a decade of structural adjustment and policy reform. AIRD has conducted agro-sector policy analysis work in countries with a host of incentive impediments, such as Haiti, Romania, and Mexico.

Haiti, for instance, lacked public sector institutions capable of supporting private initiatives. In Romania, much like the rest of Eastern Europe, the private sector faced constant fluctuations in relative prices due to high inflation rates as the country transitioned from a command to a market economy. In Mexico, the government was reluctant to move forward with liberalization efforts, fearing the impact of U.S. imports on local producers of the country's most important agricultural commodity — white maize.

Lessons Learned

In all three cases, AIRD applied some basic principles that provide important lessons for conducting effective agricultural policy analysis in difficult settings:

- Work with local partners to pair expatriate experience with thorough, country-specific knowledge of the agricultural environment and the political economy.
- Focus on short, intensive missions by expatriates, followed by longer, in-depth work with local backstopping. Contrary to USAID's emphasis on technical assistance teams sent in for four to six weeks at a time, this is a time- and cost-effective approach that makes substantive use of local capacity while capitalizing on the attention of decisionmakers during brief visits by expatriate teams.
- Use multiple analytic approaches as opposed to relying solely on protection coefficient estimates or comparative advantage indicators. Because agricultural sectors are complex, applying more than one economic approach to a given problem is likely to produce a more accurate picture of reality.
- Build long-term institutional capacity for agricultural policy analysis work after donor assistance has ended.

Future of Agricultural Policy Analysis

- In the 1980s, structural adjustment programs created a strong need for agricultural policy analysis as governments struggled to understand how to improve their competitive position and qualify for loans from bilateral and multilateral donors. Today, conditions have changed, but the demand for agricultural policy analysis will continue, largely due to two main factors:

- *Ongoing World Trade Organization (WTO) negotiations stressing the need for liberalization.* To adequately evaluate the potential impact of WTO regulations on their economies, developing countries need effective policy analysis tools.

- *The growth of the private sector throughout the developing world.* As private actors lobby government representatives, they increase pressures on policymakers to make decisions based on objective criteria, hence the need for independent policy analysis.

Q&A Discussion

Q. When you discussed trade openness and macroeconomic variables in the context of agricultural policy analysis, there was no discussion of natural resource accounting, water pricing, or ecosystem issues. How do you marry environmental sustainability with economic growth?

Ms. Salinger. There are instances in which we have taken some of these variables into account. In Haiti, we integrated environmental and non-environmental, or agricultural production, concerns. There, the challenge is how to move forward with agricultural intensification. When conducting an analysis of the policy environment and looking at the structure of price incentives, policy incentives, and favoring one group of crops versus another, the bias has been in favor of the promotion of staple crops. There seems to be a strong need to shift the policy environment to the point where it benefits crops which do well on hillsides that preserve natural resources. Water management and institutions dealing with land tenure were taken into account and efforts were made to understand what was causing people to exploit resources in the short term, instead of thinking about long-term consequences. The conclusion is that the right kind of policy environment benefiting tree crops that maintain the soil on the hillsides helps create a shift in mentality toward a long-term approach to cropping.

Q. What are the criteria involved in setting up an independent policy analysis group? In other words, how do you form a group that is neutral enough to be able to provide analysis that decisionmakers can use, without being so neutral that its analysis is neither here nor there? Also, how can you build credibility for such a group, especially when the government may resent the fact that it has access to more resources, better computers, etc?

Ms. Salinger. This is an interesting question, but the fact that we are asking the question suggests that our mental model of civil society development is a bit limited. We have many sources of policy analysis in this country — consulting firms, lobbying groups, and public sector units of policy analysis within government departments. What we have seen in Africa is that nongovernmental sources of information are not only being created, they are actually being fostered by USAID. For instance, under the Eagle project, we work through a local consulting group in every country. The idea is to build competition in the market for ideas by supporting various research units, consulting firms, university units, and even units in the public sector. Over time, what we see is a richer and more developed civil society coming together. The market for ideas will have to sort out who the policymaker listens to. The

notion that we can create a perfect public sector policy analysis unit is probably short-lived for the kind of evolving society that we are working in.

The Country Competitiveness Initiative

Summary of a presentation by Kevin Murphy, President, J.E. Austin Associates, Inc.

Most developing countries today realize the value of private sector development, although few have adopted the policies needed to create an enabling environment. Unlike in the 1980s, few competing ideas currently exist on how to promote private sector growth. In fact, donors and recipient countries have bought into the solutions, even if they have yet to be implemented.

The World Trade Organization has created a new competitive environment and many developing countries have made competitiveness a top priority. However, most are misinformed about what it entails. Competitiveness is not a product of abundant natural resources, inexpensive labor, or a cheap currency. Those that have relied on natural resource exports for their wealth have either stayed poor or become poorer over time. In fact, competitiveness is directly related to sustainable growth and productivity driven by an enabling environment and effective business strategies.

Sri Lanka Competitiveness Project

To cite an example other than Uganda, which is the subject of the paper J.E. Austin Associates submitted in these proceedings (see Annex C), a two-year competitiveness project in Sri Lanka illustrates this point. Most of the country's tea is exported in bulk or packets, with 10 percent of it in the form of branded tea bags and instant tea. Yet, export opportunities are limited because tea producers fail to realize that, in order to become more competitive, exporters need to create new varieties by mixing domestic tea with other kinds of foreign tea. Fearing that exporters may use tea imports to drive domestic prices down, producers have lobbied the government against allowing foreign tea into the country. This mistrust between producers and exporters and the lack of competitiveness strategies highlights the need for cluster cooperation.

Another case in point is the story of Sri Lanka's "lost jewels." Although the country is home to some of the best gems in the world, its political environment is not conducive to importing gold, which could be used to add value to the gems. As a result, most of the revenue generated from gem sales goes to the salespeople and owners of jewelry shops rather than the artisans whose skills and labor produce the precious stones.

Sri Lanka also claims 2.5 percent of the world's raw rubber market. A USAID project in the early 1990s allowed a group of industry entrepreneurs to innovate and acquire new technologies. As a result, Sri Lanka now controls 15 percent of the world market for specialty all-rubber tires used in heavy construction equipment. It also exports rubber surgical gloves and high-end rubber mattresses with superior back support. In fact, exports of these products have surpassed raw rubber exports. This protects rubber producers from the cyclical swings of market demand for raw rubber.

These examples illustrate the fact that competitiveness requires sophisticated business strategies not only focused on producing things better, but also producing better things.

Competitiveness Model

The competitiveness approach is a three-fold model that involves:

- Working with firms at the micro-level to upgrade company operations and develop better business strategies designed to decrease dependence on basic factors of production. This

includes promoting workforce development, technology, innovation, market and customer learning, and improved business clusters. The best approach is to choose client firms that are most likely to produce favorable results that can be built upon and replicated.

- Working at the macroeconomic level to promote policy and institutional reform. This means working at the highest levels of leadership to ensure the establishment of an enabling environment for competitiveness.

- Creating macro-micro linkages by promoting constructive dialogue between the private and public sector and translating government reform into improved business operations. Over the long term, government reform alone cannot sustain economic growth. The private sector must also take steps to increase productivity by adopting sound business strategies.

Competitiveness studies suggest that a greater correlation exists between the microeconomic environment and per capita income growth than between the macroeconomic context and economic development. Therefore, business-led economic growth, supported by a favorable policy environment and strong public-private collaboration, promises to produce long-term, sustainable results.

Q&A Discussion

Q. If USAID is putting greater emphasis on competitiveness, it means we will have to start picking winners in terms of which clients to work with. That has a lot more responsibilities associated with it, especially when dealing with the poor. Where are we in terms of applying the theory that we now know about competitiveness?

Mr. Murphy. Competitiveness is not about picking winners and losers. You can be competitive in really mature industries, commodity businesses, etc. I don't think we want to be in the business of picking winners and losers or getting governments in positions where they think they can pick winners and losers.

Q. The distinction you drew in terms of what people use, what they do, and what they have is distinct from competitiveness. If a country produces rubber, that is what it has and what it must use to become competitive. Therefore, you actually introduced a notion of competitiveness that is somewhat linked to productivity. How can you build on something you don't have?

Mr. Murphy. Indeed, you have to build on the base that you have. But at the same time, if we are going to help people get better at exporting corn and cocoa, while prices are constantly working against them, that is not a sufficient solution. A recent project in Uganda is a good example. A cluster was developed whereby the project team went to the best coffee farmers, obtained the best coffee beans and toasting equipment, and set up coffee houses in Kampala to teach a nation of tea drinkers to drink coffee. That was technological as well as marketing innovation. The project was going to export homemade coffee, but it found a great market within Uganda alone. This is a great example of competitiveness in Uganda. The project built on what they have, but it also did things a little differently. However, I agree that we need to build on the base.

Ms. Salinger. Let me add an example from Mali. There, the question is how to add value to agricultural products that Mali is already expert at producing, such as cotton fiber. Traditionally, the rest of the cluster has been focused on thread and fabric production to satisfy the local demand for *panya*, the traditional cloth wraps. The complaint you hear from the handful of people in the business is that they need more protection from Asian imports. I tried to explain that thinking of subsectors as

vertically integrated industries is a dead notion. In other words, the idea that Mali has to go from being a great fiber producer to also being a great thread and clothing producer all in one sweep is ridiculous. Let others, like the Nigerians or the Asians, sell the low quality *panyas* that people want for local consumption, but let Mali focus on the high value-added fabric — i.e., beautifully hand-woven cloth or tailored and embroidered garments — and let it focus on selling that to the external market. In other words, let's think of imports and exports happening at different stages of the industrial chain.

Q. When dealing with industry clusters, how do you go about setting priorities in terms of effective strategies to improve competitiveness?

Mr. Murphy. In Sri Lanka, we made initial presentations to 15 different industry clusters and told them we would only work with four or five. For those, we had to work from the ground up to get them away from their tendency to produce a laundry list of problems to present to the government. It became clear who the four or five clusters would be — not because we picked winners and losers, but because they were the ones that stepped up to the plate. They went beyond their association groups and assembled all the key players in their cluster, including information technology, advertising, marketing, input, and service providers. They then committed to hiring a qualified local person to work on establishing linkages within the cluster.

The next step was for each industry cluster to formulate its own particular strategy based on more sophisticated customer learning. We want them to take ownership of that process. Typically, they start with a list of what the government is doing wrong, but we encourage them to go beyond that. We want them to start thinking about their customers, their competitors, and their business model. Once they get that right, they may come up with specific requests to present to the government. For instance, they may say: For us to export fresh product, we don't need all the roads fixed, but we do need cold storage at the airport.

Once the industry clusters have developed their strategies, the next step is to approach think tanks rather than going straight to the government. The think tank can then study how fixing certain things will impact jobs, foreign exchange, revenue generation, and exports in certain categories. This will in turn be conveyed to the government. That way, the analysis is not seen as coming from an interest group, but rather, from a credible, independent institution.

Bolivia Investment Fund (BOLINVEST): Leveraging And Promoting Private Sector Investment In Natural Resource-Based Industries

Summary of presentation by Carlos Torres, President, CARANA Corporation

The USAID-funded BOLINVEST project implemented by the CARANA Corporation offers valuable lessons in how public-private relationships affect investment and export promotion. The project was highly successful in boosting exports and foreign investments in Bolivia's natural resource-based industries in the 1980s. Over the long term, however, the program suffered from several inhibiting factors, most notably lack of local buy-in.

The project was initiated as Bolivia was edging toward improved political and economic stability, which created a more favorable environment for policy reform, although significant disincentives remained. Bolivia had experienced multiple changes in government and one of the highest inflation rates in history throughout the 1970s and early 1980s. By the mid-1980s, however, conditions had improved with the election of the first democratic government and a stabilization of the national currency.

Launched in 1989, the project initially focused on redesigning and refining USAID's approach to investment and export promotion. CARANA convinced USAID to significantly simplify its approach by taking into account lessons learned from similar projects carried out elsewhere. In the second phase, the project team launched an export promotion initiative through direct technical assistance to private companies. Success in these efforts expanded the project's scope of work to include foreign investment promotion focused on natural resource-based sectors. The project's high success rate eventually led to the establishment of a permanent institution, although this was initially not part of USAID's objectives. The institution is still alive today, but its priorities and scope of work have changed radically.

Impact

Over seven years, the project generated more than $100 million in net new exports. It also attracted direct foreign investment, particularly in soybean processes and mining, with three of the largest investments accounting for half of total investments. The project generated 10,000 new jobs, mostly first-time entrants into the labor force.

At first, the project team focused its efforts on simple tasks, gradually building upon them to venture into more complex activities. For instance, the contractor helped a manufacturer that was exporting gold chains add value to its product. Over two years, the project team introduced local steps and new designs that added significant value to the gold chains, effectively creating an entire industry. Today, Bolivia is a large jewelry exporter.

Initial successes with large companies eventually allowed the project team to shift efforts to rural companies. In the end, independent evaluations demonstrated that the program had produced substantial benefits to rural and poor communities. For instance, the contractor was approached by a company exporting tropical fish to the United States and Europe. The firm wanted help in reducing the high mortality rate of the fish, which reached levels as high as 70 percent. The problem was that fishermen, most of them in rural areas, would bring their catch to the export facility, which in turn would dump a large number of fish it found undesirable. With technical assistance from the project, the company set up a communication link with the fishermen to educate them about the entire process

from the point that the fish is caught to when it is exported so they could develop a better understanding of which fish to target. As a result, mortality rates dropped to five percent over one year, a sustainable cooperative was created, and the company's profits increased.

Lessons Learned

Operate in a favorable policy environment. Implementing a project in an environment replete with disincentives to exports and foreign investment is unlikely to produce the desired results. It is therefore important to choose a host country open to policy reform.

Start simple and establish early credibility. Overly complex project designs tend to hamper effectiveness and make it more difficult to achieve early successes. By starting simple, practitioners can build upon small successes and gradually increase the complexity of their technical assistance efforts. At first, the BOLINVEST project team picked small tasks that were most likely to produce a high success rate. This approach helped build mounting credibility for the project, allowing it to exercise greater selectivity in choosing client companies and to apply more creative problem-solving techniques.

Avoid past mistakes. A wealth of information is readily available on investment and export promotion, yet many projects are based on theories of what may work rather than actual examples of what has and has not worked. Donor agencies should take data on similar programs into account before finalizing project design.

Set up clear measurement indicators. Being able to measure a project's success is crucial to identifying its strengths and weaknesses. Early on, the project lacked clear indicators, making it difficult to estimate its impact. However, USAID gradually addressed the problem by introducing indicators that not only focused on raw figures, but also on more subjective criteria such as impact on the poor.

Focus on technical assistance. USAID tends to place excessive emphasis on marketing as a tool to promote exports and foreign investment. However, the BOLINVEST project spent 90 percent of its funds on technical assistance and a mere 10 percent on marketing. It focused on helping clients lower costs, match quantities produced with market demand, improve product quality, and comply with rules and agreements.

Establish linkages with local institutions and ensure government buy-in. One of the major constraints facing the project was the lack of understanding from counterparts — the local business chambers. The chambers were supposed to provide the project team with a client base. Instead, they saw the project as a way to acquire funds to improve their offices. The contractor and USAID also share responsibility for the lack of local buy-in. When the program was launched, several Bolivia institutions were already working to promote investment and exports. However, they were not brought into the project, which created considerable animosity from various key players, including the government. This problem could have been mitigated by involving the business chambers in the program and promoting a high-level policy dialogue.

Secure sustainability. USAID invested some $12 million into the project over six years and promised to keep up a certain level of support to ensure the long-term sustainability of the institution born out of the program. However, these promises were not kept and the institution now operates under tight budgetary constraints. New personnel also led to different priorities, so much so that the project's initial scope was largely abandoned.

Q&A Discussion

Q. Have you seen any indication that USAID is shifting toward the use of private trade associations as vehicles for trade investment promotion?

Mr. Torres. I haven't. Actually, USAID has shifted away from large investment export projects in general. We never had a lot of success working with trade associations, mostly because they have specific interests in mind. For example, we did a lot of work with the Chamber of Industries in Costa Rica, but in effect, the chamber consists of local manufacturers who are reluctant to work with foreign investors. In the end, what you need is some sort of a public/private sector union with a stamp of approval from the government. The private sector should be in charge of personnel and budgetary decisions, however, since public institutions typically have a difficult time making sound decisions in that regard.

Ms. Salinger. To cite another interesting example, the West African enterprise network has over the last five years pulled together representatives from a thin private sector across 9 to 12 countries to pressure policy makers to adopt reforms related to exchange rates, banking, and customs. This network is not specific to one industry or cluster, but it works as a group to advance common interests. This interesting experiment, which has been supported by USAID, now incorporates some export/investment promotion.

Q. Several years ago, the World Bank published a paper that studied development projects around the world and asked what was common about the ones that have worked. It found that having a catalyst organization that is independent from the government and from associations increased the chances of success. The dilemma for USAID officers is that if you have a team working with local counterparts, you will need to have them work with associations and government institutions. Yet, this paper recommended going out on a limb and giving project teams the ability to work across all sectors and aspects of the problem. Does this correspond with your experience?

Mr. Torres. It certainly corresponds with mine. I have seen it throughout Central America. In Honduras and Costa Rica, PETA did that very well. Some did it better than others, but they definitely have to. The problem I have seen is that donor-funded project teams often end up being at odds with the government and I'm not sure how to fix that. For example, BOLINVEST ran across that problem and the government began to resent the project and the fact that it had so much freedom to do different things. There was less of that in Honduras and probably less in Costa Rica. But that problem occurred in El Salvador and Nicaragua, for instance.

Session 2 Synopsis
Developing An Enabling Environment In Competitive Markets

Prepared by Jeffrey Metzel, Senior Economist, Associates for International Resources and Development

As captured in the RAISE acronym, the development objective around which this workshop is organized is to raise and sustain rural/agricultural incomes. All three case studies examined in this session assume that the best way to do so in the long run is to base income growth and sustainability on market-driven private initiative. Developing an "enabling environment" for competitive markets is seen, in each case, as the best approach to develop and promote this initiative.

These overarching assumptions may sound obvious, but over the past four decades, development efforts have often taken more activist approaches that tried to invest directly in income-generating activities. However, public sector and donor agencies found it difficult to identify "winners" for the private sector and even more difficult to manage productive enterprises themselves. Thus the emphasis on private initiative. On the other hand, the need to create an enabling environment also acknowledges that current conditions in developing markets often stifle private initiative and discourage new investments.

The three experiences summarized in this workshop provide three different perspectives on creating or cultivating this "enabling" environment. The first by AIRD presents experiences in building a public policy environment to encourage agricultural investments under three different political-economy settings. The second, by J.E. Austin Associates, presents an experience of creating business-based strategies in Uganda to expand their income-generation capacity. Finally, the CARANA case recounts the experience of setting up a nongovernmental organization in Bolivia whose mandate is to promote private investment and trade. This case focuses on creating an institutional basis for building a public-private partnership with this objective. From these experiences a number of "best practices" can be distilled. These are broadly grouped under *policy environment*, *business strategy*, and *institutional structure*s, all of which are argued to be necessary to build a truly *enabling environment* for competitive markets.

Best Practices for Establishing a Conducive Policy Environment

Ensure macroeconomic stability. Macroeconomic variables — interest rates, exchange rates, and the rate of taxation — each can have profound impacts on the profitability of investments. Therefore, unless these variables are predictable, private investors are not likely to invest their resources in an economy.

Promote market liberalization. Freely functioning markets increase competitiveness and therefore drive actors to be more productive. Reducing barriers to entry and enhancing the internal rivalry of an industry will lead to greater pressures for efficiency, upgrading, and overall competitiveness.

Seek openness in trade policy. Being open to trade permits economies to take advantage of the well-known gains from trade. Yet, trade exposes firms and industries to large and rigorous demand in the global marketplace. In this way, trade contributes to national competitiveness.

Provide for public goods and services to support new business. Modern industry must have access to both physical infrastructure and institutional services that can only be provided by the collective (or

the public) because the costs of their provision exceed the capacity of any individual enterprise or their benefits cannot be captured by an individual enterprise. Without these, many business opportunities become unattractive. Low-cost communication services are particularly critical in allowing local industry to be responsive to global markets and find new technology.

Privatize productive assets. Publicly run industry usually has proven to be inefficient and costly to sustain throughout the world. When privatization has not reached critical business service industries such as energy, transport, and communications, businesses are affected by higher costs and less efficiency.

Ensure adequate human capital investment. Relevant education is an important driver of economic growth. As more jobs become available in knowledge-based industries, society and parents must ensure that their children receive the education they need to take advantage of these opportunities. Micro-level analysis reinforces this message. Firms that pursue strategies based on hard-to-replicate skills tend to have sustainable competitive advantages.

Ensure careful analysis of policy environments. The importance of the policy environment is typically not well understood by either public or private actors. Accurate information and analysis are necessary to raise awareness of its effects, and to create demand for an improved policy environment. This, in turn, created incentive for action by the private sector. Specific lessons and best practices in undertaking policy analysis include:

- *Exploit local expertise.* Analyses must be adapted to a wide range of conditions regarding the state of agricultural markets, the role of government in the sector, and the role of the sector in the larger economy. Local experts are able to provide a much more complete context for understanding the behavior of local markets and the actual application of policy. This knowledge is critical in interpreting the real impact of policy on the agricultural sector and in proposing effective solutions. Building local analytical capacity is also vital for ensuring not only the implementation of the recommendations but the sustainability of the analytic process after the consultants' departure.

- *Use technical assistance to ensure analytical rigor and provide perspective*. What is sometimes missing from the "local" understanding of policy effects are an understanding of new methodologies and comparative experiences across countries. Teaming local expertise with expatriate economists is an effective way to provide rapid but accurate assessments of the likely behavior of agricultural/rural sectors as a result of new investment or policy changes.

- *Use comparative approaches to overcome inadequate data.* In many developing country contexts, price data and technical coefficients are inadequate. In these cases, comparative approaches provide a means to overcome these lacunae. Use of rapid reconnaissance primary data and aggregate secondary data as the basis for the analyses is justifiable to the extent that conclusions are restricted to relatively aggregate sectoral trends and phenomena for which concerns about statistical precision are not relevant. Use of "expert assessment" to cross-check the plausibility of results is an effective means of validating analyses.

- *Address complex issues with multiple analytical approaches.* Agricultural sectors are complex systems involving multiple actors interacting in the presence of many unpredictable exogenous factors, yet economic models to explain their behavior must simplify based upon underlying assumptions. Application of several economic approaches

to the same problem therefore provides a fuller picture of reality. These cases argue for multiple methods to be applied in sectoral analysis.

- *Place the assessment of sector issues in the larger political economy context.* Decisions to address agricultural sector constraints are made in a larger context of pressures on decisionmakers by a host of economic and political interests. Understanding these pressures is necessary to make a realistic assessment of how policy will be applied and thus judge what are likely to be its consequences.

- *Sustain good policy by building capacity to use it*. An important complementary activity to undertaking good policy analysis must be building the local capacity to understand and apply it. This requires that resources be committed by government to monitoring and evaluating current policy.

- Be aware of biases in the assessment of policy impacts on market actors based on region, farm-type, and changes in macroeconomic variables. These biases are especially strong in economies that have had strong a government hand in productive activities such as the NIS. Understanding them is critical to any accurate assessment of impact and thus to proposals to reform sectoral policy.

Best Practices for Creating a Proactive Business Attitude

The business sector must take the initiative in creating an enabling environment. The burden of initiative must be on private sector leadership to conceive and implement competitive strategies that can form the basis for increased productivity and income per capita.

Business initiatives typically require an adequate policy environment as a precondition. Generally, business promotion has not worked where policy environment for investment was inadequate. However, in some cases, alternatives (free trade zones) can circumvent some policy obstacles.

Initiative must begin with a business strategy that identifies new opportunities and the means of attaining them. An approach to developing these strategies is the "competitiveness exercise" that J.E. Austin Associates has developed. While rich in data and analysis, the competitiveness exercise is primarily a process of dialogue and facilitation of strategic analysis by business. Several areas of particular focus in business strategies include:

- *Focus on better business practices rather than competing on costs.* Comparative advantage based on factor costs is fundamental to long-term feasibility of investments, but it is insufficient to determine business success. Private sector initiative is required. Better business practices include adding desirable product features in design, quality, reliability, packaging, presentation, and better and more direct delivery channels.

- *Focus on export orientation*. Firms that can export are certain to be more robust because they have larger markets, and are not subject to the whims of domestic market variability. Moreover, facing global competition forces firms to sustain their competitiveness.

- *Focus on diversification out of primary product-based strategies*. Studies have illustrated the correlation between low growth in GDP and overreliance on primary and natural resource exports. At the business level, export strategies based on primary products are easily replicated and, as a result, prices tend to fall over time as new entrants emerge. The

challenge is to continue to diversify and upgrade the export base of countries into higher value-added activities.

- *Focus on knowledge-based activities.* The large "western" economies have entered a post-industrial phase based upon knowledge-based industry. This new industry provides opportunities to developing countries that can become a part of this industry.

"Competitiveness exercises" can serve as a mechanism for launching strategic thinking and empowering the business sector. Many business people do not believe that they can be competitive in world markets, an attitude that often contributes to inaction. The competitiveness exercise focuses expectations on private business. If this process is carefully designed and implemented, it provides a natural lead-in to demand-driven implementation. The development of business strategies by industry clusters creates business demand for strategic change. This is a point of departure for implementation of programs called for by the strategy. In undertaking competitiveness exercises, some specific best practices include:

- *Raise awareness and create demand for an improved environment through information and analysis.* The policy analysis exercises use indicators of protection and profitability to draw attention to deficiencies. Analysis is needed to raise private and public awareness of the shortcomings of the current strategic and economic situation. *(*See discussion above for best practices in policy analysis.)

- *Identify specific links between business strategy and the macroeconomic environment*. In the absence of a conducive policy environment, business strategy will be skewed to get around policy obstacles. The focus on business strategies and specific business clusters identifies specific policy, regulatory, and service constraints in the macro environment, and focuses public-private collaboration on specific improvements.

- *Involve the media to change expectations and support competitiveness.* The competitiveness exercise "co-opted" the media by educating the economic press and involving it in the exercise.

- *Involve the public sector to encourage a shared vision.* Although competitiveness focuses on business and business strategy, the potential government role is pervasive and may be very positive.

- *The "competitiveness exercise" must be adapted to country-specific situations.* The method has to be adapted to fit the unique characteristics of the country, including the experience and current level of public-private policy dialogue, and the role and effectiveness of business groups. Use of local models helps to make the exercise more relevant.

- *Assemble high-level private and public support for new private sector initiative.* Private and public leadership need to provide visible support and cooperation at the highest level. Affiliation with a strong local partner with "convening power" can help to overcome the initial challenge of bringing the right people to the table — the business leaders, government leaders, and strategic thinkers and champions. A high-level interministerial competitiveness committee is useful to monitor the implementation and coordination of policies and initiatives.

Best Practices in Designing Projects to Promote Competitive Markets

Importance of commitment from counterpart institutions and host governments To a large degree, problems in implementation revolve around counterpart institutions and their commitment to the initiative. Resolution of these problems requires careful planning and transparency. Similarly, strong government support for an investment and/or export promotion project is an important element for success.

Design for early success and credibility Given the short life of projects, early verifiable successes are critical to give projects a recognized level of credibility. This credibility increased staff confidence and client responsiveness, which in turn led to greater success in later years. Achieving early successes requires maintaining focus on only the most attractive opportunities and not trying to undertake too many activities at once.

Public-private partnerships are crucial. Basic research is woefully inadequate in a host of areas in agriculture and the environment in developing countries, particularly in the tropics. Because of its inherently public nature, government must become more active in this area. As noted above, good analysis, joint participation in strategy building, and public private partnership institutions are tools to getting government and industry headed in the same direction. An underexploited model in this regard is the need for joint ventures between universities and industry in research.

Monitor indicators of direct and indirect effects. The impact of this type of analysis is important both to keep projects "honest" about their effects and to provided project management with greater insight into the types of activities producing the greatest development impact. This allows management to make adjustments and justified new activities that would not have been made possible otherwise. This also provides USAID with the information it needs to achieve broader support for the project.

Donor efforts can continue to assist the private and public sector in this endeavor. The private sector in transitional situations may also need "reform" assistance (or assistance in designing and implementing better strategies). A general lack of exposure to strategic tools and approaches to developing business strategies identifies a clear area where donor-sponsored technical assistance is helpful. Donors can also create the link between businesses in their home countries and developing industries because for the most part large global business concerns are *not* knowledgeable about doing business in the third world. Finally, donor involvement can ensure attention to environmental issues, policy environment.

Provide sustained support and a gradual donor exit strategy. Creating non-profit investment promotion organizations has been a common strategy, but it has stumbled on the problem of financial sustainability. The sudden retreat of the principal donor exacerbates the problem of raising funds and recruiting new donor and business partners for such organizations. This suggests the need for donors to maintain some long-term commitment to these organizations, such as through endowments.

Specific lessons for interventions in agricultural/rural investments are:

- Provide timely information on likely impacts of reform and supporting tailored advice on alternatives to facilitate the ability of farmers to adjust production activities to changes in crop incentives.

- Develop government's capacity to monitor market behavior and to devise policy that promotes its efficient performance in the context of other public objectives.

- Address issues of granting rights to resource benefits to those who manage them.

- Promote exporter affiliation with community-based associations to reduce exporter risks in investment in outgrower/contract production.

- Support private sector testing of environmentally sustainable production technologies in target ecological niches for crops that can be produced competitively for export.

- Sponsor efforts to register compliance of exports with import standards in target markets.

Issues for Further Discussion

- How can educational systems address the need to develop human capacity oriented toward business needs? Should this be the overarching purpose of primary and secondary education? Where are the boundary lines between education for business' sake and education as a public good for its own sake?

- The capacity and quality of *local expertise* varies a great deal. This variability often complicates project implementation. Can the local consultants be allowed to fail?

- Governments need to be able to monitor market behavior (in order to respond accordingly and foresee regulatory/legislative needs). What are the minimum requirements for market information? How can one ensure adequate safeguards so that information serves as a public good, rather than as a means of privileging certain actors?

- What is the role of government in basic research? How can joint ventures between universities and industry be encouraged?

- Sustaining projects beyond the donor's exit is a constant preoccupation. Is the founding of an NGO a more sustainable structure than trying to reshape a government agency? What *does* work?

- The "competitiveness exercise" is primarily a process of dialogue and facilitation of strategic analysis by business. What are the minimum data and information requirements needed to draw defensible conclusions?

- The media can play a role in fostering enthusiasm for private sector initiatives. How much should USAID-funded programs be active in the foreign media?

- Does the secular movement toward knowledge-based industries favor or disadvantage developing countries? Is knowledge a low start-up industry?

- Can a good policy environment be instituted and then put on auto-pilot? Do clean and accountable governments and an open media lead to self-scrutiny and correction? Or is there a maturing process regarding establishment of an enabling environment and therefore different technical assistance responses for each stage?

Session 3.
Strengthening Community Institutions For Natural Resource Management

Experience has proven that in order for natural resource management initiatives to succeed and operate as sustainable enterprises, the community institutions responsible for planning and managing these resources must be involved and strengthened. USAID and the RAISE partners have been applying innovative approaches to increase the capacity of community institutions and empower grassroots and community organizations, local governments, and NGOs to sustainably manage their resource base.

Participants in this session, moderated by Loren Schulze, chief of the Environment Natural Resources Division of USAID's Bureau of Europe and Eurasia, examined three case studies — the Living in a Finite Environment (LIFE) project in Namibia, the African On-Farm Productivity Enhancement project (OFPEP) in sub-Saharan Africa, and the Governance and Local Democracy project (GOLD) in the Philippines.

Finally, in a best practices synopsis paper, J. Kathy Parker, social ecologist and president of The Heron Group, and consultant to Associates in Rural Development, reviews the three projects with an eye to identifying best practices that cut across all three cases.

Using Tourism To Sustain Community-Based Conservation: Experience From Namibia

Summary of presentation by David Callihan, Management Systems International (MSI), Management Advisor to the LIFE project, and presented by Mark Renzi, MSI

When Namibia gained independence from South Africa in 1990, the country had to grapple with a host of post-apartheid issues while working to forge a path toward sustainable development. One of the main challenges was the need to empower the majority black and historically disadvantaged population while effectively managing resources. As part of this effort, the Namibian Ministry of Environment and Tourism initiated a community-based natural resource management (CBNRM) program linking the conservation of natural resources with tourism.

Launched in 1993, the USAID-funded Living in a Finite Environment (LIFE) project aims at supporting the program through grant funding and technical assistance to help build sustainable community-based conservation organizations. The project focuses on communal areas, which mostly consist of arid land and wilderness near rural communities.

The conservancy movement allowing Namibian citizens to manage wildlife actually began under apartheid, but at the time, it applied only to private land owners, i.e., white people connected to the government. With the end of apartheid rule, the Namibian government decided to extend conservancy to areas owned by black communities.

Despite the high tourism appeal of wildlife areas, rural communities have had little to gain from the surge in tourism to Namibia since independence. Until recently, the growth of the tourism sector had solely benefited the commercial sector. For instance, tourism lodges in communal areas were traditionally owned by outside investors who were not required to share tourism-related income with the local communities in exchange for using their land. In addition, wildlife-based activities had little to offer rural communities since wildlife in communal areas is owned by the state, thus giving the local population virtually no incentives to practice conservation.

This began to change when the government passed a law establishing communal area conservancies — i.e., geographic areas where local communities have exclusive rights over commercial tourism activities and the right to hunt and sell game. Through grants, technical assistance, training, and policy analysis, the LIFE project works to increase the benefits that disadvantaged communities can reap from the sustainable management of natural resources in communal areas.

Impact

Over almost seven years, the project has generated some concrete results toward improved community-based natural resource management. They include the following:

- The LIFE project has helped establish four communal conservancies registered with the Namibian Ministry of Environment and Tourism. An additional 22 emerging communal conservancies are under development. By 2005, the number of conservancies is expected to reach 24.

- Within a year of their establishment, Namibia's existing conservancies began generating profit for local communities.

- The financial management skills of local communities in the conservancies are improving. They are now able to engage in joint ventures with tour operators, hunters, and photography tourists. As a result, conservancies are becoming more self-sufficient.

- The relationship between conservancies and the private sector has moved toward greater equality as commercial actors negotiate with community-based organizations.

Challenges

When the LIFE project was launched, it faced a number of constraints, some of which are highlighted below:

- Private land is generally well-defined geographically, with fences clearly delineating boundaries. Communal farms, on the other hand, have vague boundaries, making it difficult to settle disputes if a commercial farmer hunted on communal land, for instance.

- Commercial farmers often have some form of capital and are well-connected with relevant government ministries. Communal farms, however, lack capital and are barely familiar with government entities and processes.

- Commercial farms are usually managed through a clear leadership structure, with the owner in charge of making key decisions. On communal farms, families, clans, and ethnic groups jointly make decisions and share resources.

- Commercial farmers have a basic understanding of the tourism industry through their own travels and by working with tour operators bringing a steady stream of tourists interested in the wildlife experience. Communal farmers, on the other hand, generally lack basic understanding of tourist needs. They also lack entities capable of dealing with tour operators and government officials, who play a key role in attracting tourists to communal areas.

Lessons Learned

LIFE highlighted several best practices concepts that have been key to ensuring successful project implementation, including:

- *An enabling policy environment*. Policies promoting community-based natural resource management are imperative to sustain conservation through tourism. The project made little progress until legislation was passed allowing local communities to control wildlife resources.

- *Linkages with government.* Historically, communal farmers have had virtually no connection to government officials and agencies. However, good relationships with government are key to promoting policies designed to bring tourism to communal areas.

- *Collaboration with the private sector.* The commercial tourism industry is well-versed in the needs and interests of tourists ranging from trophy hunters to adventure travelers. Commercial farmers can therefore greatly benefit from joint ventures with private tour operators and other private actors to attract more high-end tourists.

- *Community organization.* Because communal areas have traditionally lacked organizational structures capable of dealing with government officials, tour operators, and the outside world in general, the project team spent the first few years developing institutions, such as a conservancy committee, an investment review committee, and a community-based tourism association. Community organizations are key to increasing the local population's skill level and to promoting ecological, political, and financial sustainability.

- *Multiple measures of success.* Community-based natural resource management programs should not be judged solely on the amount of revenue they generate, but also on more subjective factors, such as the empowerment of historically disadvantaged communities, the creation of incentives for conservation, the promotion of tourism, and job-creation.

Q&A Discussion

Q. It seems to me that one of the challenges of the LIFE project was putting value on wildlife in the communal area, then helping the community decide how to use the money generated from this activity. Can you give us examples of how such decisions were made?

Mr. Renzi. It was different from one community to the next. It also depended on local government and the power of the stakeholders engaged in the process. For example, several villages earned income from thatching grass for tourist lodges. Some communities invited everyone to participate in the decisionmaking process about how to spend this income. The richer businessmen typically wanted the money spent on cattle. But when everyone had equal vote and women were allowed to participate, the decisions usually resulted in per capita distribution of cash. In those cases, people typically wanted less money, but wanted to be sure they would receive some of it. That was early in the program, when small amounts of money were being distributed. Today, revenues are growing, especially since hunting is involved, but the outcome is probably still the same.

Q. Was any of the income invested in community development, such as education or training?

Mr. Renzi. Villages have certainly invested in promoting awareness within their communities and maintaining their biophysical capital. They have also invested in health-related activities, such as community health centers.

The African On-Farm Productivity Enhancement Project (OFPEP)

Summary of paper by Dr. Francis Byrnes, Winrock International Institute for Agricultural Development, presented by Vicki Walker, Winrock

With NGOs as key partners, combined with highly targeted, appropriate technology and participatory training techniques, the USAID-funded On-Farm Productivity Enhancement Program (OFPEP) has benefited smallholder farmers in sub-Saharan Africa, in particular women, far more than originally anticipated. Still, lack of access to credit and extension services, and an inclination on the part of local staff to be too hands-on in doing actual work instead of training NGOs, are slowing progress.

OFPEP, implemented by the Winrock International Institute for Agricultural Development in partnership with Center for PVO/University Collaboration, evolved from a small seed project in 1987 to emphasize soil fertility and crop management. Starting with farmers in Senegal and The Gambia, the program has grown to include Kenya, Uganda, and Ethiopia, Tanzania, Guinea, Nigeria, and now Indonesia.

The program's philosophy is to introduce practices and techniques that farmers can use and adapt to their circumstances with the goal of improving nutrition, income, and food security. In this way, OFPEP is a premier example of the kind of sustainable outcomes envisioned by RAISE: it contributes directly to its own sustainability by making the smallholder farmer an active participant in increasing agricultural productivity and rural enterprise while protecting the environment.

OFPEP evolved in response to some key problems prevalent in sub-Saharan Africa, including seasonal food shortages; lack of access to seeds, credit, fertilizers, and tools; decrease in yields and degraded soils; and the social and cultural situation of women, who produce 80 percent of the agricultural products but who lack access to inputs, information, and extension services.

Implementation

For OFPEP to succeed, there must first be local interest and commitment of farmers and the village community. The cost must not exceed the benefits and value, and the project must be perceived as non-threatening. Usually the small farmer will be aware of the ineffectiveness of the current extension system, and he/she must believe there is a gap between research and what is actually applied at the small-farmer level. Further, there needs to be interest in a market economy to the extent that farmers understand there is value beyond subsistence farming and that products can be used for commercial purposes. Finally, germplasm must be available through national research and extension systems, and universities.

The project works by way of demonstration and observation. Starting with a small local staff, the project brings together farmers groups, associations, NGOs, extension workers, and community-based organizations to first talk about how they see their problems and their participation. Having helped define the problem and the solution, the farmers, supported by training through the entire process, are then given tools so they can see for themselves what works and what doesn't. For example, two plots may be placed next to each other, one using the old way of planting and the other using new technology and seed varieties, and the new type of conservation tillage. At the end of the season, the results are clear.

Impact

Since the project's inception, participating farmers have reduced or eliminated the "hungry season," providing households with food for an additional three to four months. Farmers also have surpluses of seeds to sell. Women producers have increased their technology capacity and thus their esteem and prestige in the villages. An evaluation has shown that for every one person trained, three have adopted and used these technologies by observing or talking to their neighbors or visiting their farms.

There is also an increased awareness of gender issues and changes in traditional roles. Women farmers are now demonstrating these labor-saving methods because they have been clearly shown to be of benefit, a demand other programs have not succeeded in creating. More than 160 local groups have shown they have more capacity to organize themselves and work for their own resources. Some 50,000 farmers have benefited from training, and of these, 68 percent are women, and the number is climbing.

Constraints. One of the major constraints facing the program is to teach farmers and villages how to engage with OFPEP in the participatory way the program encourages. Communities and villages need to "unlearn" that they have to be told what to do and that they can reject it. Likewise, the project has found that it has had to convince local project staff to stick to a backstopping role; the job of the local staff is to train the NGOs to do the training, not do the extension work themselves.

Lessons Learned

Technology. The technology and techniques farmers are being taught to stem decline in soil fertility and increase crop yields must be simple, and must not increase labor or time. They must satisfy household needs and require minimal investment. There must also be incentives that are relevant to the farmer.

OFPEP process. Because farmers are involved in all aspects of the program, program managers need to be gender sensitive and responsive. When a gender analysis is not done, mistakes are made. In one case, it was assumed that the income from increased rice production was going to improve at the household level. A gender analysis showed that this was not the case because the funds were not being routed back into the family for household goods.

Smallholder farmer. Smallholder farmers know how to recognize a good technology, and know the constraints better than anyone else. This farmer tends to welcome information on technology, gives priority to risk-adverse strategies, is the efficient diffuser of technologies, and appreciates programs such as OFPEP. The smallholder is also willing to reassign gender responsibilities.

Implementing agencies. NGOs, community-based organizations, and farmers associations are skeptical about the private sector and whether it can do the kind of work OFPEP performs. At the same time, most NGOs respond rapidly to training, speak the local languages, and carry out the initial steps in introducing technologies to farmers.

Government agencies. It is important to link the farmers associations with research centers, and to welcome the government and policymakers to training, field trials, and policy workshops.

Private sector. Farmers face difficulties getting credit because of interest rates and lack of collateral. The private sector needs to have a stronger interest in working with community-based and rural groups and focus on products and services.

Q&A Discussion

Q. The OFPEP project seems lacking in two particular areas, namely business skills training and credit access. Demonstration plots are useful in training farmers on how to use soy and replenishment of nitrogen in the soil, for example, but farmers also need assistance with marketing and business-related activities. The project should incorporate a credit component as well since rural communities typically lack access to credit. Are these issues being considered?

Ms. Walker. In the past, productivity was the main goal of most projects. Over the last few years, however, marketing has been incorporated into field studies and attempts at further training. I agree that this is definitely the next step for the OFPEP program. In terms of credit, several studies have revealed that lack of credit is one of greatest constraints for women seeking to purchase agricultural inputs. As a result, we have recruited local staff and credit experts in Mali, Senegal, and Kenya, where they are studying possibilities for community-based organizations to create their own cooperatives.

Local Governance And Participatory Natural Resource Management: USAID's Governance And Local Democracy Project In The Philippines

Summary of a case study presented by Dr. Kenneth Ellison, Senior Associate, Associates in Rural Development, Inc., and formerly Chief of Party of the GOLD project

Launched in 1995, the USAID-funded Governance and Local Democracy (GOLD) project in the Philippines is designed to help provinces, cities, and municipalities manage natural resources in their jurisdictions. Although the project focuses on local governance issues, it illustrates how local government can serve as a mechanism for strengthening the capacity of community institutions to effectively manage natural resources.

Typically, international development practitioners see local professionals, nongovernmental organizations, and the central government as key players in promoting community-based natural resources management. They often overlook the integral part local government can play in such efforts, giving local government officials only symbolic representation on steering and coordinating committees. Indeed, linkages are typically established between various entities at the national government level, whereas local government agencies are bypassed.

In reality, local government institutions are often more capable than the central government, and the Philippines is a case in point. Although local capabilities there are well-developed, the Filipino central government typically undermines local authorities either out of misinformation about what they can do or in an effort to capture donor resources.

Despite a common perception of local government as an extension of central government, it is more accurate to view it as part and parcel of civil society. As such, local governments often have a better understanding and grasp of the needs and interests of the local community and can therefore deliver services more efficiently.

Implementation

Open-ended approach. Led by a demand-driven agenda, the GOLD project team worked with more than 200 local governments in formulating priorities through strategic planning workshops. Rather than imposing a pre-designed strategy, the team allowed local communities to set their own goals based on their particular needs. In every one of those communities, protecting the environment ranked on top of the local agenda, even though environmental management had traditionally been controlled by the national Department of Environment and Natural Resources. Local authorities saw environmental protection as a key issue because the central government had inadequately addressed environmental degradation and the depletion of natural resources in their communities.

Simple, achievable activities. The project focused on helping local communities identify problems and develop results-oriented action agendas that could be implemented. Local officials and civic partners were not interested in massive, technically complex efforts promising grand accomplishments. Instead, they sought simple, attainable activities with measurable outcomes, such as developing a resource inventory and planning process to effectively manage the use of natural resources.

Participatory methods. The project team used innovative participatory methods to link community members with local government officials by bringing together the widest possible array of stakeholders. Strategic planning workshops helped communities identify current problems and

develop realistic solutions. Multisector technical working groups were organized around each priority issue identified in the strategic planning sessions. Hundreds of training workshops were delivered by community leaders who were themselves trained by one expatriate project team member. Technical assistance and training were also provided in dealing with issues involving multiple local government institutions, such as coastal waters and rapidly growing population centers. When necessary, the project team also brought national and local players together to negotiate arrangements designed to minimize bureaucratic constraints to local resource management.

Lessons Learned

Enabling environment. A viable local government and a central government committed to decentralization are key to success for community-based and local governance activities. The GOLD project was implemented in an enabling environment that included a far-reaching government decentralization effort that shifted authority over agricultural extension, environmental planning, monitoring, and management to local institutions.

Decentralized governance. Local governments tend to place high importance on community-related issues such as sustainable agricultural development and environmental protection. However, their commitment can translate into action only if they have the authority and the resources needed for making sound policy decisions and if they face little or no constraints on how to allocate those resources.

Setting environmental priorities at the local level. In the environmental arena, the old paradigm stipulating that policy should be formulated by central government and then trickled down to local entities has failed to yield effective results. Few national agencies in charge of environmental management have the capacity to translate policy into action, whereas local governments are better equipped to produce tangible results. They should thus be in charge of setting priorities and formulating realistic action plans for reaching their goals.

Sustaining local government capacity to address community issues. Rather than imposing a complex scheme of optimal technical strategies, technical assistance should focus on giving local government the methods and tools needed to engage the community in environmental and growth issues on an ongoing basis. Local government institutions form the foundation of a long-term commitment to environmental improvement at the community level. They may not always be able to sustain optimized technical solutions, but they are able to sustain doable activities one step at a time.

National governments are generally too far removed from local communities and are often plagued by bureaucratic inefficiency and corruption. Furthermore, NGOs and local community organizations typically organize around the issues of the day and are thus fleeting entities. Therefore, local governments offer the most promise as entities capable of effectively addressing environmental issues and sustaining community-based natural resources management over the long term.

Session 3 Synopsis
Analysis Of Three Case Studies About Strengthening Community Institutions For Natural Resource Management

Prepared by J. Kathy Parker, Social Ecologist and President, The Heron Group, and Consultant to Associates in Rural Development

Introduction

This session highlights the following three case studies focusing on the theme of "strengthening community institutions for natural resource management:"

- The Governance and Local Democracy project (GOLD) in the Philippines: USAID and Associates in Rural Development

  Goal: For local governments and communities to:

  - Achieve effective systems of local governance
  - Attain self-reliance
  - Be active partners with the national government in pursuit of the national development agenda

- The African On-Farm Productivity Enhancement project (OFPEP): USAID and Winrock International

  Goal: To improve the nutrition, incomes, and well-being of smallholder farmers by helping them gain access to good seeds of improved varieties of basic food crops.

- The Living in a Finite Environment (LIFE) project in Namibia: USAID and Management Systems International

  Goal: Increase benefits received by historically disadvantaged Namibians from Sustainable Management of Natural Resources in Communal Areas.

  - Governance and community empowerment
  - Rural economic development
  - Conservation

Analysis

Case study details. Five tables (see Attachment 1 at the end of this paper) systematically outline details from each case study relative to major topics they explored:

- Table 1 — Preconditions
- Table 2 — Implementation processes
- Table 3 — Constraints
- Table 4 — Impacts
- Table 5 — Lessons learned

The tables serve as a compilation and easy reference to the individual and collective details derived from the three case studies. They also form the base for the next stage in an effort to identify "best" practices cutting across all case studies, not just those practices that might arise in the context of any given case.

Comparability. The GOLD, OFPEP, and LIFE project case studies identify a wealth of learning from their individual contexts and actions. There are even some quickly gleaned cross-cutting issues about the need for participation, benefit distribution, ensuring the rights of participants, the need for information, and others. However, without having utilized a comparative case study approach, it is difficult to determine exactly the ways and the degrees to which the cases really do compare. Additionally, without additional analysis, it is difficult to determine whether any or all of the many "good" practices identified and discussed are replicable and therefore perhaps fitting into what might be defined and offered as a "best" practice.

Comparability and the ability to systematically derive both a substantial as well as increasing learning curve is a major challenge for the development community. Part of the challenge arises from the "disciplinary tribalism" that exists within the community. We are economists, geographers, anthropologists, biologists, ecologists, social ecologists, and the list goes on. Another part of the challenge is the role differentiation between practitioner, researcher, policy maker, butcher, baker, and candlestick maker. Each plays a role in what occurs in development — yes, even the butcher, baker, candlestick maker, all of whom may be one person or members of a household of natural resource managers at the most local of levels in the context in which the rest of us try to work. We all have something to learn from each other, and we must all work with each other for success to occur.

Let me focus my attention for a moment, however, on a key challenge we must all understand — our world maps, perspectives, or conceptual frameworks. We all have them. We all use them as a frame of reference for our thinking, understanding, and acting. But, we may each go into the same context with a different conceptual framework. That is not much of a problem except when we are unable to acknowledge the conceptual frameworks of others, unwilling to communicate about our different points of view, or so obstinate that we will not revise our own conceptual frameworks even when new information better reflects the reality in which we are working. (See Attachment 2 at the end of this paper, "Reflections on the Value of Conceptual Frameworks for Practical Interventions in Development Efforts.")

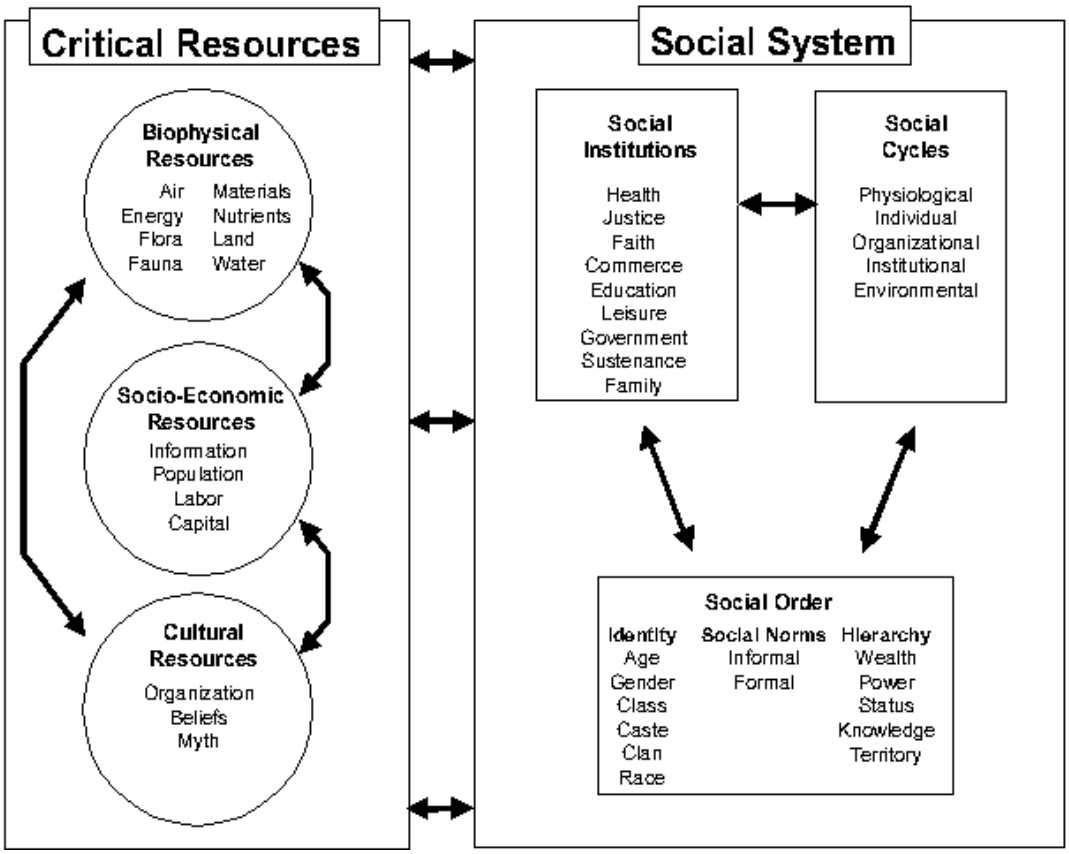
The point of raising the issue of the value of conceptual frameworks here is that they are fundamental components of the efforts to derive "best" practices. They serve, in effect, as the basis for the development hypotheses that shape our actions. They help bound the kinds of information that we need to be looking for, and at, to make determinations about what is good, bad, ugly, most recent, or perhaps even "best" among the practices we are employing. But, before someone moves to condemn what might seem like an academic exercise to draw theory into this discussion, it may be useful to reflect on two important ideas:

- First, as Kurt Lewin said: "There is nothing so practical as a good theory."
- Second, as Yogesh Malhotra offered as a constructivist corollary to Lewin's point: "There is nothing so practical as good practice of theory."

Given the potential value of a conceptual framework, it might be interesting to explore what one conceptual framework might contribute to the analysis of the three case studies on strengthening community institutions for natural resource management. The following provides insight into the development of a human ecosystems model (see Figure 1 on the next page) or framework. It has gone

through various iterations through the efforts of William R. Burch, Jr. (at Yale University's School of Forestry and Environmental Studies), Gary Machlis and JoEllen Force (at the University of Idaho's School of Forestry), J. Kathy Parker (President of the Heron Group), J. Morgan Grove and others working on the Long-Term Ecological Research Site under the auspices of the National Science Foundation) which is studying the Urban Ecosystem of the city of Baltimore.

Figure 1. Human Ecosystems Model



There are some familiar variables in this human ecosystems model/framework. It looks at some of the patterns and processes of human ecosystems much like those described in the three case studies presented at this workshop. There are critical resources — some are biophysical; some are socioeconomic; some are cultural. These affect the human system in many ways. We can identify patterns of these resources and develop hypotheses about how they affect other resources and how they are affected by other patterns of resource use or abuse.

There are also processes like the flow of materials such as trash. In this case, garbage may affect human health that is dealt with through organizations, and may be defined as contrary to the human right to a healthy environment. There are flows of energy and other resources that affect different people in different ways depending on their status, their gender, the systems of resource distribution.

For the purpose of this analysis, I have chosen one of the critical resources: capital. I define it more broadly than it is defined in the model/framework above. I define capital as a stock of accumulated "wealth" that can be built, accumulated, and devoted to the production of more "wealth." All forms of capital are human constructs. They are identified by humans, defined by humans, categorized by humans, given value by humans, and become resources only when humans so denominate them as

resources. Iron is an element. Without use for it or ways of making it into something of use, it remains an element. Its value derives from the human designation that it is of use to humans. Its value changes when technologies — part of the wealth of human culture — make it possible to mine it, transform it into tools, market it so it becomes available to be bought and sold as a good or product, etc. This is merely one example of a form of capital. There are many other forms, biological, social, economic, institutional, etc.

Thus, in this context, "wealth" can include an abundance or high quality of:

- *Biological and physical capital,* comprised of elements that, when exploited, transformed, used, and therefore valued in some way by humans, are called natural resources

- *Social capital,* comprised of relationships that usefully connect people in more trusting group and organizational relationships that can be drawn on to solve problems and accomplish things that matter to us (e.g., cleaner environment, improved education, economic growth)

- *Knowledge capital,* comprised of data, information, and actionable knowledge and valued because of the power (e.g., control over intellectual property) obtained when we know what we know, when we know what we need to know, when we know how to know, and when we know how to use our knowledge purposefully

- *Human capital,* comprised of the totality of human attitudes, behaviors, and competence and given increased value when human imagination, intuition, education, skills, and experience are brought to bear on problem-solving and action

- *Cultural capital,* comprised of all human developments including technology, infrastructure, art, traditions, etc.

- *Organizational capital,* comprised of the wide array of agencies, associations, and other arrangements of humans into groups with norms, procedures, systems for distributing or allocating resources (whether equitably or not) on behalf of members of the group or of broader society

- *Institutional capital,* comprised in this conceptual framework as the ends or higher order goals (e.g., justice, health, faith, education, commerce) of the organizations (e.g., courts, hospitals, churches, schools, markets) that are designed by humans to achieve them

- *Economic capital,* the most conventional form of capital, comprised of a stock of accumulated goods, especially at a specified period; the value of these accumulated goods; accumulated goods that can be used for the production of other goods; and/or accumulated possessions that can be calculated to bring in income

These forms of capital can be used as one of many patterns that appear in the three case studies on strengthening community institutions for natural resource management. Attachment 3, CBNRM Comparables by Capital, provides an analysis of this kind. Information from each case study was entered into a relational database that focused on the comparables (see the tables in Attachment 1), the forms of capital (see discussion above), the case study name, etc. Attachment 3 provides the report of a database run looking at comparables (i.e., preconditions, implementation, constraints, impacts, and

lessons learned), forms of capital (e.g., economic, social, human, knowledge), descriptions of the forms of capital based on details in the respective case studies, and the case study.

Thus, in column 1, we can look at the initial set of comparables. If we look at the set of comparables denominated “implementation” in column 1 and then at the kinds of capital that were identified by the authors of the three case studies, we see a variety of different kinds of capital that were being tapped or built during the implementation process, including economic, human, institutional, knowledge, organizational, and social capital. In applying the forms of capital as one lens through which to look at the implementation process in all three case studies, one can see that organizational capital is one aspect where there was a great deal of focus and is the only one where there is attention given to it by all three cases. That is of little surprise since the case studies were chosen for presentation for exactly that facet. However, the concept of “social” capital appears as the second most mentioned form of wealth creation in the analysis of all the case studies. Therefore, this concept may need to receive more attention as USAID promotes more partnering, alliances, and collaborative efforts in project/activity implementation — all of which contribute to the creation of social wealth.

It is absolutely critical to note at this point that this does not mean that any given kind of capital formation was not being done to a greater or lesser degree than any other form in each and every case. It is also important to note that the lens of this author might be different from the lens of another analyst even using the same definitions of capital formation.

These issues are important to consider for all the reasons that any of us can come up with in a discussion on the topic. However, these issues may be less important than what we might learn from even attempting this kind of comparative analysis using a conceptual framework to help bound the kinds of things we need to ask and answer about what we do in development. If nothing else, this kind of analysis points out how a systematic analysis may begin to identify or raise questions about the kinds of things we might think about when trying to come up with “best practices.” Although well done, interesting, and useful individually, the three case studies may not add up to much collectively because of the lack of comparability.

Obviously, it is my intent to provoke thinking on the issue of looking at various patterns of capital formation as one lens for comparing the case studies in hand. It is certainly not the only lens. However, it is one that perhaps might be usefully explored. We are in the business of learning how to do a better job at development. And, we are all dedicated to the concept of doing a better job at achieving more sustainable development. Tapping existing forms of capital and building them so that they produce greater forms of wealth that are the basis for greater sustainability may be one area of further exploration.

Summary

In this context, I have raised two major issues. The first is the issues of comparability for the kinds of questions they raise about what “best practices” are and how we can determine what they are. The second is the issue of capital formation for the kinds of questions we might begin to explore that might contribute to greater success in our efforts to achieve more sustainable development.

Attachment 1
Tables Demonstrating Comparable Details From Three Case Studies

Table 1 — Preconditions For Success

OFPEP	GOLD	LIFE
Local Interest	Local Government Code of 1991, decentralized major authorities, responsibilities and financial resources to local government units	In May 1995, Namibia's Ministry of Environment and Tourism approved its Community-Based Tourism Policy that grants rights to communities over tourism within their areas of jurisdiction; communities have exclusive right to operate commercial tourism activities within a registered conservancy.
Status of food security	National government agencies shifted to a technical assistance role supporting priorities of local government	Communities must form themselves into conservancies and meet specified registration requirements (mapping of conservancy boundaries, with adjacent communities on boundaries; elected and representative management committee; community-approved constitution; benefit distribution plan)
Potential interest in developing a market economy for present subsistence farmers	Allocates 40 percent of all internal revenue collections to local authorities and has a system for sharing national wealth extracted from local environments	Authority given to sustainably utilize and benefit from the area's wildlife; petition the MET for sustainable wildlife off-take quota, which can be auctioned to trophy-hunting firms or used for consumptive purposes; enter into contracts with private sector tourism operators
Availability of national research and extension system or universities as a source of germplasm, improved practices, and related information	Control: • Local is more genuinely in charge of all elements of service delivery • Local authorities have latitude within broad national guidelines to set and collect fees-for-service and use-charges, to develop their own management methods and rules, and to collaborate with the non-governmental sector to deliver services	
Favorable government attitudes or policies with respect to working with NGOs and other community groups		
Existence of ongoing projects as potential collaborators		
One or more organizations or institutions interested in and capable of providing financial support for at least a 3-year, and preferably for a 5-year period		

Table 2 — Implementation Process

OFPEP	GOLD	LIFE
Collaborators work with small staff of local nationals	All local government partners/clients involved in GOLD have been chosen via a process of self-selection using screening criteria that aim to unearth the more progressive, less traditional leadership throughout the archipelago.	Providing communities greater self-determination, management authority, and income
Work with and through NGOs, community-based organizations (CBOs), farmer associations (FAs), and local extension works to establish participatory relationships with farmers	In three local government action areas: • Revenue generation and financial management • Investment prioritization and promotion • Environmental planning and management Other dimensions of the transition to local autonomy and decentralized service delivery: • Strengthening of participatory mechanisms • Supporting policy reform and advocacy through the Leagues of Local Government • Developing an information sharing and feedback system	Increasing tourism investment in communal areas • Assist conservancies to attract private sector tourism investment • Provide conservancies assistance to better understand private sector interests, and to review joint venture proposals • Create forums to build community-private sector partnership and understanding information • Encourage the establishment of joint management committees to ensure a mechanism exists for routine communication between facility managers • Ensure that communities become partners in tourism development, and equitably share in the benefits • Ensure that joint venture agreements include clauses to provide communities training and opportunities to assume management positions • Support the integration of community-based tourism in Namibia's mainstream commercial tourism industry
Informal advisory group comprised of representatives of donors and major collaborators met semi-annually to review progress and problems	**Participatory planning process** • Tap the widest and most diverse community of stakeholders • Assist them to identify what is doable by them and their local government to address problems they want solved • Enable those very same stakeholders to self-assign responsibilities through immediately implementable action plans.	Increase communities' ability to productively manage (tourism) revenue • Ensure that conservancy committees represent the interests of the broader community • Provide conservancies the skills they need to account for funds and undertake financial planning • Develop and implement realistic conservancy sustainability plans, taking care to maintain a balance between operational revenues and expenditures • Develop benefit distributions plans
Integrate sound technical knowledge with social, cultural, and educational conditions at the farm level		
Bottom-up, using a participatory,		

OFPEP	GOLD	LIFE
request-driven approach where farmers with assistance from OFPEP and implementing partners, use participatory rural appraisal (PRA) techniques to identify problems and potential solutions.		
OFPEP serves as liaison between NGOs, CBOs and other community groups and research institutions that provide training and information about tested techniques to stem the decline in soil fertility and improve crop yields through improved varieties and management practices		
OFPEP collaborates at management level and in the field where small technical teams work with networks of local and international organizations and other groups		
Use a participatory approach through which farmers learn about new technologies and select and use those they find appropriate		
Provide technical assistance on a variety of topics		
Local consultants were engaged, when possible, because of their ability to respond to country-specific needs, their availability after the consulting assignment was over, as well as fulfilling the commitment to promote linkages and locally appropriate solutions		
Capitalized on “volunteer consultants” (e.g., local students, graduate students from universities abroad, and former Peace Corps Volunteers		
Where available, local consultants were engaged early in the program to assist in start-up activities relating to databases for information, collection of resource materials, economic analyses of markets for specific crops, and problems related to soil erosion and salinization of rice fields and provide training and ongoing support to local staff and partners		

Table 3 — Constraints Or Ways Impact Could Have Been Increased

OFPEP	GOLD	LIFE
If agriculture is to meet projected worldwide demands for food at reasonable prices, nations and development agencies must address at least two key issues: a) Support and management of research that addresses the technology constraints to productivity b) The policy, economic, and social issues and incentives that will facilitate production, encourage processing and distribution, and ensure availability to consumers	Code did not go far enough in devolving environmental management authorities and functions to local government. Of all the major services devolved to local authorities, those affecting the environment were least aggressively mandated and pursued.	The scope of Namibia's nature conservation act is too limited
Expectations, based on top-down approaches to extension, continue to be a constraint in working with new groups or in new areas	The national department of environment and natural resources placed considerable emphasis on a code caveat that all environmental activities are "subject to the supervision and control of DENR." DENR devolved to local governments only lower-level personnel (e.g., forest guards), few assets, and no resources.	Traditional common property resource management regimes, such as those that operate in Namibia's communal areas, are often at odds with the requirements of building and operating market-driven private sector businesses
Division of responsibilities and decision making on a gender basis. Varies by crop and region. Rather universal constraint is that control and use of animals for power usually rests with men that restricts access women have to animals for land preparation, transport of inputs and harvests, etc. May generate tensions within household when yield women begin to achieve with basic food crops leads to marketable surpluses	Profoundly different perspectives from which each entity views the problem complicates the interface between national (e.g., technical inputs are needed) and local government (e.g., policies and practices coordinated with other elements operating in a geographic area are needed). Therefore, little coordination between sector-oriented agencies	There is a large chasm between the experience of Namibia's communal area communities and the requirements of operating a tourism facility that caters to international tourists
Constraint to find ways to conserve and build soil fertility through crop and soil management practices and fertilization (organic and inorganic).	Organizations and incentives have impact on what actions get priority by field personnel (e.g., DENR focus less on local priorities or strategies than national ones)	Tourism investors can easily become deterred from working in communal areas because of the multitude of actors and organizations with which they must deal. Aside from causing confusion, this situation also increases their transaction costs.
OFPEP has encountered few constraints in this area. Those that exist include need to register NGOs, need to clear participatory practices with national extension service, etc. OFPEP has avoided perception that it has crossed a line between demonstration and technology diffusion vs. grassroots advocacy		Communities are short of development capital.
Size, composition and training of local-hire individuals to work with local groups. Transportation becomes an issue as # of local participating partners and operational sites become more scattered geographically		Public sector incentives to encourage increased tourism investment in communal areas have not yet been developed in Namibia
Categories of capacity building identified by staff: • Organizational management for		

OFPEP	GOLD	LIFE
sustainability • Specific agricultural production and harvesting technologies • Farmer participatory methods • Organization and management of small-scale credit programs • Specific post-harvest, processing, marketing, and storage technologies Training needs assessment; Organizing and carrying out participatory rural appraisals; Developing and maintaining liaison with public and private sources of information and support; Documenting and reporting program activities and accomplishments.		
If such programs are to help smallholder farmers move from subsistence to commercial production, less labor-intensive technology options are needed and CREDIT farmers require access to readily available credit on reasonable terms		
Obtaining acceptance and understanding of local groups, early on, of the value of participatory rural appraisals and in providing adequate training in how to conduct these		
Providing a broader range of training for local NGOs and similar groups, particularly in such areas as post-harvest processing, storage, marketing, and integrated pest management		
Getting local project staff to understand that effective execution of their role is in training NGOs, associations, extension groups, not in doing extension themselves		
Early involvement of private sector interests would increase supportive individuals		
Recognizing that use of new technology generates need for further technological changes		
Avoid problems for which neither farm-ready solution nor competent staff are available		
When production exceeds local subsistence needs, markets for surpluses become necessary		

Table 4 — Impacts

OFPEP	GOLD	LIFE
Direct: In all four countries, OFPEP has had a positive impact on agricultural production, food security, and farmer incomes	Satisfaction with local government rose steadily over period	Registration
An estimated 250,000 small and mostly poor farmers, many of them women, have learned or are learning about testing and implementing improved seed varieties and soil management technologies for producing basic food crops	Local governments used one or more tools, developed management plans, hosted technical reviews, participated in environmental summits, budgeted self-generated revenues for environmental purposes	Conservancies are beginning to earn significant income from NRM-related activities
Farmers have eliminated or reduced the length of the 'hungry season' and, in some cases, produce surpluses for sale	Filled position of Code-mandated Environmental Officer	Structures are being created that will enable conservancies to manage their own finances
Farmers and farmer groups reconfirmed that seeds and soil fertility are priority issues	2,500 facilitators trained	Newly registered conservancies are proving capable of securing join-venture business agreements with private sector operators.
Technologies most in demand are those that address food security and income generation	Local governments have basic capacities to: • Identify environmental issues • Organize community solutions • Commit local revenues • Sustain local actions	Progress is being made in moving conservancies toward financial self-sufficiency
Participation in OFPEP increased the prestige of women and strengthened the capacity of groups of women to plan, implement, and advocate programs		A new and more equitable model of community-private sector tourism partnership is emerging in Namibia
Strong links have been forged with research and technical institutions in all four countries		
Indirect: Several OFPEP-introduced technologies have spread through farmer contact and observation to farming communities adjacent to but outside target areas		
Participating and non-participating farmers are identifying new problems and issues that they wish OFPEP to help them resolve		
NGOs and other community organizations now more readily accept the idea and value of participatory rural appraisals		
Farmers and farmer groups report that they now have more options and greater control over decision processes that affect their daily lives		
NGOs and other community organizations have improved capacities to plan, organize, and provide training; participation in OFPEP increased their credibility and prestige		

Research institutions gained access to farmers and their problems as well as opportunities to test research at the smallholder level		
Extension workers experienced new, more effective ways to work with farmers		
Sustainability: Role of smallholder farmer (as active and participatory member of the research and extension team and exercises his or her roles through farmer associations or local NGOs. In: • Defining the problems constraining productivity • Developing, through research and adaptive trials, satisfactory solutions • Demonstrating these in farmers' fields so farmers may choose among options those that meet their own criteria		
Building effective links with universities, research stations, NGOs, farmer groups, and similar organizations in all aspects of planning, implementation and evaluation. Such organizations: • Remain in target areas for extended period; this facilitates monitoring, modification, and evaluation • Recognize the value of learning local languages and culture, or already are knowledgeable in these areas • Develop knowledge and understanding of community social structures, including leadership, groups, and problems • Strive to establish rapport through multiple assistance programs over time • Gain experience and confidence in participatory approaches to learning and community action		

Table 5 — Lessons Learned

OFPEP	GOLD	LIFE
Local staff as trainers to work with NGOs and other local groups and to help these groups establish training methods and materials for working with farmers	Do not focus exclusively on optimizing technical solutions. Give equal attention to normalizing governance processes by demonstrating tools and training locals in methods that could be used to address their own problems on an ongoing basis.	It is essential to have a legal policy foundation that allows communities to utilize and manage natural resources and enables communities to control tourism within their jurisdictions
NGO staffs and others in training needs assessments	Shift locus of responsibility for environmental management to local government and broad-based civil society groups. Recognize that macro policies have to be implemented at local level.	A strong base of organizational and financial skills is essential to building sustainable community conservation organizations.
Early establishment and orientation of a country advisory team	Reverse the conventional sector-oriented, expertise-driven process by addressing environmental problems through a governance perspective, rather than from a technical (sector) perspective. In this manner local government and civil society institutions become the foundation of a long-term commitment to environmental improvement.	Communities need support in understanding tourism, developing tourism skills, and integrating their activities into the mainstream commercial tourism sector.
Invitation to and mobilization at an early date of private sector participants	Focus less on trying to get people to support optimal technical strategies in total and more on enabling people to accomplish doable actions one step at a time. Sustainability is the ability of local institutions to manage processes and methods by which issues are continually acknowledged and for which doable solutions are continually experimented with by involving all stakeholders in generating such solutions.	Communities need support to negotiate joint venture agreements with private sector operators
Conduct studies to determine commodities or products for which there would be a continuing market demand		It is useful to develop a mechanism to encourage tourism collaboration between the government, private, and communities.
Briefing the country advisory team on the necessity of helping OFPEP establish criteria for setting priorities for responding to the many demands for services		Communities need to acquire a legal personality to be able to interact with commercial tourism operators on an equal basis, and to ensure joint venture operational and financial transparency.
Establishing procedures and schedules for data collection and analysis, as well as documentation and reporting of program accomplishments.		CBNRM programs need to be judged more broadly than solely on their ability to generate revenue
		Partnerships with the private sector are necessary to establish and operate successful high-end tourism facilities in communal areas

OFPEP	GOLD	LIFE
"New" technology: • Must be simple • Must not increase farmer's labor or time involved • It must satisfy household needs, including cash • It must conserve or build soil fertility • Initial investment must be minimal • There must be farmer-relevant incentives		
Smallholder farmer: • Knows how to recognize a good technology • Knows his/her socioeconomic context and inherent constraints better than anyone else • Welcomes assistance in gaining access to information on new technologies • Can be entrepreneurial if well-identified incentives are present • Gives priority to risk-adverse strategies • Diffuses technologies efficiently • Will reassign gender responsibilities when appropriate		
About OFPEP process: • Must encourage and facilitate community participation • Must involve farmers at all stages from problem identification to evaluation • Must identify present, prospective stakeholders, public and private, formal and informal • Those who introduce and manage the process must have and maintain community credibility • Must be gender sensitive and responsive • Recognize and respect local and regional consultants		
Prerequisites to participation: • Must have time to participate before action is required; not appropriate in emergency • Financial cost must not exceed the values, economic or otherwise, that come from it. • Subject must have relevant interest, ability, experience, and (or) knowledge • Participants must be able to talk each other's language to exchange ideas • None of the participants should feel his/her position is being threatened • Decisions on action can take place only within the group's area of job and decision freedom		
About implementing agencies: • NGOs, CBOs, and FAs initially are skeptical of the private sector • NGOs have unwarranted confidence in the NGO sector and many have false assumptions or information about		

OFPEP	GOLD	LIFE
technology and their abilities • Some NGOs employ and retain agriculturally competent personnel • Most NGO personnel respond rapidly to sharply focused training • Most NGO personnel speak site-specific languages and dialects • NGOs perform critical first step introducing PRAs and technology to farmers • Experience with U.S. Peace Corps Volunteers generally excellent		
About government agencies: • Essential to work closely with national research and extension system • Include locally developed varieties and practices in field trials, demonstrations • Link NGOs and FAs with experiment stations and research staff • Welcome extension participation in all training, trials, and demonstrations • Invite educational institutions, at all levels, to participate in activities • Can provide facilitating policies and incentives		
About private sector: • Farmers have difficulties getting credit because of interest rates and lack of collateral • Focuses on specific products and services, less on production or marketing system • Maintain weak rapport with NGOs and extension services • Needs intermediaries, such as NGOs, to develop product demand • Some small farmers become commercial seed producers directly, or on contract		
About Winrock International: • Science/knowledge-based approach to technology appreciated • Demonstrated ability to operate successfully as non-biased catalyst • Provides important strategies through long-term commitment and continuity • Serves as a communication link to sources of technology • Brings conscience issues to technology assessment and diffusion • Introduces participatory approaches into all of its programs and projects		

Attachment 2
Reflections On The Value Of Conceptual Frameworks For Practical Interventions In Development Efforts

A number of conceptual and theoretical frameworks currently exist that deal with the full array of social and natural aspects of the human ecosystem and their integration. One of the major challenges in selecting a framework for application is to identify the array of possible variables to be considered in most ecosystem contexts. These variables require some sort of framework for bounding and linking multiple, complex, and typically interacting biological, physical, social, and other variables. Thus, only some conceptual and theoretical frameworks may be useful to the variety of end-users who must also be considered. The following are some reflections on the value of conceptual frameworks relative to the end-users.

Citizens can use a conceptual framework to:

- Make explicit their perceptions of reality (both what they know and what they may think they know)
- Express their understandings and values of ecosystems
- Articulate their processes of interaction with each other, with other biological species, and with non-living elements of the environment
- Provide a basis for testing ideas about priorities for what needs to be learned and how learning, from their perspective takes place
- Provide a record of what they desire and/or anticipate as outcomes from proposed ecosystem management interventions.

Researchers can use a conceptual framework to:

- Provide a basis for outlining and justifying any assumptions they make and the questions they ask during the research process
- Help identify the most significant variables that need to be considered and suggest the linkages that may exist between them
- Help guide collection of data for a single study or provide a minimum set of variables that can be the basis of a model that, in turn, can be systematically tested in comparative studies (NOTE: If the value of the information proposed to be collected cannot be established, the information collection effort may not always be able to be justified)
- Continually clarify the role researchers themselves play during the course of research
- More explicitly link questions of citizens, managers and policy makers in research efforts
- Provide a sound basis for any recommendations proposed

Field practitioners can use a conceptual framework to:

- Understand the realities with which they have to work
- Understand the complex interactions between humans and their resources and the potential impacts of given management interventions on humans and other elements of the biosocial environment (see Burch and Grove this volume)
- Identify potential obstacles, opportunities, and options that they, as practitioners, might have available to them as they design and implement on-the-ground, multiscale responses for adaptive ecosystem management

Policymakers can use a conceptual framework to have:

- A basis for raising questions and analyzing information that comes to them from researchers, practitioners, citizens, and organizations
- Better understanding of the complex interactions and issues on which they must make decisions
- More insight into the potential intended and unintended, direct and indirect impacts of policy interventions (Parker 1994)

(Original Source: Parker, J. Kathy. 1994. "Improving the Contribution of Forestry to Food Security: A Proposed Conceptual Framework for Designing Research Studies and Practical Field Interventions." Submitted to the Food and Agriculture Organization in Rome. Broomall, PA: The Oriskany Institute.)

Attachment 3
CBNRM Comparables By Capital

Comparables	Capital	Description	Case Study
Constraints	Biophysical	Constraint to find ways to conserve and build soil fertility through crop and soil management practices and fertilization (organic and inorganic)	OFPEP
	Cultural	If programs are able to help smallholder farmers move from subsistence to commercial production, less labor-intensive technology options are needed	OFPEP
	Cultural	Need to address technology constraints to productivity	OFPEP
	Cultural	Transportation becomes issue as # of local participating partners and operational sites become more scattered geographically which affects size, composition, and training of local hire individuals to work with local groups	OFPEP
	Cultural	Recognizing that use of new technology generates need for technological changes	OFPEP
	Cultural	Traditional common property resource management regimes are often at odds with the requirements of building and operating market-driven private sector businesses	LIFE
	Economic	To move from subsistence to commercial production, farmers require access to readily available credit on reasonable terms	OFPEP
	Economic	When production exceeds local subsistence needs, markets for surpluses become necessary	OFPEP
	Economic	Communities are short of development capital	LIFE
	Economic	Public sector incentives to encourage increased tourism investment in communal areas have not yet been developed in Namibia	LIFE
	Human	Capacity building needed in areas of: organizational management for sustainability, specific ag. Production and harvesting technologies, farmer participatory methods, organization and mgmt. of small credit programs, specific post-harvest technologies (processing, marketing, harvesting)	OFPEP
	Human	Expectations, based on top-down approaches to extension, continue to be a constraint in working with new groups or in new areas	OFPEP
	Human	Obtaining acceptance and understanding of local groups early on of the value of PRAs and in providing adequate training in how to conduct these	OFPEP
	Human	How to do training needs assessments; organize and carry out PRAs; develop and maintain liaison with public and private sources of info and support; document and report program activities and accomplishments	OFPEP

Comparables	Capital	Description	Case Study
	Human	Providing a broader range of training for local NGOs and similar groups, particularly in such areas as post-harvest processing, storage, marketing, and integrated pest management	OFPEP
	Institutional	Need to address policy, economic and social issues and incentives that will facilitate production, encourage processing and distribution and ensure availability to consumers	OFPEP
	Institutional	Division of responsibilities and decision making on a gender bias--rather universal constraint is that control and use of animals for power usually rests with men which restricts access women have to animals for land preparation, transport of inputs and harvests, etc.	OFPEP
	Institutional	Need to register NGOs, need to clear participatory practices with national extension service, etc.	OFPEP
	Institutional	Code did not go far enough in devolving environmental management authorities and functions to local government. Of all the major services devolved to local authorities, those effecting the environment were least aggressively mandated and pursued	GOLD
	Institutional	The scope of Namibia's nature conservation act is too limited	LIFE
	Knowledge	Getting local project staff to understand that effective execution of their role is in training NGOs, associations, extension groups, not in doing extension themselves	OFPEP
	Organizational	Incentives have impact on what actions get priority by field personnel (e.g., DENR focus less on local priorities or strategies than national ones)	GOLD
	Organizational	The DENR placed consider emphasis on a Code caveat that all environmental activities are "subject" to the supervision and control of DENR". DENR devolved to local governments only lower level personnel (e.g., forest guards), few assets and no resources	GOLD
	Organizational	There is a large chasm between the experience of Namibia's communal area communities and the requirements of operating a tourism facility that caters to international tourists	LIFE
	Social	Some initial confusion as to whether the OFPEP and its partners in a country could or should communicate directly with an international ag. Research center with respect to seed of a new variety or for recommendations on cultural practices	OFPEP
	Social	Early involvement of private sector interests would increase supportive individuals	OFPEP
	Social	Little coordination between sector-oriented agencies	GOLD
	Social	Tourism investors can easily become deterred from working in communal areas because of the multitude of actors and organizations with which they must deal. Aside from causing confusion, this also increases transactional costs	LIFE

Comparables	Capital	Description	Case Study
Impacts	Biophysical	Agricultural production has increased	OFPEP
	Cultural	Technologies most in demand are those that address food security and income generation	OFPEP
	Cultural	Several OFPEP-introduced technologies have spread through farmer contact and observation to farming communities adjacent to but outside target areas	OFPEP
	Economic	Farmer incomes have gone up	OFPEP
	Economic	Conservancies are beginning to earn significant income from NRM-related activities	LIFE
	Economic	Progress is being made in moving conservancies towards f	LIFE
	Human	Participation in OFPEP increased the prestige of women and strengthened the capacity of groups of women to plan, implement, and advocate programs	OFPEP
	Human	2,500 facilitators trained	GOLD
	Human	Extension workers experienced new, more effective ways to v	OFPEP
	Human	An estimated 250,000 small and mostly poor farmers, many of them women, have learned or are learning about testing and implementing improved seed varieties and soil management technologies for producing basic food crops	OFPEP
	Institutional	Registration of communities as conservancies	LIFE
	Organizational	Local governments have basic capacities to: identify environmental issues, organize community solutions, commit l	GOLD
	Organizational	Structures are being created that will enable conservancies to manage their own finances	LIFE
	Organizational	NGOs and other community organizations accept the idea and value of PRAs	OFPEP
	Organizational	NGOs and other community organizations have improved capacities to plan, organize, and provide training	OFPEP
	Organizational	Public opinion and satisfaction with local government rose steadily over the period	GOLD
	Organizational	Local governments used one or more tools, developed management plans, hosted technical reviews, participated in environmental summits, budgeted self-generated revenues for environmental purposes	GOLD
	Social	Research institutions gained access to farmers and their OFPEP problems as well as opportunities to test research at the smallholder level	OFPEP
	Social	Strong links have been forged with research and technical institutions in all four countries	OFPEP

Comparables	Capital	Description	Case Study
Implementation	Economic	Increase communities' ability to productively manage (tourism) revenue	LIFE
	Economic	Skills to account for funds and undertake financial planning	LIFE
	Economic	Increasing tourism investment in communal areas; attract private sector	LIFE
	Economic	In conservancy sustainability plans, maintain a balance between operational revenues and expenditures	LIFE
	Human	Provide conservancies with skills	LIFE
	Human	Joint ventures ensure training and opportunities for communities members to assume management	LIFE
	Institutional	Dimensions of transition: 1) strengthening participatory mechanisms; supporting policy reform and advocacy; and 3) developing information sharing and feedback system	GOLD
	Knowledge	Create forums to build community-private sector partnership and understanding	LIFE
	Knowledge	Assistance to better understand private sector interests, and to review joint venture proposals	LIFE
	Knowledge	Encourage joint management committees to ensure LIFE mechanism for route communications between facility managers	LIFE
	Knowledge	Integrate sound technical knowledge with social, cultural, and educational conditions at the farm level	OFPEP
	Organizational	Ensure that conservancy committees represent the interests of the broader community	LIFE
	Organizational	Participatory planning process to 1) tap wide diversity of community stakeholders; 2) assist in ID of what among problems they want solved are doable by them and local govt; & 3) enable stakeholders to self-assign responsibilities through implementation action plans	GOLD
	Organizational	All local partners/clients have been chosen via self-selection using screening criteria to unearth more progressive, less t	GOLD
	Organizational	Flexible, demand-driven design in 3 action areas: 1) revenue generation and financial management; 2) investment prioritization and promotion; and 3) environmental planning and management	GOLD
	Organizational	Develop and implement realistic conservancy sustainability plans	LIFE
	Organizational	Develop benefit distribution plans	LIFE
	Organizational	Collaborators work with small staff of local nationals	OFPEP
	Organizational	Informal advisory group of donors & collaborators meet to review progress and problems	OFPEP

Comparables	Capital	Description	Case Study
	Organizational	Bottom-up, farmers with assistance from OFPEP and implementing partners, use PRA techniques to ID problems and potential solutions	OFPEP
	Organizational	Communities equitably share (in partnership arrangements) in benefits from tourism	LIFE
	Organizational	Use participatory approach through which farmers learn about new technologies and select and use those they find appropriate	OFPEP
	Organizational	Engaged local consultants early in program to assist in start-up relating to databases, resource material collection, market analyses, biophysical problems, and provide training and ongoing support to local staff and partners	OFPEP
	Organizational	Support the integration of community-based tourism in Namibia's mainstream commercial tourism industry	LIFE
	Organizational	OFPEP provides technical assistance on a variety of topics	OFPEP
	Organizational	Local consultants had ability to respond to country-specific needs; they were available after assignment; fulfilled commitment to promote local linkages	OFPEP
	Organizational	Capitalized on "volunteer" consultant (e.g., local students, grad students, PCVs	OFPEP
	Social	Work with & through NGOs, CBOs, FAs, and extensionists to establish participatory relationships with farmers	OFPEP
	Social	OFPEP collaborates at management level and in the field where small technical teams work with networks of local and int'l organizations and groups	OFPEP
	Social	Joint venture agreements include opportunities for communities	LIFE
	Social	OFPEP serves as liaison between NGOs, CBOs and other groups and research institutions that provide training and information	OFPEP
	Social	Ensure communities become partners in tourism development	LIFE
Lessons	Cultural	"New" technology must be simple, must not increase labor or time, must satisfy household needs, conserve or build soil fertility, investment must be minimal, farmer-relevant incentives	OFPEP
	Economic	CBNRM programs need to be judged more broadly than solely on their ability to generate revenue	LIFE
	Institutional	Do not focus exclusively on optimizing technical solutions. Give equal attention to normalizing governance processes by demonstrating tools and training locals in methods which could be used to address their own problems on an ongoing basis	GOLD

Comparables	Capital	Description	Case Study
	Institutional	It is essential to have a legal policy foundation that allows communities to utilize and manage natural resources and enables communities to control tourism within their jurisdiction	LIFE
	Institutional	Communities need to acquire a legal personality to be able to interact with commercial tourism operators on an equal basis, and to ensure joint venture operational and financial transparency	LIFE
	Institutional	Recognize that macro policies have to be implemented at local level	GOLD
	Knowledge	Smallholder farmer knows how to recognize a good technology; knows his/her socioeconomic context and inherent constraints better than anyone else; diffuse technologies efficiently; will reassign gender responsibilities when appropriate	OFPEP
	Knowledge	Establishing procedures and schedules for data collection and analysis, as well as documentation and reporting of program accomplishments	OFPEP
	Knowledge	Conduct studies to determine commodities or products for which there would be a continuing market demand	OFPEP
	Organizational	Briefing the country advisory team on the necessity of helping OFPEP establish criteria for setting priorities for responding to the many demands for services	OFPEP
	Organizational	A strong base of organizational and financial skills is essential to building sustainable community conservation organizations.	LIFE
	Organizational	NGOs, CBOs, and FAs initially are skeptical of private sector; have unwarranted confidence in NGO sector, employ and retain competent personnel; respond rapidly to sharply focused training; are critical in PRA	OFPEP
	Organizational	Early establishment and orientation of a country advisory team	OFPEP
	Organizational	OFPEP must encourage and facilitate participation, involve farmers at all stages, identify present and prospective stakeholders, have and maintain credibility, recognize and respect local and regional consultants	OFPEP
	Organizational	Local staff as trainers to work with NGOs and other local groups and to help these groups establish training methods and materials for working with farmers	OFPEP
	Organizational	Shift locus of responsibility for environmental management to local government and broad-based civil society groups	GOLD
	Organizational	Sustainability is the ability of local organizations to manage processes and methods by which issues are continually acknowledged and for which doable solutions are continually experimented with by involving all stakeholders in generating such solutions	GOLD
	Social	Invitation to and mobilization at an early date of private sector participants	OFPEP

Comparables	Capital	Description	Case Study
	Social	It is useful to develop a mechanism to encourage tourism collaboration between the government, private sector and communities	LIFE
	Social	Partnerships with the private sector are necessary to establish and operate successful high-end tourism facilities in communal areas	LIFE
	Social	Communities need support to negotiate joint venture agreements with private sector operators	LIFE
Preconditions	Biophysical	Organizations as source of germplasm for farmers	OFPEP
	Cultural	Source of improved practices	OFPEP
	Human	Subsistence farmers have potential interest in market economy	OFPEP
	Human	Local interest exists	OFPEP
	Institutional	Locals genuinely in charge of service delivery	GOLD
	Institutional	Locals can set and collect fees and use charges	GOLD
	Institutional	Locals can develop management methods and rules	GOLD
	Institutional	Locals can collaborate with others to deliver services	GOLD
	Institutional	Authority to enter into contracts with private sector operators	LIFE
	Institutional	Favorable government policies toward working with NGOs and communities	OFPEP
	Institutional	Community-approved constitution	LIFE
	Institutional	Authority to petition the MET for sustainable wildlife off-take quota	LIFE
	Institutional	Decentralization to local government units of major authorities, responsibilities and financial resources	GOLD
	Institutional	MET grants rights to communities over tourism within their areas of jurisdiction; communities have exclusive right to operate commercial tourism activities in registered conservancy	LIFE
	Institutional	Authority to sustainably utilize and benefit from area's wildlife	LIFE
	Knowledge	Status of food security	OFPEP
	Knowledge	Farmers have source for related information	OFPEP
	Organizational	Experience of ongoing projects as potential collaborators	OFPEP
	Organizational	Elected and representative management committee	LIFE
	Organizational	Favorable government attitudes toward working with NGOs and communities	OFPEP
	Organizational	Shift in national agency role to supportive of local government	GOLD
	Organizational	40% of revenue collections to local authorities and system for sharing national wealth from local	GOLD
	Organizational	Communities must form into conservancies and meet registration requirements	LIFE

Comparables	Capital	Description	Case Study
	Organizational	Interest in market economy to allocate resources	OFPEP
	Organizational	Availability of national and extension system or universities	OFPEP
	Social	Organizations available to give financial support	OFPEP
	Social	Mapping of conservancy boundaries agreed upon with adjacent communities	LIFE

ANNEX A

Agenda

RAISE Workshop:
Growth-Environment "Win-Win" Through Natural Resource-Based Industries

8-8:30 a.m.	Registration and coffee
8:30-9 a.m.	Welcome to the Conference John V.D. Lewis, Director, G/EGAD/AFS Chris Brown, RAISE co-manager, G/EGAD/AFS Alan Hurdus, RAISE co-manager, G/ENV
9-10:15 a.m.	**Keynote Session:** **The Lack of Development Planning and its Consequences for the Gulf of Fonseca** *Jorge Varela Marquez* *Director, Committee for the Defense and Development of Flora and Fauna of the Gulf of Fonseca (CODDEFFAGOLF)*
10:15-10:45 a.m.	Coffee
10:45 a.m.-12:15 p.m.	**RAISE Best Practices: Session 1** **Expanding Markets by Improving Product Quality and Value** Chair: Scott Wayne, World Travel and Tourism Council Forest Management Certification: A Step Toward Sustaining Forest Ecosystems *Joshua C Dickinson* *Forest Management Trust* Agro-Processing and Food Safety *Paul Guenette* *DAI* Assessment of Tourism for Sustainable Development in Rural Areas *Donald Hawkins* *George Washington University*
12:15-1:45 p.m.	Lunch and Poster Session
1:45-3:15 p.m.	**RAISE Best Practices: Session 2** **Developing an Enabling Environment in Competitive Markets** Chair: Jerry Brown, USAID/AFR/SE

Best Practices in Agro-Sector Policy Analysis
Lynn Salinger
Associates for International Resources and Development

Business Competitiveness in Uganda
Kevin Murphy
J.E. Austin Associates

Bolivia Investment Fund (BOLINVEST) — Leveraging and Promoting Private Sector Investment in Natural Resource-Based Industries
Carlos Torres
Carana Corporation

3:15-3:45 p.m. Coffee

3:45-5:15 p.m. **RAISE Best Practices: Session 3**
Strengthening Community Institutions for NRM

Chair: Loren Schulze, USAID/E&E/ENR

Using Tourism as a Means to Sustain Community-Based Conservation: Experience from Namibia
Mark Renzi
Management Systems International

The African On-Farm Productivity Project (OFPEP)
Vicki Walker
Winrock International

Local Governance and Participatory Natural Resources Management
Kenneth Ellison
Associates in Rural Development

Best Practices Synopsis: Analysis of Three Case Studies about Strengthening Community Institutions for Natural Resources Management
Kathy Parker
Associates in Rural Development

5:15-6 p.m. Conference Closing
John V.D. Lewis, Director, G/EGAD/AFS
Scott Wayne, World Travel and Tourism Council
Jerry Brown, USAID/AFR/SD
Loren Schulze, USAID/E&E/ENR
Chris Brown, RAISE co-manager, G/EGAD/AFS
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ANNEX B

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ANNEX C

Best Practices Papers

FOREST MANAGEMENT CERTIFICATION — A STEP TOWARD SUSTAINING FOREST ECOSYSTEMS

Summary

Author: Joshua Dickinson, Forest Management Trust

Thematic Area: Non-Agricultural Natural Resource Based Industries — Logging/Timber Industry Development and Environmental Mitigation

A. Abstract

In 1993 the Forest Stewardship Council (FSC) launched a worldwide program to promote independent, market-driven certification of sustainable forest management. Certifiers also audit and issue chain-of-custody certificates to added-value processors and retailers to ensure that any product sold with an FSC label can be traced to a well-managed forest. Certification is an effective incentive for industry to practice forest management that is sustainable. Specifically, certification helps promote:

- Maintenance of ecological functions and biological diversity of the forest ecosystem
- Participation in the long-term benefits of forest management by the peoples who inhabit or work in the forest
- Financial returns from forest management and value-added activities that are profitable and competitive with conversion to alternative uses

FSC certification is guided by 10 principles and associated criteria that constitute a code of best practices for substantially mitigating the environmental impacts of timber extraction. The USAID-funded sustainable forestry project in Bolivia, BOLFOR, exemplifies how an industry, uniform in its past destructive logging practices, can make major advances toward environmentally and socially sound forest management while gaining access to global markets for certified forest products. As more timber companies realize the advantages of certification, BOLFOR has raised its sights to realizing certification of 1.6 million hectares of forests, up from 1 million. As a condition for maintaining their certification, companies will have to deal fairly with peasant and indigenous communities with tenure rights to extensive areas of forest. Some form of joint enterprise is needed. The environmental assessment requirements under FSC certification constitute a best practice that meets or exceeds the environmental assessment requirements of USAID under the Foreign Assistance Act.

B. Impacts of the BOLFOR Project

- There has been a rapid increase in both the number of concessionaires, private owners, and communities seeking certification and in the area of certified forest , expected to reach 1 million hectares in 1999.

- An effective forest law, with enforceable regulations, has been established that complements and encourages voluntary certification and improves the overall practice of forestry.

- Training and technical assistance in such areas as inventory, management planning, reduced impact logging, equipment operation, and utilization of lesser known species have benefited the entire sector, not just certified operations.

- Bringing the largest area of tropical forest in the world under certified management has positioned Bolivia to markedly increase its exports of certified products.

- The establishment of a Bolivian Council for Voluntary Forest Certification (CFV) as an NGO responsible for establishing national standards, certification oversight, and promotion of certification ensures that FSC has a presence in Bolivia (funded in part by FSC).

- With the establishment of a Bolivian certifier linked to the SmartWood network of certifiers, the cost of certification has been brought down.

- USAID is positioned to effectively promote economic development while achieving significant results in the conservation of tropical forest ecosystems and biodiversity as a result of fostering certification of good forest management under FSC principles.

C. Constraints to Achieving the Full Range of Benefits from BOLFOR

- Insufficient practical management information to ensure regeneration of valuable species and long-term maintenance of ecosystem functions

- Deficiencies in business structure, management, and entrepreneurship resulting in high production costs, inefficiency, and lost sales

- Value-added processing facilities that lack the capacity to process the available supply of certified lumber

- Outmoded equipment limits on the quality and diversity of products offered to the international market

- Lack of adequate financing for expansion of the certified forestry sector due to the poor reputation of conventional logging with financial institutions

- Lack of a robust market for products made from lesser known species because an aggressive demonstration and sales effort has been lacking

- Lack of participation by communities and indigenous groups in certified forestry due to limited links to essential sources of technology, financing, and market access

D. Suggestions for Future Implementation

- Continue the DAP mechanism — BOLFOR is one of the few design and performance contracts USAID has ever let for competitive bid. Under this highly successful approach to handling contracts, the learning and local contacts developed during the proposal process

were carried over into the design and then smoothly into implementation. The DAP formula allowed the team to focus its design proposal on realistic issues expected to come up in year 1 rather than having to anticipate at the proposal stage activities in year 5. Although new people came on board for implementation, the designers were there from the outset to explain what thinking lay behind the contractual obligations.

- Strengthen links — In a developing country context, developing productive capacity such as certified production and identifying markets is not sufficient. The constraints in the value chain must be strengthened through an emphasis on enterprise support and development. In the case of Bolivia, emphasis is needed on business management, finance, and marketing.

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Detailed Description

A. Overview of the BOLFOR Project

The goal of the USAID-funded Bolivia Sustainable Forestry (BOLFOR) project is to reduce degradation of forest, soil, and water resources and to protect the biological diversity of Bolivia's forests. The purpose of the project is to build Bolivian public and private sector capacity to implement programs for sustainable, certifiable forest use.

The project is being implemented under a design and performance (DAP) contract with Chemonics International Inc. Subcontractors have included Tropical Research and Development, Wildlife Conservation Society and until 1999, Conservation International.

The Forest Management Trust became involved with BOLFOR in 1997 through a MacArthur Foundation grant to bring together certified producers with buyers from the European and North American certified markets. A total of 63 business meetings were held between Bolivian producers and buyers from Europe and North America. Currently the Trust is helping create a private forest enterprise center to continue key BOLFOR activities funded through the International Forestry Program of the U.S. Forest Service.

A1. Contract Information

BOLFOR's primary activities have been carried out mainly in the Santa Cruz department of Bolivia, with additional activities carried out in other departments of northern Bolivia.

BOLFOR was designed in 1993 under a design and performance contract. Implementation began in February 1994. The contract was amended in 1998 to extend it to seven years with a life-of-project budget of $16.2 million. The current formal project counterpart is the Ministry of Sustainable Development and Planning; the working counterpart is the Forest Superintendency.

The primary beneficiary of this forest ecosystem conservation project is the forest itself. In the process of conserving the forest resource, long-term benefits accrue to the communities, private land owners, and forest concessionaires practicing improved management and making sales of certified forest products as a result of receiving technical assistance and training from BOLFOR.

More broadly, the Bolivian people have benefited from having a functional forest law; an increased cadre of well-trained professionals in forestry and the biological sciences; large, commercial-scale models of good forest management; and a boost in exports of value-added products. Society at large benefits from better conservation of diverse forest ecosystems.

A2. Project Components

BOLFOR was created to promote certifiably good forest management. Voluntary, market-driven certification of good forest management represents a new approach in the global effort to sustain our

diverse forest ecosystems. Sustainability is a goal of certification that can be verified only generations hence. BOLFOR has worked toward elements of this goal:

- Maintenance of ecological functions and biological diversity of the forest ecosystem
- Assurance that peoples who inhabit or work in the forest participate in the long-term benefits of forest management
- Financial returns from forest management and value-added activities that are profitable and competitive with conversion to alternative uses

The goals of certification and of BOLFOR are served by its three project components, as discussed below.

Forest policy. When BOLFOR was launched in 1994, a forest law had been languishing in Congress for two years and a "Pausa Ecológica" was in effect — an enforced pause in the granting of concessions, resulting in near total chaos in the forest sector. BOLFOR worked with the government of Bolivia and the president to shepherd a comprehensive forest law through Congress, passed in 1996, and craft supporting regulations, implemented in 1997. Virtually overnight, Bolivia moved from nonexistent forest management to a reasonably well-enforced process requiring management plans, designated cutting areas and minimum 20-year cycles, set asides of areas for biodiversity protection, minimum harvest diameters, low-impact logging requirements, the payment of a fixed fee per hectare per year for concessions (approximately $1US), and five-year independent compliance audits.

In 1993, the Forest Stewardship Council (FSC) launched a worldwide program to promote independent, market-driven certification of sustainable forest management. Given that most of the requirements of the forest law are the same as those called for under FSC certification, the opportunity costs for forest operations to seek certification are low relative to the market access benefits gained. The government, with its limited capacity for command-and-control enforcement, benefits from certification because all certified operations are required to obey the forest laws of the country (FSC principle 1), thus ensuring compliance with the law.

Forest management. Technical assistance and training in forest management are core BOLFOR functions, with training open to anyone and assistance conditioned on a commitment to seek certification. Its comprehensive approach to management includes inventories including 20 or more lesser-known species (LKS), management and extraction plans, low-impact logging, and a research agenda addressing forest regeneration and biodiversity maintenance, the role of fire, wildlife conservation, and LKS studies addressing identification, biology, and wood technology. A wide array of fact sheets, bulletins, monographs, and peer-reviewed articles have profiled all aspects of management.

Products and marketing. With an export forest sector dedicated primarily to selling green mahogany and cedar lumber from a declining stock, the industry was ill-prepared to enter the market for certified products. Certified markets provide a window of opportunity for the utilization of LKS. As lesser known and therefore less valued in the market, LKS requires value-added processing and the sale of a competitive product rather than sale of a wood with a high intrinsic value like mahogany. Once certified products were available, BOLFOR launched a product development and marketing component. Activities have ranged from training in saw sharpening and wood drying, to LKS wood technology, to participation in trade fairs and visits by potential buyers.

B. What Makes BOLFOR Different?

The success of the BOLFOR project stems from a combination of excellent project management and USAID support, and the convergence of several important project features as discussed below.

B1. Courage

The purpose of this "environmental" portfolio project enunciated at the start — to bring the maximum area of forest possible under biodiversity conserving sustainable management — represents a courageous decision by USAID. At the time, timber management in tropical forests to save biodiversity was not a popular theme with the environmental community. Boycotts against the import of tropical timber were popular in Europe and the United States. Most donor-funded environmental projects in forestry have a strong community/indigenous peoples, non-timber forest product and agroforestry emphasis. This was not so with BOLFOR, whose performance mandate from the outset was to bring 25 percent of the forests of the Santa Cruz Department under sustainable management. This forced the project to deal with the forest industry concessionaires who control the majority of the forest resource. Had the project focused solely on communities, results would have been different and the area under management would not have reached a tenth of the 1 million hectares currently projected. To date, 60,000 hectares of indigenous community forest have been certified and more work with communities is planned.

B2. DAP

BOLFOR is one of the few design and performance contracts USAID has ever let for competitive bid. Under this highly successful approach to handling contracts, the learning and local contacts developed during the proposal process were carried over into the design and then smoothly into implementation. The DAP formula allowed the team to focus its design proposal on realistic issues expected to come up in year 1 rather than having to anticipate at the proposal stage activities in year 5. Although new people came on board for implementation, the designers were there from the beginning to explain what thinking lay behind the contractual obligations.

B3. Luck and the FSC

The Forest Stewardship Council was launched in 1993 and opened an office in 1994, about the same time as the DAP award to Chemonics. During the 1993 environmental assessment, Jack Putz, forest ecologist, and Josh Dickinson, geographer, recommended that USAID consider requiring all beneficiary forest operations to commit to FSC certification as a condition for receiving project support. They noted that producers would get clear guidance and market recognition for good management. They also argued that in the face of inevitable controversy, USAID would get better coverage from an internationally recognized environmental and social performance system than it could expect from its own environmental assessment process. At the time the idea was presented, not a single hectare of forest had ever been certified by FSC anywhere in the world. Today, Bolivia has the largest area of commercial forest under certified management in the tropics.

B4. Research

Research, both basic and applied, has played an integral role in guiding BOLFOR. Forest ecologist Jack Putz advocated vigorously for a strong research program under BOLFOR, arguing that a strong research program would help establish an ecologically valid basis for the management practices implemented; result in training of Bolivian and international students and professionals in how to

conduct research; and allow the showcasing of knowledge generated on forest ecology and management in the peer reviewed (not gray) literature. Unlike the vast majority of donor-funded projects, valuable data and lessons learned will be available to future generations. For example, a vexing problem and recurring topic of research is the regeneration of economically and ecologically valuable species. Such pieces of the puzzle now are being assembled and published.

C. Impacts of Certification as a Best Practice

Global context. As shown in Figure 1 on the next page, more than 16 million hectares have been certified in 30 countries, mostly since 1996. This exponential growth in area under certified management has been paralleled in Bolivia, as shown in Figure 2. While Bolivia's place in the global context is significant, it is ranked first among countries with certified tropical forests under commercial management. In addition, two companies in Santa Cruz, the Industria del Mueble Roda and CIMAL, and two companies in Cochabamba, Jolyka Bolivia SRL and Industria Maderera Sali Ltd, currently hold chain-of-custody certification. A bottleneck for Bolivia is the lack of capacity among chain-of-custody certified industries to process the potential production of certified forests.

The carrot. Sustainable forest management is intended to ensure that future generations will have an adequate supply of forest products. Indeed, certification is a *best practice* in the quest for biodiversity conservation, as attested to by the Bolivian concessionaires, private owners, and communities now seeking certification of more than 1 million hectares of forest. Forest users who voluntarily seek certification are motivated by perceived market advantages; they would be far less likely to implement biodiversity-conserving practices under conventional command-and-control mechanisms imposed by government.

The stick. Certification is a *best practice* in the achievement of meaningful policy reform. Principle 1 of FSC certification calls for the forest operation to obey relevant laws. This makes it essential that laws be compatible with good management. At the same time, it assures government that certified operations are obeying the law, freeing scarce enforcement resources to be utilized elsewhere. Policy reform is facilitated as the private sector sees market opportunities and supports the policy changes that will facilitate certification. Certified operators become supporters of policy enforcement because loggers who flaunt the law gain unfair cost savings compared to those practicing good management.

Collateral benefits. Becoming certified and practicing certifiable management costs more than practicing conventional logging, at least in the short run. However, planned extraction and reduced-impact logging can reduce short-term costs while yielding ecosystem benefits. Were forest managers to be compensated in the market for maintaining ecosystem services, biodiversity conservation, and carbon sequestration, then the benefit-cost relationship would be improved. Certification becomes a *best practice* for improving the environmental performance of uncertified operators who participate in training and observe that conducting inventories, planning extraction roads, and practicing directional felling result in reduced cost.

Economic boost. By bringing the largest area of tropical forest in the world under certified management, Bolivia is well positioned to markedly increase its exports of certified products. Because quality value-added processing is integral to success in the certified market, employment will be higher in the sector and the overall value of exports will tend to be higher. The mandated fair treatment of indigenous peoples and local communities in general will have important income distribution and equity benefits. Certification, therefore, is a *best practice* contributing to greater export income in the forest sector, greater employment, and improved income distribution.

Figure 1: Growth in area of certified forests in the world.

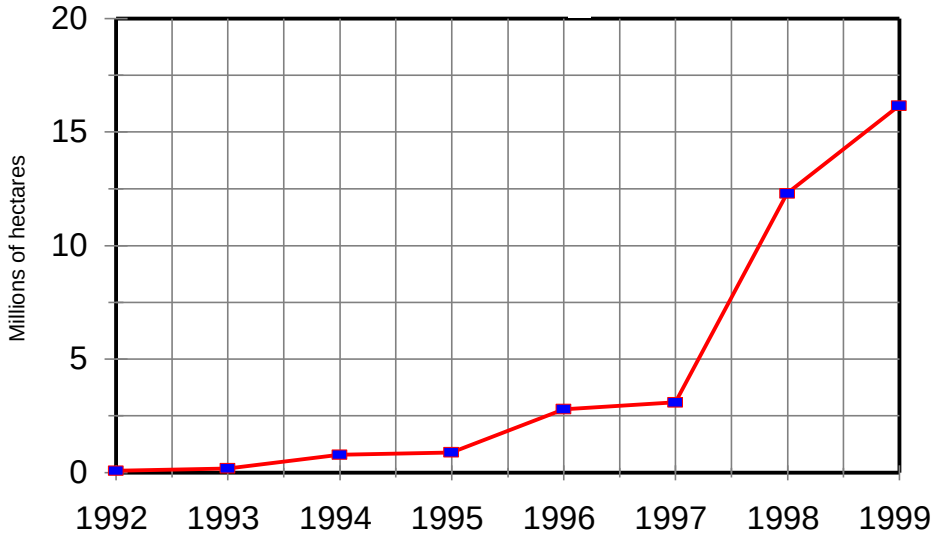
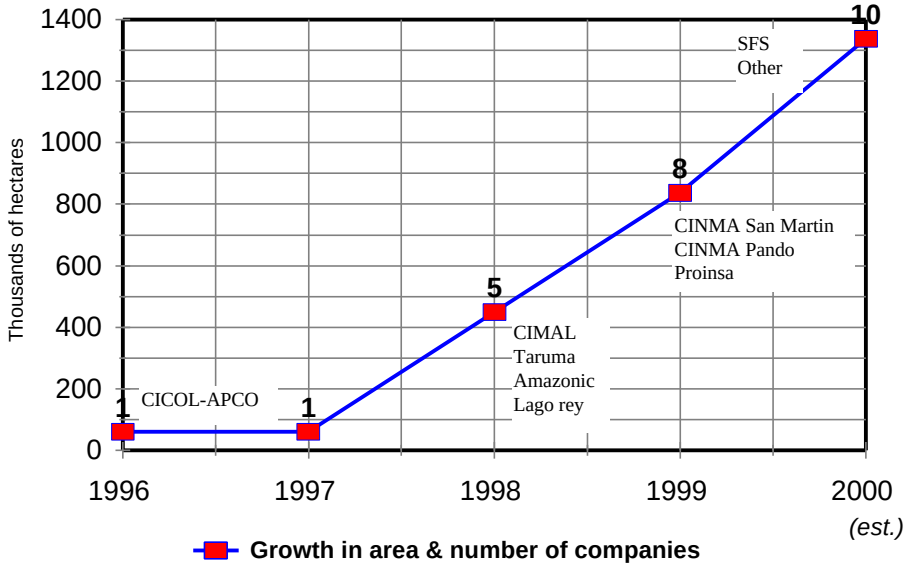


Figure 2: Growth in area of certified forests and number of certified companies in Bolivia (BOLFOR; August 1999).



Shared responsibility. Without certification, government is virtually alone and generally ineffective as an advocate and enforcer of good forest management. Environmental NGOs are more preoccupied with protection issues and industry trade associations tend to be more concerned with minimizing government environmental restrictions that raise short term-costs. Therefore, certification also serves as a *best practice* for broadening and strengthening the support for the environmental, economic, and social benefits of good forest management. For example, establishment of the Bolivian Council for Voluntary Forest Certification (CFV) as an NGO responsible for establishing national standards, certification oversight, and promotion of certification reinforces the will of government and the NGO community in their support of good forest management. Having a Bolivian certifier linked to the SmartWood network of certifiers brings down the cost of certification.

Win-win. Certification of good forest management under FSC principles has served as a *best practice* under which USAID can effectively promote economic development while achieving significant results in the conservation of tropical forest ecosystems and biodiversity. This practice carried out in the buffer zones of protected areas directly complements investments in protection by promoting low-intensity but remunerative activities, compatible with biodiversity conservation.

A good name. BOLFOR, employing the *best practice* of certified forest management, has contributed significantly to restoring the good name of tropical forestry since the collapse of British colonial forest management operations in Africa and Asia 50 years ago. Destructive and wasteful logging practices have been vilified for decades. In his 1989 book, *No Timber Without Trees*, Duncan Poore noted that less than 1 percent of tropical forests were under good management. Thanks to efforts in Bolivia by BOLFOR, good forest management is being shown to be feasible: economically, socially, and ecologically.

Only a tool. What is the future of forest management certification? Will society, in rich and poor countries alike, find value in maintaining forest ecosystems outside of parks that have a dual function of generating income while maintaining biological diversity? Certification is only a tool for providing consumers with a point-of-purchase opportunity to endorse forest conservation. Increasing efforts are needed by environmental organizations to educate the public on the value of forest ecosystems and their role in maintaining them. Efforts are also needed to encourage the forest sector to produce and handle certified products.

D. Constraints on Achieving Sustainability

BOLFOR has emphasized creating a favorable policy environment for sustainable forestry, understanding forest ecosystems, forest inventories, and management planning, with significant resources also devoted to value-added processing and marketing. The signal accomplishment of BOLFOR has been to prepare forest operations with more than 1 million hectares for certification, of which more than 400,000 hectares have already been certified. The 1 million-hectare goal is expected to be achieved during 1999. The target for certification has now been raised substantially as more enterprises have become convinced that certification offers advantages in the marketplace.

At the same time, this success has revealed constraints to the Bolivian forest sector achieving its potential as a supplier to the world market for certified forest products. In November 1997, a series 63 business meetings was held between Bolivian forest sector companies and companies dealing in certified forest products in Europe and North America. Subsequently, most of the business deals initiated at the meeting unraveled, revealing an immaturity in the certified market itself in 1997 and highlighting constraints in the Bolivian forest industry. These constraints include:

- Deficiencies in business structure, management and entrepreneurship resulting in high production costs, inefficiency, and lost sales
- Outmoded value-added processing facilities limiting the quality and diversity of products offered to the international market
- Lack of adequate financing for expansion of the certified forestry sector due to the poor reputation of conventional logging with financial institutions
- Lack of a robust market for products made from lesser-known species because an aggressive demonstration and sales effort has been lacking

- Lack of participation by communities and indigenous groups in certified forestry due to limited links to essential sources of technology, financing, and market access

An additional constraint recognized during BOLFOR implementation as a result of the research component of BOLFOR is that there is insufficient practical management information to ensure regeneration of valuable species and long-term maintenance of ecosystem functions.

E. Applying Lessons Learned

The most valuable lessons from the BOLFOR project lie in identifying constraints to the full achievement of environmental, economic, and social benefits of certified forest management. To build on the work of BOLFOR and help address these constraints, a new non-profit organization functioning as a hybrid business/foundation has been created with the mission of helping Bolivia realize its potential as an exporter of certified forest products to the North American and European markets.

The new Amazonian Center for Sustainable Forest Enterprise will draw its funding from a) commissions and the sale of services to the Bolivian timber and value-added processing industry, and b) grants and contracts funded by multilateral and bilateral donors and private foundations. Funding from the latter will help forest holding communities and small/medium-scale wood products industries become participants in the export market for certified products primarily through joint ventures with successful larger private sector companies.

Already the Multilateral Investment Fund of the Inter-American Development Bank is seeking bids addressing the business management and product improvement needs of communities and small/medium scale enterprises. This activity will be complemented by BOLFOR's continuing program of support to community forest management activities and an incipient program funded by WWF Bolivia in support of community forest management certification.

A key constraint to the future of both the BOLFOR project and the center is the lack of community participation in certified forestry. Community forestry has been unsuccessful in bringing economic benefits to indigenous and campesino communities because communities and their supporting NGOs lack business expertise, capital, technology and market access. Also, private sector relationships with forest communities historically have often been exploitative.

Now, however, there is a convergence of interests between communities and the private sector. Communities are claiming and actually gaining legal control over more forested land. This community resource control will provide a compelling incentive to the private sector to engage in joint activities with the communities and indigenous groups because the communities control access to timber. Community partners can benefit from the fact that the private sector is better capable of modernizing its operations, attracting capital, and gaining access to markets. FSC certification will level the field in this relationship because the core principles of certification ensure that communities are treated fairly in transactions with the private sector. The mutual benefits from joint ventures can only be realized when the private sector gains the competence to enjoy widespread success in the export of certified products.

To alleviate the constraints identified above, the center has developed the following service components to build on and expand BOLFOR activities.

Business management and entrepreneurship. The program will operate at two levels: the first will focus on basic business practices and skills, and the second will emphasize entrepreneurship, finance, and marketing. Capacity building and training will be designed based on a needs assessment and design exercise, and will combine formal courses and workshops with consultancies tailored to the needs of a specific company. Small businesses that gain strong management skills will be candidates for chain-of-custody certification as part of a value chain between well-managed forest operations and the growing international market for certified forest products. Strategic relationships will be fostered between beneficiary small businesses and both certified community/private sector forest management operations supplying raw materials and national and international firms dealing with certified products. Value-added processing firms currently marketing products to Argentina or the United States have shown a strong aptitude and interest in becoming chain-of-custody certified.

Value-added processing. Dual strategies for sawmills and processing factories are anticipated. The focus on certified holders of concessions, private landowners, and community/indigenous operations with their associated sawmills will emphasize efficiency in wood utilization (including shorts and "character" wood), adapting mills to handle very dense woods, and the production of lumber meeting various milling requirements (quarter sawn, etc.) and dimensions in response to orders. Changes in the value-added processing industry will be driven by market intelligence acted on by the more sophisticated local firms or joint ventures with international partners, with closely supervised venture capital. Some operations will be vertically integrated as will the anticipated support strategy. A strategy specifically geared to the needs of small and medium enterprises has been proposed under the Inter-American Development Bank Multilateral Investment Fund.

Sourcing of financing. Financing of the certified forest products value chain at levels and rates comparable to that available in other sectors will achieve conservation goals while creating profitable and sustainable forest-based enterprises that will pay a competitive return on the venture capital invested. The center executive director and key board members will visit the sources of funding and investment to present the center concept and business plan in late 1999. Funding sources include:

- Grant funding by private foundations, and bilateral and multilateral development assistance organizations for essential activities for which cost recovery is not probable, at least during the first one to three years.

- "Green" venture capital equity investment from such sources as IFC instigated Terra Capital Fund and the Inter-American Development Bank's Multilateral Investment Fund to facilitate participation by smaller value-added enterprises in the value chain. When the certified forest sector shows credible results, conventional venture capital investment can be anticipated.

- Investments by international companies in joint ventures with Bolivian companies bringing together capital, technology, and market access with a rich and reliable supply of raw material from well-managed forests.

Marketing of certified products. The strategy will not be to sell LKS directly. Rather, the market for value-added products will be assessed — including design, quality, wood characteristics and finishes — and then matched with the best LKS substitute for the wood currently on the market. For example, teak is the premier wood for outdoor furniture, yet only 10 percent of outdoor furniture is made from teak, leaving 90 percent of the market open for LKS that meet the durability, price, and design requirements of the market. One Bolivian company, CIMAL, has taken advantage of this very large niche. Their sales record is shown in Table 1 below.

Research in forest ecology. Ongoing research beyond BOLFOR will be initially supported by USAID through organizations such as universities and international institutions willing to commit to such a research program. The twin challenges to sustainable forest management are to support continuing applied research to help forest managers a) ensure regeneration of valuable tree species, and b) maintain the structure and diversity of the forest ecosystem while ensuring the economic viability of the operation.

Table 1. Outdoor Furniture Sales by CIMAL (Grupo Roda)

Year	Sales
1996	0
1997	$600,000
1998	$3,500,000
1999	$6,000,000 (projected)

(Source: Personal communication - Cristobal Roda, President of the Roda Group)

Note: The Forest Management Trust is a non-profit 501(c)(3) organization registered in the State of Florida. The purpose of the Trust is to promote sustainable management of forests for timber and non-timber products and services. Activities have been funded by private foundations including the MacArthur Foundation and the Moriah Fund, the U.S. Agency for International Development, and the U.S. Forest Service.

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Summary

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Everyone wants food that is safe and affordable. Done well, processing can extend food availability and affordability. It can also reduce household energy consumption and time devoted to meal preparation. Done poorly, processing and improper packaging and handling can produce foods that sicken or kill.

This paper examines the problems faced by developing countries when they seek to expand their food processing industries and initiate or diversify their export markets. The case studies used are the DAI Morocco Agribusiness Promotion Project (MAPP) and the International Executive Service Corps (IESC) Trade Development Services Project.

The primary focus is on successful approaches to gaining access to the U.S. markets, with a secondary focus on gaining entry to EU markets. While both markets are increasingly using principles of traceability for identifying problems in food safety, the U.S. system places primary responsibility on the processor, while the EU still places primary food safety responsibility on national certifying agencies. Global forces have begun to push national systems slowly towards convergence for internationally traded products.

The costs and returns of the different approaches, implications of food safety programs for the safety of national consumers, their effects on the growth or preservation of export market access in the face of growing regulation of the processed food industry, and design recommendations for food safety activities are presented.

Special emphasis is placed on the institutional links vital to the sustainability of food safety programs and on key indicators that can be tracked by program managers to ensure that progress towards sustainable change is being made.

Detailed Description

A. Food Safety Problems Faced by Agri-Processors Entering or Expanding Export Markets

The costs of seven food borne diseases in the United States of America (U.S.) have been estimated conservatively at between $6.5 and $13 billion annually in medical charges and lost productivity.[1] In the European Union (EU), the costs are of similar magnitude and are probably higher than those in the U.S. Consumers in both markets are increasingly concerned about the safety of their food. EU Common Market consolidation and harmonization of rules for food safety and labeling, and the steps being taken by Canada, Mexico, and the U.S. to harmonization regulations among North American Free Trade Agreement members, mean that processors who export to the two largest blocks of food importers need to learn how to cost-effectively comply with import regulations to avoid costly rejections. Compliance requires exporters to address the traditional food safety concerns that are the subject of long-standing regulations of importing nations. It also requires them to deal with a dizzying array of new problems brought to the fore at the conclusion of the Uruguay Round of negotiations of the General Agreement on Tariffs and Trade (GATT) that created the World Trade Organization (WTO) in 1994. Among these are the basis for determining when food is defined as "safe." Does science and economics, customary practice, political power, or some combination thereof, decide the issues of use of antibiotics and hormones in animal production, the inclusion of raw material from genetically-modified organisms (GMOs) in foods, or the classification of organic products as safe?

A1. Standard Problems Faced in Designing Food Safety Programs

Importing Countries Have Different Food Safety Standards

For the same product. In the U.S. regulations require detailed nutritional labeling for all packaged and processed food that is sold at the retail level. Ingredients and additives must also be disclosed on labels for packaged foods. The objective is consumer education and notification of nutritional value for dietary management and to signal ingredients that some consumers must avoid. Labels inform consumers whose diets restrict the intake of some ingredients, such as salt by people with high blood pressure. They indicate the presence of food components, such as the gluten of wheat or dairy products, or additives, such as sulfites, to which some people are highly allergic. Labels also indicate the presence of food components that are toxic to some people, for example, phenylalanine for those with a genetic deficiency in the metabolism of this amino acid. European regulations also require ingredient labeling, but have different definitions and disclosure requirements for ingredients, additives, and colorants than in the U.S. The EU requires less detail on ingredients and does not have as detailed requirements for the presentation of information on food composition to consumers.

For the same type of packaging. The U.S. and Canada have similar processed food regulations. But, the Canadian food and seafood regulators have more detailed requirements, and perform more frequent inspections, related to how well canned foods are sealed than in the U.S.

[11] Buzby, Jean C. and Tanya Roberts, 1996. "ERS Updates U.S. Foodborne Disease Costs for Seven Pathogens." **FoodReview** (September-December): pp 20-25.

For the same health concern. In the U.S., histamines in canned sardines, mackerel, and anchovies may not exceed 50 parts per million (ppm). In the European Union up to 150 ppm of histamine in canned fish is permitted. The EU follows the guidelines of the United Nations' Food and Agriculture Organization' s (FAO) Codex Alimentarius, or Food Code. The U.S. sets a lower limit based upon the presence in its population of individuals with a high sensitivity to histamines. In the European Union, especially in France, soft cheeses are manufactured with non-pasteurized milk. These enter commerce throughout Europe, but carry warnings about potential hazards for infants, and pregnant and nursing women. These cheeses may not be legally manufactured in the U.S. and are banned from entry and sale in the United States. In France, Spain, and Italy these cheeses are considered to be a historical and commercial part of the diet of the population deemed safe by customary practice.

For the same process. All processed foods packaged for retail sale that enter or circulate within the European Union must carry an expiration date. Past date goods must be removed from shelves. In contrast, U.S. federal authorities do not require expiration dates on processed and packaged foods, but most state health or agricultural authorities require retail packs to carry a "best if sold by" or "best if used by" date.

Export Markets Have Different Regulatory Approaches

The regulatory approaches in the U.S., the EU, and other markets have changed dramatically since the creation of free trade areas and the World Trade Organization, but there are still major differences in the ways that countries regulate the safety of imported food products. Three examples follow:

The EU nations, and many other countries, requires that all foods imported from a foreign processor be accompanied by a certificate from an authorized national agency. The EU reserves the right to inspect the regulatory process used on an industry by industry basis, and decertify a national agency until remedial action is taken. De-certification would exclude all members of an industry in a given country from exporting to the EU. Individual firm exclusions are also possible. In practice European Economic Commission authorities have prioritized their certification missions, concentrating on meat and poultry, dairy, and fisheries products first and offering help to bring developing country agencies procedures into compliance with EU requirements.

In the United States, the U.S. Food and Drug Administration (FDA) and the United States Department of Agriculture's (USDA) Food Safety and Inspection Service (FSIS) requires each processor (domestic or foreign) to meet U.S. food safety standards. Under current law, neither federal agency can delegate its responsibility to inspect and ensure the safety of any food product that enters the United States or interstate commerce. The individual processor has to demonstrate an understanding and ability to produce processed and packaged foods according to U.S. regulations. Problems with arriving products, improperly filed processes, and failure to respond to queries from these agencies may result in automatic detention of an exporters product upon arrival at a U.S. port of entry. If several processors share the same problem, these agencies may detain all processed product of the same type arriving from the country of origin. These agencies, depending on the funding and availability of personnel, may also make direct inspections of individual foreign facilities, personnel and operations, processing records, and handling, storage and transportation conditions.

The World Trade Organization, through technical committees, seeks to establish a more harmonized set of food safety and trade regulations across member countries, following the provisions of Article 4-SPS (Agreement on the Application of Sanitary and Phytosanitary Measures) within the WTO. Article 4 deals with bilateral determination of the equivalence of sanitary and phytosanitary regulations and regulatory process between importing and exporting nations. Trading partners are making progress, but at very slow rates.

A2. New Issues in Designing Food Safety Programs

Since signature of the Uruguay Round of GATT in Marrakech, Morocco in 1994, the pace of change in World Trade has accelerated, with important fall out for food safety programs.

1. WTO SPS changes and WTO rulings are in dispute. The case of the meat dispute between the U.S. and the EU is a good example. Both produce and export beef. United States' regulatory agencies have carried out studies that show that the use of the cattle growth hormone BSt (Bovine Somatropin) to meat production efficiency does not endanger human health. The World Health Organization also arrived at the same conclusion in its studies. The EU has not accepted the U.S. health studies as applicable to its population and has frobidden the entry of beef from animals receiving BSt. The U.S. brought a claim of unfair trade practices against the EU through WTO mechanisms. The WTO found in favor of the U.S. and set a May 13, 1999 deadline for compliance. The EU-member nations, with strong public support, refused to admit beef from BSt-treated animals, claiming that their studies of the potential carcinogenic effects of the hormones are continuing and that their ban may yet be justified by scientific studies. In June 1999, the U.S. implemented trade sanctions by applying special duties on a list of products imported from the EU.

2. Intensification of certification/decertification procedures by product group between EU and its trading partners. Meat, poultry, fish, and dairy products are good media for microbial growth and processes such as freezing, drying, smoking, fermenting, and canning do not completely eliminate microbial survival and growth. Developing countries have received a number of EU delegations starting from the mid-1990's, with preparatory work done in some sectors in the late-1980's and early-1990's. Fisheries industries were hard hit. Some exporting nations found that they had to hire private food safety and quality control specialists to manage and train the national staff in standards and procedures that would meet EU expectations for fresh, frozen, smoked, dried, and canned fish and seafood.

3. HACCP (Hazard Analysis and Critical Control Points) approaches and trace-back provisions increase costs of consultants, personnel, recordkeeping, training. HACCP, originally devised by Pillsbury to provide safe food for NASA astronauts, has gained great acceptance in the late 1980's and the 1990's as a method to improve food safety.[2] It replaces traditional "cookbook" or "command and control" approaches to food processing with more science-based hazard analysis and process control points that are based on processing plant, raw material, process, and other variables that may vary with season or as plant modifications are made. Long the underpinning of the FDA regulations for low-acid (fish, many vegetables) and acidified (pickles,eg) products, it has been adopted by much of the U.S. processing industry, with increasing adoption in the EU and Japan, and growing application in developing countries. Exporters of seafood to the U.S. have been the most greatly affected. The Seafood HACCP law (implementation begun on December 18, 1997 with a full effective enforcement date of Dec 17 1999) means that all processors of fish (including vessels that freeze fish onboard) and who export to the U.S. will have to develop and implement a verifiable HACCP plan. For a HACCP plan to work, the individual processor must already have a plant and operations that meet Good

[2] Stevenson, Kenneth E. and Dane T. Bernard (editors), 1995. "HACCP: Establishing Hazard Analysis and Critical Control Points- A Workshop Manual." The Food Processors Institute, Washington, DC.

Manufacturing Practice (GMP) standards for food establishments.[3] Many developing country processors do not.

4. ISO (International Standards Office) 9000 requirements for exports to the EU also adds costs to operations. The EU is gradually stepping in the requirement that exporters to the EU have ISO 9000 certification. This is generally ISO 9002 for food processing plants. It certifies that the physical plant, management, personnel, and production operations are consistently managed to produce a consistent product, lot after lot. As currently implemented, ISO certification companies advising food processors in developing countries often find that a two-to-three year timeframe is needed to put in place GMP's and to devise and implement a HACCP plan before ISO 9000 certification becomes possible. Many industry analysts believe that ISO 9000 certification will become a standard requirement for the importation of processed, packaged foods by EU buyers. ISO 14000 certification on environmental practices is a likely future requirement.

5. Harmonization and equivalency processes require more national public investment in food safety and quality control. Tracking the progress on the WTO SPS and TBT (Technical Barriers to Trade) and responding to regulatory changes in target export markets has stimulated much re-examination of national laws and implementing agencies and procedures. The strengths and weaknesses, synergies and contradictions in national codes are thrown into high relief when importing nations change, modernize, or more rigorously enforce their food safety regulations. New rules also come into play when national processors seek to export more value-added products in retail and food service packs, rather than provide intermediate inputs to foreign food processors operating in target markets. Who pays the investment and operating costs for changes in agency infrastructure, such as improved laboratories and computerized record-keeping and retrieval systems, inspection and enforcement procedures, and retraining of personnel is not a small issue.

6. Advances in the technology of food analysis for microbes, additives, pesticide residues, and other foreign matter permit faster, cheaper detection of potential safety problems in foods. The sensitivity of the methods continues to increase to the point that some pesticide residues can now be detected at the parts per billion (ppb), and in some cases, the parts per trillion (ppt). When zero tolerances are established based on the ability of a test to detect parts per million (ppm), the increase in sensitivity to ppb or ppt may suddenly turn a "safe" food product into an "unsafe" one. Zero levels of residues keeps dropping. When some importing countries permit the use of a pesticide on a crop while others do not, both producers and national authorities have to grapple with the issue of increasing sensitivity of tests.

7. The spread of antibiotics around the world, and the misuse of antibiotics, has led to the development of bacteria which are resistant to antibiotics and often have increased resistance to some standard food pasteurization and sterilization practices (E. coli O157:H7, Staphylococcus aureus strains, etc.) Their existence and the increase in the presence of highly sensitive groups of immuno-suppressed consumers (AIDS and cancer patients receiving chemo or radiation therapy) increases the precautions that must be taken in food processing. Those precautions come at higher costs.

[3] Katsuyama, Allen M. 1993. **Principles of Food Processing Sanitation.** Second Edition. The Food Processors Institute. Washington, DC, and, Title 21 Code of Federal Regulations (CFR) Part 110 "Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food."

A3. Practical Problems for Agri-processors in Export Markets

When processed and packaged food clears customs and enters an export market without problems, everyone is happy, and business continues. Products can be delayed or refused entry for a variety of reasons ranging from improper documentation to catastrophic damage during transit. Food products entering the U.S. and the EU may encounter the following four classes of problems at arrival:

1. *Detention.* In the U.S. the FDA or USDA will notify the importer of record that product has been detained and provide the reason for detention. If a food safety issue is involved, the notification may come in the form of a civil notice requiring that evidence be provided within ten days to contest the finding, to demonstrate that the product can be rendered safe for human consumption (by re-processing for example), to show that the product can be used for non-food purposes, or to present a re-export or destruction plan.

2. *Refusal.* If the product cannot meet entry requirements, or the case is not contested, the product may be refused entry and either destroyed or re-exported at the importer's cost.

3. *Re-Export.* Prior to 1999 the U.S. has not required the marking of re-exported product as having been rejected for importation or found unfit for human consumption. Legislation is currently being considered that would make such marking mandatory for re-exported product. Marking rules may be implemented as early as 2000.

4. *Destruction.* If the importer of record does not re-export, or if the product is deemed dangerous, destruction is done at the cost of the importer of record. Some sales agreements to specify that either the exporting broker or the agriprocessor pay the costs of product that is destroyed by the authorities in importing countries.

Each of these actions is handled differently in major markets. Exporters to a new destination see high risks associated with their entry into new processed foods markets. They place a high financial risk premium on new destinations because they have no base of experience to help anticipate and avoid entry problems. Import-export brokers have historically absorbed some of this risk, especially the handling of required documentation, in exchange for a fee. Established brokers in importing countries usually know the import rules, but there are many exceptions, and their willingness to incur the costs to solve detention problems is usually a function of the size of the deal (i.e. commission) for them.

Too many brokers in importing and exporting countries try to register as representatives of the processor for the U.S. market. Their service is sold to the exporter as a way of simplifying the export process, "We'll take care of the FDA, USDA, Fishery Service, etc. issues for you." A representative relationship binds the exporter to the broker and may block the agri-processor from learning the food safety regulations and procedures that apply to his/her product. Knowing what food safety regulations apply and how to comply with them is a fundamental part of meeting the food safety requirements of most importing nations.

Infrequent exporters to the U.S. may always want to deal through brokers, because the costs of learning the regulations for the U.S. may be too high. However, regular exporters to the U.S. can recoup their costs, and expand volume if they learn how to comply with food safety regulations directly. It opens up the door to direct sales to co-packers, re-packers, food service distributors, and the retail market, where value-added is highest.

However, retail sellers of food face increasing risk of legal suit when customers are sickened or poisoned. The levels of punitive damages awarded in the U.S. is such that retailers are requiring their suppliers to provide liability insurance on food (and other) products. Distributors, importers and brokers are passing through the costs of liability insurance requirements to both domestic producers and foreign suppliers of processed products packaged for the food service and retail markets.

How can agri-processors deal with these issues while expanding their export markets and turning a profit? The following section illustrates how an industry and its supporters can successfully meet the challenge.

B. Morocco Case Study

This section presents the experience and lessons learned from two programs in Morocco funded by USAID.

A U.S. Agency for International Development (USAID) study in 1990 found that 42 Moroccan food exporters were on the FDA's automatic detention list.[4] Automatic detention means that all products from these companies would be held at the port of arrival without physical sampling. Why were so many companies, nearly a third of all agri-processors in Morocco, on this list?

The majority of Moroccan canning companies produce foods that are classified by the FDA and the USDA's FSIS as low-acid, canned foods or acidified canned foods. These foods require special handling and reporting procedures to ensure that foods are not contaminated by *Clostridium botulinum,* the bacterium that produces the deadly botulism toxin.[5] Among the special procedures is a requirement that all processors (domestic firms and all foreign firms intending to export to the U.S.) of these canned foods register as Food Canning Establishments (FCEs) with the FDA and receive a registration number.[6] Failure to register as an FCE results in automatic detention of processed product. Each FCE also has to file a "schedule process" – a form describing the product, the type and size of container used, and the steps and procedures used to ensure that the botulism bacterium, and other disease causing organisms, will be killed during processing.[7] Scheduled processes must be established by a qualified person who has expert knowledge that has been acquired through training and experience in the key operations in the manufacture of low-acid and acidified foods. FCE filing must be made 120 days before offering a product for sale to the U.S. The process must be filed with the FDA at least 60 days before a processor delivers product for sale or entry into the U.S. The FCE number and the identification code that each processor gives to each product manufactured under a file process must appear on export bills of lading. Shipments arriving without a filed process, or with a defective process, are automatically detained without physical inspection at the port of arrival. Many of the Moroccan processing plants had no FCE number or had not filed a process with the FDA before exporting. Other firms were on the automatic detention list because they had a history of shipping products that had safety problems (forbidden lead-sealed seams on fish cans, filth in dried

[4] Humpal, Donald S., David C. Wilcock, Edgar Ariza-Nino, Brad Bradley, David Nelson, and Robert Wiley, January 1991. "Morocco Agribusiness Promotion Project Paper Team Report." Prepared for USAID by Development Alternatives, Inc. Bethesda, Maryland.

[5] Title 21 Code of Federal Regulations (CFR), Part 113 "Thermally Processed Low-Acid Foods Packaged in Hermetically Sealed Containers;" 21CFR, Part 114, "Acidified Foods;" 21CFR, Part 108,"Emergency Permit Control;" and Title 9CFR, Part 318(381), "USDA-FSIS Canning Regulations." (The term canned food is used for all foods that are processed and hermetically sealed, whether the container is a metal can, glass jar or bottle, plastic jar or bottle, plastic bag or pouch, aluminum bag or pouch, or any other container than can be sealed to exclude air.)

[6] FDA Form No. FD-2541, "Registration for canning establishment".

[7] FDA Form No. FD-2541a, "Process filing for all processing methods, except aseptic processing of low-acid foods," or FDA Form No. FD-2541c, "Process filing for aseptic processing of low-acid foods."

herbs, rusty cans, or, in a few cases, residues of pesticides not permitted for use on food crops in the U.S.).

USAID in Morocco included a food safety program within the broader Morocco Agribusiness Promotion Project (MAPP) to address these problems.[8] The objective of the program was to ensure that processed foods from Morocco to the U.S. were safe and wholesome for U.S. consumers and Moroccan consumers. Overall project objectives included improving commercial exchange between the two nations through the development of joint ventures between U.S. and Moroccan firms, the expansion of markets, and the transfer of technology from the U.S. to Morocco. MAPP was implemented through three contracts from 1992 through early 1999 with funding provided mainly by USAID, with a host of in-kind and cash contributions by the Government of Morocco, and Moroccan and U.S. companies.[9]

Early project operation highlighted a number of reasons why Moroccan firms were having problems complying with FDA requirements. In 1992 and years prior, export brokers in Morocco, bankers with no food processing background, and importers in the U.S. were filling out FCE and process forms for processors. Many processors, who did not have English-speaking staff, received letters from the FDA with questions about their process filings that they did not understand. Repeated failure to answer FDA queries leads to automatic detention of product. Olive, gherkin cucumber, and caper packers who had shipped bulk products for canning in the U.S. were attempting to add value to their products by canning them in Morocco and exporting finished product, not realizing that canned products were ruled by different regulations than bulk products. And, a large number of plants were simply not up to modern food plant construction and equipment standards needed to meet Good Manufacturing Practice codes. In addition, a companion USAID project working extensively with fish canning plants, the Trade and Development Services Project, found that many plants were using over-simplified processes recommended by European buyers that did not meet FDA requirements.[10]

A MAPP innovation was to support the costs of visits by FDA staff to directly inform the Moroccan agri-processing industry and concerned Moroccan agencies about U.S. laws and regulations. Trips by FDA staff in 1992 and 1993 to hold informational seminars, visit food safety and quality control agencies, and make informal visits to individual processing plants to point out potential problems helped to "de-mystify" U.S. regulations, as many Moroccan in the industry commented. Morocco's agency for export inspection, the Etablissement Autonome de Contrôle et Coordination des Exportations (EACCE- Autonomous Agency for Export Inspection and Coordination) was selected as the appropriate collaborator for the food safety program. The EACCE has export safety and quality enforcement responsibility for processed fruit, vegetable, meat, poultry, fish and seafood products. The project developed a three-track program:

1. EACCE regulatory strengthening through training of inspectors, laboratory personnel, improvement of laboratory instrumentation and management, and revision of Moroccan administrative code to adopt U.S. food safety principles for products destined for U.S. markets;

[8] USAID/Morocco, August 1991. "Morocco Agribusiness Promotion Project Paper (608-0210)." Rabat, Morocco.
[9] USAID let three contracts to implement MAPP. The primary contract for overall project management, technical assistance, and coordination was awarded to Development Alternatives, Inc in 1992. An interagency services agreement (PASA) was signed with the USDA in 1992 to provide services from the USDA, USFDA, the US Environmental Protection Agency, and others to the Moroccan Ministry of Agriculture. A training and research contract was signed in 1995 with the University of Minnesota to develop industry-oriented training, outreach, and research services with Morocco's agricultural and veterinary university, IAV Hassan II.
[10] The Trade Development Services Project was implemented by the International Executive Services Corps (IESC) under a grant agreement with USAID.

2. Industry (and public inspector) training and institutionalization of FDA-approved Better Process Control School (BPCS) training courses to demonstrate that Moroccan processors had the capacity to meet FDA regulations, and that the Moroccan public sector had sufficient commitment to support training to meet U.S. requirements; and,

3. The adoption of a private-sector "processing authority" approach to work with individual Moroccan agri-processors on the development of scheduled processes. Process authorities are defined by federal code to be qualified persons who have expert knowledge acquired through appropriate training and experience in a specified range of processing techniques. Processing authorities in the U.S. are from the private sector, and may be employees of agri-processors, processing, equipment manufacturers, laboratories, or other firms in the food industry.

B1. EACCE Regulatory Strengthening

The EACCE committed to translating FDA regulations into French and developing draft administrative law that would ensure compliance with FDA regulations for exporters of products to the U.S. The translation was complicated by both the legalese of the U.S. Code of Federal Regulations and the dense technical content. Three different translations were done, before it was decided that it made sense for the EACCE to develop FDA-style regulations for individual products in a way more compatible with existing Moroccan regulations. This conclusion was reached after senior EACCE enforcement officials visited the FDA in Washington and in regional field offices to observe inspection and compliance procedures first hand.

The EACCE central laboratory lacked the in-house capacity to analyze products for heavy metals and carbamate pesticides and was overly dependent on manual recordkeeping. USDA consultants performed a laboratory audit and mapped out an equipment investment, laboratory restructuring, training, and management program to upgrade the laboratory over a four-year period. By the end of the project, the restructured and re-equipped laboratory was applying for ISO 25 certification of its management procedures on a portion of its operations.

The project began training of EACCE inspectors in a short-course on the principles of thermal processing of low-acid and acidified foods in 1993. The short-course was followed by practical, plant audit exercises led by U.S. processing authorities.[11] The training course and audits were followed by a short-course on thermal process establishment and validation of sterilization equipment and processes. At the time, both vegetable and fish canners were encountering major problems in U.S. acceptance of their schedule processes. Local equipment suppliers and the technicians of European buyers were establishing processes essentially based on lengthening sterilization times by 10 or 15 minutes to ensure that potential pathogens would be killed. This approach, which works sometimes, does not work all the time, and also damages the texture and flavor of the product by over-cooking. In addition, the audits showed that processors were using sterilization equipment that, while broadly used in Europe, was not properly validated for each installation as required by the FDA as part of process filings. Finally, the audits demonstrated that nearly all inspectors and plants needed to work intensively on GMP issues to ensure the safety of their canned products.

The project monitored FDA monthly reports on detentions of Moroccan products, initiating a dialogue with EACCE to follow-up each detention with an inquiry to the Moroccan exporter on why the problem occurred. This process had three important consequences. First, the EACCE was able to

[11] Pharmaceutical and Food Specialists, Inc. (PhF) of San Jose, CA led the training and the plant audits with DAI's food engineer.

intervene directly with a processor to isolate and solve the identified problem, reducing the list of firms on automatic detention from 42 in 1992 to 0 in 1996. Second, it helped establish a working relationship between the FDA and the EACCE on the resolution of food safety issues, improving EACCE understanding of FDA requirements, and improving FDA confidence in EACCE's commitment to enforcing food safety provisions. Third, it showed that the advantages of a public policy of transparency on food safety issues. With project assistance, the EACCE accelerated the development of its internal management information system and the publication via print of its statistical information, and via the Internet of its statistical information, Moroccan regulations and draft code, and foreign regulations (including the English text of FDA and USDA FSIS regulations).

B2. Institutionalization of an FDA-approved Better Process Control School (BPCS) in Morocco

U.S. code requires that the operators of key processing equipment for low-acid and acidified foods be under the operating supervision of a person who has satisfactorily completed training in a school approved by the Commissioner of the FDA. These "schools" are called Better Process Control Schools and are given frequently as short-courses by U.S. Universities. They are only approved when they are held under the supervision of an FDA inspector and meet a series of other requirements in terms of instructors, content, testing, and institutional commitment to continuity. The project took the view that the best way to prepare the Moroccan industry and Moroccan inspectors for compliance with U.S. regulations was to obtain formal FDA approval for a Better Process Control School in Morocco. A U.S. university provided the technical leadership for this program within MAPP. [12] Individuals from U.S. industry- associations, universities, and processing authorities participated in the training program. Short courses began with GMP, HACCP, and thermal process training in 1994, ran through two cycles and led to the first FDA-approval Better Process Control School on the African continent in Casablanca on July 1996.[13]

The trainees included industry and regulatory personnel in Morocco. Initially, the regulatory staff was fearful of losing status if trained with industry personnel. Company heads were afraid that joint training might reveal problems that would be the subject of regulatory action by the public officials after the course. After the first GMP and HACCP short course, however, all participants thought that the joint format was a very good idea. It enabled regulators and industry staff to work through and arrive at a common understanding of the principles and practices behind U.S. food safety regulations and practices.

Before the FDA would send a supervisor to the first BPCS, it required a demonstration that the course would take place on a regular basis. The FDA recommended that a Moroccan institution with food science training capacity provide a memorandum of agreement to take over the running of the BPCS and commit to continued use of U.S. instructors to keep the training current with U.S. industry practice and the Federal regulations. The Institut Vétérinaire et Agronomique Hassan II, Morocco's Ph.D.-granting agricultural and veterinary university, entered into the letter of commitment in 1996. With MAPP assistance, it completed the second FDA-approved BPCS in 1998.[14] Personnel from 53 Moroccan agri-processors were fully certified in the processing of low-acid and acidified canned foods at the first two Better Process Control Schools. Most of these people were directors of

[12] Dr. James Chambers of Purdue University, Department of Food Science, provided technical direction for this program from 1993 through the end of DAI's contract in 1998. Purdue University was a subcontractor to DAI.
[13] The Food Processors Institute and the National Food Laboratory of the National Food Processors Association, Purdue University, Pharmaceutical and Food Specialists, Inc., FMC Food Processing Systems Division, Ohio State University, Virginia State Polytechnic University at Blacksburg, John Clemence and Associates, Carnaud Metalbox (Morocco), DAI, Institut Agronomique et Vétérinaire Hassan II (IAV), and the University of Minnesota.
[14] IAV was supported in the second BPCS by the University of Minnesota through the latter's training and research contract.

production, quality control, or marketing for their organizations. The task for future schools will be to extend the training to all relevant processed food manufacturing companies and to deepen the training to reach more line supervisors, retort operators, and technicians within the processing plants.

The objectives of the training went beyond the certification of supervisory personnel. The training was intended to strengthen agri-processors ability to produce safe food using HACCP approaches. In the process, they would be able to identify problems, adjust their practices to correct problems, and avoid making mistakes that could result in refusal of their products. The key factor in maintaining food safety is the performance of individual food industry employees, because no amount of mechanical or automated devices can "prevent or offset human error and the resultant potential for tragic consequences to consumers, processors and the industry in general."[15] A total of 69 companies developed and implemented HACCP plans during the project. And, the EACCE and the Ministry of Ocean Fisheries were successful in defending their regulatory systems with the European commissions' inspection teams.

B3. Private Sector Processing Authority Approach

As discussed earlier, when MAPP began the scheduled processes for canned low-acid and acidified foods were developed by a wide variety of people. Most were cook-book approaches that did not adequately reflect the variations in raw material arriving at processing plants or the normal operating differences in the newer types of steam sterilizing equipment (retorts) in their plants. Specialists from European buying tended to develop processes that included overly long cooking times to compensate for the potential risks posed by less than exemplary plant sanitation practices or high variability in raw material deliveries.

One of the project's early and vigorous debates with Moroccan officials and the agri-processing industry was how processes should be established. FDA and FSIS requires that scheduled processes be established by qualified persons with expert knowledge of thermal processing and/or acidification requirements for low-acid foods in hermetically sealed containers. In addition, the processing authority has to have facilities to use the scientific methods needed to adjust processes to the type, range, and variation of conditions encountered in commercial production. In the U.S., most processing authorities or experts are from the private sector. Specialist firms, individual consultants, associations and industry organizations, food equipment manufacturers, and processing plant personnel may all be processing authorities. While many public universities have food scientists, engineers, and microbiologists who could be processing authorities, universities generally prevent professors or extension staff from establishing processing schedules because of the implied legal liability for the food that is manufactured following the recommended process. While the U.S. Government sets the standards for safe food processing, it does not generally obligate a processor to use a particular method or process. The FDA, while it acquires information on processing authorities through its review of process filings, does not approve or certify processing authorities.

For the U.S. market, MAPP advanced the use of private processing authorities with the medium-term goal of helping to establish one or more joint ventures between U.S. and Moroccan companies to develop a source of Moroccan processing authority expertise. The first step was to reach general

[15] Gavin, Austen and Lisa M. Weddig (Editors), 1995. *Canned Foods: Principles of Thermal Process Control, Acidification and Container Closure Evaluation.* Sixth Edition. The Food Processors Institute. Washington, DC.

agreement with other U.S. projects in Morocco to go to U.S. processing authorities for process establishment services. The second was to defray some of the travel costs of exploratory visits by U.S. firms to Morocco to establish processes and review process filings. The third was to show Moroccan companies the commercial value of these services in meeting market entry requirements. For example, most food industry trade shows in the U.S. do not permit the sampling of low acid or acidified foods that lack scheduled processes. Why bring a product to a food trade show if the customers can only look at it? The fourth was to identify Moroccan firms with the capability of becoming processing authorities.

Only one U.S. processing authority had worked in Morocco prior to MAPP. Over the course of the project seven U.S. firms came to explore the market for food safety services to agri-processors. Three firms entered into contracts to perform plant audits, validate the operating characteristics of retorts, prepare process filings, and amend process filings. In the months running up to the implementation date for the Seafood HACCP law in December 1997, the level of demand increased enough for one firm to enter into a joint venture agreement with a Moroccan private laboratory to develop the country's first firm with processing authority capability. The strategy of the firm was to train the Moroccan partner's staff to do plant audits, HACCP plans, and to collect the thermal and acidification data needed to establish scheduled processes. The scheduled processes themselves would be validated by the U.S. personnel before they were submitted to the FDA. Both partners estimated that it would take several years before Moroccan staff could take over the formal filings of scheduled processes. Moroccan staff needed to be trained in thermal process analysis and establishment. They needed to work in the U.S. partners firm to become familiar with the U.S. industry, FDA, and FSIS regulatory practice. They needed to acquire the English-language capacity needed to reduce the confusion in communications between Moroccan and U.S. partners, clients, and regulators.

B4. General Results and Lessons Learned

With modified food safety law and practice, an institutionalized Better Process Control School, and a sustainable processing authority establishment, MAPP was able to help improve Moroccan ability to comply with U.S. food safety law. The decline from 42 to zero firms on the FDA's automatic detention list is a regularly verifiable indicator of that ability that groups the overall responsiveness of both the Moroccan industry and Moroccan regulators to U.S. requirements.

MAPP paid some of the costs that are barriers to outreach by U.S. federal agencies in ways that improved food safety for U.S. consumers. However, keeping training and advice professional and paid for by firms was key to project success. It enabled firms to identify the costs and benefits of making changes and ensured that the largest numbers of firms would benefit. Projects cannot substitute for private U.S. process authorities and probably should probably seek the lowest cost way to facilitate the sale of professional services to foreign firms.

The project found that the most basic changes are the most difficult ones to make. Moroccan processors who needed to bring a plant up to U.S. and European Good Manufacturing Practice standards had to decide whether to retrofit their plants or build new ones. Personnel hygiene programs that required changes in the basic design and management of lavatories, changing rooms, and handwashing confronted cultural problems in their implementation. Plant operators frequently underestimated the complexity, costs, and additional liability of moving up the value-added chain from the supply of bulk commodities for reprocessing to food service packaging to consumer packaging.

National consumer interests are advanced by the focus on export markets. The increasing need for transparency in production in order to export inevitably falls over into the domestic food market, even in an export-oriented canning industry, where only 5 to10 percent of total production is consumed in-country. Domestic market linkages can accelerate industrial change. In 1995, the Association Marocaine des Consommateurs (Moroccan Consumers Associations) was established and put food safety at the top of its agenda helping to bring the export and domestic marketing agenda together. And, export market linkages, such as the EU regulatory certification inspections, and the U.S. Seafood HACCP law, accelerated the pace of change in overall food safety regulation within Morocco.

In terms of sustainability, the institutionalization of a BPCS in Morocco's leading agricultural university through a formalized letter of commitment to the FDA provides the basis for continued improvement in the human resource base essential to a modern food industry. Basic changes in the competency, regulations and enforcement practice of food industry regulators provide an environment reinforces the need for good food safety practice. There has also been growth in the Moroccan food safety market in the form of suppliers of industrial cleansers and sanitizers, metal detectors, increased laboratory services, and process establishment expertise. The development of these supply industries and supporting services is a very important indicator of the commercial diffusion of food safety practice in an industry.

C. Costs and Returns to Food Safety Programs

Agri-processors want to know how much it costs to meet the food safety requirements of importing countries and whether the game is worth the candle. The following sections provide a rough guide to the costs and returns of actions that are common to the development of food safety and quality control programs. The ranges are broad because costs vary greatly with the age, size, complexity, volume, and physical environment of food plants.

C1. Costs

Processors pay a series of costs nationally to manufacture foods. Exporters pay another set of costs to national authorities to meet export requirements when they enter export markets and to meet the regulatory requirements of importing nations. The following paragraphs summarize the costs of the more common steps for an established firm that seeks to enter the U.S. market.

1. *FCE filing.* FDA form FD 2541 is simple and inexpensive to fill out in English. It also enables processors of low acid and acidified canned foods to obtain, free of charge, the Federal Code of Regulations sections that apply to their industry. Costs should not exceed $50 in postage and communications to obtain and submit the form. All communications with the FDA must be in English. Translation costs vary substantially, but should not exceed $250 in most markets. Each processing location of a company is required to have its own FCE identification number, even if all communications are handled by a single corporate officer or an appointed representative. The FCE is a necessary first step for canned food processors to enter the U.S. market. It is not sufficient to gain entry, however, canned food products that enter without the FCE number are automatically detained at the port of entry.

2. *LACF and Acidified Canned Food Process Establishment.* Establishing an acidification or thermal process can be done simultaneously with the application for the FCE, if the processor knows the FDA regulations or has access to process authority services. Simple processes, for example acidification followed by pasteurization, may cost only $1000 to

$3000 to establish with a process authority. Low acid canned foods require the filing of a thermal process that in turn requires that the heating and cooling characteristics of the retort (pressurized sterilizer), as it is installed at each plant, are known. Then cooking tests can be designed and carried out on different product formulations (styles) and packaging types and sizes. Costs for a few products and packaging sizes will range from $5000 to $15,000 for initial process establishment. Complicated product formulations and high speed rotary retort process establishment can easily cost from $10,000 to $30,000. Aseptic processes in which both packaging and product are sterilized and filled in aseptic conditions range from $10,000 to $50,000 and up. Costs can be even higher for meals that are hermetically-sealed and microwaveable, where extensive research and development may be needed to formulate a safe product.

3. *Retort Validation.* The FDA is concerned about the effectiveness and reliability of new thermal processing equipment, particularly the retorts. When a new design or a new retort manufacturer enters production, the FDA will often pose questions to food processors that bought the new equipment about the basic design and operating characteristics of these retorts. U.S. manufacturers will in some cases assist with the submission of technical drawings and information to the FDA. Processors, however, often end up bearing the costs of heat distribution tests and visits by process authorities to the FDA that are sometimes needed to demonstrate the operating characteristics and sterilization performance of the installation. Total costs for validation of new retort designs with the FDA can run from $20,000 to $50,000, and up. Early purchasers of new retort designs will often bear the burden of demonstrating to the FDA that the equipment can effectively and reliably sterilize low acid foods. It can take four to five years before the technical staff of the regulatory agency feels that a new design has proven itself under different operating conditions and across many different types of installations.

4. *Plant Audit.* Plant audits should be carried out before a processor first enters a foreign market, and ideally should be done by experts who know, and are known by, the regulatory agencies of the importing country. Export certifying agencies in many countries perform audits that are part of the certification process for the country's major export market, reducing the need for external audits for that destination. However, an external audit can provide a processing plant's owner or manager with vital independent information about plant environment, operations, procedures, equipment, and products and their adaptation to new market requirements. Costs for a small plant producing a few hundred tons of product a year may run as little as $3,000. Plants producing a few thousand tons may cost from $6,000 to $10,000. Larger, multi-line plants producing tens of thousands of tons of product may have audit costs that run from $15,000 and up. Plant audit costs are not expensive in themselves, but the recommendations about changes in physical plant, equipment, personnel, and procedures can add up quickly, particularly for older processing facilities, to the point where they become major plant retooling investment projects.

5. *HACCP Plan Development and Monitoring.* HACCP plans may cost as little as $500 to $1000 to develop for classic acidified products (pickles), to a few thousand dollars for low acid canned foods up to $20,000 or more for aseptic processed products. Costs may be reduced if plan development is combined with plant audits (most consultants will not produce a HACCP plan without performing some) or included in the establishment of a process filing. While the FDA does not require the filing of HACCP plans that are produced under the requirements of the Seafood HACCP law, but the plans must be available for inspection at the processing plant. Annual monitoring of HACCP plans is a

requirement of the U.S. Seafood HACCP law. Monitoring seafood HACCP costs from about $1,000 to more than $5,000 annually. Personnel training programs to implement HACCP plans can easily cost $100 to $300 per employee, even when done on site by internal company trainers.

6. *ISO 9002 Certification.* ISO certification costs vary greatly with the size and scope of processing operations. In the mid-1990's in Morocco, the basic assessment for older, small plant (1,000 metric tons) certification, which includes a plant audit, meetings with key personnel, and a report outlining the steps in certification process cost about $3,000. A total cost of $50,000 was advanced for the two-year program that would result in certification. Certification costs for larger plants would be higher, but (except for the costs of works needed to upgrade physical plant) does not increase directly with the scale of operations. Multi-product plants with multiple processing lines carry the highest costs. A moderately complex plant handling several thousand to 15,000 MT of product would probably take two years and cost around $150,0000 to certify.

7. *BPCS Training.* Better Process Control School costs in the U.S. run about $150 per day for a three- or four-day school or $450 to $600 per person, exclusive of travel, food and lodging. Overseas schools that will be supervised by the FDA require about two years of preparation to set up. When they are run by U.S. institutions the cost for each participant is about $2600 (class of 40), if no language translation is required. The Food Institute of the National Food Processors Association has both Spanish and French course materials available.

It is evident that processors who would only export a container or two a season would find the costs of complying with U.S. or European regulations a barrier to their entry to export markets. A processor needs to be exporting dozens of containers of processed products each year to spread the costs of regulatory compliance, or be content to operate as a supplier of raw or intermediary material for re-packing in the destination market. As an approximate rule of thumb, an exported volume of about 250 metric tons a year needed to carry the costs of compliance programs.

C2. The Costs of Non-Compliance

Three types of actions face the exporting firm that does not comply with import regulations.

1. *Reprocessing.* Some products have problems that can eliminated by reprocessing. Re-sterilization of canned foods is sometimes permitted, but inevitably results in loss of commercial quality. Re-packaging is sometimes permitted, but the costs of opening cans, bottles, or jars in an export market, refilling, and reprocessing, is usually many times the cost of the country of origin. As reprocessing can cost 25% or more of the original landed value of a product, it is rarely perfomed.

2. *Re-export.* Product may be refused entry and the importer may be given the option of re-exporting the product to a third nation or the country of production. The costs of inspections, laboratory test, multiple handlings, documentation, and transport can quickly add up to a few to several thousand dollars per ocean container of product.

3. *Destruction.* Occasionally, and especially if a processed food is found unsafe or unfit for human consumption, it will be destroyed. Besides resulting in a total loss of the value of the landed product, the costs of destruction are paid by the importer of record and usually

charged back to the exporter by the importer. Total losses can quickly add up to $12,000 to $18,000 per ocean container.

As important as the financial costs, are the severed business relationships that result when products do not arrive. In the U.S. and, increasingly, in the EU the food industry depends upon just in time deliveries of processed foods for the food service and retail trade. Suppliers who cannot deliver just in time get weeded out of the market.

If a product that is potentially unsafe makes it through import inspection to commercial distribution and is discovered in trade channels, the importer of record is responsible for organizing and paying for a recall of the product from shelves and distributors warehouses according to U.S. law. Recalls of even small quantities of processed foods scattered in many retail outlets can easily cost hundreds of thousands of dollars to the distributor and importer. If an unsafe product is consumed and causes illness, then medical and legal liability claims against the retailer, the restaurant, the distributor, and the importer can, and usually are, made in the U.S. The potential losses run into millions of dollars. The risks of the U.S. market have increasingly led U.S. importers and distributors to require their overseas suppliers to pay or split the costs of product liability insurance, usually reducing by 1 or 2 percent the gross returns to the exporter.

The bottom line is that it is always cheaper and more profitable to fix product problems at the point of origin than it is once the product is shipped to an export market.

D. Implications of Food Safety Programs for the Safety of National Consumers

Export regulatory compliance can affect the safety of food products that are sold to national consumers in countries of production. Key points are that:

A. Dual or multiple standards for products that are both consumed locally and exported are a financial and regulatory dead end. The same lines cannot be used in substantially different ways for alternating lots of product between national and export markets. Companies that attempt to apply lower food safety operating standards for the local market than for the same product that is exported will always encounter higher rejection rates overseas than companies that apply one standard consistently.

B. Personnel hygiene programs in processing facilities can reduce the incidence of food borne diseases at the household level. Regular and repeated training and supervision of floor personnel on hand washing, sources of microbial contamination, water quality, proper cleaning and sanitation of food preparation surfaces, usually finds its way from the plant back to the home. Many food line workers are women responsible for meal preparation at home. The employees of firms with good plant hygiene programs tend to have households with lower rates of diarrheal diseases.

C. The review of differing market requirements for product safety usually sparks a debate on export market development and common industrial standards that can lead to changes in food safety policy at the national level. Whether it is the application of Codex Alimentarius standards, the establishment of ISO committees to certify national industries, or the review of national codes in the light of USFDA or USDA standards, a heightened awareness arises of conflicting codes and problematic practices that may endanger the national population’s health.

D. There are real private costs in improving food safety programs among developing country agri-processors. As trade policy and national policy pushes the reformation of industrial practice, export earnings may improve and the public safety of the national food system may improve. Public subsidy up to the level that public benefit accrues can make sense to jump-start the process.

E. Food borne illness reporting and public health agency response is lacking in many parts of the world, both developed and developing. The U.S. has a comparative advantage in providing this type of assistance.

F. Consumer movements are establishing themselves in emerging markets. Their capacity to provide public information to consumers through newspapers, radio, and television can help promote regulatory change and enforcement of food safety provisions. In Morocco, the consumer movement began publicizing the health problems associated with unsanitary abbatoirs and helped launch a campaign to clean up the food preparation practices of street vendors in major metropolitan areas.

G. When a country's food industry starts broadscale adoption of food hygiene and food safety programs they create a demand for sanitation equipment, supplies, and services. Exports may finance their entry, but suppliers and services then become accessible nationally to a much broader set of national food service providers. They begin to reach the military messes, hospitals, company cantines, schools, and enventually small restaurants and street vendors.

H. Even the best technical solutions do not solve the problem of large, wealthy offendors if arcane procedures and parallel channels permit bribes to release products that have failed food safety inspections. The link to export regulatory programs, particularly in an era of rapid change on the fair trade front, has begun to require more regular application of laws to all manufacturers.

I. Products prepared with good food safety controls tend to have fewer problems with spoilage in national distribution. As feedback from consumers to retail outlets, national retail outlets start selecting more reliable processors.

J. The categories of products that are universal points of concern, whether for national or export markets are the same: fish, milk and dairy products, meat and poultry, and infant foods.

E. Effects of Food Safety Programs on the Growth or Preservation of Export Market Access in the Face of Growing Regulation of the Processed Food Industry

Most developing countries have spread in agri-processor modernity, technical staffing, scale, etc. The effects of food safety programs are going to be different across these groups. Each export market has its own approach costs. Consequently, an industry cannot comply with all markets' requirements with one set of regulations. The public choice boils down to which markets are of most importance today, and which ones promise growth tomorrow. The answers to this question can be surprising as developing countries from mainly rural to mainly urban. Rapid middle class growth can lead to quickly expanded national market for processors. Food safety programs need to stay abreast of demographic patterns (rural/urban, dual couple outside the house employment, commercial food service development). If national policymakers and the agri-processing industries do not follow these trends and adapt, the current movement to liberalized trade and general tendency towards tariff

reductions means that large producers of good quality, safe products will enter, and eventually control, national markets. The failure of either the private or public sector to act means that a tacit decision has been made to remain a bulk supplier of raw materials or semi-finished goods. The final packer in the country of distribution will meet food safety standards and take most of the value added. On a global level, agricultural commodity prices declining. This means that competition will increase to supply the value added markets. The firms and countries that do not keep up with food safety standards may end up finding that their main foreign competitors end up supplying both their traditional export markets and their own national markets.

F. Design Recommendations for Food Safety Activities

This section lists in summary form a series of design recommendations culled from a broad set of DAI projects that have dealt with agri-processing and food safety. It also supplies a short-list of useful indicators for tracking progress in food safety initiatives.

F1. Priority Products and Problems

1. Fish products are programmatically of highest interest. Almost 55% of U.S. fish is imported. The effects of the Seafood HACCP law promulgated in the U.S. and fully enforceable at the end of 1999 will fall heavily on developing countries. The U.S. and Canada seek regulatory equivalence in the Year 2000 expanding the scope of the impact on developing nations. EU sanitary codes and the certification and decertification of processors of fisheries products has already had a substantial impact on developing countries. The Codex Alimentarius adoption of HACCP principles will further lead to tightening of the regulation of trade. Key U.S. agencies are the USFDA, USDA FSIS, and the National Fisheries Service.

2. Dairy and milk products are mainly national importance in developing countries. While they are extremely important to public health concerns, they do not enter substantially into export trade from developing nations. Key U.S. agency: USDA FSIS

3. Meat and poultry are products of both national and export importance. Key U.S. agency: USDA FSIS.

4. Low acid and acidified vegetable products are important to the international commerce of developing countries. Key U.S. agency: USFDA.

5. Dried products, fruits, nuts, herbs and spices are important developing country value-added exports. Key U.S. agencies: USFDA, USDA FSIS.

Design Recommendation 1. Evaluate the level of problems in agri-processing industries through plant audits done by professionals whose recommendations carry legal liability for them in importing markets - U.S. process authorities, and Federal regulatory staff.

Design Recommendation 2. Estimate product losses, morbidity and mortality from foodborne illness nationally. It helps focus the personal interests of plant owners, managers, supervisors, and employees on the lines. It also points out the educational needs for basic plant and personnel hygiene that has a spill-over effect on the urban working poor and all national consumers of processed foods.

F2. Prioritization of Project Activities

Design Recommendation 3. Look at U.S. and EU legislative/regulatory pipelines for the best indications of when the world's major markets will affect a particular processed product industry. It is best to work with sectoral associations in each market to ascertain what will happen when regulatory changes occur. The WTO changes are interesting at the policy level, but will take substantial amounts of time to translate into enforcement actions at the national level. The U.S. and EU is where the rubber meets the road on the minimum requirements for food safety.

Design Recommendation 4. National policy and regulatory change and implementation. The broader the change envisioned the longer the time required to implement it. Even subsectorally-focused programs are multi-year efforts and require concomitant resources to make a difference.

Design Recommendation 5. Start activities with GMP and now GAP (Good Agricultural Practice) /GMP considerations. These are the foundations for export market success.

Design Recommendation 6. From GAP and GMP activities move to HACCP considerations for processed food products. HACCP is of broad applicability to all processed food product markets.

Design Recommendation 7. Add activities that address specific food processing techniques (Thermal, Aseptic, Drying, Freezing) to group industry participants and introduce technology transfer work with the U.S. private sector.

Design Recommendation 8. ISO 9000 series certification can be a separate or linked track depending on export market destination importance on a product or plant basis.

F3. Sustainability

In most countries, there is no need to create additional public institutions to provide for food safety programs. The rationale is simple, if difficult to implement.

1. A product's value ultimately has to bear the cost of food safety programs. Commercial services are more likely to do this cost-effectively, but may require public assistance (some elements of subsidy) to start.

2. Joint ventures between importing country firms (co-packers, distributors) and exporting country agri-processors is perhaps the best, and least publicly costly, way to ensure that export market regulatory compliance is met, but they take the longest time to develop (three to five years a piece).

3. There are usually a plethora of regulatory agencies and overlapping authorities for food processors. Regulatory, inspection services need clearly defined fee or cost-recovery mechanisms and transparent, science-based observation, sampling, testing, and reporting procedures. Establishing enforcement authority with existing services is preferable to building yet another institution.

4. Continuing education is essential for agri-processors and for regulators, inspectors. In food safety, continuing education can be linked to either public or private national schools and universities. It must be linked to national institutions if USFDA recognition of key training (Better Process Control Schools) is to be had.

F4. Key Indicators for Program Management

While these will vary by program goals and the relative importance of national and export markets, the following have been selected because they can generally be constructed from secondary data sources.

1. Trade flows by product and package size in both volume and value: These can be used to track new product growth and diversification into new markets. A convenient definition of a new product is one that represents less than 5% of prior five years average annual volume. A convenient definition for a new market is one which has imported less than % of prior five years average export volume of the exporting country. The U.S. Bureau of Census or USDA/FAS trade flows provide baselines on flows to U.S.. EUROSTAT is a good source, if a bit slower, for EU baselines.

2. A proxy for the success of food safety programs where countries export to the U.S. is the USFDA Oasis systems port detention records that available on the Web. Programs can construct indicators of detentions by major product and category over past flows and track to show overall change and relative change. An increasing flow with a steady or declining frequency of detentions per unit volume of the food product indicates that good export standards are being enforced. An effective public regulatory program in the exporting nation fixes problems.

3. USFDA CFSAN maintains a list of firms that are on an Automatic Detention list. An exporting country that develops a collaborative relationship with the USFDA will show a decline in the absolute number of firms on the Automatic Detention list.
4. National industrial statistics can be used in combination with export records to determine the number and percentage of LACF-producting firms with Food Canning Establishment (FCE) numbers.

5. Individual firm interviews or questionaires can determine the number of firms exporting to the U.S. who have LACF processes filed with the FDA that have been signed by recognized process authorities.

6. EU certification of national systems for each product group, as having Article 4 equivalence. This is becoming a threshold indicator for a country's ability to trade processed products with the EU.

7. The presence of an FDA-authorized BPCS. For countries where the U.S. is a major export destination, this is a threshold indicator of national institutional commitment to training agri-processors to comply with U.S. regulations. This is probably an optional indicator, as the FDA does not have sufficient course inspectors available to supervise annual or bi-annual BPCS's in very many countries.

8. The presence, numbers and percent of BPCS certified

   a. production or plant managers
   b. government inspectors and laboratory personnel

   c. line supervisors in key plant operations (QC, raw material supply, retort or pasteurization rooms, acidification line, warehousing, transport, sales). This indicator does not require a BPCS in country for the a. and b. level employees. But the training

costs for sending these individuals to the U.S. for the BPCS would be high. These costs might be appropriately subsidized by USAID programs.

9. HACCP plans filed by Seafood processors, percentage representation of seafood subsectors, percent completing annual verification. These are requried elements for exporters to the U.S..
10. Long-term program impact can be measured by progress to obtaining an FDA Memorandum of Understanding for the resolution of problems relative to a processed product or category of products. These take several years to more than a decade to come into being, as they are based on the history of resolution of problems that takes a substantial trading flow to establish.

11. As a corollary impact measure, the public health records can be tracked to follow the change from a baseline on foodborne illness with time. This is only manageable for an agri-processing project when it is limited to key health concerns tied to exportable categories of products that are also consumed nationally.

12. Multiplier effect indicators can include:

    a.Courses offered in GMP/HACCP/LACF/Process controls/Industrial Hygiene and numbers of participants

    b. Cleansing and sanitation product and service company creation and volume of sales

    c. Private laboratory development with food safety capacity in microbiological analysis, container integrity evaluation, and thermal process development

    d. Personnel hygiene training programs in plants and numbers of participants.

ASSESSMENT OF TOURISM FOR SUSTAINABLE DEVELOPMENT IN RURAL AREAS

Summary

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Thematic Areas: Non-Agricultural Natural Resource-Based Industries (Tourism)

A. Abstract

Tourism is becoming a major world industry. Growing at an unprecedented rate, tourism can have an enormous impact on the earth's natural and social environment. The industry depends on a clean, safe environment as its principal "resource," and thus has a vested interest in preserving the environmental and social resources it relies on.

The International Institute of Tourism Studies at The George Washington University has partnered with several organizations to investigate and implement ways to minimize tourism's negative impact while maximizing its economic benefits to the global economy. In the last several years a series of Environmental Management Systems (EMS) designed for the needs of the travel and tourism industry has emerged to address this situation. The concept of EMS is relatively new in the area of travel and tourism. However, benchmark examples such as the GREEN GLOBE Destination program and the Certification in Sustainable Tourism Program (CST) of the Costa Rican Tourism Institute are proving that an EMS can help minimize the negative environmental impact of tourism while increasing the economic sustainability of a destination, community, or individual property.

B. Impact of Environmental Management Systems for the Travel and Tourism Industry

- Decrease negative environmental impact of tourism
- Create economic alternatives to more destructive industries, such as logging
- Empower local community and enterprise owners to actively protect the natural resources of an area
- Afford economic benefits by reducing costs while increasing efficiency
- Provide an equitable skill set to the local community

C. Constraints, or Ways Impact Could Have Been Increased

- Greater participation in EMS throughout the world
- Increased consumer demand for environmentally friendly tourism destinations and services
- Lack of availability of funding for developing areas and programs

D. Suggestions for Future Implementation of an Environmental Management System

- Utilize an existing EMS framework wherever possible
- Seek external assistance to ensure a legitimate, fair auditing and monitoring system
- Involve training, especially in areas where the local human resource pool does not have travel and tourism experience

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Detailed Description

A. Introduction

By some accounts, travel and tourism is the world's largest industry, and is expected to enjoy continued growth well into the next millennium. Estimates show that by the year 2005 the travel and tourism industry will generate 900 million international travelers, 300 million new jobs, and will gross US $7.2 trillion.

These figures mean tourism will continue to have an enormous economic, environmental, and social impact around the globe. More and more countries are choosing to develop tourism as an economic generator, either where other industries have failed (e.g., agriculture, manufacturing) or in areas where no prior economic activity existed. As tourism increases, so does its global impact. However, the type of tourism and the manner in which it is developed dictate what long-term benefits or problems a destination will encounter. For tourism to benefit the local community as well as the regional and national government, it must be developed in an economically, environmentally, and socially sustainable manner. The absence of just one of these elements will likely result in such negative impacts as economic failure, cultural denigration, and natural resource exploitation.

The threat of tourism's negative impacts has caused many to shy away from tourism. However, the enormous increase in tourism arrivals and receipts worldwide makes it impossible to ignore tourism as an economic development option. Just like any other industry, tourism has a "right" way and a "wrong" way. By following established examples of sustainable tourism development, such as the adoption of quality management systems or the implementation of environmental management systems, paired with adequate training, any area can develop a tourism "product" that benefits those most directly affected by tourism, the local community.

The International Institute of Tourism Studies at The George Washington University. For more than two decades, The George Washington University (GW) has been a pioneer in tourism management, education, research, and technical assistance. GW was the first university in the United States to offer a master's degree in tourism administration. In 1988, it created the International Institute of Tourism Studies (IITS), the first university-based World Tourism Organization Center for Tourism Education and Research. In addition, GW also offers a BBA, MBA, and Ph.D. with concentrations in tourism and hospitality management.

In addition to "traditional" education, experience and research has led GW to become involved in non-traditional activities such as just-in-time training or short, targeted programs intended to fill immediate tourism training gaps, easily customized to the needs of the audience. The most innovative of our training programs is the Tourism Destination Management and Marketing Certificate Program (DMP), which is designed for those working in tourism-related areas such as economic development, investment promotion, planning, protected area management, historic preservation, cultural resources, performing arts, museums, small business development, sports and recreation, and transportation. The DMP follows the example set by its sister program, GW's highly successful Event Management Program.

Training is key to development, particularly in the case of tourism. However, training should be just one element of a larger, well-structured comprehensive organizational framework. In many areas, either the adherence to a Quality Management System (QMS) or the implementation of an

Environmental Management System (EMS) provides the framework necessary for tourism development that benefits the social, environmental, and economic situation of an area. This type of development should be stakeholder driven, attempting to address the needs and concerns of all those who will effected by the creation or expansion of tourism.

B. Quality Management Systems, Environmental Management Systems, and the Tourism Industry

In 1992, Agenda 21, a comprehensive program of action to achieve sustainability, was adopted by 182 governments at the Earth Summit in Rio de Janeiro. After adoption of the program, the World Travel and Tourism Council (WTTC), the World Tourism Organization (WTO), and the Earth Council gathered to translate the guidelines highlighted in Agenda 21 into an action plan for sustainable development within the travel and tourism industry. They agreed that the framework to be followed by the industry should be based on the Rio Declaration on Environment and Development, from which they adapted the following guiding principles[16]:

- Travel and Tourism should assist people in leading healthy and productive lives in harmony with nature
- Travel and Tourism should contribute to the conservation, protection and restoration of the Earth's ecosystem.
- Travel and Tourism should be based upon sustainable patterns of production and consumption
- Nations should cooperate to promote an open economic system, in which international trade in Travel and Tourism services can take place on a sustainable basis
- Travel and Tourism peace, development and environmental protection are interdependent
- Protectionism in trade in Travel and Tourism services should be halted or reversed
- Environmental protection should constitute an integral part of the tourism development process
- Tourism development issues should be handled with the participation of concerned citizens, with planning decisions being adopted at local level
- Nations should warn one another of natural disasters that could affect tourists or tourist areas
- Travel and Tourism should use its capacity to create employment for women and indigenous peoples to the fullest extent
- Tourism development should recognize and support the identity, culture, and interest of indigenous peoples
- International laws protecting the environment should be respected by the Travel and Tourism industry

These principles have been a guiding force in the work of GW, GREEN GLOBE, and other organizations involved in tourism development. However, for the guidelines to be utilized, they must move from a conceptual state into practical, real-world applications. As a first step toward this end, quality management systems and environmental management systems for the tourism industry have begun to be adapted and applied to actual tourism development. In the last two decades, the concept of quality management systems (QMS) emerged in an effort to gain consistent performance in meeting specified standards (initially in military equipment procurement and operations). The best

[16] World Travel and Tourism Council, World Tourism Organization and Earth Council. "Agenda 21 for the Travel and Tourism Industry: Towards Environmentally Sustainable Development". p.34.

known QMS in the commercial world is the ISO9000 standards of the International Standards Organization. The implementation of a QMS is intended to assure consumers that a company's products and services will be of consistent quality.

As the importance of environmentally friendly private sector operations grows, the QMS model can be applied to industry operations that affect the environment in the form of an Environmental Management System (EMS). An EMS is defined as a management system that incorporates management commitment, organizational structure, operational practices and procedures, and resources into a documented and implemented environmental policy. By implementing an EMS, an organization can exercise control over its impact on the environment by systematically gathering and coordinating knowledge about those impacts. Implementing an EMS demonstrates a strong commitment to Agenda 21 principles.[17]

Indeed, QMS and EMS have many features in common. These include:

- Documented policy statements
- Appropriately organized management structures with documented responsibilities
- Documented operational and process controls
- Documented quantifiable performance targets
- Record keeping systems
- Self-auditing programs
- Awareness and training programs
- Management reviews

Applying EMS to tourism destinations. The application of the EMS process to tourism destinations is an emerging area of interest. As currently applied, the QMS/EMS and ISO14001 is intended to be used with private businesses or certain public sector agencies and is not designed for use with a tourism destination comprised of many different types of organizations from the public and private sector. However, it does lay a foundation of terminology and processes that will be useful in discussing EMS for tourism destinations. Although there is not yet a substantial amount of direct anecdotal or documentary evidence to examine, we can look to recent work by such groups as GREEN GLOBE and its Destination program (to be explained later in this paper) that illustrate the potentials and pitfalls of the destination-based EMS process.

The rationale behind applying the EMS process to tourism destinations is simple and logical. The natural environment is a valuable resource for most tourism destinations and the aggregate impact from many different sectors of the travel and tourism industry — transportation, accommodations, and tour operations — tends to have a negative environmental effect. Furthermore, the public sector, responsible for many functions that are intended to minimize negative environmental impacts (i.e., waste management, land use planning, transportation infrastructure, biodiversity conservation, etc.), often fails to meet this challenge adequately.

Proponents of destination-based EMS believe that truly sustainable destination management requires a public/private sector partnership in the form of a cooperative management structure that deals proactively with environmental issues. With this in mind, we will be looking closely at methodologies and processes that can be used in the creation of a strategically designed EMS with broad public/private stakeholder support.

[17] Hawkins, Donald and Holtz, Christopher (1999). "Global Environmental Policies and Management Systems in the Tourist Industry" Washington, DC

Where applied, the benefits of EMS include:

- Providing a systematic framework for public and private sector cooperation on environmental issues
- Improving compliance with regulatory requirements and industry codes of conduct
- Reducing public and private sector operation costs as greater energy/resource savings are achieved
- Increasing competitive advantage in the market for "green" tourism destinations
- Creating a practical mechanism for pursuing the Agenda 21 principles of sustainable development.

Below we detail examples of Environmental Management System programs that GW is currently involved with.

C. GREEN GLOBE

GREEN GLOBE (GG) is a world-wide environmental management and marketing program for the Travel & Tourism industry. GG has more than 500 members in 90 countries; established destination environmental improvement initiatives in Asia, Europe, Middle East, Latin America and the Caribbean; and a global certification process partnered with SGS, (Societe Generale de Surveillance, S.A), the world's leading verification bureau. Its prime objective is to provide low-cost, practical ways for all travel and tourism businesses to undertake practical improvements in environmental responsibility. GG was established in 1994 by the World Travel & Tourism Council (WTTC), along with a global coalition of industry chief executive officers, and spearheaded by Dr. Maurice Strong, chairman of the Earth Council and former secretary general to the 1992 Rio Earth Summit. GG has earned the broad support of the United Nations Environmental Program (UNEP), the World Tourism Organization (WTO), as well as 27 international tourist industry associations.[18] GREEN GLOBE has two major areas of development, the GG Destination program and the GG Certification program, both of which are explained at length later in this document.

In 1998, the International Institute of Tourism Studies (GW), the WTTC, and the GREEN GLOBE International Office formed the GREEN GLOBE Alliance. The principal focus of the alliance includes expansion of GG's environmental audit systems to include travel and tourism destinations for accreditation and certification; identifying funding sources for destinations in need of substantial environmental remediation or sustainable development; and serving as a best practice clearinghouse. The alliance's goal is to facilitate development of sound environmental management practices for travel and tourism businesses and destinations worldwide.

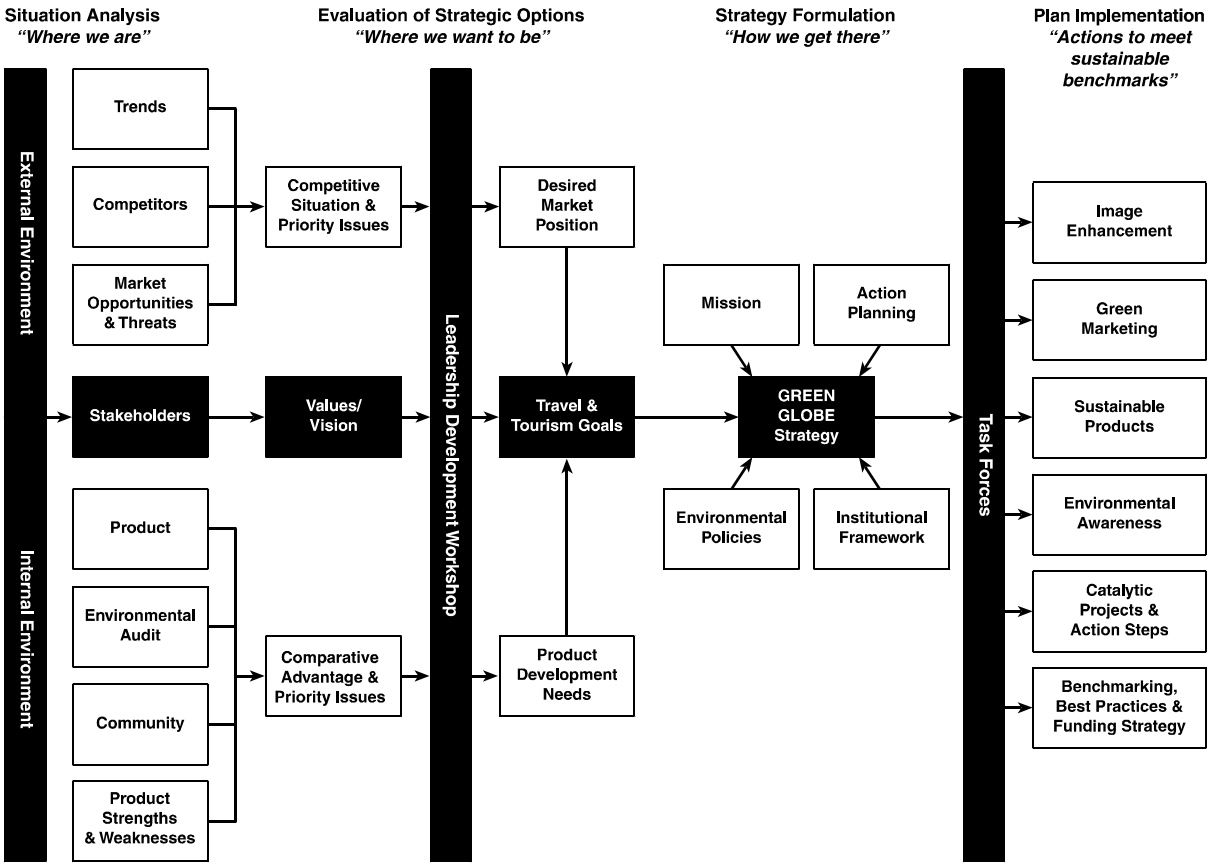
C1. GREEN GLOBE Destination Program

Developing countries are particularly attractive settings for GG activities. They are typically places with high and growing pressures on environmental resources, where environmental policies and conservation activities are inadequate, and in need of economic opportunities. GG programs positively benefit all three issues: reducing environmental degradation, improving environmental policies and implementation, while providing economic benefit. An important collateral benefit occurs from the improved policy environment arising from having a positive affect on environmental conditions not directly associated with the tourism effort. It is a highly cost-effective way to implement USAID environmentally related development objectives while at the same time improving the local economy.

[18] World Travel and Tourism Council. (1998)

The process to become a GG Destination begins with an exchange of communications between GREEN GLOBE and the destination sponsor of the partnership group. A formal agreement is negotiated outlining financial arrangements, timetables, outputs, priorities, and methodological approaches through an MOU or contractual procedure. The framework illustrated in Figure 1 below outlines the steps involved in strategy formation and action planning.

Figure 1. GREEN GLOBE Strategy & Action Planning Framework



Environmental audit. The process begins with a preliminary environmental audit, which would entail the following: a) performing a situation analysis of current tourism industry structure and marketing policies, (b) analyzing existing and planned infrastructure for environmentally sustainable tourism, (c) performing a comparative advantage analysis focused on natural and cultural heritage potential for sustainable tourism development, (d) studying local and national policies for the environment, (e) gauging current levels of environmental awareness, and (f) identifying priority external issues related to the competitive situation and internal issues related to the comparative advantages of the destination.

Sustainable tourism draws on the natural strengths of a community to create visitor attractions that are economically profitable, and environmentally and culturally sustainable year after year. Sustainable tourism should meet the demands of host communities and tourists, while preserving the resource base for future generations by fulfilling economic, social, and aesthetic needs. It involves best practice management techniques, minimizes negative impacts, maintains the cultural and environmental integrity of a region, and creates opportunities for employment and improved local

well-being. Sustainable tourism engages all stakeholders in the tourism development process — government, tourism businesses, local communities and visiting tourists — in a long-lasting, positive relationship.

Leadership workshop. The next step in the process is to plan and conduct a GREEN GLOBE Leadership Development Workshop. The workshop will be targeted toward tourism leaders and key stakeholders from government, NGOs, the private sector and tourism-related interests. The workshop enables participants to create a unified vision for sustainable tourism development, establish clear directions, and develop action plans they can immediately begin to implement to achieve specific goals. A unified vision for environmentally sustainable tourism for a destination can also help attract additional funding and investment from outside donor agencies and domestic/foreign investors and business sources.

The leadership development process helps stakeholders within the various sectors of the tourism industry to:

- Define the destination's current competitive situation with respect to both the perceived and actual contributions of the tourism industry to sustainable development

- Develop a vision and mission with a realistic potential for enhancing the destination's environmental management practices and potential for developing environmentally sustainable tourism actions that are economically sound

- Formulate action strategies that are realistic, consensus-building, fundable, and well integrated with other tourism industry planning and marketing efforts
- Strengthen the destination's capacity for strategy implementation, monitoring and continuous improvement using measurable environmental and economic indicators

Developing actions. Following the workshop, task forces meet to develop specific actions to be undertaken. Measurable "performance outcomes" or "critical success indicators" are established as benchmarks to be used in the monitoring and evaluation processes. With input from the task forces and the destination sponsor, GG provides a draft strategy and action plan document for consultation with funding partners and others. The document does the following:

1. Sets out the policy heads for further analysis and detailed assessment
2. Identifies strengths and weaknesses in current environmental policies and management within the tourism industry
3. Identifies new opportunities for environmentally sustainable tourism development, including catalytic projects, products, and remediation actions
4. Compares the relative position enjoyed by the country in relation to other destinations undertaking GREEN GLOBE Destination studies
5. Identifies opportunities for the business community to develop new business and attract additional investment
6. Offers marketing advice in relation to ecotourism and other green tourism opportunities

The purpose of this report is to outline the strategic framework, which includes a specific plan of action, targeting priority projects for the future GREEN GLOBE Destination implementation.

Progress review. The final phase of the project is to review the destination's progress with regard to formal designation as a GREEN GLOBE Destination. Evidence that the destination has achieved

performance outcomes, and results of the "success indicators" specified in the strategy and action plan are presented to an independent certifying body — e.g., SGS. Destinations receiving certification are awarded official GREEN GLOBE status.[19]

The following locations are in the process of becoming GREEN GLOBE destinations:

- Island of Jersey, United Kingdom
- Philippines — 3 sites with support from Department of Environment & Natural Resources & UNDP
- Dominica, Caribbean
- Cape area of South Africa
- Two areas in Scotland — Aviemore & Scottish Borders

C2. Property-Based Environmental Management Systems

The creation of property-based EMSs to guide site audits and monitoring processes, and in which to anchor certification processes, is a new phenomenon in the travel and tourism industry and one without a defined standard thus far. This is generating mounting confusion within the industry over what environmental standards, which criteria, and whose certification program to use. The advent of EMS into tourism is based on the success of EMS operations in other industries, the perceived market benefits of independent certification of environmental standards for individual tourism enterprises, and a demonstrated growth in demand for environmentally friendly or "green" tourism destinations in major outbound markets. EMSs are desirable because their adoption can reduce operation costs through energy and resource savings, improve internal management methods, reduce liability/risk from environmental deterioration, improve a property's image in the area of environmental performance and compliance with regulatory requirements, and open opportunities for profit in the emerging market for "green" tourism destinations. The overall benefit of a properly designed and administered EMS is its ability to provide credible and objective assurance to inbound markets that the environmental conditions in a particular property or destination are of a higher quality than those of competing locations.[20]

C3. Certification in Sustainable Tourism Program[21]

The Certification in Sustainable Tourism Program (CST) is one of the fastest growing certification programs for Central America and the Caribbean. The Costa Rican Tourism Institute designed this program to differentiate tourism sector businesses based on the degree to which they comply with a sustainable model of natural, cultural, and social resource management. To this end, four fundamental aspects are evaluated:

- Physical-biological parameters — evaluates the interaction between the company and its surrounding natural habitat
- Infrastructure and services — evaluates the management policies and the operational systems within the company and its infrastructure
- External clients — evaluates the interaction of the company with its clients in terms of how much it allows and invites the client to be an active contributor to the company's policies of sustainability

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[19] *Best Practice Sustainable Tourism Approach*: GREEN GLOBE Destination Strategy and Action Planning **,** London, United Kingdom, p.1.
[20] Holtz, Christopher (1998), *Sustainable Tourism Best Practices,* Washington, DC: The George Washington University, p. 28
[21] Certification for Sustainable Tourism Website. "What CST is all about" http://www.turismo-sostenible.co.cr/EN/sobreCST/about-cst.shtml. 9/15/99

- Socioeconomic environment — evaluates the interaction of the company with the local communities and the population in general

The CST system is designed to include incentives that will increase in benefits for each company, in direct proportion to its increased rating. This means that as the rating increases, more and better benefits for companies; international and national publicity and promotion, specifically designed for the CST; training for its personnel; priority participation in various world tourism fairs and events, etc.

D. Case Study: Hotel and Resort Environmental Management Systems in Jamaica

Following is an example of EMS implementation at the hotel level. The hotels certified in the case study represent the first GG-certified hotels in the world. However, many other organizations, such as CST or Green Seal, provide hotel certification programs.

The Environmental Audits for Sustainable Tourism (EAST) project in Jamaica, funded by the U.S. Agency for International Development (USAID), is a program of audits within a corporate environmental management system aimed at the tourism and hospitality sector. The EAST project was implemented through the Jamaica Hotel and Tourist Association, with assistance from GREEN GLOBE and Hagler Bailly.

As of June 1999, 26 hotels were audited in Negril, Ochos Rios, and Port Antonio. Five hotels received GREEN GLOBE certification. Six hotels received a Statement of Intent.[22] The first hotels to receive certification in Negril were the Negril Cabins, Sea Splash, Hotel Mocking Bird Hill, and Sandals Negril. The EAST project continues to certify new hotels as they meet the criteria outlined by the EMS audits. In addition, GG is working with other sectors of the tourism industry toward environmental awareness and, in some cases, EMS implementation.

The project's objectives are to:

- Develop greater awareness and understanding of the benefits of environmental management systems and audits among the tourism and hospitality sector

- Upgrade the technical skills of Jamaicans who are expected to conduct audits and advise on environmental systems

- Assist a select representative number of tourism-related establishments in carrying out environmental audits

- Help finance selected audit recommendations, on a cost-sharing basis, in order to demonstrate the financial benefits of the systematic application of environmentally friendly practices.[7]

The EAST program facilitated the development of a formal EMS within the participating hotels and resorts through which management and staff could exercise clear operational control over their impact on the environment. EMS implementation has also resulted in significant operational cost savings by increasing the efficiency of resource use. The participating hotels and resorts received technical assistance through the EAST program to conduct an audit of the environmental impacts of

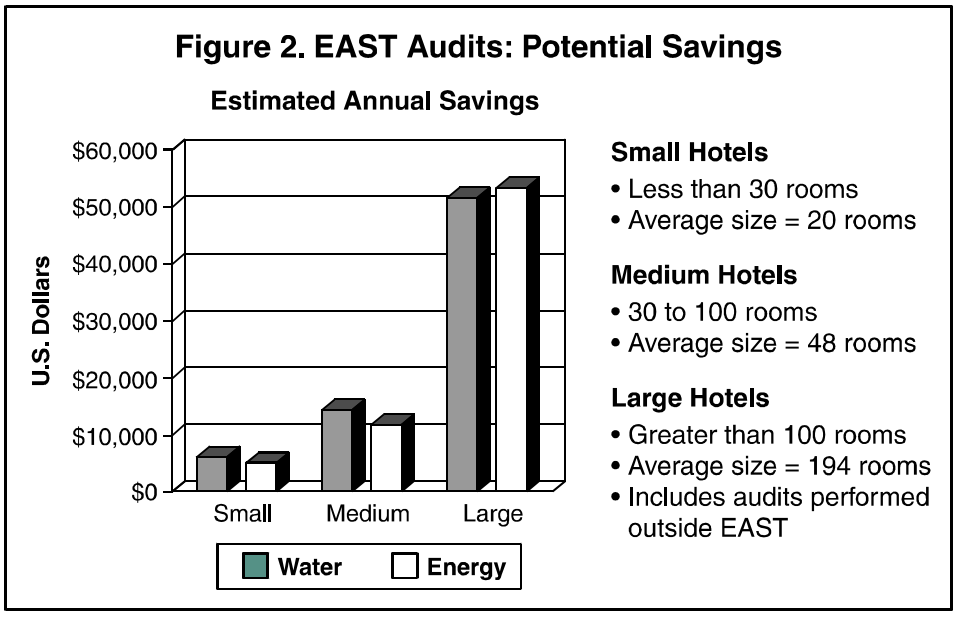
[22] Meade, Bill. Information provided by Hagler Bailly Overview of EAST presentation. 9/9/1999.

their operations and develop an EMS for implementation. The areas addressed in the environmental audit included:

- Water use
- Energy use
- Solid waste generation
- Generation of pollutants
- Use of hazardous substances
- Generation of emissions
- Damage to the ecosystem

Hotels are among the first to gain substantial economic benefits by implementing an EMS. For example, in the case of one of the hotels involved in the EAST project, the rise in its water use index is costing one property J$2,270,000 (US$63,055) per year in higher water bills. In addition, if no changes were to be made this amount will increase to J3.4 million (US$94,500) per year once the sewage surcharge is in effect.[23] However, based on the recommendations made by the EAST audit, the property was able to moderate its water usage.

As shown in Figure 2 below, substantial savings can be achieved in both water and energy consumption by implementing recommendations resulting from an EMS audit.



D1. Lessons Learned

The general findings from the EAST audits included:

- Inefficient use of energy
- Inefficient use of water
- Excessive and unnecessary use of chemicals

[23] Hagler Bailly. (1998) "Environmental Audits for Sustainable Tourism (EAST) Phase II Final Project Report. Hagler Bailly, Arlington, Virginia, p. 6.

- Excessive solid waste generation
- Lack of adherence to staff operating procedures
- Poor (or no) monitoring[24]

The audits found great variation in water and energy utilization within the participating hotels. Those deemed "most efficient" consumed 116 imperial gallons of water and 8.7 kWh of electricity per guest night compared to the "least efficient" hotel, which utilized 351 imperial gallons of water and 39.2 kWh of electricity per guest night. The average hotel used 216 imperial gallons of water and 21.4 kWh of electricity per guest night.[25]

It was found that once the audits were completed, implementation of simple and easy changes would result in substantial savings. It was also established that the greatest environmental and financial benefits could be achieved by improving frequent monitoring, management supervision, staff practices/training, and preventative and routine maintenance.[26]

The cost of implementing the recommendations for the average hotel was, in most cases, minimal. To better visualize these costs, they were broken down by room. For example, 78% of the recommendations would cost less then US$10 per room to implement, 19% would cost from US$10-50 per room, and 3% would cost more than US$50 per room.[27]

The payback period for the majority of the recommendations is extremely short. According to EAST, 62% of implementations would require 2 months to earn back their cost, 36% could be made up within 2-12 months, and the remaining 2% would be recaptured in less than 1 year.[28]

E. Environmental Management Systems Training Program

Hagler Bailly, GW, and GREEN GLOBE have currently partnered in the development of an EMS training course curriculum for both customized and distance learning deliveries worldwide. Puerto Rico and Hawaii will be utilized as pilot projects, focusing on coastal tourism EMS. This curriculum will build on GW's existing Tourism Destination Management and Marketing Certificate Program and the hotel EMS training course developed by Hagler Bailly and GREEN GLOBE for the EAST project.

Once implemented, the pilots can serve as models for development of similar training content offered in other locations physically or via Internet distance learning delivery. The subject area, which could be expanded, would initially encompass training, strategic environmental assessment, and investing in the environmental certification process, among others.

Specific application modules will be developed for destination businesses — hotels and resorts, cruise operations, airports and aviation, tour operations, and attractions. In addition, specific training for auditors of each of the above-mentioned areas is currently being developed.

[24] Meade, Bill. (1999) Information provided by Hagler Bailly Overview of EAST Presentation. Hagler Bailly, Arlington, Virginia.
[25] Ibid.
[26] Ibid.
[27] Ibid.
[28] Ibid.

F. Conclusion

Tourism development is a global phenomena that has yet to come close to its full potential. As this growth continues, more and more destinations want to jump on the proverbial bandwagon. However, while the promise of tourism dollars is very attractive, tourism must be planned properly to ensure its own sustainability and that of the community in which it is developed. There is no cookie-cutter model for tourism development. However, more and more, smart tourism planning, where all affected stakeholders are included, is helping to minimize the negative and accentuate the positive impacts of tourism. Tourism does not have to be destructive.

Tourism finds itself in an interesting conundrum: the industry is dependent on the preservation and protection of the very resources it must utilize to develop. Therefore, tourism should maintain a vested interest in the social and environmental well-being of its product to obtain economic sustainability. Tourism development that does not maintain its cultural and natural resources is in danger of jeopardizing its most important sales asset, that unique quality the area maintains that makes people want to travel there.

Summary

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A. Abstract

Due to resource constraints, agricultural policy decisions are frequently made on the basis of very little practical knowledge of how agricultural sectors actually function and how they are likely to respond under changed policy conditions. In the absence of such practical insights, political economic forces are likely to hold sway over economic analysis, as competing interests prevail upon policy makers to decide in their respective favors.

The application of AIRD's approaches to agro-sector policy analysis is described here under three quite different political and economic conditions:

- Preparation to undertake agro-environmental investments to promote sustainable agricultural sector diversification in the absence of functioning public institutions (Haiti)
- Undertaking agricultural market assessments to inform policy reform decisions in an economy transitioning from command to market driven incentives (Romania)
- Undertaking an integrated agribusiness analysis, looking at a broad range of economic variables involved in turning a primary commodity (white maize) into a processed foodstuff (tortillas) (Mexico)

B. Impact of this Work

The direct impact of AIRD's agro-sector policy analyses has been superior policy decision making by agricultural policy makers in developing countries.

Indirectly, donors have appreciated this approach, and are now contracting with AIRD to synthesize these experiences in toolkits (Salinger, 1999), handbooks, and web-based instructional materials for the benefit of staff and clients alike.

Ways AIRD's impact could have been increased. There are always opportunities to increase the impact of one's work. Unfortunately, many of these are resource-dependent. To the extent that additional resources (calendar time as well as donor monies) are available, more emphasis should be placed on developing local capacity to design, implement, or at least collaborate with this kind of analysis.

C. Lessons Learned and Success Factors

The cases examined here suggest five lessons for future implementation of policy analysis to support new investments and new policy directions in agricultural sectors:

- *Exploit local expertise, assure analytical rigor*. Local experts are able to provide a much more complete context for understanding the behavior of local markets and the actual application of policy. This knowledge is critical in interpreting the real impact of policy on the agricultural sector and in proposing effective solutions. What is sometimes missing from the "local" understanding of policy effects are an understanding of new methodologies and comparative experiences across countries. Teaming local expertise with expatriate economists is an effective way to provide rapid but accurate assessments of the likely behavior of agricultural sectors as a result of new investment or policy changes.

- *Use comparative approaches to overcome inadequate data.* In many developing country contexts, price data and technical coefficients are inadequate. In these cases, comparative approaches provide a means to overcome these lacunae.

- *Address complex issues with multiple analytical approaches*. Agricultural sectors are complex systems involving multiple actors interacting in the presence of many unpredictable exogenous factors, yet economic models to explain their behavior must simplify based upon underlying assumptions. Application of several economic approaches to the same problem therefore provides a fuller picture of reality. These cases argue for multiple methods to be applied in sectoral analysis.

- *Place the assessment of sector issues in the larger political economy context*. Decisions to address agricultural sector constraints are made in a larger context of pressures on decision makers by a host of economic and political interests. Understanding these pressures is necessary to make a realistic assessment of how policy will be applied and thus judge what are likely to be its consequences.

- *Sustain good policy by building capacity to use it*. An important complementary activity to undertaking good policy analysis must be building the local capacity to understand and apply it. This requires that resources be committed by government to monitoring and evaluating current policy.

D. For Further Information

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Detailed Description

A. Purpose of the Activities

Agricultural policy makers are constantly called upon to make judgements that will affect the livelihoods of vast numbers of rural households and firms in their sectors as well as countless consumers of the products of their sectors. Sometimes these decisions relate to individual variables (such as a price or a tariff rate), sometimes they have to do with the way the meso-economy functions, and still other times, they face decisions with regard to long-term investments for the strategic development of their sectors.

Due to human capacity and other resource constraints in agricultural ministries and related local research institutes, these judgements or policy decisions are often made on the basis of very little practical knowledge of how the agricultural sector actually functions and how it is likely to respond under changed policy conditions. Often policy makers are not even convinced that agricultural performance indeed *will* respond to changes in policy conditions. In the absence of such practical insights, political expediency is likely to hold sway over economic analysis, as competing interests prevail upon policy makers to decide in their respective favors.

Over the last 20 years, AIRD has developed an array of policy analysis approaches and tools to assist policy makers to overcome these constraints. These have been built using simple rapid appraisal techniques. Their focus is to collect sufficient data in a timely fashion to allow analysts to construct indicators of market structure and behavior. These indicators can guide policy decisions making by modeling shifts in market variables which will result from policy changes. AIRD's models of agricultural sector structure and behavior can also be updated easily in order to trace sector evolution over time.

The application of AIRD's tools of agro-sector policy analysis is described here under three different political and economic conditions:

- Design of investments to promote sustainable agricultural sector intensification in the absence of functioning public institutions (Haiti)

- Informing policy reform decisions in an economy transitioning from command to market driven incentives (Romania)

- Evaluating the implications of a radical liberalization of sector policies affecting the most important agricultural commodity and staple food of an economy (white maize in Mexico)

B. Assessing the Opportunities for Agricultural Intensification in Haiti

For the past two years AIRD has helped the Inter-American Development Bank and the World Bank design investments to intensify agriculture in Haiti in the context of political paralysis, a nearly non-functional agricultural ministry, and a highly risky private investment environment. Objectives of the design activities were to identify investments that would be economically profitable and both environmentally and institutionally sustainable in such a climate. The almost total absence of recent data on the agricultural sector required that the analysis be conducted based upon expert opinion and rapid reconnaissance information. Given the highly uncertain nature of the policy environment

underlying all investment options, the investment designs sought interventions that would become sustainable without public sector support beyond the project.

B1. Brief Background

Over the past 30 years, the agricultural sector in Haiti has regressed as a contributor to the national economy. Productivity per unit area is stagnant and productive agricultural land area is being lost to erosion and the encroachment of other land uses. As a result, the role of the agricultural sector in Haiti is shrinking in both relative and absolute GDP s, while the country's agriculture-based population continues to grow at a rapid pace. The juxtaposition of the shrinking value-added from the sector versus the rising number of households struggling to make their living from it explains the continuing impoverishment of these populations.

Irrigation investments have been a focus of efforts to intensify agriculture in the past, yet the record of these investments is poor. Currently, as much as five-sixths of the area developed for irrigation is not currently irrigated, and on land that is irrigated, yields remain well below norms in other countries with similar natural conditions. In upland and dryland conditions, intensification is also lacking, as very few farmers use improved seeds or other modern inputs. This lack of recourse to improved inputs is not inevitable, however, as other countries with very similar natural endowments have been able to move in the opposite direction.

B2. Data Collection and Analysis

Two analyses were based on information and documentation collected during very brief (one-week trips) to Haiti between November 1996 and December 1998. In both cases, the analyst worked with other specialists (agronomist, agribusiness specialist, phytosanitary specialist, irrigation engineer, and hydrologist) first to develop a common understanding of the situation in the field and then to devise a feasible strategy to advance agricultural intensification.

The analytical tools applied in Haiti included both standard cash flow-based cost-benefit analyses of the proposed investments, and an analysis of effective protection for each commodity which the investments proposed to promote. This latter analysis was not typically a component of donors' investment analyses, but was valuable in revealing both the current distortions of the policy environment in Haiti in which the investments were being proposed, and the likely impact on the investments of various possible changes in that environment.

The analytical conclusions of the Haiti work revealed, first, a continued policy bias in favor of low-valued, import-substituting staples (e.g., rice, maize, sorghum) despite much less attractive opportunities for intensification in these commodities. Second, the analysis documented the negative effects of several input subsidy programs for fertilizers and seeds. These programs have a number of programmatic flaws that discourage agricultural intensification by increasing market uncertainties and crowding out private actors. They also have negative distributional effects, benefiting wealthier farmers. Third, the analysis demonstrated that the greatest opportunities for investment appear to be in traditional export crops (e.g., coffee, cocoa, mangos) and higher-valued, tropical, often perishable, products with potential to meet "niche" market demand in the United States, Canada, and Europe. A fundamental objective of the strategy subsequently elaborated was to develop reliable supply of exportable quality produce. These export opportunities also required the support of official services to meet phytosanitary requirements and created a framework for securing and recouping investments, contracting growers, and securing seasonal credit.

Overall, the analyses found that strong arguments exist for investment in agricultural intensification in Haiti. First, there is substantial agronomic scope for raising yields in Haitian agriculture. Second, low relative costs of labor give Haiti a strong comparative advantage in labor-intensive agricultural activities. Third, Haiti possesses natural marketing advantages for high-valued export crops which are yet to be exploited.

Arguments against more investment to intensify agriculture rightly point to the poor record of past efforts in Haiti. Important reasons that past efforts have failed include the poor economic policy environment for agriculture, and the deterrent effect on private investment of broader social and political instability.

Many of the reasons for these failures have been or are being addressed. Most importantly, economic policy for much of the seventies and eighties created a very strong disincentive to agriculture, particularly for exports. Three of the four responsible factors have recently been addressed. First, explicit export taxes on traditional exports (coffee and cocoa) have now been eliminated. Second, an implicit tax on exports created by the requirement that 40% of foreign exchange earnings be remitted to the government at an unfavorable exchange rate has also been eliminated. Third, high taxation of many of the inputs to agriculture, which had created negative effective protection for agriculture, have been reduced to reasonable levels and tax rates have been harmonized. Lastly, the exchange rate has been consistently overvalued. This problem remains, although liberalization of the exchange market, the recent discipline of the Central Bank in controlling inflation, and efforts to tighten fiscal policy demonstrate the government's commitment to achieving stable exchange rates.

In addition to economic policy, social and institutional issues have disrupted investments in agriculture. For instance, political insecurity has created a strong negative impact on any intentions to invest in agriculture. Moreover, the lack of clear land tenure for most individual farmers has strongly dissuaded them from long-term investment in agriculture. Hillside degradation resulting from the short-term strategy of "mining" of agricultural resources has, in turn, created further enormous costs for downstream agriculture.

Today, many of these issues are being addressed. Problems of political instability are being countered by the progress being made towards democratization of the political process in Haiti. Simultaneously, efforts to strengthen civic institutions and the rule of law are in progress. Land tenure security is being fostered by efforts to reform land law, create institutions to give clear title, and resolve disputes.

B3. Direct Impact

The direct impact of the analyses undertaken by AIRD was to advance both proposed programs for investment in agricultural intensification. In the process, the focus of the investment strategies for both IADB and the World Bank was strengthened to include addressing the underlying constraints to success in agricultural intensification.

Specific project design measures that were identified to assure that investments were tailored to the local economic and sociopolitical environment included:

- Coordination of downstream and upstream investments through integrated watershed management institutions

- Assurance of the sustainability of water control investments by making water users responsible for management and maintenance of water delivery infrastructure

- Demonstration of a secured land tenure for a large share of beneficiaries of public investments required as a prerequisite for investments

Some more general “best practice” recommendations for Haitian agriculture that flowed from analysis of experiences there include:

- In considering investments, it is important to include consideration of reform of sectoral policies in agriculture to encourage private investment in input markets and in the production of higher valued, exportable produce.

- An investment program should continue support to private sector testing of environmentally sustainable production technologies in target ecological niches for crops that can be produce competitively for export.

- Promotion of export association sponsored measures to comply with import standards in target markets is vital to success.

- Affiliation with community-based associations should be one component of the strategies which need to be developed to reduce exporter risks in backward investment in production.

C. Evaluating Effective Protection in A Transitional Economy: Livestock in Romania

In 1996 the World Bank needed to understand the structure of agricultural incentives in Romania’s grains and livestock subsectors in preparation for an agricultural sector adjustment operation with the Ministry of Agriculture. AIRD was called in to work with a Bucharest-based agricultural sector analysis unit, created by the Bank. The team’s charge was to document the structure of nominal and effective protection shaping incentives to both state and emerging private producers. Given the weakness of price information due to the incomplete development of competitive markets in the country, and given the dominance of state-managed production operations for which audited accounting by independent firms was non-existent, creative investigations were required to determine structures of costs and profitability.

C1. Brief Background

The agricultural sector in Romania in 1996 was characterized by three types of producers: “state” farms, traditional small private producers, and “emerging private” farms formed from privatized state farm assets. “State” farms were generally the largest and most capitalized, occupied the best lands, and enjoyed the most privileged access to subsidized inputs, especially seed, fertilizer, and credit. Although highly mechanized, much of the technologies employed by state farms were out of date by current standards. Small private producers generally held small plots on marginal lands or in mountainous regions and employed technologies that have not changed over the past century. By comparison, “emerging private” farms were relatively large, recently created from the privatized assets of state farms, and employed modern technologies. Although “privatized,” many of these farms retained some public capital, and some also included foreign investors.

C2. Data Collection and Analysis

AIRD was asked to measure agricultural effective protection for five principal agricultural commodities: pork, poultry, milk, wheat, and maize. These analyses served as the basis for designing reforms to the sector that anticipated removal of heavy subsidies to state farms, elimination of fixed

in favor of market-determined domestic prices, and liberalization of trade to lower tariffs and remove trade quotas.

Romania's transition from a command to a market economy posed a number of issues that influenced the assessment of effective protection. First, access to farm inputs and product markets was still biased in favor of "state farms"[1] in comparison to small farms and to emerging private sector farms, which was expected to skew patterns of nominal and effective protection and thus the patterns of incentives faced by different kinds of farms.

Second, the effects of price reform were expected to vary by region because of regional differences in the historical importance of state versus small private farms and because of differences in the pace of reforms in each region.

Third, the assessment of input/output coefficients for the budget analyses was confounded by the lack of a market economy. Substantial data on aggregate state farm production existed, but disaggregation by production processes was expected to be difficult because of the vastness and complexity of these firms and the "creativity" of the accounting processes used to track these activities. Almost no data were available on smallholder farms because their existence had only recently been "officially recognized." Emerging private farms had a very short track record on which to base production cost estimates.

More generally, in the absence of effective markets for some commodities and in the presence of a multiplicity of controls in markets that did exist, prices for inputs and products were not expected to be good measures of their economic value or opportunity cost.

A final issue that complicated the analysis was the high rate of domestic inflation, which averaged above 40 percent. Because inflation results in an erosion of the real value of all fixed domestic prices, it serves to drive down measures of official protection over time until prices are realigned. In Romania at the time, official prices were adjusted on a biannual basis for each commodity. Yet the official exchange rate was floating and depreciating rapidly. Thus, protection coefficients were expected to vary by roughly 20 percent between corrections.

To evaluate effective protection in this context, the team sought to isolate effective protection by region and farm/firm type in order to explicitly document the biases that each system introduced. For this reason, the team chose to apply a budget-based analysis of effective protection. In this approach specific scenarios of production, processing and marketing systems were identified which were deemed to be typical of each region. Each scenario was then costed at financial and economic prices to calculate the relevant measures of protection.

To undertake this task in a three-week mission, two separate teams were comprised to focus on the cereals and livestock subsectors, respectively. Both spent all but three days outside of Bucharest collecting data. Data requirements for the analysis included: financial costs of production, collection, processing, storage, and marketing; farm and marketing technologies, including input use rates, yields and processing conversion factors; prevailing market prices of inputs and outputs; transport costs and patterns; direct and indirect taxes and subsidies on inputs and products; and breakdowns of economic prices into tradable and non-tradable components.

[1] The term "state farms" is a misnomer. Technically, by 1996 they had become "state holding companies," following the 1991 privatization act which established the Romanian citizenry as shareholders in Romanian public enterprises. Nevertheless, these enterprises still operated as public entities. For the sake of simplicity, they are referred to here as "state farms."

Each team first identified the types of production/processing activities that they wished to evaluate. To isolate the differential effects of policy on farm types and regions, the team selected a highly stratified, sample of firms from which to obtain data based on characteristics of asset ownership, geographic region and commodity focus.

To address the difficulties of obtaining accurate data, and in view of the limited period available for its collection, a two-pronged data collection approach was used on large state and "emerging" private farms and processing firms. This involved the simultaneous use of structured questionnaires and qualitative discussion with each enterprise.

On arrival at large enterprises, the team divided into two subgroups. One group focused with the farm/firm director on qualitative issues of management, market behavior, and policy as they affected the firm, while a second group met with the accountant to review the structured questionnaire. The qualitative discussions focused on trying to determine how access to input and product subsidies really worked, how product markets were structured, what drove behavior in the markets for these commodities, how farms managed to gain access to working and investment credits, farm asset and debt structures, and what determined access to production and processing technologies. Interviewees were also asked about non-market distortions and the degree to which hidden transaction costs also figure into the cost equations.

The quantitative assessments sought a consistent costing of one or more typical products of the firm, inclusive of a prorated share of all direct taxes and subsidies that the firm paid or received.

The structured questionnaires were carefully designed to focus only on quantitative production and financial data known to be collected and the divulging of which would not create great opposition. To gain time and give greater transparency to the process, these questionnaires were faxed or mailed to each farm ahead of the visit. This allowed farm management to prepare itself for the interview and greatly increased the efficacy of the contact.

With small farmers/firms, the qualitative and quantitative data collection processes were combined. Unlike large firms, whose use rates and transformation rates for most important inputs were well known, input/output coefficients for these small farms were estimated after detailed recall questioning about inputs used in production processes in the previous year.

To approximate opportunity costs for each input and product, prices paid or received by each farm type in each region were compared to each other and to reference prices for tradable substitutes. A consistent set of "economic" prices for each commodity was then developed from these comparative assessments for each region.

To address the problem of inflation, all analyses were conducted for a specific date in the previous year. Subsequently, different time scenarios of the protection coefficient results were evaluated by revising the price vectors in the analysis to other time periods in which world prices, the exchange rate, and fixed prices were adjusted directly, and all other prices were increased by the pace of inflation from the reference date.

C3. Direct Impact

The study results were sufficiently detailed to provide a clear picture of the pattern of distortions in each commodity market, and their relative impact on profitability of each farm type and region. Moreover, the analysis identified the most important causes of these distortions, and the likely impact

of their removal on profitability for each farm/firm type. Regarding the substantive issues raised above, specific policy conclusions of the analysis included:

- *Regional biases.* The study found no evidence of bias by region in the reception of commodity price subsidies (premia), except for milk premia which were higher around Bucharest than they were outside the capital. Also, targeted, subsidized investment credit programs did not appear to be penetrating rural areas in the north and central parts of the country.

- *Farm type biases.* State farms and large private farms were found to be more aware of, and took better advantage of, public subsidies than did small farmers.

- *Inflation effects.* Due to rapid inflation and fixed prices to producers, real protection levels and real incentives to producers were demonstrated to follow a saw-toothed pattern over time which created a highly uncertain production environment. Time sensitive measures of protection where therefore required to understand marketing behavior at any point in time.

Government policies were found to be disruptive in *virtually all* aspects of the agricultural sector, including resource markets, technology choices, investment choices, storage, input and output marketing, and international trade. The effects of the instability of incentives to producers and the continued disruption of public interference in the sector have created a discouraging environment for producers.

The study concluded that Romania would better serve the agricultural sector by removing government from price determination and from interference in investment allocations, narrowing its enormous expenditures on premia to benefit carefully targeted consumers, and eliminating transfers to uneconomic public firms.

D. Understanding the Food-Market Chain for Maize in Mexico

Following the sudden devaluation of the peso, AIRD was brought to Mexico by the World Bank in 1995 to give policymakers guidance with respect to liberalization of their strategic maize sector, Mexico's most essential food commodity. For political reasons, policymakers in Mexico City were preoccupied with potential regional differences in impact of the marketing reforms already under consideration. In particular, they worried that the lack of competitive wholesale market conditions in certain regions of the country, particularly in the politically unstable southern states, would result in low equilibrium market prices being faced by producers there. A second concern was with regard to tortilla pricing after reforms. Policy makers were concerned that strong oligopsony conditions in the maize agro-processing sector in Mexico would cause tortilla prices to skyrocket, with an especially detrimental effect on Mexico's poorest urban households, who depended heavily on subsidized tortilla consumption for their basic needs.

D1. Brief Background

After the 1992 conclusion of NAFTA negotiations, the government of Mexico's stated policy objective was to eliminate guaranteed prices to maize producers and the generalized consumer subsidy on tortillas. In their wake, a producer income support program and a targeted consumer subsidy program were proposed. Guaranteed producer prices were to be phased out and the national parastatal grain company (CONASUPO) was to become a buyer of last resort of maize in isolated rural areas where, it was feared, transportation bottlenecks would cause farm-gate prices to fall precipitously.

The 1994 devaluation provided an opportunity to accelerate and complete the liberalization process, as the fall in the value of the peso immediately pushed guaranteed prices below equivalent world market prices. However, the government's ability to "manage" the maize sector disintegrated rapidly in the face of cumulative exogenous pressures. As market prices rose following the devaluation and official, guaranteed prices remained fixed, CONASUPO could no longer compete with market intermediaries for maize. As a result of the shortfall of maize into the parastatal, upward pressure on flour and tortilla prices and/or reductions in their availability and/or quality were feared. Alternatively, there was concern that any attempt to shore up CONASUPO's position would burden the federal budget.

D2. Data Collection and Analysis

A team of three economists (cereals economist, livestock economist, quantitative modeler) first visited Mexico for three weeks in February 1995 to evaluate production and marketing issues. A follow-on mission of the cereals economist and a food processing technologist in May 1995 evaluated reform issues relating to the agro-processing subsector. During the initial visit, the mission met with a wide variety of actors in the maize agro-processing sector. In addition to Federal government officials in Mexico City (Ministry of Agriculture, Ministry of Finance, Ministry of Commerce and Trade), the team met with state government officials and public grain trade and storage agencies.

Because of the great complexity of the maize agro-processing sector in Mexico, it was also vital to interview various representatives of the private sector as well, including industrial consumers of grains, grain products, and oilseeds; private producers, producer associations, credit unions, truckers, warehousers, input suppliers, and industrial and small-scale food processors, in three distinct agro-ecological zones of the country. For the agro-processing study, the mission interviewed representatives of the flour, dough mixing, and tortilla baking industries from Mexico City and eleven other states around the country. The two largest maize flour companies, as well as smaller scale mills and bakers, participated in a survey of structural and financial characteristics of their businesses.

To understand the full system of variables affecting the viability of the maize sector after liberalization, the effects of the devaluation needed to be understood at the level of maize production (effects on the domestic parity price of international grain markets, input and factor prices, producer decisions regarding resource allocation), marketing (structure of storage, transportation, marketing credit; market information requirements; processing), international trade, and consumption. The mission also compared incentives in the maize subsector with those in the wheat, beans, and horticulture crops sectors, in order to get a relative sense of producers' resource allocation options across alternative cropping activities.

The cornerstone of the production analysis was a two-product (white and yellow maize) spatial and temporal equilibrium model of the Mexican maize market, divided into eight producing/consuming regions and three urban regions (consumption only) (Salinger, Metzel, Arndt, 1995). The model assessed the extent to which regional market prices in some corners of the country would be adversely affected by both the devaluation and increased regional trade integration under NAFTA over a twelve-month period.[2]

In the analysis of the maize agro-processing subsector, the objective of the mission was to understand the biases introduced by various price, trade, and investment policies; outline a vision of what a liberalized tortilla market might look and act like; trace the policy reform steps which needed to be introduced in order to facilitate a smooth transition to a liberalized maize economy; and predict the equilibrium price of tortillas in different regions, under alternative liberalization scenarios (Salinger and Almeida-Dominguez, 1995).

D3. Direct Impact

The maize sector assessment produced by the team concluded that intra-annual domestic maize price variability would squeeze producers in certain regions where evacuation costs were high and who were obligated to liquidate their surplus immediately post-harvest in order to meet credit repayment obligations. The fall in incentives for maize production post-devaluation relative to those for other field crops was expected to lead to a reduction in maize production, expected to be more pronounced in irrigated regions than in rainfed zones. Producers were expected to move into crops with higher economic profitability (cotton, sorghum, fruits, and vegetables), although continued cultivation of cereals and oilseed crops in high productivity, irrigated zones was also considered likely.

It was also anticipated that rural households, which supply labor to the general economy, would be adversely affected by the devaluation in the short term, as many businesses contract and the demand for labor is reduced. Over the longer run, however, as resources in the Mexican agricultural sector are reallocated into higher value, more labor-intensive crops, such as horticulture, the demand for labor would expand and labor-supplying households would be expected to increase.

On the consumer side, without a compensatory increase in tortilla prices, the subsidy burden to the government budget was expected to increase dramatically with the devaluation. The anticipated devaluation impact on consumers was nuanced by household income class and the relation of the household to the market. The net effect of income and price changes on the national demand for maize was expected to be neutral, as increasing demand in urban areas due to negative income elasticities of predominantly wealthier households would largely compensate for decreasing demand in rural areas due to positive income elasticities of predominantly poor households. Within the rural sector, the increase in maize prices after devaluation would improve incomes for net producers of maize. Net consuming rural households, however, were expected to be more adversely affected by increases in maize grain prices than in tortilla prices due to the fact that a relatively small share of total maize expenditures in rural households were for maize in its processed form.

Assuming that import quota restrictions were relaxed, it was expected that much more extensive use would be made of imports from the U.S., particularly given the much lower cost of storage (due to

[2] The model treated prices, demand by humans (white corn only), demand by livestock, exports, imports, stocks, transport, and CONASUPO purchases as endogenous variables. White and yellow corn were considered perfect feed substitutes. Supply of white corn was injected exogenously into the system based on harvest forecasts, while yellow corn had to be imported. The model also accounted for industrial and specialty demand for maize (about 5% of total demand). The model was written and solved in GAMS, a math programming software.

lower interest rates) in the U.S. compared with Mexico. Under certain scenarios, white maize would actually be exported from Mexico post-harvest and re-imported in September-October prior to the next Spring-Summer harvest.

The spatial/temporal equilibrium model tested scenarios regarding the degree of market liberalization, alternative consumer price scenarios, and “best guess” scenarios. The latter suggested that price variability would leave producers in two regions (Pacific Center and Chiapas) particularly vulnerable to post-harvest price drops.

With respect to agro-processing, government policies had distorted the maize farm-market chain in a number of ways. Flour-based tortilla production was encouraged over fresh *nixtamal* (hominized maize dough)-based tortilla production. Development of alternative maize-based consumer products was discouraged. Livestock sector demand for white maize (more expensive, under liberal market conditions) was increased, relative to cheaper substitutes. And consumption of tortillas was promoted at higher levels than would otherwise occur, especially in Mexico City where income levels relative to rural areas suggested a lower consumption need.

These biases had a number of effects. First, the traditional tortilla industry was characterized by low scales of production and backward technology, with limited possibilities of modernization owing to the reduced profitability brought about by the controlled price. Second, the difference in price between the capital city and the rest of the country encouraged fraudulent traffic of maize and flour from one region to another. Third, official price rigidities led to undesirable commercial practices (low product quality, cheating on weight, separate charging for paper wrapping, price violations, limiting the hours of sale in order to limit volumes sold). Fourth, fiscal resources were used inefficiently, resulting from the fact that the preponderance of generalized subsidies supported consumers with levels of income that could pay for tortillas at their real cost, and inhibited the possibility of expanding targeted subsidy programs to the population with reduced resources.

The production and market analysis suggested that the government of Mexico facilitate the ability of the agricultural sector to respond to changes in crop incentives that will result from a withdrawal of direct support to maize, devise a new mechanism for supporting consumer subsidies other than via physical CONASUPO intervention, foster an open market environment in which the private market can rapidly and efficiently take over the marketing role of CONASUPO, and develop the Government's capacity to monitor maize market behavior and to devise policy which promotes its efficient performance in the context of other public objectives.

The agro-processing analysis recommended that the government achieve consensus regarding general economic liberalization, develop and implement a plan for general liberalization of tortilla prices, redefine the roles of the parastatals involved, eliminate the remaining or potential trade, finance, and regulatory barriers to efficient market operation, monitor the effects of maize market liberalization at the border and in rural and urban markets around the country, and establish and publicly disseminate a transparent and automatic set of policy rules.

E. Indirect Effects, Constraints, and Sustainability of These Approaches

Indirect effects of all three case studies include a greater appreciation of the value of policy analysis tools by local counterparts, local policy makers (probably only in the Mexico case where government officials were most directly involved), and local donor representatives.

Each analytic experience discussed above also encompassed specific pitfalls. The Haiti experience sought to evaluate the policy environment for agricultural intensification in the context of a very

unstable public sector environment. The Romanian experience examined the structure of prices in an environment in which markets where only beginning to emerge from compete government control, and did so for the World Bank rather than for, on behalf of, or in conjunction with Ministry of Agriculture officials. In the Mexico case, the issue was more narrowly confined to the implications of reform in one subsector, but one that was crucial to the livelihood of most rural people and to the consumption basket of all of the urban poor.

Implicit in the selection of the cases described here was the presence of severe constraints on the time and resources allocated to undertake the activities. These constraints shaped the approaches taken to addressing the issues in each case. For two of the three cases (Haiti and Romania), lack of reliable data was a severe constraint to conducting economic analysis, while in Mexico secondary data were more abundant but resource constraints limited the capacity of the team to assemble and digest the data.

All three policy analysis experiences used rapid reconnaissance primary data and aggregate secondary data as the basis for the analyses conducted. Constraints to rapid reconnaissance analysis are well known and include the lack of representativeness and consequent loss of any statistical measurement of reliability of results produced from the data. To address these concerns, “expert assessment” of results was used to check on the plausibility of results. “Expert assessment” relies on the past experience of the experts and their ability to assess the extent to which results conform with what theory and experience would predict. While an informal process, it contains relatively strong checks on the reasonableness of information incorporated in an analysis and of the results of the analysis. Rapid reconnaissance is also justifiable to the extent that conclusions are restricted to relatively aggregate and therefore obvious sectoral trends or phenomena for which concerns about statistical accuracy are often not relevant.

In all cases, the rapidity of the activity meant there was little time for the analysts to develop a full understanding of the context of the issues they were being asked to address. This meant that all analyses provided only a partial assessment of the issues at hand. Local capacity building, so vital for ensuring not only the implementation of the recommendations but the sustainability of the analytic process after the consultants’ departure, also suffered in each case. These issues are explored for each case below.

In the case of Haiti, the lack of competent and available government counterparts meant that the exercise lacked the historical memory and institutional context that such counterparts might have furnished. Moreover, the exercise clearly had much less capacity building effects than might have occurred with collaboration. Because public sector institutions were so weak and policy directions so unformed, the interventions designed by the analysis were flexible enough to respond to any of a number of public sector roles ranging from total incapacity to support the project to taking direct roles in project implementations. This approach required some redundancy in the project design that reduced the expected value of economic returns of the projects to ensure a higher probability that the expected value would be positive under any conditions.

The detailed Romanian results were limited by the numbers of regions and types of enterprises that could be visited and evaluated. Thus documentation of distortions in the evaluated sectors was only partial. More importantly, in a highly charged political context in which the futures of many of the state firms were being determined by the results of the analysis, the objectivity of the data provided by them was certainly likely to be compromised. There was little assurance of the reliability of the results, except as ascertained by the cross check of private sector and border prices. In some cases there was no identifiable private sector alternative. Moreover, quality issues that distort comparisons with world product markets biased the results in important ways.

In Mexico, the field investigations undertaken by the AIRD team were unique opportunities for Mexico City-based (and normally, -bound) civil servants to get into the countryside and learn how to do rapid appraisal and develop economic insights from such interviews (the same could be said for Romania, as well). While not an original objective of the World Bank terms of reference, government capacity building in the use of the market model would have been desirable in order for the ministry to be able to run subsequent scenario analyses.

The Mexico case operated under a number of constraints due to uncertainty created by the highly charged atmosphere brought on by the peso crisis, the extreme sensitivity of Mexicans vis-à-vis maize prices, and the civil unrest in Chiapas. While many of the more responsible Ministry of Agriculture officials in charge of maize sector liberalization had also been intimately involved with the agricultural sector trade negotiations leading up to NAFTA and thus were committed to a reform process, they were also very aware that anything that further aggravated feelings of isolation or economic abandonment in the southern provinces could spark dangerous political backlashes for the administration. Thus, there was a great deal of sensitivity with regard to the mission. In fact, when the team's initial findings were presented to a seminar of policy makers, one of Mexico City's largest daily newspapers printed large chunks of its executive summary, much to the chagrin of policy makers in the Ministry of Agriculture.

An additional political economic dimension, though not constraint, of the second phase agro-processing sector study in Mexico was the tense economic and financial relations between the nation's leading maize flour company and its competitors and between the parastatal maize marketing agency and other economic agents in the market. Complex personal, political, and financial linkages between government officials and these companies encouraged strong accusations of unfair market advantage by others in the markets. As with any strategic sector liberalization program, the threat of sharp reductions in rent-seeking opportunities for privileged market actors compromised, in some instances, the collection of data and the pursuit of interviews. Casting the political economic net a bit wider, developing commercial alliances between key Mexican and U.S. agribusinesses further aggravated competitive fears in the local marketplace. Clearly, lots was at stake with pending reforms.

F. Lessons Learned and Success Factors

Better economic analysis of agricultural sectors is needed prior to making policy changes or direct investments to improve the performance of agriculture. These analyses must be adapted to a wide range of conditions regarding the state of agricultural markets, the role of government in the sector, and the role of the sector in the larger economy.

The AIRD cases examined in this paper suggest five lessons for future implementation of policy analysis to support new investments and new policy directions in agricultural sectors:

Exploit local expertise, ensure analytical rigor. Local experts are able to provide a much more complete context for understanding the behavior of local markets and the actual application of policy. This knowledge is critical in interpreting the real impact of policy on the agricultural sector and in proposing effective solutions. What is sometimes missing from the "local" understanding of policy effects are knowledge of the broader effects of specific policies gleaned from comparative experience across countries and awareness of new methodologies. This is where expatriate economists provide added value in sector policy. Teaming the two is an effective way to provide rapid but accurate assessments of the likely behavior of agricultural sectors as a result of new investment or policy

changes. It also allows for cost-savings, by minimizing the amount of time expatriate analysts need to spend in the field.

Use comparative approaches to overcome inadequate price and technical coefficient data. In many developing country contexts, price data are still inadequate to evaluate markets, either because good data are not available or because markets do not perform sufficiently well to use price signals to evaluate long run market equilibria. Techniques include the use of world market prices brought to local points of comparison, referring to parallel domestic markets for the same commodity, or substituting market data (adjusted appropriately) from similar commodity markets that perform better (e.g., using maize market data to understand sorghum markets). Technical coefficients for assessing physical productivity, unit cost, and comparative advantage may also be unavailable. In these cases, comparative approaches to production systems in similar agroecological environments provide a means to overcome these lacunae.

Address complex issues with multiple analytical approaches. Agricultural sectors are complex systems involving multiple actors interacting in the presence of many unpredictable exogenous factors, yet economic models to explain their behavior must simplify based upon underlying assumptions. Application of several economic approaches to the same problem therefore provides a fuller picture of reality. Adding several approaches to the same analytical exercise is often cost-effective because many of the same data are required for different analyses, and more importantly, the lessons of different approaches are best discerned when their results are juxtaposed in a comparative analysis. Thus, for example, in addition to financial cash flow and rate of return analyses of investments, measuring the effective protection for specific products of planned investments provides a clearer picture of the policy risks entailed in investment analysis because it makes clear the economic distortions which might bias the analysis. Similarly, optimization models can assess likely changes in the behavior of farms or markets as policy contexts change incentive structures, or as new investments change cost structures. Supply and demand projection models can provide a dynamic picture of evolving pressures for price changes and for trade in the near to intermediate future. These cases argue for multiple methods to be applied in sectoral analysis.

Place the assessment of sector issues in the larger political economy context. Decisions to address agricultural sector constraints are made in a larger context of pressures on decision makers by a host of economic and political interests. Understanding these pressures is necessary to make a realistic assessment of how policy will be applied and thus judge what are likely to be its consequences.

Sustain good policy by building capacity to use it. An important complementary activity to undertaking good policy analysis must be building the local capacity to understand and apply it. This is not only necessary to implement the specific policy reform recommendations, but more importantly to assure that the process of reform is sustainable. This is particularly the case in developing countries where the context of particular policy conclusions changes rapidly and so the need for updating policies and their analysis is continuous. Sustaining good policy requires that government officials understand the effects of policy and the utility and limits of the analyses that can measure these effects. This requires that continuous resources be committed by government to monitoring and evaluating current policy.

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Summary

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A. Abstract

The businesses and economies of many countries remain dependent on cost-based strategies, with exports that are largely commodity-based. The implication is that business are "hostage" to the price and quantity dictates of the markets. The businesses remain "price takers," and are vulnerable to competition from lower-priced producers. As commodity prices decline over time, profits and wages are squeezed. This is precisely the opposite of economic development.

Also, many countries find that despite considerable policy change, business investment does not respond with expected levels of investment and activity.

A solution to such situations is to empower businesses to develop and implement strategies that are not dependent on basic factors of production. Instead, their strategies should be based on upgrading factors, and a knowledge of and responsiveness to consumer and market requirements. The goal is to improve overall productivity, and enable businesses to compete on a more sophisticated basis, thus encouraging investment in skills, technology, and other advanced factors. This approach can lead to sustainable and long-term economic growth.

At same time, a supporting goal is to strengthen business strategy and its implementation by improving the industry cluster, improving the quality and impact of the dialogue between the private and public sectors, and realizing a true shared vision and partnership, with effective and recognized roles for both government and business.

The focus on competitive business strategy is a logical follow-on to programs focused on areas such as SME development, export development, improvement of business skills, and improvement of financial services.

The Uganda Competitiveness Exercise. An intensive exercise was carried out in Uganda to develop a USAID prototype to help private and public sector leaders identify and implement effective steps to achieve greater competitiveness. The competitiveness exercise encouraged businesses to move from commodity-based strategies based on comparative advantages to strategies based on competitive business strategies. It focused the basis for economic growth on the competitive performance of businesses and business clusters.

The exercise also focused Government's role on taking actions to establish the most effective policy and service platform for business to develop and implement its strategies. It centered public-private dialogue on these platform priorities, on macro-micro linkages, and on the effective roles of business and government. In addition, it identified Ugandan business clusters that could focus on improving the cluster and firm competitiveness.

Initial data collection was carried out through interviews, focus groups, workshops, and published sources. Five sectors were selected for analysis on the basis of their growth and importance to the Ugandan economy (coffee, fish, flowers, manufacturing, and tourism). Intensive competitiveness exercises were conducted with these industry clusters. A competitiveness workshop was provided to the faculty and students of Makerere University Business School. A briefing was provided to President Museveni, 4 cabinet ministers, and 20 private and public sector leaders.

A final report summarized the results of the activities undertaken in the fulfillment of the task order and recommended follow-on actions.

B. Impact

The exercise generated private and public awareness of the possibilities of and requirements for competitiveness:

- Private firms demonstrated strong demand for competitiveness tools and strategies at the firm and industry level.

- Competitiveness has become a conceptual and practical filter for both government and business actions. It has offered a new basis for understanding industry and economic growth.

- A follow-on competitiveness retreat, involving 20 leaders from business and government, was held in October 1998. A continuing competitiveness program is being organized.

- Competitiveness principles are being incorporated into donor assistance.

- USAID has applied the competitiveness exercise in other countries with great success. In Sri Lanka, it has mobilized business and government interest. The approach has also been applied to issues such as work force development. This a powerful tool to apply to issues of economic growth, and around which public and private interests can rally.

C. Constraints/Ways to Increase Impact

- The Uganda competitiveness exercise benefited from many positive attributes present in Uganda. In countries without such attributes, the competitiveness exercise will have to be appropriately modified.

- This pilot effort, designed as a learning exercise, had clear budget and LOE limitations. However, it may also have launched a larger effort by private and public stakeholders to renew and strengthen the current dialogue.

- A major challenge of the exercise was to reconcile conflicting definitions and expectations associated with the term “competitiveness.” Conceptual confusion and disagreement arise when there is focus on country performance on the one hand, and firm and industry-level performance on the other. This exercise demonstrated the mutually supporting elements of the two approaches.

- Business and government professed enormous interest in implementing an ongoing competitiveness program following the exercise. However, subsequent actions have been slow to be implemented.

- Follow-on implementation needs to be self-started. Businesses and industry clusters must be ready to take responsibility for implementation.

D. Suggestions for Future Implementation

The competitiveness exercise demonstrated that:

- Countries need not only sound policy, but sound business strategy.
- The competitive response by business to policy reform is not as automatic as assumed.
- The private sector in transitional situations may also need reform, or help in designing and implementing better strategies.

The competitiveness exercise as demonstrated by the experience in Uganda has the following attributes and implications for developing countries:

- Places equal or greater responsibility on the private sector leadership
- Directs attention away from traditional focus on cost competition to more attractive ways of competing and adding value (product features and service, for example)
- Suggests that improved policy and institutions are a necessary but not sufficient cause for firm and industry-level competitiveness
- Sheds light on the dynamic two-way effect that competitive businesses may have on improving the national platform for competitiveness
- Responds to the concern regarding slow response levels and lag times between public policy reform and private sector response
- Highlights opportunities for firms and industries in developing countries to boost sales, profits, and productivity through better strategy and business practices

The methodology of the competitiveness exercise has to be adapted to fit the unique characteristics of the country. Factors that need to be considered include:

- Predisposition in terms of economic policies, and familiarity with macro and microeconomic analysis
- History and effectiveness of private-public dialogue
- Existence of competitiveness “champions,” and models of competitive business strategy
- Existence of effective business associations, and particularly associations focused on specific industry clusters
- The perceived urgency of finding a means to increase private business growth

Business associations can help members achieve competitiveness by focusing discussion on industry strategy. Donor efforts can continue to assist the private and public sector in this endeavor.

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Detailed Description

A. Purpose of the Project

The objective of the Uganda competitiveness exercise was to develop a USAID prototype for a competitiveness exercise to help public and private sector leaders identify and implement effective steps to achieve greater competitiveness. Uganda was selected as the pilot because of its commitment to bold, private sector-oriented reforms.

"Competitiveness" as used by strategic advisers to corporations and industries refers to real improvements in industrial and firm-level productivity, on which sustainable growth in income ultimately depends. In contrast, this term as used by macro-economists and policy advisors refers to the ability of a country to achieve economic growth, attract investment, or increase exports.

Prior to the competitiveness exercise, Uganda had experienced several years of high growth. However, this growth had only returned per capita incomes to levels equivalent to those in the early 1970s. Also, the rate of growth of GDP was declining, and there was fear that a peak had been reached. Exports had diversified and increased, in particular nontraditional agricultural exports. However, the bulk of Ugandan exports were relatively undifferentiated commodities. Many positive policy changes had been made. Yet there was little evidence of significant investment in value-added production, nor of Ugandan business developing differentiated strategies.

With this background, the competitiveness exercise had subsidiary objectives that included:

- Encourage business and government to move from commodity-based strategies based on comparative advantages to strategies based on competitive business strategies.
- Encourage the use of strategies based on factors other than comparative cost advantages, which offer the potential for sustainable growth in incomes. This implied more than simply increasing domestic value added (itself a laudable objective).
- Focus the basis for economic growth on the competitive performance of businesses and business clusters. Rather than regarding further government action as a precursor to business growth, business themselves needed to see the opportunity and means to develop and implement effective strategies.
- Focus government's role on taking actions to establish the most effective platform for business to develop and implement its strategies.
- Focus public-private dialogue on these platform priorities, on macro-micro linkages, and the effective roles of business and government.
- Identify Ugandan business clusters that could focus on improving the cluster and firm competitiveness.

B. Implementation

The competitiveness exercise was carried out for USAID's Global Bureau. USAID's Africa Bureau requested that the pilot exercise be carried out in Uganda because of the commitment of the Ugandan leadership to creating an enabling environment for private sector-led growth. J.E. Austin Associates was engaged through the PEDS III IQC to develop the prototype and conduct the exercise. JAA in part utilized methodologies developed by Dr. Michael Porter, and received assistance from the Monitor Company. JAA engaged Ugandan consultants to participate in the implementation.

The exercise was carried out between January and April 1998, and the final report was delivered in May 1998.

Several Ugandan institutions and organizations were partners in the work. Most notable were the Private Sector Foundation, the Government of Uganda (particularly the Ministry of Finance), and several business associations. The business associations mainly involved included:

- Uganda Flower Exporters Association
- Uganda Fish Processors Association
- Uganda Manufacturers Association
- Uganda Tourism Association (and Uganda Tourist Board)
- Uganda Coffee Growers Association

Certain preconditions in Uganda provided a strong basis for the competitiveness exercise:

- Public-private-civil agreement that business activity should be the basis for economic growth

- Business already had in place a fairly high degree of institutional organization, with several industry associations and a strong umbrella organization

- Business-government dialogue was institutionalized and effective

- Major liberalizing policy changes had already been made

These factors created uniquely favorable conditions; in many countries, their absence creates hurdles to developing country-specific methodologies.

A strong and effective process guided project implementation. Information-rich, the process was based on changing business and government views on what it takes to be competitive. The exercise was organized around five major components:

1. Overview and benchmarking of economic results.
2. Assessment of the Ugandan platform for competitiveness.
3. Analysis of industry and firm-level competitiveness.
4. Examination of the linkages between the macro-level policy environment and firm-level operations (macro-micro linkages).
5. Conclusions and recommendations, which included strategies for the public and private sectors to work together to improve Ugandan competitiveness. Potential follow-on activities for Ugandan stakeholders and for USAID were developed.

C. Findings

C1. Overview of Economic Results

The review of Uganda's economic results identified areas of exemplary performance, as well as some continued weaknesses. The main results included the following:

- Reflecting macroeconomic and policy reforms implemented under the Museveni government, Uganda's GDP has grown an average of 5.1% annually over the last decade and 6.7% annually since 1990. Growth in 1995 jumped to 11% (third best in Africa). The top 20 countries over the last 20 years have achieved average GDP growth rates of 6-8% per year. Ugandan growth in the 1990s is within this benchmark range.

- Uganda's GNP per capita has grown an average of 1.8% per year over the last 20 years. The highest performing countries since 1975 have experienced growth rates of 4-6% per year.

- Per capita income has grown over the last decade. GNP per capita growth has averaged about 2.2% since 1985 and more than 3.3% since 1990. Per capita growth jumped to 8% in 1995.

- Uganda has had among the lowest domestic investment levels in the world, but they are growing and have been strong recently. The importance of strong investment rates, particularly private sector investment, for long-term growth has been well documented.[3] Private investment in Uganda has averaged almost 9% of GDP since 1990 (up from only 5.4% between 1985-89). By comparison, private investment rates amongst the top 20 performing countries have averaged between 15-20% of GDP. Foreign investment, quite low historically, has risen to more than 2% of GDP in 1996.

- Uganda has the best 20-year incremental capital-output ratio (ICOR) in the world, although this is largely due to "snap-back" growth and previously low investment levels.[4]

Neither high investment levels nor strong ICOR scores alone are enough to generate high growth. The challenge is to achieve both. Uganda is attempting to do this. While Uganda's ICOR performance has recently been strong, its very low absolute levels of investment have prevented it from joining the ranks of high-growth countries such as Singapore, Hong Kong, Korea, and Malaysia. The goal for Uganda is to increase levels of investment while maintaining high ICOR performance.

Uganda still faces several constraints to achieving this goal. To achieve the "breakout," Uganda must achieve sustained increases in savings and productivity. This will depend significantly on both business and government and the linkages between them. It will depend on the quality of the national platform, or the macro-level enabling environment in which businesses operate and human resources develop. It will also depend on the strategies, learning, and innovation at the micro level where firms compete. Balanced analysis of competitiveness must examine both macro and micro levels, as well as the linkages between them.

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[3] See: The East Asian Miracle: Economic Growth and Public Policy, World Bank Policy Research Report, 1993; Sachs, Jeffrey, "Growth in Africa: It Can Be Done," The Economist, June 29, 1996.

[4] ICOR is calculated by dividing GDP growth by gross domestic investment (GDI) as a percentage of GDP. The consultant stresses that ICOR is a very crude indicator of investment quality as many factors influence GDP growth rates besides investment (i.e., savings, exports, government spending, technology, labor). ICOR is one tool among many that can be used to assess investment productivity.

C2. Ugandan National Platform for Competitiveness

The analysis of the Ugandan "national platform" for competitiveness evaluated the macro-level policy environment in which firms operate. An effective national platform is one that facilitates business trade and investment, and access to finance and business services, and allows business to focus on competitive global strategies rather than the domestically restricted strategies needed to overcome or bypass platform weaknesses.

The analysis of the Ugandan platform was based on multiple sources and methodologies, and was complemented by extensive interviews with and data gathered from business and government leaders. The analysis examined Ugandan performance in seven major "platform" areas: political stability, macroeconomic policy, openness to trade and investment, legal and institutional environment, finance, infrastructure, and human resources.

Uganda has a favorable policy environment but a mediocre overall competitiveness ranking. However, Uganda ranked first out of 20 African countries surveyed in terms of the net positive improvement in its policy environment since 1992.[5] Private sector perceptions of the business environment confirm that Uganda's policy environment has improved sharply in recent years. Increased private investment in Uganda in recent years, both domestic and foreign, is a powerful indicator of a favorable policy environment.

While Uganda has benefited from political stability and economic reform, much remains to be done to create an effective financial, legal and institutional enabling environment. Major issues focus on civil service capacity, corruption, and fair enforcement of taxes and import duties. A strong judiciary is still lacking. Infrastructure and human resource capacity need strengthening.

Some key findings are presented below.

Political stability:

- Uganda was ranked 128th out of 180 countries worldwide according to its political risk rating based on assessment of risk analysts, risk insurance brokers, and bank credit officers.

Macroeconomic policy:

- Uganda has restored fiscal and macroeconomic stability. The government is stable and has the confidence and support of the international donor community. Inflation rates have been reduced dramatically under the current government. Uganda maintains no wage or price controls.

- Interest rates on lending remained high and appear to be discouraging stronger rates of investment. High interest rates reflected the continued underdevelopment of the Ugandan financial sector, the high cost of financial transactions, and lack of competition in the sector.

- Government consumption of economic output in Uganda is moderate and on a downward trend. This reduction in government consumption of economic output can be attributed in part to the privatization of numerous state-owned enterprises, a process that is ongoing.

[5] World Economic Forum and HIID, "The African Competitiveness Report 1998," Geneva, 1998.

- Relatively high corporate and income tax rates in Uganda were cited as a constraint to business growth. Uganda's maximum income and corporate tax rate was 30%. Withholding tax on dividends was 20% for Ugandan residents,15% for non-residents.

Openness to trade and investment:

- There is strong correlation between openness (economic freedom) and growth. Uganda has made progress in reforming its overall trade policy environment. The government has implemented numerous reforms to improve openness to trade.

- Reform of the trade policy environment has been significant in recent years, but practical application of reform has been slow and local businesses perceive continued obstacles.

- Uganda is open to foreign investment and maintains no restrictions on foreign ownership. The country has a comprehensive Investment Code, which provided incentives to attract foreign investment (recently replaced by a system of aggressive depreciation allowances).

Legal and institutional enabling environment:

- Uganda has strengthened its protection of private property rights and reformed its land tenure systems,[6] although land reform was still generating significant controversy.

- Uganda is reforming its commercial and business legislation, but enforcement and judicial credibility are generally weak. Most business respondents do not have much faith in the general public willingness to accept legal dispute settlement mechanisms.[7]

- Lack of uniform standards and weak quality control supervision may affect Ugandan exports. For example, two multinational companies had recently complained about excess moisture in Ugandan coffee.[8] Fish exporters cited the lack of adequate sanitary standards as a major issue for the industry.[9]

- Uganda has "black market" activity, but it is declining as business becomes more formalized and import restrictions are alleviated. Smuggling is still a major issue of concern to formal private sector businesses.

- Public-private dialogue is seen as a model. The National Forum coincided with a major shift in attitude toward building dialogue with the private sector, and proved to be an important vehicle for improved public-private cooperation in strengthening the national environment for business growth. The Private Sector Foundation had recently been created to continue this process.

- Civil service capabilities are weak. Planning and enforcement of laws is particularly weak. The government has introduced a broad civil service reform package to improve civil service capabilities and the delivery of public services.[10]

Finance:

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[6] Economist Intelligence Unit, EIU Country Report, 1997-98.
[7] "Africa Competitiveness Report 1998," World Economic Forum and Harvard Institute for International Development, 1998.
[8] Economist Intelligence Unit, EIU Country Report, 1st Quarter, 1998, pp. 19.
[9] JAA interviews with Ugandan businesses, Uganda, 1998.
[10] "Trends in Developing Economies," Volume 3, Sub-Saharan Africa, World Bank, 1995.

- Despite considerable deregulation in the financial sector since 1993, structural problems continue to affect business growth: e.g., high cost of non-performing loans, high administrative costs, poor risk management, pervasive influence of personal relationships in lending decisions, weak capacity of banking sector officials, and limited local investment opportunities.[11]

- Uganda has moderate financial sector restrictions and its banking sector remains relatively underdeveloped.

- Lack of access to finance is a major constraint for smaller businesses. Where small firms do have access, high interest rates and strict collateral requirements are major barriers to borrowing.[12]

Infrastructure:

- Despite heavy investment, Uganda's physical infrastructure is severely deficient. For example, only 5% of Uganda's population has access to electricity.[13] Water supply, sewage, and sanitation are key problems. Uganda's telecommunications infrastructure is also weak. The country has only 2.3 telephone mainlines per 1,000 people, and prices are high in comparison to the top 20 performing countries.

- Local firms cite the poor quality of feeder, trunk, and international roads and lack of access to industrial space as key obstacles to their future operation and growth. A landlocked country, Uganda relies heavily on international transport links, particularly through Kenya.

- Uganda has one of the lowest computer prevalence rates in the world.

Human resources:

- Average life expectancy in Uganda is just 42 years, and infant mortality is high.

- More than 38% of Uganda's population over 15 years of age is illiterate. Indicators for educational enrollment still lag behind most countries.[14]

- Income in Uganda is unevenly distributed, raising questions of the equity of growth. The richest 10% of Uganda's population controls more than 33% of the country's income, ranking Uganda 59th out of 84 countries surveyed in terms of income distribution.

C3. Industry and Firm-Level Competitiveness

Export analysis. Key findings with respect to Uganda's export structure include the following:

- Uganda has a low world export market share. Despite a low world market share, exports are important to the Ugandan economy, accounting for roughly 12% of GDP.[15]

[11] "Africa Competitiveness Report 1998," World Economic Forum and Harvard Institute for International Development, 1998.
[12] Ibid, pp. 195.
[13] World Development Indicators 1997, World Bank. JAA calculations.
[14] EIU Country Profile, 1997-98, pp. 19.
[15] World Development Indicators 1997, World Bank.

- However, Uganda has been one of the world's top performers in export growth during the 1990s. Since 1984, Ugandan exports of goods and services have grown an average of 7.3% annually. Coinciding with macroeconomic and policy reforms, Ugandan exports increased an average of almost 8% annually over the 1986-1995 period, one of the fastest growth rates in the world. Much of Ugandan export growth has been due to diversification within the natural resource sector (e.g., fish, flowers) rather than the export of higher value-added, processed products.

- Coffee and coffee-related products are Uganda's leading exports, comprising 66% of total exports in 1996. Uganda had doubled its world market share for coffee since 1993.[16] Coffee generated more than 70% of Uganda's total export income in 1992.[17]

- In 1996, 7.7% of Ugandan exports were "upstream industry" exports, products that are mainly used as inputs into other sectors and that compete primarily on cost advantages. Natural resource-based products still accounted for almost 90% of total Ugandan exports in 1996. This represented a 6.7% decline from the 1995 share and a 9% drop from the 1994 share, perhaps indicating a gradual reduction in resource dependency.

Numerous studies have demonstrated a high positive correlation between increases in a country's industrial exports and improvements in per capita GDP. Monitor Company has found that building competitiveness in advanced areas other than primary resources requires higher levels of innovation, human capital development, technological upgrading ,and rapid learning, and that these qualities are highly correlated with positive real changes in GDP per capita.[18]

The vast bulk of Ugandan exports are raw, unprocessed, or semi-processed. Over reliance on the export of primary commodities and unprocessed resource products subjects Uganda to declining real prices in world markets. Thus, exporting more processed goods is a key goal for Uganda. There is also negative correlation between the export of final consumption and upstream products (most of Uganda's exports) and wealth. Countries with the lowest standards of living tend to be those most dependent on exporting mainly primary, resource-based products.

The evidence suggests that Ugandan growth will neither be sustainable nor have a real measurable impact on standards of living unless Uganda reduces its dependency on the export of natural resource products. Private sector knowledge of and resulting ability to adopt alternative, competitive strategies is limited. Thus, businesspeople need to place greater emphasis on strategy and customer learning. A business leader recently acknowledged, "I don't think that business owners know what strategy is. We produce what we can, and then sell it; that's our strategy."[19]

Industry and firm-level analysis. Having examined Ugandan export competitiveness based on growth and market share data, competitiveness issues were examined at the firm level and within industry clusters. Based on analytical tools developed by Michael Porter, 7 opportunities were categorized that are essential for improving firm and industry-level competitiveness: competitive position, customer learning, innovation, human capital investment, cluster cooperation, forward integration, and competitive strategies and attitudes. This framework was then used to analyze 5 industry clusters, including 3 in agribusiness: coffee, fish processing, and cut flowers.

[16] Ugandan Ministry of Planning and Economic Development statistics, 1998.
[17] Monitor Company, 1998.
[18] Based on Trade Statistics Methodology correlating changes in export structure with changes in GDP per capita over a 13-year period in 17 countries worldwide.
[19] Based on interviews conducted with Ugandan businesses in April 1998.

The information for this analysis was based on interviews with businesses and 10 intensive workshops/working sessions with industry clusters in Uganda in January and April 1998. A summary table illustrating competitive opportunities for each cluster is provided in Figure 1.

D. Three Clusters: Coffee, Fish Processing, and Cut Flowers

D1. Coffee — The Case of Bancafe

From 1992 to 1996, Uganda's coffee exports almost doubled in volume and more than quadrupled in revenue, a sign of the significant recovery of the industry.[20] However, Uganda competes on basic cost and natural advantage. Ugandan costs and yields result in much lower returns for the average Ugandan coffee farmer relative to Kenyan farmers. Also, global demand for coffee is changing with consumers increasingly purchasing specialized or gourmet coffee over commercial varieties.

Ugandans need to focus not only on costs and operational efficiency, but also on the attractiveness of the segment where they choose to compete. The Ugandan coffee industry has focused primarily on non-demanding, large commercial buyers and has not directed attention to demand, cluster, consumer preferences or strategic issues.

Figure 1. Seven Opportunities for Ugandan Competitiveness

	Coffee	**Fish**	**Flowers**	**Manufacturing**	**Tourism**
Competitive Positioning	Robusta vs. Arabica Specialty vs. Commodity	Fresh Frozen Other varieties Quality level	Roses now commodity business Seeds and other products	Import substitution to export penetration	Target attractive segments
Customer Learning	Micro Markets Niche Preferences	Europe vs. Middle East	New varieties Customer preferences	Identification of regional and global opportunities	Four stages of customer decision
Innovation	Bancafe	Offshore purchasing platforms New distribution partnerships	Bouquets, packaging, dry pack shipping	New strategic partnerships and new products	Design elite high-end packages (cf. Tanzania)
Human Capital Investment	Bancafe	Sanitary and environmental requirements	Direct market exposure	Upgrading technical and managerial skills	Tourism training institute
Cluster Cooperation	Grading Systems	Improve industry sanitary standards	Joint market development Cold storage	Support regional integration Incorporate local design	Regional tourism network Standards
Forward Integration	Bancafe Packaging Retailing	Fresh chilled and frozen fillets Packaging directly for retail	Leap frog Dutch auction (Norway example)	NA	Develop new marketing channels Invest in tourism sites
Strategies and Attitudes	Introduce gourmet coffee to a nation of tea drinkers	Industry collaboration	Beyond roses Develop local market for roses	Vision for Ugandan manufacturing competitiveness	Exposure to world class destinations Develop local market

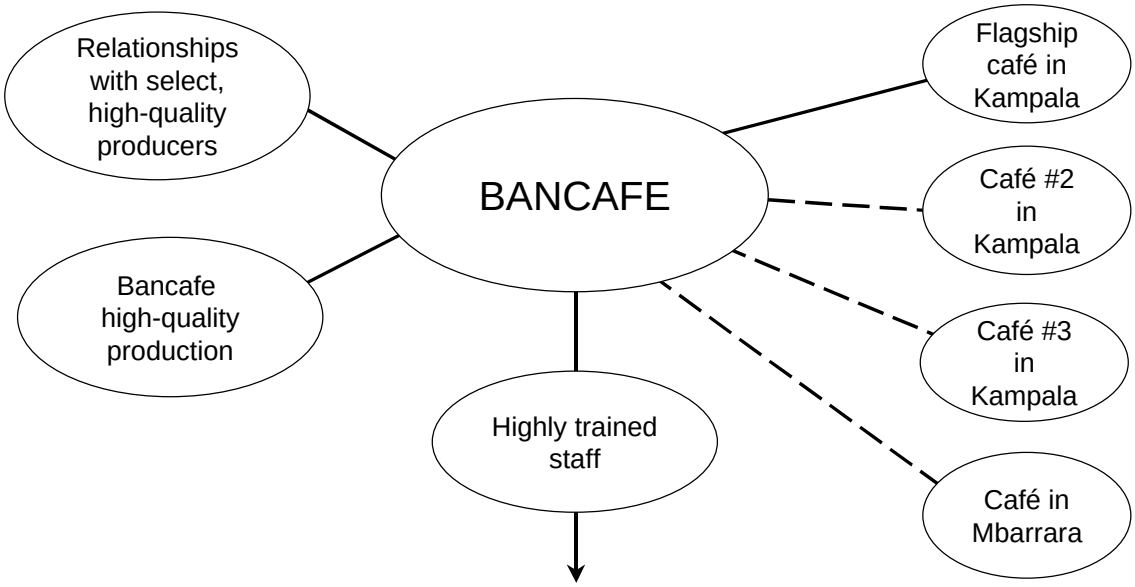
[20] The Economist Intelligence Unit Limited, *Uganda Country Profile, 1997-98,* pp. 32.

The GOU was promoting the idea of investing in instant coffee processing in Uganda, with the goal of adding value in Uganda. However, both the export of basic coffee beans and instant coffee are relatively unattractive segments because they are characterized by high competition and stagnant consumption trends in the United States and Europe. The focus on instant coffee was not based on competitive strategy; and although processed, instant coffee is still a commodity product.

A case study of one Ugandan coffee company, Bancafe, illustrates excellent competitive behavior in taking advantage of the seven competitive opportunities:

- *Competitive position* — Bancafe decided to position itself as the leading gourmet coffee supplier in Uganda, a nation of tea drinkers. By choosing to compete where there was little existing competition, it gained the advantage of the "first mover" and the company's coffee commands a premium price.
- *Customer learning* — Stephen Banya, the company's founder, moved close to customers to both learn from them and educate them. He opened a café in Kampala, for example, to learn about customer tastes and preferences, as well as to educate customers in coffee quality.
- *Innovation* — Bancafe conducted international research on the best beans and has invested in a top quality roaster. His innovation has extended from procurement to processing to retailing.
- *Human capital investment* — Bancafe has a highly trained staff. Mr. Banya focuses on high quality production and processing. His goals are "to serve the best coffee in Uganda, employ the highest paid workers and cultivate a desire for good coffee amongst Ugandans." He continually trains his employees, pays incentives for good service, and provides opportunities for upward mobility.
- *Cluster cooperation* — Mr. Banya has developed relationships with producers and stimulated a cooperating cluster. He has developed a network of relationships with high quality producers. This emerging cluster is illustrated in Figure 2 below.

Figure 2. A Success Story in Specialty Coffee — The Bancafe "Cluster"



Since opening its first café in 1997, Bancafe sales have risen dramatically. "I used to think that instant coffee was the answer, but now, I'm making money in specialty coffee. I may think about exporting directly some day, but I'm selling all that I can produce and buy right here."

—Steven Banya, Bancafe

- *Forward integration* — By setting up retail operations, Bancafe has decided to capture the value of the coffee literally "to the last drop." He has now opened other cafés and is also seeking to sell to the most demanding hotels in Kampala.

- *Attitudes and strategy* — This kind of entrepreneurial behavior, if emulated, could lead to a gourmet coffee production industry in Uganda of significant scale. More importantly, if gourmet coffee turns out not to be a great market in 5 to10 years, entrepreneurs such as Mr. Banya will already be making the necessary adjustments in strategy.

D2. Cut Flowers

Although cut flower exports are still low in terms of overall value, they are regarded as a success story for Uganda in penetrating new markets. In 1996, Uganda exported 385, 915 kg of flowers.[21]

- *Competitive position* — Ugandan flower growers export roses to the European market. Their selection of market is based on air transport costs; their selection of rose variety is made with the assistance of technical experts and buyers. The rose has become a commodity business.

- *Customer learning* — Ugandan producers rely heavily on buyers for information on market trends. The industry is heavily reliant on intermediaries, trade journals, and trade fairs for advice on customer trends.

- *Cluster cooperation* — The industry cluster includes 17 growers who began in 1993 or later, a relatively strong association and a growing network of contacts and experts. Airport

[21] From export statistics complied by the Uganda Export Promotion Board.

shipping facilities are somewhat restrictive with only a few daily flights to Europe and no cold storage facilities. Uganda is dependent on technology and expertise from abroad. Makerere University is initiating a program for training in technical and management areas relevant to the industry.

- *Forward integration* — Several companies are seeking to go beyond the Dutch auction and develop closer links to the end user. One focus group participant reported making contracts with a leading supplier to Norwegian supermarkets, thereby guaranteeing his sales and prices in advance and capturing value for both parties by selling and shipping directly. Another exporter sells directly to the consumer through a Dutch partnership.

- *Competitive strategies and attitudes* — The Ugandan flower exporters, who have only recently penetrated European markets, show a strong desire to cooperate within the industry and a strong interest to capture additional value in the cut flower industry.

The Porter Diamond for cut flowers. The team also provided the Ugandan cut flower industry with a Porter "diamond analysis" of the Ugandan and Dutch flower industries.[22]

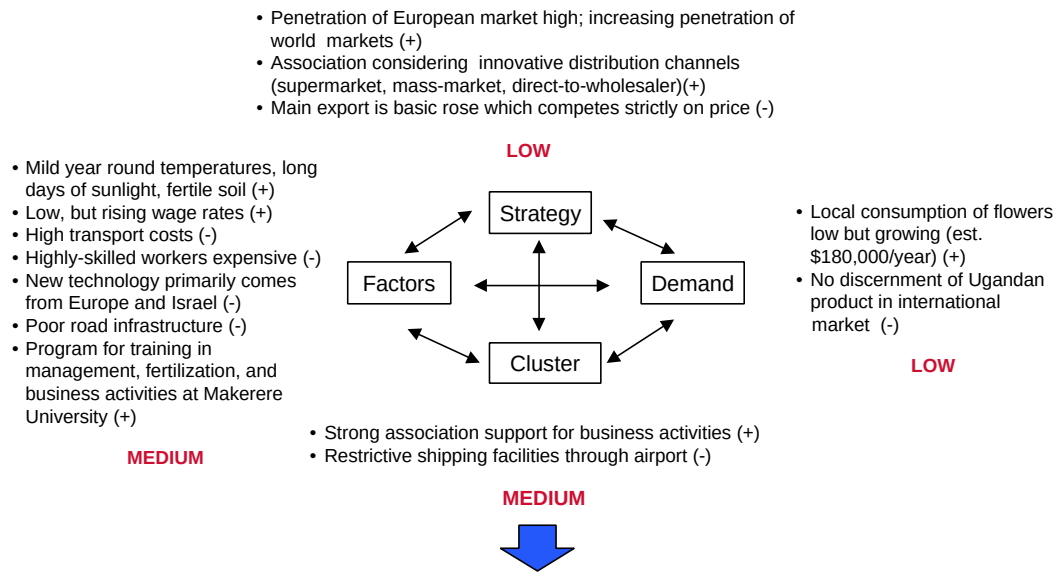
Looking at basic competitive factors, Uganda has a number of natural advantages: a mild year-round temperature with long and relatively even days of sunlight; extremely fertile soil; good sources of water, a factor critical to cut flowers; and low wage rates. Created factor conditions, e.g., transport costs, skilled workers, new technology, and research and breeding capacity are still weak in Uganda, as shown in Figure 3 on the next page.

Ugandan companies lack direct exposure to demanding consumers. Such exposure stimulates competitiveness. There is no tradition of local demand. However, there is a growing market among the westernized segment of the population and in institutional markets such as restaurants, hotels, and larger businesses.

The lack of exposure to demanding consumers is not compensated by direct learning from demanding consumers abroad. Most exporters at a focus group meeting reported selling their flowers at the Dutch auction. There is little international discernment of a particularly "Ugandan" product. Ability to anticipate and adapt to changes in style, demand, or variety is limited.

[22] The Porter Diamond illustrates the dynamic interaction among government policy, factor conditions, consumer demand, industry clusters, strategy, firm structure and inter-firm rivalry. The Porter Diamond model is used to help firms understand the dynamism of the industry in which they compete.

Figure 3. The Competitive Diamond - Ugandan Flower Industry



Ugandans face competitive crossroads in light of commodity price pressures

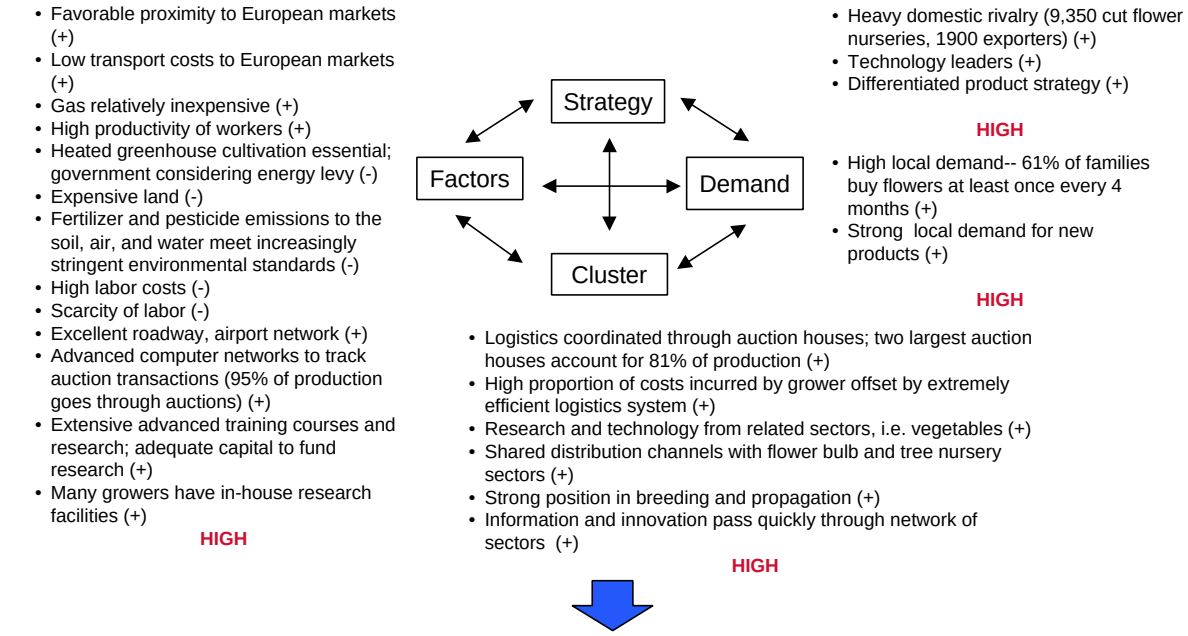
SOURCE: Interviews

The Dutch competitive diamond offers an illustrative contrast to Uganda, as shown in Figure 4 on the next page. Despite a poor climate and high costs of land, labor, materials, and energy, the Netherlands has become the world leader in cut flowers. There is high local demand as 61% of families buy flowers on a repeated basis.

The Dutch cut flower industry is characterized by heavy domestic rivalry among more than 9,000 cut flower nurseries and 1,900 exporters. They are technology leaders and have a differentiated product strategy. The high costs of production are somewhat offset by an extremely efficient logistical system including efficient transport and distribution channels. Research and technology from related sectors also support the industry cluster. Growers closely watch changes in buyer behavior in the European market. Most growers have in-house research facilities, access to extensive training, and adequate capital. Advanced computer networks track auction transactions.

The point is not to compare Uganda to a country with a 400-year tradition in flowers. Rather, it is meant to illustrate that Uganda's current advantage in natural growing conditions will not be enough to ensure a profitable industry. Other countries possess similar advantages. Sustained success in the industry will require innovation, customer learning, better firm-level strategies, and an improved domestic environment that fosters training, human capital investment, research, and market development

Figure 4. The Competitive Diamond - Dutch Flower Industry



SOURCE: Rabobank, Flower Council of Holland

D3. Fish Processing

The export of fresh chilled Nile Perch to Europe and frozen fish to Middle Eastern markets is a recent success story. In 1996, Uganda's total fish catch was 0.22 million, and fish/fish product — exports generated more than US$39 million.[23] Although the fish cluster has been successful, a number of competitive challenges must be overcome to sustain current growth.

- *Competitive positioning* — The "Nile" and "African" origin of Ugandan fish is not viewed as a selling point, and Europe recently placed an embargo on fish exports from countries of the region, ostensibly because of the presence of cholera. Lake Victoria is an abundant source of Tilapia and Nile Perch. However, nothing limits the Ugandans to these two principal varieties. Ugandans could diversify into other, higher-priced varieties that the ecosystem could also support.

- *Customer learning* — The leading Ugandan fish exporter has a sophisticated knowledge of the European and Middle-Eastern markets. Being able to serve both markets has provided some diversification of risk, although the fresh market in Europe is by far more attractive.

- *Innovation* — One Ugandan company introduced offshore platforms for buying fish catch directly from fishermen. This eliminated the risk of contamination from purchasing on beaches where sanitary conditions are less subject to control.

- *Cluster cooperation* — The fish industry has largely been unable to coordinate to unify sanitary standards or strengthen the industry in other ways. The government lacks

[23] The Economist Intelligence Unit Limited, *Uganda Country Profile, 1997-98*, pp. 32.

institutional capability to enforce minimum standards. The private sector has also not been able to define and enforce minimum standards. Some processing plants are in excellent condition with laboratories and trained quality control staff; others lack such facilities.

E. Macro-Micro Linkages

An analysis was also conducted of the linkage between critical government policy and institutions and business-level operations based on intensive interviews with Ugandan business owners and managers over a four-week period. Adapting the Austin Policy Impact Matrix[24], the impacts of policies, openness, institutions, infrastructure, finance and human resources on firm-level operations including marketing, production, organization, and staffing were analyzed.

Impacts at the firm level can trigger reform if a mechanism exists for identifying and communicating those impacts. It is not difficult for firms to identify where governmental action or inaction most impinges on their operations. Less obvious is that there are effective ways to build dialogue, establish priorities, and take action. The following are examples of some of the more critical impacts as they affect the competitiveness of selected key industries in Uganda.

- In the *coffee industry* (see Figure 5), the greatest impact in recent years has been the government decision to privatize most of the functions of the coffee board. By privatizing these functions, efficiencies were introduced in the system that have benefited farmers.

- In the *cut flower industry* (see Figure 6), weak infrastructure and underdeveloped human resource capacity affect the ability of flower exporters to compete in international markets. Without adequate refrigeration and cold storage facilities, Ugandan exporters cannot guarantee the quality of their products. Transportation is also a major constraint. Moreover, Uganda is highly dependent on European sources of technology and expertise. Domestic skills are still limited. The ability of Ugandan cut flower exporters to capture additional value will depend heavily on improvements in supporting infrastructure and technical and managerial training.

- In the *fish industry* (see Figure 7), the key impact point is at the intersection of government health and sanitary institutions and company exports to Europe. The uneven quality of exported fish and the questions raised by those interviewed regarding inspections and enforcement could threaten the future of this industry, particularly in light of new WTO guidelines on sanitary standards.

F. Impacts

Although it is too early to predict lasting impacts from the competitiveness exercise, the following should be noted:

[24] The Austin Policy Impact Matrix examines the impact of critical government policy instruments such as monetary policy, fiscal policy, foreign investment, trade promotion and sectoral initiatives on important firm-level operations such as finance, control, production, marketing, human resources and management.

Figure 5. Coffee Cluster - Policy Impact Points

Category	Platform element	Company Impact Points				
		Finance	Markt'g	Prod'n	Org'n & Staffing	
Macroeconomic Policies						
	Monetary	x				
	Fiscal	x		x		
	Trade	x	x			
	Labor - minimum wage			x	x	
	Labor - expatriates				x	
	Capital - ownership	x			x	
	Capital - repatriation	x			x	
Legal and Institutional Enabling Environment						
	Appropriate commercial legislation	x	x		x	
	Functioning judiciary or arbitration mechanisms	x		x	x	
	Productive civil service		x	x	x	
	Tax collection	x			x	
	Customs	x	x			
	Health and sanitary		x	x		
	Business licensing	x			x	
	Investment promotion	x		x		
	Government procurements and contract awards					n/a
	Privatization		x			
→	Coffee Board	x	x	x		
Infrastructure - Cost and Service						
	Safe water			x		
	Telecommunications		x			
	Informatics		x			
	Energy			x		
→	Transport		x	x		
Human Resources						
	Literacy		x		x	
	Education level		x	x	x	
	Technical and Managerial Training		x	x	x	
→	Productivity			x	x	
	Health Initiatives				x	

Note:

→ Refers to areas that have a large impact on the competitiveness of Uganda's coffee sector.

Source: J.E. Austin Associates, Inc. assessment. Based on concepts in Austin, James E. "Managing in Developing Countries: Strategic Analysis and Operation Techniques." New York: The Free Press, 1990.

Figure 6. Flower Cluster - Policy Impact Points

Category	Platform element	Company Impact Points				
		Finance	Markt'g	Prod'n	Org'n & Staffing	
Macroeconomic Policies						
	Monetary	x				
	Fiscal	x		x		
	Trade	x	x	x		
	Labor - minimum wage			x	x	
	Labor - expatriates				x	
	Capital - ownership	x			x	
	Capital - repatriation	x			x	
Legal and Institutional Enabling Environment						
	Appropriate commercial legislation	x	x		x	
	Functioning judiciary or arbitration mechanisms	x		x	x	
	Productive civil service		x	x	x	
	Tax collection	x			x	
	Customs	x	x	x		
	Health and sanitary		x	x		
	Business licensing	x			x	
	Investment promotion	x	x	x		
	Government procurements and contract awards					n/a
	Privatization					n/a
Infrastructure - Cost and Service						
→	Water					n/a
	Telecommunications		x		x	
	Informatics		x			
	Energy			x		
→	Transport		x	x		
Human Resources						
	Literacy				x	
	Education level		x	x	x	
→	Technical and Managerial Training		x	x	x	
	Productivity			x	x	
	Health Initiatives				x	

Note:

→ Refers to areas that have a large impact on the competitiveness of Uganda's flower sector.

Source: J.E. Austin Associates, Inc. assessment. Based on concepts in Austin, James E. "Managing in Developing Countries: Strategic Analysis and Operation Techniques." New York: The Free Press, 1990.

Figure 7. Fish Cluster - Policy Impact Points

Category	Platform element	Company Impact Points				
		Finance	Marketing	Prod'n	Org'n & Staffing	
Macroeconomic Policies						
	Monetary	x				
	Fiscal	x		x		
	Trade	x	x			
	Labor - minimum wage			x	x	
	Labor - expatriates				x	
	Capital - ownership	x			x	
	Capital - repatriation	x			x	
Legal and Institutional Enabling Environment						
	Appropriate commercial legislation	x		x	x	
	Functioning judiciary or arbitration mechanisms	x		x	x	
	Productive civil service		x	x	x	
	Tax collection	x			x	
	Customs	x	x	x		
→	Health and sanitary		x	x	x	
	Business licensing	x			x	
	Investment promotion	x	x			
	Government procurements and contract awards					n/a
	Privatization					n/a
Infrastructure - Cost and Service						
	Safe water		x	x		
	Telecommunications		x	x	x	
	Informatics		x			
	Energy			x		
	Transport		x	x	x	
Human Resources						
	Literacy				x	
	Education level		x	x	x	
	Technical and Managerial Training		x	x	x	
	Productivity			x	x	
	Health Initiatives			x	x	

Note:

→ Refers to areas that have a large impact on the competitiveness of Uganda's fish sector.

Source: J.E. Austin Associates, Inc. assessment. Based on concepts in Austin, James E. "Managing in Developing Countries: Strategic Analysis and Operation Techniques." New York: The Free Press, 1990.

- The effort generated private and public awareness of competitiveness. A follow-on "competitiveness retreat" involving 20 leaders from business and government was held in October 1998. This retreat contributed to achieving a shared vision. A continuing competitiveness program is being organized.

- Private firms demonstrated strong demand for competitiveness tools and strategies at the firm and industry level. Widespread interest has been created in applying the concepts of competitiveness in Uganda. Some companies are facing difficult challenges in a more competitive environment. They provided very direct and open feedback for the benefit of this effort.

- Competitiveness has become a conceptual and practical "filter" for both government and business actions. It has offered a new basis for understanding industry and economic growth.

- Competitiveness principles are being incorporated into donor assistance. USAID has applied the competitiveness exercise in other countries with great success. In Sri Lanka, it has mobilized business and government interest. The approach has also been applied to issues such as work force development. This a powerful tool to apply to issues of economic growth, and around which public and private interests can rally.

G. Constraints

The Uganda competitiveness exercise benefited from many favorable conditions in Uganda. There had already been an effective public-private dialogue and considerable policy change. The level of cohesiveness in society was high. Much of the business community exhibited sophistication with respect to macro and micro economic principles. A rising degree of tension resulting from lack of business growth and investment also created a greater receptiveness to the competitiveness message.

In countries where such attributes are lacking, implementation of a competitiveness exercise will have to be appropriately modified. Designed as a pilot learning exercise, this effort appropriately had clear budget and LOE limitations. At the same time, it may have launched a larger effort by private and public stakeholders to renew and strengthen the current dialogue. The budget and LOE limitations did not permit immediate support to continuing implementation.

A major challenge of the exercise has been to reconcile conflicting definitions and expectations associated with the term "competitiveness." Competitiveness as used by macro-economists and policy advisors refers to the ability of a country to achieve economic growth, attract investment, or increase exports. Competitiveness as used by strategic advisors to corporations and industries refers to real improvements in industrial and firm-level productivity, upon which sustainable growth in income ultimately depends. They note that firms, not countries, compete.

Conceptual confusion and disagreement arise between those who focus on country performance and those who focus on firm and industry-level performance. In fact, this exercise demonstrated the mutually supporting elements between these two approaches. They are interdependent and mutually reinforcing. These macro-micro linkages generate insights and lessons for competitiveness at both the firm and the national level.

Both business and government have, subsequent to this exercise, professed enormous interest in implementing an ongoing competitiveness program. A private-public coordinating committee was informally constituted at the October 1998 retreat. However, subsequent development has been slow.

The private sector has not yet taken a lead in implementing competitiveness. The Ministry of Finance has also been slow to act and still retains a certain leadership.

H. Lessons Learned

The experience of the competitiveness exercise in Uganda, with its focus on business and industry-level competitiveness, offers a number of implications for developing countries.

H1. Macro-Micro Linkages: Reinforcing Messages

When multiple methodologies appear different but come to similar conclusions, the result is a message that can be compelling. The examination of Uganda's "competitiveness" at a national level using a policy-oriented approach and at the firm level using the competitive diamond approach generated mutually reinforcing messages for Uganda. They include:

- *Openness* — exposing firms and industries to large and rigorous demand in the market contributes to national competitiveness.

- *Liberalization* — Reducing barriers to entry and enhancing the internal rivalry of an industry will lead to greater pressures for efficiency, upgrading and overall competitiveness.

- *Privatization* — When privatization has not reached critical business service industries such as energy, transport, and communications, businesses are affected by higher costs and less efficiency.

- *Communications infrastructure* — The critical benefit of exposure to end markets, suppliers, and sources of technology and innovation underscores the importance of providing greater access at lower cost to communications technologies.

- *Education* — Macro-economic and policy studies have long pointed to education as an important driver of economic growth.[25] Economic growth also supports stronger educational performance as countries have increasing resources. As more good jobs become available in competitive industries, parents make additional sacrifices to ensure that their children receive the education they need to take advantage of these opportunities. Micro-level analysis reinforces this message. Firms that pursue strategies based on the sustainable advantage of hard-to-replicate skills tend to have sustainable competitive advantages. In Uganda, companies that pursued competitive (versus comparative) advantage were placing greater emphasis on upgrading the skills and capabilities of their employees.

- *Export strategies based on primary products* — Studies have illustrated the correlation between low growth in GDP and over reliance on primary and natural resource exports. At the business level, export strategies based on primary products are easily replicated and, as a result, prices tend to fall over time as new entrants emerge. The challenge for Uganda is to continue to diversify and upgrade its export base.

H2. Policy-Strategy Interactions

The "competitive diamond" approach to competitiveness places greater responsibility on the private sector for conceiving and implementing competitive strategies leading to increased productivity and

[25] World Bank, The East Asian Miracle: Economic Growth and Public Policy, Oxford: Oxford University Press, 1993. See pages 193-203.

income per capita. It encourages business leaders to look more closely at their customers and competitors than at their government policies. In contrast, the "national platform" approach to competitiveness emphasizes the role of government in economic management, financial sector regulation, infrastructure development, and education.

Indeed, the competitiveness exercise demonstrated that:

- Countries need sound policy as well as sound business strategy
- The competitive response by business to policy reform is not as automatic as assumed
- The private sector in transitional situations may also need assistance designing and implementing better strategies

During the early stages of economic stabilization and reform, public policy and public institutions have greater impact on prospects for economic growth. Over time, sustained growth in productivity comes to depend more on the quality of private sector leadership. Private sector decisions regarding investment, human resources, and competitive strategy then become crucial to continued rapid growth.

Weeks of intensive interaction with the Ugandan private sector revealed lack of exposure to strategic tools and approaches. In addition, it uncovered a confidence problem: many business people do not believe that they can be competitive. Intensive and prolonged exposure to competitiveness tools and techniques, and to international sites of best practices, can help combat these problems and foster Ugandan competitiveness.

To address these issues will require high level private and public support. The key economic advisor to the president and a key private sector leader in Uganda have agreed that the competitiveness initiative is a priority and have promoted follow-on interest and action.

H3. Adapting the Methodology of the Competitiveness Exercise to Country-Specific Situations

The methodology of the competitiveness exercise appears valid for many situations. Still, the method must be adapted to fit the unique characteristics of each country. Factors that need to be considered include the following:

- Economic policy orientation, and familiarity with macro and microeconomic analysis
- History and effectiveness of private-public dialogue
- Existence of competitiveness "champions," and models of competitive business strategy
- Existence of effective business associations, particularly associations focused on specific industry clusters
- The perceived urgency of finding a means to increase private business growth

Other recommended follow-on steps include:

- The GOU should form a high-level interministerial competitiveness committee, chaired by either the President of Uganda or the Ministry of Finance, to monitor the implementation and coordination of policies and initiatives. Competitiveness requires consistency in policies related to trade, investment, tax, labor, regulation, education, health and institutions, among others. The interministerial committee should focus on creating a national platform for Ugandan competitiveness but should not try to pick winners and losers.

- The private sector, under the umbrella of the Private Sector Foundation (PSF), can take responsibility for implementing its competitiveness program. It was beyond the scope of this exercise to conduct an in-depth competitiveness exercise in key industry clusters, but such assistance is needed.

- Business associations can help members achieve competitiveness by focusing discussion on industry strategy. The association should go beyond its traditional services and address the competitive challenges mentioned above.

- Donor efforts can continue to assist the private and public sector in this endeavor. The BUDS, IDEA, and PRESTO projects are focusing on the role of the private sector and support the growth of private enterprise. Competitiveness approaches can be built into such projects.

- Donors can be especially useful linking competitive clusters in their home countries to Ugandan industries.

I. Best Practices

The Uganda competitiveness exercise developed and exemplified several best practices. These include:

- *Importance of business strategy* — Improving business strategy, at the heart of the Uganda competitiveness exercise, is a vital component of economic growth. It is businesses that compete.

- *Build momentum for action through sound benchmarking* — The competitiveness exercise used economic and cluster benchmarking to raise private and public awareness of the shortcomings of the current strategic and economic situation. This created an incentive for action, and a degree of joint private-public purpose.

- *Identify specific links between business strategy and the macro platform* — In the absence of a strong macro platform, business strategy will be skewed to get around the platform obstacles. The focus on business strategies and specific business clusters identifies specific policy, regulatory, and service constraints in the macro environment, and focuses public-private collaboration on specific improvements.

- *Competitive exercise as the start of a process* — The competitiveness exercise is primarily a process of dialogue and facilitation of strategic analysis by business. Carefully designed and implemented, the process will provide a natural lead-in to cluster based facilitation and implementation.

- *Follow-on implementation becomes demand-driven* — The focus on specific clusters and business strategies creates business demand for strategic change. This is a point of entry for follow-on implementation of programs directed to strategic change. It is clear that new and improved strategies cannot be imposed from outside.

- *The competitiveness exercise empowers business* — In seeking a way out of the status quo, business will often look to government for leadership, policy change, and improved services without recognizing its own strategy weaknesses. Government often maintains this expectation, but grows impatient with the lack of business response to platform change. The competitiveness exercise focuses expectations on private business and provides a way forward for business.

- *Involving the media helps to change expectations and support competitiveness* — The competitiveness exercise co-opted the media by educating the economic press and involving it in the exercise.

- *Involving the public sector results in mutual understanding and shared vision* — Although competitiveness focuses on business and business strategy, the potential government role is pervasive and may be very positive. The Uganda exercise achieved a high degree of consistency between public and private expectation and understanding.

- *Local models are exciting* — The exercise identified local models of competitive business behavior. Local models are more meaningful to a national audience.

- *Use a strong local partner with "convening power"* — An initial challenge is to bring the right people to the table – the business leaders, government leaders, and strategic thinkers and champions. In Uganda, key public and private leaders served as conveyors, as did the local consultants working with JAA. In Sri Lanka, the cooperation of the Ceylon Chamber of Commerce and other groups was essential to the early success of the competitiveness imitative. In Brazil, a leading agribusiness association sponsored competitiveness presentations.

J. Summary and Conclusion

The businesses, and hence the economies, of many countries remain dependent on cost-based strategies, with exports that are largely commodity based and undifferentiated. Most developing country businesses remain "price takers," and are vulnerable to competition from lower priced producers. As commodity prices decline over time, profits and wages are squeezed.

In contrast, the competitiveness approach empowers business to develop and implement strategies that are focused on upgrading factors of production, and on differentiation based on knowledge of and responsiveness to consumer and market requirements. The resulting improvements in productivity and ability of business to compete on a more sophisticated basis encourages investment in skills, technology, and other advanced factors. This leads to sustainable and long-term economic growth and income growth.

The competitiveness approach thus helps private sector agribusiness to respond rapidly to a reformed policy and institutional environment to achieve quick and significant gains as measured by investment, growth, productivity, profitability, employment, and exports.

The focus on competitive business strategy is a logical follow-on to programs addressing SME development, export development, improvement of business skills, and improvement financial services. Competitiveness approaches provide USAID with a powerful tool to facilitate sustainable, business-led economic growth. This tool also facilitates a shared private-public vision for growth, and provides improved public sector focus on improving specific policies and services.

The Uganda competitiveness exercise was the USAID prototype for the competitiveness approach. It provides a powerful model for USAID programming.

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BOLINVEST— LEVERAGING AND PROMOTING INVESTMENT INCENTIVES FOR PRIVATE SECTOR INVESTMENT IN NRBIs

Summary

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RAISE Thematic Areas:

- Leveraging and promoting incentives for private investment in natural resource-based industries (NRBIs)
- International Trade in NRBIs
- Institutional Capacity Building
- Transferring technology which enhances both the income generating Potential and Sound Management of Client Countries Natural Resource Endowments
- Information and Other Support Services

A. Abstract

The multi-year BOLINVEST project was designed to expand and diversify the country's non-traditional exports, with an emphasis on manufactured and natural resource-based products. Beginning in 1989, the project provided technical assistance and training directly to small, medium and large firms and rural producer associations committed to export development. Assistance under this project focused on improving production (e.g., quality control, increased production volumes, managerial skills, timeliness and performance) at the company level and providing support for marketing, information and data bases, export finance, and promotion of policy and regulatory reform. In 1992, the contractor, CARANA Corporation, assumed full responsibility for promoting foreign investment in non-traditional export industries as well. This component, which focused on attracting investment from Bolivia's neighboring countries, owes its great success mostly to aggressive and targeted promotion of business opportunities in Bolivia. As of August 1995, the project had been credited with promoting more than $100,000,000 in exports, $50,000,000 in direct foreign investment, and the creation of about 10,000 permanent jobs.

A major part of the overall effort in the last year of the project (1995) was the creation of a local institution, Fundación BOLINVEST, developing its capacity to carry out export and investment promotion activities as a private, non-profit foundation, well beyond the life of the contract. Upon completion of the project in March of 1996, CARANA left behind a team of Bolivian nationals and an organization (Fundación BOLINVEST) capable of providing technical assistance and training, market information and investment promotion activities without the need for outside support.

B. Impact

- Direct Impact: The project led directly to substantial increases in exports and direct foreign investment
- Indirect Impact: The project led to increased employment opportunities and higher incomes for both rural and urban low income communities
- The project benefited both large and small firms as well as producer associations and cooperatives

- The project promoted a new focus on adding value to NRBI products
- The project led to a sustainable organization

C. Constraints

- Lack of understanding, lack of local buy-in
- Lack of cooperation from local institutions
- Lack of support from USAID after project completion

D. Suggestions for Future Implementation

- Lessons learned in project design and implementation:

  - Importance of commitment from counterpart institutions
  - Self sufficiency efforts
  - The need for early success and credibility
  - Appropriate Indicators and Indirect Effects on the Project

- Lessons learned in export and investment promotion:

  - Importance of the "Lessons Learned" in project design
  - Importance of commitment from the host government and related public agencies
  - A positive policy environment

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Detailed Description

The BOLINVEST project, which began operations in November of 1989, was designed to *promote and leverage investment incentives for private sector investment in the various NRBIs*, and at the same time to *build institutional capacity* to make the effort sustainable. The project was initially designed as an export promotion initiative, providing technical assistance indirectly to local exporters through local business chambers in the three main cities of Bolivia (La Paz, Cochabamba, and Santa Cruz). A key component of BOLINVEST was to strengthen the chambers in order to enhance the delivery of export related services.

Over six years, BOLINVEST evolved from an elementary organization, designed to provide limited technical assistance and institutional strengthening to local business chambers and their members, to a complex trade and investment promotion institution. In addition to the facilities in the three Bolivian cities, additional offices were established in several South American, North American and European cities. Today, BOLINVEST (now known as Fundación BOLINVEST) continues to exist as a stand alone, not-for-profit organization, although with a reduced level of funding and activity.

A. Project Implementation

The project was implemented by CARANA Corporation over a six year period (November 1989 to August 1996) and was funded through two contracts with USAID, with additional PL-480 local currency contributions as well as payments from local beneficiaries of services.

The project evolved through five distinct phases that are briefly discussed below.

Phase 1 — 1989-1990: Initial Project Design

The initial project design called for the contractor (CARANA Corporation), to place an expatriate advisor within a local counterpart institution in each of the three Bolivian cities, one of which was a public sector trade promotion agency. The other two were local business chambers supported by the private sector. The role of the advisors was to work with and through these local organizations to provide technical assistance to their members. The initial project design anticipated that this strategy would help to strengthen the organizations so that they would be able to continue to provide technical assistance services to their members beyond the life of the project.

Constraint: Lack of Understanding, Lack of Local Buy-In

The project began to experience problems from the outset, as the result of mixed objectives and a lack of understanding as to what was required to be successful in export promotion. The major difficulty was the fact that the local institutions were basically interested in acquiring funding, and had not fully bought into the project. In some cases, export promotion had never even been an objective of the organization, and was accepted only as a way to obtain USAID support. This was further complicated by poorly trained or otherwise inadequate staff, and a lack of objective criteria for selecting recipients for technical assistance.

An even greater constraint to the success of the project was little understanding on the part of management of these organizations of what was required for effective export promotion. Moreover,

in the initial design of the project USAID ignored lessons learned in successful export projects elsewhere in Latin America. As a consequence, the early months of this project were far from productive.

CARANA was able to convince USAID officials that the project would be more effective if it could be implemented independently of the chambers and export promotion agency. Eventually an agreement was reached with those organizations to spin off the export promotion activity and place it under the direct control of the contractor. However, this split from the local organizations did cause some resentment that was to haunt the project.

Phase 2 — 1990-1991: Export Promotion Focus

During this phase of the project, the focus remained on export promotion, and the first promotional offices outside of Bolivia were established in Chile, Argentina and Peru. The offices were used to support Bolivian producers targeting those countries, as well as to provide market intelligence. CARANA was able to achieve some early, verifiable successes which in turn gave the project some much needed credibility.

This initial credibility was an important factor in determining the project's future.
Staff became more confident in their abilities and were able to provide improved services. This led to companies being more responsive to staff and consultant recommendations. The results were:

- Greater demand for project services from local companies seeking technical assistance
- Project staff able to be more selective with the companies it worked with, thus allowing even greater success in the future
- Additional funds being provided from new sources that allowed the project to expand its services into new sectors and regions

Strength: Export of Natural Resource Based Products

The early successes achieved during this phase were due to two main factors: a focus on a few companies in a small number of sectors that allowed some degree of specialization; and, an understanding by all parties that the majority of the assistance required was on improving the product (rather than focusing solely on promotion),[26] as a means to promote exports. The fact that the early efforts focused on agricultural and other natural resource based products — which required little transformation prior to export, and where Bolivian producers enjoyed a relative competitive advantage — made this task easier.

Phase 3 — 1990-1991: Introduction of Investment Promotion Activities

In mid-1990, USAID became interested in creating an investment promotion capability in Bolivia and began exploring successful models from other countries. In an effort to build a consensus, USAID selected key public and private sector representatives to visit the investment promotion program in Costa Rica, then one of the most successful initiatives of its kind in Latin America. This created a greater awareness of the potential benefits of an investment promotion initiative. But it also led to some debate on how best to organize the effort (i.e., should the vehicle be a private sector or

[26] While this may be a commonly accepted principle today, prior to 1990 the majority of export promotion programs failed because of an almost exclusive focus on marketing existing production rather than on the development of *exportable* production.

public sector institution; should it be independent of or incorporated within the BOLINVEST project; were there more effective alternative organizational structures?).

Constraint: Lack of Cooperation with Local Institutions

After a great deal of discussion, USAID decided that a pilot investment promotion program within the existing BOLINVEST project offered the lowest risk solution. The decision was based on USAID's reluctance to create a new institution, coupled with the understanding that such a program would never be successful within existing public or private sector institutions. This decision was not popular within the public sector nor among some of the private sector associations - which had been lobbying hard for the program (and USAID funding). As a result, a great deal of resentment was created towards the project, which made coordination with these private and public sector institutions very difficult.

By late 1990, the investment promotion pilot was established within BOLINVEST as an fully autonomous project unit. The decision not to integrate it with the export promotion activity seemed like the appropriate option at the time, but unintentionally created to two different "cultures" within the project. Eventually this evolved into a significant internal conflict.

Phase 4 — 1991-1994: Multi-Function Organization

By the end of 1991, the investment promotion unit was fully staffed and had established its own offices in the United States. The export promotion program continued to operate on its own and generated excellent results, routinely exceeding targets and expectations. It was during this time that the export promotion unit initiated a pilot project (PROATEC Project), funded by local currency (PL-480 funds), to assist small rural, resource-based associations and cooperatives. This initiative focused on strengthening rural producer associations and linking them, in some cases, to larger export oriented companies.

Strength: New Focus on Adding Value to NRBI Products

It was during this phase that the investment promotion unit began to produce successes, although not in the areas initially anticipated. While the original investment promotion strategy emphasized selling Bolivia as a source of low wage, skilled labor, the revised strategy focused much more on promoting Bolivia's natural resource based opportunities (minerals and mining, agriculture) and its ability to serve as a manufacturing platform for the region.

It was also during this phase that the export promotion program began targeting higher value added products in new sectors with significant results. At the same time, the PROATEC project was achieving some success. As a consequence, the local PL-480 administration expanded funding of the initiative.

Constraint: Lack of Coordination Within the Project

Unfortunately, during the early part of this phase, the BOLINVEST export and investment promotion divisions were constantly in competition and scarcely coordinated with each other. Changes in senior management in 1993 produced fundamental changes in how the different components operated and related to each other. This restructuring produced positive results. The most important was a reorganization of the foreign offices to support both export and investment promotion activities.

Phase 5 — 1994-1996: Self-Sufficiency

It is important to note that in the early phases of the project, USAID did not intend for the BOLINVEST project to evolve into a permanent institution that would continue to offer services beyond the life of the CARANA contracts. The original project design assumed that CARANA would work with existing local counterpart institutions, obviating the need for a new institution. Even when the decision was made to allow CARANA to implement the project independently of existing organizations, USAID was still unwilling to invest in the creation of a new institution. USAID's position was based on the fact that investment and export promotion projects in other countries had spent too much time and money on institutional issues, to the detriment of effective project implementation. USAID also liked the flexibility of working with a contractor, thereby allowing it greater control over the project.

In 1994, USAID began to consider the possibility of converting the BOLINVEST project to a self-sustaining institution. Program results were positive, as borne out by independent evaluations and audits. More importantly, although it was never a stated project goal, was that BOLINVEST had developed into an effective organization, with competent local management, that could function independently of CARANA or USAID.

Discussions with influential members of the business community throughout 1994 and 1995 convinced USAID and CARANA that there was enough local support to warrant BOLINVEST management to prepare a self-sufficiency plan. A Board of Directors was recruited from the Bolivian private sector, and in 1995 Fundación BOLINVEST was officially established. In 1996, the CARANA contract ended, and USAID continued funding Fundación BOLINVEST through a cooperative agreement, albeit at a much reduced level. In mid 1996, expectations were high among USAID and BOLINVEST's management and Board of Directors that other donors would support the Foundation, and that it would be able to offer a full range of development services well into the future.

B. Impact

Direct Impact: Raising Import and Export Levels

The project had a direct impact on the level of exports from and investment in Bolivia: by August of 1995, the BOLINVEST project was credited with generating more than $100 million dollars in new exports, over $50 million in new direct investment, and creating over 10,000 permanent direct jobs. Furthermore, the project was able to facilitate significant levels of technology transfer in key industries, including traditional and non-traditional agriculture, mineral extraction and processing, agricultural processing, etc.

Two independent evaluations were carried out during the life of the project, in addition to the semi-annual "results audits" implemented by USAID. These evaluations, both undertaken in 1994, specifically analyzed project impacts. A mid term evaluation, conducted by the Development Economics Group/Louis Berger International, Inc.,[27] concluded that the project "represented a significant catalyst in the expansion of exports through both its major components — export and investment promotion — and in the formation of entrepreneurs." The report went on to say that "[t]he return on USAID/Bolivia's resources is highly positive and few projects generate foreign exchange, income and employment in such an effective manner." The evaluation pointed out that

[27] A Midterm Evaluation of the USAID/Bolivia Investment and Export Promotion Program; Development Economics Group/Louis Berger International, Inc.; January 1994

between 1990 and 1993 the project helped develop more than $40 million in exports, working with a cross section of large, medium and small enterprises in a broad range of sectors. Moreover, 8,633 direct permanent jobs and 13,302 indirect employment opportunities were generated as a result of CARANA's work. The evaluation estimated that the level of exports generated through the project accounted for approximately 10% of the national total of non-traditional products, the focus of CARANA's efforts. Another finding of the evaluation was that the $17 million in foreign direct investment, reported at the time, was generated in areas in which none had previously existed.

Most importantly, through its PROATEC initiative the project was able to improve the lives of thousands of rural families by raising income levels, as a result of improved productivity and product quality.

Strength: Work with Both Large and Small Firms

The evaluation also analyzed the tradeoffs between focusing on larger companies in order to generate exports rapidly and not assisting smaller firms with a longer term (and higher risk) payoff. The conclusion was that:

> *"The project has achieved a good balance between assisting larger, already exporting firms in finding new export markets and providing intensive production and marketing technical assistance to smaller, export-ready (but not necessarily exporting) firms. Assistance to larger firms generates good results, but the overall firm-level impact is mostly in saving these firms time and money. Assistance to small/medium firms is generally thought to be more critical and to have had more of a transforming effect on production, management, and marketing processes. BOLINVEST must continue to maintain a good balance between the medium firm-level impact/high results longer term, high firm impact/medium results assistance."*

These findings validated BOLINVEST's position that a focus only on meeting the stated indicators at the time (e.g., exports, investment and job creation) should not be the driving force behind the project. As a result, BOLINVEST and USAID agreed that the project should expand its efforts to work with smaller firms and in rural areas, even though it might increase costs and possibly delay results. Additional funding was also secured from the PL-480 program, which permitted expanded PROATEC activities.

A second evaluation was conducted by the Mission economist[28], and served further to document the economic impact of the project.

> *"The [BOLINVEST] Export Promotion Project has increasingly represented a significant catalyst in the expansion of exports through both its major components — export and investment promotion — and in the formation of entrepreneurs. The Project's impact on the economy, measured in terms of net value added, total income effect and employment, have been and will become more significant by Project completion. The return on USAID/Bolivia's resources is highly positive and few projects generate foreign exchange, income and employment in such an effective manner."*

The evaluation went on to describe the impact on net foreign exchange generation, and the nature of the technical assistance itself. Some of the principal conclusions of the study found that:

[28] "Financial Analysis of the Economic Impact of the Export Promotion Program"; Oscar Antezana M.; USAID/Bolivia; March 9, 1994.

- Exports attributable to the project in 1990 were only 1.1% of Bolivian non-traditional exports, but by 1993 the percentage had increased to 11%

- The percentage contribution to high value added exports increased from 1.3% in1990 to 20% by 1992 (latest available data at the time)

- Assistance had been provided to 145 export companies or 36% of the total number of export companies in Bolivia

- Of the 145 companies assisted, 127 had actually exported under the project (new markets, new products, etc.) and represented more than half of the companies that exported regularly

- A total of 8,633 direct permanent jobs, and 13,302 indirect or temporary jobs had been generated as a result of the project

- The labor segment that most benefited from increased employment opportunities were the poorest segments of the labor force

- Workers salaries in the projects assisted by the project were estimated to be 43% higher than the national average for similar employment

The results described above were achieved by adhering to the lessons learned from previous work in investment and export promotion carried out by USAID and other donors.

C. Lessons Learned

The years following termination of direct contract support for the organization have been difficult for BOLINVEST's management and Board of Directors. Aside from the Cooperative Agreement with USAID, and continued support from PL-480 local funds which provided a reduced level of funding, it has had little success is selling services or projects to other donors. Attempts to achieve a greater level of financial self-sufficiency, particularly by enhancing cost recovery on its programs through increased service fees, were also not successful, and probably overly optimistic from the outset.

BOLINVEST also never has been able to generate full support from either the government or the private sector. Much of this is the direct result of resentments created when the project was spun out from the organizations it was originally designed to support. On the government's side, there has always been a certain animosity towards the project, which varies in intensity from distant acceptance to open hostility, depending on the administration.

As a result, Fundación BOLINVEST no longer carries out a proactive investment promotion program, and it has had to limit significantly its other activities in order to live within budgetary constraints. While it still maintains excellent management and staff, other personnel have left, and with them a great deal of talent and know-how in export and investment promotion. This pool of skilled professionals will be very difficult to assemble again, particularly in the near future.

This case study does not make an attempt to judge the effectiveness of BOLINVEST's self-sufficiency efforts, since it is still too early to make such a determination. Similarly, the study does not explore what might have been done to improve the organization's chances to achieve financial independence. It does focus, however, on the conditions that made the project successful, as well as the "lessons learned" that can be applied to similar initiatives in the future.

The lessons learned fall into two main categories:

- Lessons learned in project design and implementation
- Lessons learned in export and investment promotion

In the following sections, each of the areas is discussed in greater detail.

C1. Lessons Learned in Project Design and Implementation

Many of the problems faced in project implementation can be traced back to the initial project design. To a large degree, these problems revolve around counterpart institutions and their commitment to the initiative.

Importance of commitment from counterpart institutions. One of the major issues that affected the project in its early phases was a misunderstanding between the local counterpart organizations and USAID with respect to project objectives - an issue that had plagued other export and investment promotion projects in the region as well. Counterpart organizations had little to no understanding of and commitment to the overall project objectives. Instead, they were much more interested in access to USAID funding, which they hoped could be used to support some of their own initiatives and needs.

The initial project design called for the direct participation of the counterpart institutions, and for CARANA to act as a technical assistance arm to the counterpart institutions which in turn were to provide assistance to its member companies. When it became clear that this strategy was not going to work, given the conflicting objectives and a lack of day-to-day support from the local counterpart institutions, CARANA pushed for a re-design of the project which would allow the program to channel technical assistance to companies directly. While this change in strategy was important in achieving success, the local counterpart institutions saw it as a withdrawal of “promised” support. This led to a great deal of resentment towards the project and towards USAID.

Self sufficiency efforts. USAID’s initial project design did not contemplate an organization that would evolve into a permanent institution. However, the success of the project led both USAID and BOLINVEST management to explore the possibility of becoming a non-profit organization upon completion of the CARANA contract.

A feasibility analysis carried out in 1995 convinced the parties involved that a stand alone not-for-profit organization (Fundación BOLINVEST) could survive. However, several key assumptions made in the analysis proved to be wrong. As a consequence, Fundación BOLINVEST had to scale back its activities substantially to the point where it now operates on only a fraction of its former budget, and carries out only a few of the services it once used to offer. Three of the assumptions are briefly discussed below:

1. One of the major assumptions of the feasibility study was that USAID/Bolivia would provide additional financial support for Fundación BOLINVEST in the form of an endowment. This was stated several times by USAID officials during the design of Fundación BOLINVEST and during the recruitment process for the Board of Directors. However, this proved to be difficult, and additional support from USAID came in the form of a Cooperative Agreement with a reduced level of funding. This resulted in the organization not being able to accumulate an endowment of any significance, which made it difficult for it to operate outside of individual grants. Between 1995 and 1997 many of the officials at USAID/Bolivia changed, leading to some erosion in

support for Fundación BOLINVEST and dampening any hopes of further significant USAID support for the project.

2. A second assumption was that there would be strong support from the international donor community. Efforts to raise funds from other donor organizations for an endowment also failed (although some specific grants were obtained). Part of the problem was that no organization wanted to be the first, citing that its contribution would not be enough to fund all of the activities. Others had a problem with the concept of an endowment versus specific grant support, while still others felt that this was not "their" project, and that they should not be called on to "save a USAID initiative.". In hindsight, this activity was started too late to help the Foundation in the early years (some support has been secured recently from the International Development Bank).

3. The third assumption was that the Foundation would be able to charge a significant portion of the cost of providing services to the client companies. However, given that up until this point in time the project had only asked local clients to reimburse a small portion of the cost of a technical assistance program, this was harder to implement than anticipated. In the end, resistance to paying the full cost of the services provided forced a reduction in the levels of technical assistance that could be provided.

Whether or not the decision to support Fundación BOLINVEST in its efforts to become a sustainable institution was correct, its impact was substantial. We believe that USAID needs to reassess its position on the use of endowments to achieve a long-term sustainable impact. The use of a cooperative agreement instead of an endowment in USAID's final assistance package to Fundación BOLINVEST prevented the organization from generating a level of operating income that would allow it to fund a core management and operational center (i.e., overhead costs). It also deprived BOLINVEST of the opportunity to use those funds as leverage to make itself more attractive to other donors.

The need for early success and credibility. One of the factors that made BOLINVEST so successful in the long run was that it was able to generate early verifiable successes which gave the project a recognized level of credibility. This credibility increased staff confidence and client responsiveness, which in turn led to greater success in later years.

Because the project initially focused on a few activities, it was able to score some quick successes. Too many projects start out with multiple objectives and tasks, failing to succeed at any of them, quickly losing credibility, thereby making achievement of future success even more difficult. By contrast, projects that begin with a focus on a manageable set of activities and seek a few early success stories, quickly gain a level of credibility to allow them to be more creative and achieve more as the project matures.

Appropriate indicators and indirect effects on the project. When the project was initially designed in 1989, broad targets were set in the area of exports and investment generation. However, little time and effort was spent on thinking how these were actually going to be measured and reported. It was not until 1993, that USAID staff in Bolivia made an effort to define how the project's performance and impact were going to be measured and reported and, more importantly, how USAID was going to verify these results. This culminated in an important study carried out by the USAID Mission Economist,[29] and was the first serious attempt to objectively measure the impact of an investment and export promotion effort in the region.

[29] "Financial Analysis of the Economic Impact of the Export Promotion Program"; Oscar Antezana M.; USAID/Bolivia; March 9, 1994.

The impact of this work was significant. While on the one hand, it kept the project "honest", on the other it also provided project management with greater insight into the types of activities producing the greatest development impact. This allowed management to make adjustments and justified new activities that would not have been made possible otherwise. This also provided USAID/Bolivia with the information it needed to achieve broader support for the project.

C2. Lessons Learned in Export and Investment Promotion

While a discussion of all of the "lessons learned" goes beyond the scope of this case study, a review of some of the more important success factors in export and investment promotion is useful. In addition to addressing the importance of understanding the lessons learned during the project design stage, this section also discusses two of the major lessons learned in export and investment promotion. These are critical to the design of any effective initiative in this field.

Importance of the "lessons learned" in project design. It has been our experience that the vast majority of export and investment promotion programs are ineffective. Unfortunately, too many investment promotion programs do not learn from the mistakes - or lessons learned - of others. Instead, many programs tend to repeat the same errors, or try and re-invent an investment promotion process without studying the reasons why programs are successful or why they fail.

Over the past decade, many lessons have been learned in the practice of export and investment promotion. Several useful studies have been conducted. Two of the better analyses that have withstood the test of time are:

- The Role of Support Services in Expanding Manufactured Exports in Developing Countries[30]

- USAID Evaluation Series on Export and Investment Promotion[31]

In designing the BOLINVEST project many of the mistakes of previous projects were ignored, and were in fact repeated. This led to a flawed project design which eventually had to be significantly modified.

While USAID was flexible enough to allow a re-design of the project by the end of the first year, there is no doubt that the initial design resulted in wasted financial resources and created other problems for BOLINVEST that continued to cause problems for the project well into the future. Clearly, understanding the lessons learned during the design phase of any project is important. In investment and export promotion projects, it is critical.

Importance of commitment from the host government and related public agencies. Strong government support for an investment and/or export promotion project is an important element for success. Yet the BOLINVEST project lacked clear government commitment to its goals. While relations with the counterpart government agencies were generally positive, during one administration in particular, the Ministry of Industry and Commerce — a key institutional actor — was openly hostile to the program. Further aggravating the problem was the fact that the Ministry of Foreign Relations fought openly with the Ministry of Commerce over which should be responsible

[30] "The Role of Support Services in Expanding Manufactured Exports in Developing Countries"; Paul Hogan, Donald Keesing and Andrew Singer; The International Bank for Reconstruction and Development/ The World Bank; 1991.
[31] Promoting Trade and Investment in Constrained Environments: A.I.D. Experience in Latin America and the Caribbean; USAID/The Development Economics Group of Louis Berger International, Inc.; 1990.

for promoting foreign investment. Moreover, each ministry felt that if the BOLINVEST program could be terminated, they would be able to secure USAID funding for their respective in-house programs. BOLINVEST countered this by maintaining a very low profile and working independently of the government to the extent possible.

It is difficult to quantify the degree to which the lack of government support and understanding of investment and export promotion strategies affected results, but there is no doubt that the project could have been even more successful had this support been made available. By maintaining a low profile, and operating independently, the project was able to exceed its goals. Nevertheless, there were also instances where government actions actually impeded results. Lack of government backing was also detrimental to BOLINVEST initiatives to secure additional funding from the international donor community. While the government lobbied hard to fund its own initiatives (and different Ministries lobbied against each other for funds), it blocked any support for additional funding for BOLINVEST.

A positive policy environment. There is ample proof that the overall policy environment in which an export and investment promotion program is implemented impacts heavily on the results of a program. The positive policy environment includes such macro-level variables as the overall legal and economic policies in a country (i.e.: favorable and stable monetary and fiscal policy). It also includes other variables that can be readily improved, such as the cost and availability of infrastructure (water, electricity, industrial space), human resources, community services, raw materials and other necessary inputs, as well as the general quality of life.

Few countries or regions have been successful in their export and investment promotion efforts when carried out within an inhospitable policy environment. However, the lack of a perfect environment does not mean automatically that a program will fail. Alternative strategies exist that can be implemented to counter and even eliminate policy obstacles. One example is the use of free zones, used to isolate important sectors from adverse economic policies.

It is important though, to have a clear understanding of the policy environment and account for its potential impacts in the design of a project. For example, implementation of an investment promotion program in El Salvador in the late 1980s during the civil war in that country predictably resulted in little or no success (in contradistinction to the successes achieved within three years of the signing of the peace agreement). A similar situation occurred in Nicaragua, where an investment program was successfully introduced *after* the end to civil strife and within months of a new democratically elected government, but still to early to achieve results.

Implementing an export promotion program in Bolivia in the early 1990s was appropriate given the massive economic restructuring that took place in that country in the 1980s, and which led to a stable — although by no means ideal — policy environment. Implementation of an investment promotion project was more difficult, but made possible by the fact that international investors in key sectors, such as mineral development and mining, were more accustomed to working in difficult environments. Investment promotion efforts in other sectors, including apparel and other assembly operations, were not as successful since investors were able to find more a more conducive policy environment in other countries.

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USING TOURISM AS A MEANS TO SUSTAIN COMMUNITY-BASED CONSERVATION: EXPERIENCE FROM NAMIBIA

Summary

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A. Abstract

This paper has been prepared by David Callihan[1] for the RAISE (Rural and Agricultural Incomes With a Sustainable Environment) project to highlight best practices. The themes discussed, notably the impact and constraints of the project, address the key program elements of RAISE: 1) leveraging and promoting investment incentives for private sector investment in natural resource-based industries; 2) enhancing policy conditions that provide the foundation for sound economic growth and natural resource management decisions; and 3) transferring technology through private and public sector channels, to enhance income generating potential and sound management of client countries' natural resources.

This case study is about the Living in a Finite Environment (LIFE) project, which operates in Namibia under a Cooperative Agreement between USAID's Southern Africa Regional Office and the World Wildlife Fund (WWF). The project supports community-based natural resource management (CBNRM) through the provision of grant funding and technical assistance. Developing and strengthening the link between conservation and tourism is an underlying premise of Namibia's CBNRM Program, and an objective that is supported by the LIFE project. This case study discusses the LIFE project's efforts to link tourism and conservation and, more specifically, discusses how tourism is used as an element to the LIFE project's strategy of building sustainable community-based conservation organizations.

B. Impact

- In 1998, Namibia's first four communal conservancies were registered with the Ministry of Environment and Tourism.
- Conservancies are beginning to earn significant income from NRM-related activities.
- Structures are being created that will enable conservancies to manage their own finances.
- Newly-registered conservancies are proving capable of securing joint-venture business agreements with private sector operators.
- Progress is being made in moving conservancies towards financial self-sufficiency.
- A new and more equitable model of community-private sector tourism partnership is emerging in Namibia.

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C. Constraints

- Traditional common property resource management regimes, such as those that operate in Namibia's communal areas, are often at odds with the requirements of building and operating market-driven private sector businesses.
- The Scope of Namibia's Nature Conservation Act is too limited.
- There is an enormous chasm between Namibia's communal area communities and the requirements of operating an international tourism facility. Since tourism investors must deal with a confusing multitude of actors and organizations, they can easily become deterred from working in communal areas. This situation raises their transaction costs.
- Communities are short of development capital.
- Public sector incentives to encourage increased tourism investment in communal areas have not yet been developed in Namibia.

D. Lessons Learned/Suggestions for Future Implementation

- It is essential to have a legal policy foundation that allows communities to utilize and manage natural resources, and enables communities to control tourism within their jurisdictions.
- A strong base of organizational and financial skills is essential to build sustainable community conservation organizations.
- Communities need training and support to understand tourism, develop tourism skills, and integrate their activities into the mainstream commercial tourism sector.
- Communities need training and support to enable them to negotiate joint venture agreements with private sector operators.
- It is useful to develop a mechanism to encourage tourism collaboration between the government, private sector, and communities.
- Communities need to acquire a legal personality to be able to interact with commercial tourism operators on an equal basis, and to ensure joint venture operational and financial transparency.
- CBNRM Programs should be judged more broadly than on their revenue-generating ability.
- Partnerships with the private sector are necessary to establish and operate successful high-end tourism facilities in communal areas.

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Detailed Description

The Living in a Finite Environment (LIFE) project operates in Namibia under a Cooperative Agreement between USAID's Southern Africa Regional Office and the World Wildlife Fund (WWF). The project supports community-based natural resource management (CBNRM) through the provision of grant funding, technical assistance, and training. The consortium that implements the project is led by World Wildlife Fund and includes Management Systems International (MSI), the Rossing Foundation, and World Learning. The LIFE project is the largest component of a broader Namibian CBNRM effort, which includes policy and technical support from Namibia's Ministry of Environment and Tourism, as well as training and field support from numerous non-governmental organizations (NGOs). The Namibian NGO, Integrated Resource Conservation and Development (IRDNC), a partner and grantee of the LIFE project, is generally credited with initiating CBNRM in Namibia in the early 1980s through its program in the northwest to involve communities in efforts to protect black rhinos.

A development topic currently generating much interest is how tourism can be used to generate funding to support rural development and conservation. It is no wonder, as tourism currently generates 10 percent of the world's income, and is the world's fastest growing industry.[1] International tourism, which has been growing at the rate of at least 4 percent per annum, is expected to continue to experience significant growth over the coming decade. Tourism to developing countries has been increasing since the 1950s, and is expected to increase at an even faster pace than the general global trend.[2] As more tourists spend their income in developing countries, particularly in nature-related destinations, such countries are increasingly looking for ways to use tourism receipts to spur local development. To ensure that tourism growth can be sustained, economic development planners and conservationists are trying to build in safeguards that will ensure that the resource base upon which so much of tourism is dependent can be sustainably managed. Otherwise both the economic and conservation benefits of tourism will be in jeopardy.

Developing and strengthening the link between conservation and tourism is an underlying premise of Namibia's CBNRM Program, and an objective that is supported by the LIFE project. This case study discusses the LIFE project's efforts to link tourism and conservation and, more specifically, shows how tourism can contribute to the development of sustainable community-based conservation organizations. To build such organizations, termed conservancies in Namibia, the LIFE project works toward the following objectives: a) helping communities to attract tourism investment though the development of equitable joint venture partnerships; b) ensuring that communities gain skills to account for and productively manage funds (earned from nature-based tourism) for the benefit of their communities; and c) helping communities acquire the knowledge and skills needed to sustainably manage the natural resources upon which tourism is dependent.

The focus of this case study is on the LIFE project's efforts to use tourism as a mechanism to support the operations of community conservation organizations. The project's broader conservation

[1] Ashley, Caroline and Dilys, Roe, *Enhancing Community Involvement in Tourism: Issues and Challenges*, International Institute for Environment and Development, London, December 1998.
[2]. Goodwin, Kent, Parker and Walpole, *Tourism, Conservation and Sustainable Development: Case Studies from Asia and Africa*, Institute of International Environment and Development, London, December 1998.

activities, which form a majority of the LIFE project's efforts, are not discussed in detail within this paper.

B. A Historical Overview of Wildlife Utilization and Tourism In Namibia's Communal Areas

Namibia is blessed with a rich heritage of spectacular wildlife that includes kudu, zebra, giraffe, wild dog, sable and roan antelope, lion, leopard, buffalo, hippopotamus and large herds of migratory elephant. Namibia is home to 32 species of large mammals, and 80 percent of its large mammal population resides outside of parks and protected areas. Namibia's northern communal areas, where many of these animals roam freely, are also home to thousands of impoverished villages, whose residents practice subsistence agriculture and face an uncertain future. In northern Namibia's rural communal areas education levels are low, unemployment is high, infrastructure is generally poor, and the population is plagued by a high incidence of disease, including elevated rates of HIV/AIDS and seasonally high incidences of malaria. In addition, much of the area is far from transportation hubs and industrial centers. Consequently, Namibia's communal areas have had, and will continue to have, difficulty in attracting investment and creating employment. Although the main livelihood activity of most of the area's rural inhabitants is subsistence agriculture, soil fertility is poor, and rainfall is spatially erratic and generally low.[3] As population increases, already poor soils become overtaxed, agriculture spreads, and wildlife habitat decreases. A lack of economic alternatives, and unmitigated reinvestment into agriculture, is causing a decline in the productivity of the resource base on which many of the area's residents currently depend.

B1. Wildlife Utilization and Regulation

In Namibia's communal areas wildlife is owned by the state. Within these areas, wildlife-based tourism is an incipient but rapidly developing industry. Until very recently, the communities who live in areas inhabited by game species — including sometimes destructive species such as elephant and lion — have only marginally benefited from commercial wildlife-based activity.

While Etosha National Park is Namibia's premier tourist attraction, much of Namibia's big-game species, including the vast majority of the country's approximately ten thousand elephants, can be found on communal lands, or within protected areas adjacent to communal lands. Protected areas in the country's north include the West Caprivi Game Reserve, and the Mahango, Mudumu and Mamili National Parks. Since none of these parks are fenced, game is free to wander across park boundaries and into villages and agricultural areas. As a result, it is communal area residents who often bear the cost of conservation. There is occasional human loss, but more often there is cattle loss to lions. Elephants also cause substantial damage to grain agriculture. In some areas of northern Namibia it is not unusual for communities to annually lose large portions of their crops to elephants. For example, within the Caprivi's Kwandu area (adjacent to the West Caprivi Game Reserve) a 1998 survey indicated that 74 percent of residents had lost crops to wildlife within the past five years, and 38 percent of residents had lost crops to wildlife in three or more of the past five years.[4] While most crop loss is attributed to elephants, crops are also lost to hippopotamus, wart hogs, bushbucks, kudus

[3]. In 1970, South Africa's Odendaal Commission, operating under its apartheid system of government, recommended that Namibia be partitioned into the following land classifications: African Homelands; Areas Reserved for Whites; and Game Reserves and Other Government Areas. Within Namibia's communal areas " the formerly designated "African Homelands" — wildlife and land were designated as the property of the state. Currently, forty percent of Namibia's land is classified as communal land. In general, the South African government selected land least-suitable to agriculture to designate as communal "homelands." As such, it is no wonder that a majority of communal area residents are quite poor, as agriculture is their main livelihood activity.

[4]. Mosimane, Alfons, An Assessment on Knowledge and Attitudes about Kwandu Conservancy and the Socio-Economic Status, University of Namibia, Social Sciences Division, September 1998.

and monkeys, among other species. So, not only have community residents not generally benefited from the area's tourism, but communities have come to view wildlife as a nuisance - something that has had a negative impact on their livelihood.

Historically, Namibia's Ministry of Environment and Tourism (MET), whose mandate it is to manage the protection and sustainable use of wildlife and habitat, has relied heavily on regulation and enforcement to carry-out its role. In doing so, it generally restricted its management activities to protected areas. It only became involved in communal areas in its capacity as a law enforcement agency, to prevent people from "poaching" wildlife — wildlife that local communities have historically lived with and relied upon as a source of protein, but which now legally belongs to the state. Not surprisingly, illegal hunting which flourished in Namibia over the past few decades, and the large-scale wanton killing of wildlife by the South African Defense forces during their occupation of northern Namibia (circa 1966-1988), led to a precipitous decline in game populations in communal areas. Once Namibia gained independence the situation somewhat stabilized, but illegal hunting nevertheless remained commonplace since communities saw little reason to cooperate with national conservation policies.

Around the time of Namibia's independence, in 1989, there began to be discussion and efforts to address the recognition that many game populations were in decline as a result of illegal hunting and habitat loss. It was argued that this situation had evolved because the populations who lived in these areas were poor, and had no incentives to practice conservation. In fact, the converse was true. Since communities were not able to share in the benefits associated with wildlife, including trophy hunting and tourism, it was often in their best interest to transform wildlife habitat into grazing pasture and grain fields, activities from which they could derive direct benefits.

B2. Tourism in Communal Areas: Historical Practices

During South Africa's rule northern Namibia was off limits to travel. The area was heavily occupied by the South African Defense Forces, land mines were prevalent, and military skirmishes were frequent. However, once Namibia gained independence, international tourism interest rapidly increased. Since independence, Namibia's tourism industry has been the country's fastest growing economic sector, and is now the third largest earner of foreign exchange income. Tourism currently contributes 5 percent to Namibia's Gross Domestic Product, and comprises 13 percent of foreign exchange earnings.[5]

Tourism's Typical Benefit to Namibian Communities. When lodge owners were asked to cite examples of how they shared benefits with local communities they mentioned the following "assistance": a new suit had been purchased for a local headman; materials had been contributed for the construction of a new thatched traditional court (Khuta); transportation was periodically made available to take villagers to town; and local residents were given the "opportunity" to sell firewood to the lodges. While these benefits are valuable to the affected communities, in all cases they stop short of being characteristic of a formal business partnership — such as one would normally expect to find between a commercial establishment and the owner of the land that is occupied by that establishment.

The recent upsurge in tourism to Namibia has been principally led by the country's commercial sector, and relatively little income has been earned from tourism by communal area residents, despite the high tourism appeal of such areas. A 1998 LIFE survey of six tourism lodges in northern communal areas revealed that all of these establishments were owned by someone from outside of the community, either someone from Windhoek, or by overseas investors. To secure operating "rights" all of the lodges surveyed had made informal agreements with traditional headmen, but none

[5]. Community-Based Natural Resource Management Programme, Ministry of Environment and Tourism, undated, circa 1998.

of these agreements included a legal requirement that the lodges share income with the adjacent communities, whose land they occupy. In Namibia, these deals have been the norm of operation, and are sometimes referred to as "blanket and brandy" deals, in reference to the informal nature of the agreements and a common belief that communities usually receive far less than market value for their agreements to allow lodges to be established. In fact, oftentimes "communities" would not receive any of the benefits of these deals, as whatever benefits resulted were often retained by traditional headmen and not shared with the larger community.

Overall, tourism lodges in Namibia's communal areas have not been treating communities, whose land they occupy, as partners in their business ventures. Relations between communities and the tourism lodge owners can most often be characterized as paternalistic, informal and *ad hoc*. In addition to not equitably sharing revenue, the agreements that the lodges operate under generally fail to address issues that are important for maintaining a community's commitment to conservation. One example is how to compensate farmers who agree to tolerate living adjacent to wildlife areas, but as a consequence occasionally suffer crop and livestock loss. On the positive side, the lodges surveyed were the most significant generator of formal employment within the areas where they are located.

Thus, at the time the LIFE project was established, Namibia's communal areas were beginning to experience an upsurge in wildlife-based tourism, but were largely excluded from gaining any of the benefits associated with these activities. This situation existed because the government's policies did not favor community participation in either consumptive or non-consumptive wildlife use, and because communities did not have the skills, organization or capital to be able to take advantage of market opportunities.

C. Policy Context: The Enabling Foundation

C1. Namibia's Policy on Community-Based Tourism

In May, 1995 the MET approved Namibia's Community-Based Tourism Policy. This policy grants rights to communities over tourism within their areas of jurisdiction. The Nature Conservation Act of 1996 (which allowed for the formation of communal area conservancies), grants conservancies the rights over non-consumptive use of wildlife, which includes tourism use. This legislation provides communities the exclusive right to operate commercial tourism activities within a registered conservancy.

A New Beginning. In June 1995, the MET granted Permission to Occupy status to Elias Xoagub, enabling the development of a tourism campsite at Twyfelfontein, the site of the world"s largest known concentration of stone age petrogylphs. This marked the first time in Namibia's history that a tourism concession was granted to a black-owned communal-area business, and was made possible by the passage of Namibia's Community-Based Tourism Policy. Currently, several communal conservancies are applying for tourism concessions in order to control tourism within their boundaries.

Now, for the first time in Namibia's modern history, local residents are being given an opportunity to benefit from wildlife — and these benefits will largely be from tourism-generated revenue. Without tourism, and in particular tourism that can benefit local people, it is almost certain that the area's animal populations would continue to decline. Thus, for northern Namibia, sustainable wildlife utilization, including tourism and trophy hunting, appear to be the only economically viable mechanism to encourage improved conservation practices.

C2. Namibia's Conservancy Policy

In June 1996 the Namibian Parliament amended the country's Nature Ordinance to allow rural communities to benefit from sustainable wildlife utilization, pending compliance with certain conditions. These conditions stipulated that communities must form themselves into conservancies, and this meant that communities had to meet specified registration requirements. Government requirements for becoming a registered communal area conservancy include: mapping of the conservancy's boundaries, and having neighboring communities agree to the boundary demarcations; registering a conservancy's members, who should form a majority of the population within a conservancy's boundaries; forming an elected and representative management committee; developing a community-approved constitution; and developing a benefit distribution plan, which provides guidance on how financial and non-financial benefits will be shared among a conservancy's members.

Once a conservancy becomes registered (which has generally required a two to three year effort), it then gains authority to sustainably utilize and benefit from the area's wildlife. In particular, conservancies have the right to petition the MET for a sustainable wildlife off-take quota, which can be auctioned to trophy-hunting firms or used for consumptive purposes. In addition, the conservancy also gains tourism rights and, as a legal entity, has the authority to enter into contracts with private sector tourism operators.

The passage of Namibia's conservancy legislation in mid-1996 was intended to provide incentives to communities to conserve wildlife; to encourage a change of attitude whereby wildlife would come to be seen as an economic asset to be treasured and protected; to enable wildlife, and wildlife-based activities, to become an impetus to stimulate economic development in many of the country's most impoverished areas; and to help the government and communities to become partners in wildlife conservation.

There are currently four communal conservancies in Namibia, all approved within the past year, and another 22 or so others under development. Namibia's four communal conservancies cover an area of just over 1.6 million hectares.

D. The LIFE Project

Against the aforementioned background, Namibia launched a CBNRM program in the early 1990s, with the MET's Directorate of Environmental Affairs playing the lead role in developing the policies that underpin the program. The premise of Namibia's CBNRM Program is that natural resources must have an economic value if those living within proximity of the resources are to have an incentive to practice conservation and sustainable use.

D1. The LIFE Project's Purpose and Activities

The CBNRM program developed in Namibia has three areas of concentration: governance and community empowerment, rural economic development, and conservation.

- *Governance and community empowerment.* Communities can take advantage of rights promulgated under Namibia's Communal Area Conservancy Legislation by forming representative and accountable management committees. Although initially formed to manage sustainable resource use, once formed, the committees become skilled organizations able to manage and account for funds, undertake land-use planning,

negotiate business agreements, and represent a community's interests on a wide range of land use and development issues.

- *Rural economic development.* Conservancies are a mechanism for communities to be able to earn income from wildlife-related activities, including from working with private sector firms in the areas of trophy hunting and tourism. Under the conservancy legislation, communities must develop equitable community-approved benefit distribution plans, and it is expected that many conservancies will establish and manage *community development funds*, which will be used to support local development initiatives.

- *Conservation.* The CBNRM program promotes conservation of biodiversity by creating the necessary incentives for communities to use resources sustainably. To ensure sustainable resource use, communities must develop resource management plans, and monitor that resources are being utilized at sustainable levels.

To support Namibia's CBNRM initiative, USAID developed the LIFE project. Begun in May 1993, and scheduled to operate through early 2000, the project has been funded at $25 million. A recently approved second phase of the project, LIFE II, will operate from late 1999 through 2004, with a level of USAID support of $12 million. WWF has been selected as the lead implementing organization for the first three years of the project's second phase. The latter two years of LIFE II USAID support will be contracted directly with Namibian NGOs, under the structure of a Namibian National CBNRM Program. One of the main objectives of the LIFE II project is to support the development of a Namibian CBNRM Association, whose job will be to raise funds and manage grants in support of Namibia's National CBNRM Program, thus taking-over several of the responsibilities currently managed by the LIFE project.

The purpose of the LIFE project is to "*increase the benefits received by historically disadvantaged Namibians from sustainable management of natural resources in communal areas."* To achieve this purpose, the LIFE project provides grants, technical assistance, training, and supports economic and policy analysis. The LIFE project currently supports about twelve grants, which include the following activities:

- Helping communities to form legally recognized conservancies, so that local communities can control, and economically benefit from, the sustainable use of natural resources

- Promoting economic development, including encouraging private sector tourism investment and supporting small enterprise development, such as the development of campsites, craft outlets and cultural villages

- Improving natural resources management, by helping conservancies develop sustainable resource-use plans, training community game guards to monitor wildlife populations and conduct anti-poaching patrols; and by re-introducing game species

- Strengthening Namibian NGOs to be able to implement CBNRM activities

- Supporting the establishment of Namibian CBNRM Association, and ensuring that it establishes a capability to raise funds and mange grants in support of national program objectives.

The project involves a variety of Namibian NGOs, as well as the MET, as grantees and partners. Overall project direction is under the authority of the LIFE Steering Committee, which is composed of NGO, university and government representatives, and is currently chaired by the MET's Directorate of Environmental Affairs.

Over the first phase of the LIFE project a great deal of effort was put towards organizing communities into conservancy structures that are able to effectively represent community interests, particularly in regard to resource management issues. As the LIFE project continues, an increased effort will be directed toward helping conservancy committees to improve their ability to manage and monitor natural resources, and to operate themselves as self-financing development organizations.

D2. Targeted Areas and Intended Beneficiaries

The LIFE I project was a pilot effort, designed to test the CBNRM concept in Namibia in a limited number of locations. These locations included the Nyae Nyae area of eastern Odjozondujpa (formerly Bushmanland), east and west Caprivi, and the area of Uukwaluudhi, northwest of Etosha National Park. These areas are all located within communal lands, and many are located adjacent to national parks or, in the case of eastern Caprivi, adjacent to Botswana's Chobe National Park.

The project's beneficiaries are defined as historically disadvantaged Namibians — meaning black Namibians, who suffered social and economic discrimination under South African apartheid rule. All project sites are located in communal areas, and within these areas living standards and income are low. Although there is a paucity of income and employment data on Namibia's communal area residents, the LIFE project has undertaken socioeconomic studies that confirm that project beneficiaries are economically disadvantaged. For example, in the Kwandu area, where the project is supporting the development of one of several Caprivi-area conservancies, it was found that 60 percent of the area's households do not earn any income to supplement their subsistence agricultural activity. Of the households who do report receiving regular income, over two-thirds reported receiving less than $33 per month. In fact, across Namibia's communal areas, agricultural incomes are so low and variable that cash remittances and pensions are essential supplements for most families, and 17 percent of rural households regard remittances as their main source of income.[6]

Direct beneficiaries of the project will be those who will earn wage income as a result of project-related activities, including wages earned from tourism lodges and community-based tourism enterprises, those producing and selling crafts, and those employed on a full-time basis by conservancy committees. Other direct beneficiaries will include the many thousands of community members who will receive income distributions from net conservancy earnings, and those who will benefit from activities supported by the use of conservancy-generated community development funds. The LIFE project estimates that there will be 56,000 conservancy members by 2005 (Namibia's current population is 1.6 million).

In addition to financial benefits, a number of non-quantifiable benefits will result from the LIFE project. These benefits have been identified in a paper by Caroline Ashley, entitled *Intangibles Matter: Non-Financial Dividends of Community Based Natural Resource Management in Namibia.* In this paper, Ashley states "empowerment is perhaps the most important benefit [of the CBNRM program], because rural communities, disempowered by colonialism and apartheid, have had few opportunities to gain rights and responsibilities, or develop skills and status. Empowerment is multifaceted, deriving from the many ways in which CBNRM activities and the gradual development

[6]. Barnes, Jon and Ashley, Caroline, *Wildlife Use for Economic Gain: the Potential for Wildlife to Contribute to Development in Namibia,* MET Directorate of Environmental Affairs, Research Discussion Paper No. 12, September 1996.

of common property resource management strengthen communities' social organization." Other project benefits identified by Ashley include: a diversification of livelihood strategies, in particular the opportunity to use income and game meat as a way to cushion the affect of Namibia's periodic droughts; an increased accountability of community leaders to their constituents; and support for traditional values, which place a preeminence on the cultural and aesthetic value of wildlife.

E. Linking Tourism and Sustainable Community-Based Conservation

The LIFE project is working in areas of Namibia where nature-based tourism is on the increase. However, the resource base upon which this tourism increase is dependent is fragile and, within Namibia's recent past, has not been sustainably managed. In turn, tourism development practices have not significantly benefited local communities — communities who must be relied upon to manage the areas' natural resources if tourism is to be maintained or expanded. And around it goes: an interdependent web of tourism, communities, sustainable resource management, and economic opportunities. The LIFE project's intent is to help to ensure that the various strands of this web are in harmony, and that the web's various interest groups understand their interdependence, and find ways to cooperate for mutual benefit. If successful, the results of the LIFE project will include a healthier and better managed resource base, an expanded and more profitable tourism sector, and a better standard of living for local communities.

A critical performance target under the WWF/LIFE Phase II project is that a minimum of five conservancies will become financially self-sustaining by October 31, 2002. This section presents the strategy and activities that will be used to achieve the objective of helping conservancies to become self-sustaining.

E1. Community-Based Tourism and the LIFE Project's Strategy to Develop Sustainable Communal Area Conservancies

The LIFE project's aim is that conservancies become self-financed independent natural resource management organizations, and that these organizations eventually expand their activities to represent community interests across a broad range of social and economic development issues. Based on the analysis of revenue-generating opportunities, it is believed that tourism and trophy hunting offer the best and most immediate promise as generators of conservancy revenue. In fact, by the year 2005, it is projected nearly 80 percent of conservancy revenues, or over $500,000 in income per annum, will be earned through partnerships between conservancies and the private sector.[7] About 60 percent of conservancy income is expected to be generated through cooperation with private sector tourism lodges, another 20 percent through sustainable trophy hunting, and the remainder through conservancy-owned campsites, craft outlets, cultural villages and other tourism-related activities.

To effectively manage natural resources an average conservancy will consist of a staff of at least five full-time professionals, which will likely include a manager, a bookkeeper/finance assistant, two game guards, and one community resource monitor. Although all conservancies will have different needs, the LIFE project believes that five full-time staff positions will be the minimum number necessary for a conservancy to effectively manage a community's natural resources. It is hoped, however, that most conservancies will develop to be able to employ more than a minimum configuration of staff. In addition to staff requirements, most conservancies will need to be able to

[7]. LIFE project, unpublished, projections of CBNRM-Based Income in Registered Conservancies, February 1999.

maintain a vehicle, hire casual labors for various tasks, and maintain boreholes, fences and other wildlife-related infrastructure.[8]

A principal emphasis of Namibia's CBNRM Program is to help conservancies to become independent self-financing organizations. To ensure a community's support toward conservation, it is important that a conservancy be able to generate benefits that can be distributed among its broader membership, for example, by generating income that can be distributed to members, or used to support community development projects. Many of the benefits received by community members where conservancies have been formed, however, will accrue in the form of employment income from tourism lodges and hunting contracts, or from an increased level of economic activity within an area, such as increased agricultural marketing opportunities, or through the sale of firewood and thatching grass, rather than as a result of the distribution of net conservancy income. Nevertheless, it is expected that most conservancies in Namibia will be able to generate revenue in excess of their operating requirements, and thus will be able to periodically distribute benefits to community members. Aside from whether or not conservancies are able to make household distributions of income, a principal benefit of Namibia's CBNRM program will be the establishment of self-financed community conservation organizations that can exist in perpetuity, and which will be skilled in attracting increased investment and development into an area (in addition to managing natural resources).

The LIFE project is placing a strong emphasis on improving conservation stewardship in communal areas, and ensuring that all communal area conservancies are able to self-finance their own operational costs. As part of this effort, the project works with each of its target conservancies to identify and implement a diversified range of income-earning activities, and to match conservancy management structures with income earning potential. The LIFE II project will place an emphasis on narrowing the gap between private sector tourism and rural communities — ultimately resulting in the development of formal business relationships between conservancies and tourism operators. A combination of increased income, together with improved financial management skills, should lead to the development of conservancies able to sustain and manage their operations. Sustainable conservancies will exist when they earn enough income to support their basic operations, and are able to analyze and manage finances in a manner that ensures revenue and expenditures remain in balance. Once conservancies are helped to reach financial sustainability, a role of the CBNRM Association of Namibia will be to help identify funding for additional capital developments, which can be externally financed but managed through the personnel and skills of existing conservancy structures.

E2. Current Project Initiatives: Providing Communities Greater Self-Determination, Management Authority, and Income

Below we describe the current LIFE project activities that will contribute to making conservancies sustainable.

In the area of increasing tourism investment in communal areas, the following activities are undertaken by the LIFE project:

Help conservancies attract private sector tourism investment. The LIFE project: works towards registering conservancies to become legal entities, so that they are able to enter into joint-venture

[8]. The LIFE project has calculated that an average of $28,000 per annum will be required to sustain a basic conservancy operation. It is projected that an average joint venture lodge operation will provide a conservancy $13,000 per annum (plus $16,000 in wage income), the operation of a campsite can bring a conservancy an additional $2,600, and that a trophy hunting contract will earn about $13,000 in conservancy revenue (plus $2,000 in wage income).

business agreements; helps conservancies to produce tourism development plans, which build community consensus for linking sustainable natural resources management and tourism development; provides assistance to conservancies to zone and map parcels of land to be used exclusively for business and tourism development; and increases conservancy knowledge of tourism, by offering study tours and training, principally through the work of the Namibian Association of Community-Based Tourism (NACOBTA).

Collaborative Management Strengthens Relations Between Communities and Tourism Operators

The Damaraland Camp uses a joint management committee to help it select employees. When first hiring employees the operator asked the conservancy to nominate three candidates for each available position. The operator then interviewed all of the candidates, selected particular individuals for a few positions, and made a short-list of its preferences for other positions. The conservancy management committee was then able to select final candidates from the short list and, in doing so, was able to take into consideration factors such as the financial welfare of the candidate"s family and the necessity to share the jobs among several villages. Both parties were pleased with the process used and its outcome.

Provide conservancies assistance to better understand private sector interests, and to review joint venture proposals. The LIFE project has provided workshops for communities and NGOs to discuss tourism investment and joint ventures, and has done this through the use of presentations, discussion and role plays. In this way, communities become familiar with investment issues and negotiation techniques, and when the opportunity arises are prepared to deal with these issues within time frames acceptable to investors, who have a financial interest in concluding negotiations as quickly as possible.

Create forums to build community-private sector partnership and understanding. The LIFE project initiated the establishment of a Communal Area Tourism Investment Review Committee, which is composed of NGO, private sector and government representatives, and whose role is to review proposals from private sector investors wishing to build tourism facilities in communal areas. The committee is an advisory committee, which reviews investment proposals and then provides a single set of observations to both investors and communities regarding how the proposal fits with CBNRM objectives and structures, as well as to what degree the proposal represents standard industry practice in Namibia. For example, a recent proposal review helped a potential investor understand that there are successful precedents for private sector-community joint management committees in Namibia, as had been requested by the community. The same review process helped the community understand that the 30 year lease proposed by the investor was not unusual, but rather was a fairly standard industry practice in southern Africa. In this way distrust between investors and communities can be overcome - and both parties can learn a bit more about each other’s business culture and practices.

Encourage the establishment of joint management committees to ensure a mechanism exists for routine communication between facility managers and communities. As a first step to forming a joint management committee, community and tourism operator representatives need to define the committee’s role and composition, and ensure that both parties are clear as to the issues over which the committee will have authority. In Namibia, tourism facility operators have insisted on retaining day-to-day management authority over operations, but have successfully used joint management committees for identifying workers, establishing personnel policies, approving an expansion of facilities or activities, maintaining a communications link to the broader community, and using the committee as a forum for solving disputes. These committees also provide community leaders opportunities to increase their skills in tourism and business management, and place them in a position to increase their management responsibilities as the venture proceeds.

Ensure that communities become partners in tourism development, and equitably share in the benefits. The LIFE project works to help conservancies formalize their relationships with private sector tourism operators. Formalizing relationships will require the development of mutually-agreeable and transparent revenue sharing agreements, which generally ensure that communities gain

some form of lease revenue, combined with a percentage of gross income. For example, a model agreement would stipulate that a community receive so much per year in the form of a flat concession fee, plus an additional amount of funds based on turnover and occupancy levels. The LIFE project is currently encouraging communities to seek 5 percent of total revenue in the initial years of an operation, and then receive a gradually higher percentage as the business becomes established, occupancy rates increase, and capitalization costs begin to be recovered. It is hoped that once a business is fully established communities can earn 10 percent-15 percent of total revenues. The LIFE project, however, provides this only as guidance, as it is between communities and investors to decide what is appropriate under any given arrangement.

Ensure that joint venture agreements include clauses to provide communities training and opportunities to assume management positions. Preference should be given to hiring workers from communities adjacent to the tourism business, and opportunities need to be created to allow workers to move into management positions. In the long term this is in both parties' interest, since the replacement of expatriate managers by community members should reduce operational costs and increase profit margins.

Support the integration of community-based tourism into Namibia's mainstream commercial tourism industry. The Namibian Association of Community-Based Tourism (NACOBTA), established with the support of the LIFE project in 1996, is playing a significant role in helping communities to gain tourism skills and to develop small-scale tourism facilities. In the past two years, NACOBTA has provided training to more than 200 rural community participants (more than 2,000 person-days of training) in subjects such as introduction to tourism, building a community-based tourism enterprise, and tour guiding. In addition, NACOBTA has recently begun a grant-making program to provide qualified enterprises funds to improve tourism facilities, such as campsites and cultural villages. Once tourism facilities are brought up to international tourism quality standards, NACOBTA works to make sure that the facilities are used by private tour operators. A current initiative of NACOBTA is working on the establishment of a reservation system for community-based campsites, in response to the private sector's need to be able to ensure clients accommodation in particular locations.

In the area of increasing communities' ability to productively manage (tourism) revenue, the following activities are undertaken:

Ensure that conservancy committees represent the interests of the broader community. The LIFE project, most often through support provided by partner NGOs, helps conservancies with their formation process, and helps to facilitate the selection of management committees that are representative of the community, as is required by Namibia's conservancy legislation. In many cases, this has meant that representatives are elected from various regions within the conservancy, or from each village within the conservancy. In addition, it has been common for conservancies to appoint one or more members from traditional authorities to also serve on the committee. These committees must then develop governance procedures, which requires skills in meeting management, communication, and decision-making. After a committee has been formed, and has had some time to become familiar with its role, then the LIFE project works with the University of Namibia to undertake surveys on the conservancy committee's effectiveness. These surveys ask community members to assess whether they feel the committee is representative of the community, whether it is doing a satisfactory job in managing the conservancy's development and informing members of issues, and whether or not members are familiar with and support the programs of the committee. The analysis of these surveys is fed-back to the committees, and then participatory management exercises are undertaken to improve the committee's structure and functions, as necessary. In Namibia, conservancy committees range in size between twelve and forty members, depending on the size and preference of membership. (An average conservancy includes 2,300 people.)

Provide conservancies the skills they need to account for funds and undertake financial planning. Financial management skills are a necessary foundation for the development of a successful conservancy. These skills will enable conservancies to undertake the following functions: effectively account for development funds, including grants from the LIFE project and the National CBNRM Program; assess business development opportunities, and be able to negotiate contract terms with private sector investors; manage conservancy payroll and other financial obligations; and wisely invest net income in socially and economically productive activities. If conservancies do not gain a strong capability in the area of financial management, it is unlikely that they will become effective self-sustaining organizations.

Develop and implement realistic conservancy sustainability plans, taking care to maintain a balance between operational revenues and expenditures. As part of the Namibian National CBNRM Program, the Namibian Nature Foundation (NNF) plans to provide financial management assistance to all registered conservancies. Once a conservancy becomes registered, NNF will help the conservancy to track and project revenues and expenditures. Developed jointly by conservancy management committees and support NGOs, sustainability plans recommend how a conservancy should adjust its staffing and expenditures so that operational expenditures can be brought into line with revenues. As a general guide, the CBNRM program expects that conservancies should be able to cover 100 percent of their operational costs within five years of becoming registered. Because of varying income-earning potential, the size of conservancy staff and operations will vary between locales.

Develop benefit distributions plans. Conservancies are provided assistance in developing equitable distribution plans, and in deciding how to balance income distribution with the need to set-aside funds to cover conservancy operations. In some cases, conservancies have decided to share income with members through household-level distributions, whereas in other cases conservancies they have elected to establish community trust funds, which will be used to support local development projects. In either case, the LIFE project provides workshop training and technical assistance to help communities identify and manage their particular preferences. The project has found that it is particularly important to return benefits to the broader community, as quickly as possible, as a way to maintain support for overall conservation efforts.

F. A Modest But Promising Beginning: Impacts and Constraints

The CBNRM Program in Namibia is still in its infancy. Over the past seven years, a great deal has been learned about how to effectively implement CBNRM in Namibia, and much effort has gone into helping a dozen communities form conservancy committees that are representative of community interests, accountable to their communities in the decisions they make, and capable of leading local area conservation and tourism development. The LIFE project is now in a transition, from being a geographically focused pilot effort, to becoming one of several partners who support Namibia's rapidly developing National CBNRM Program. Full implementation of a national Namibian CBNRM program will entail broadening the geographic focus of conservancy support efforts, working with a substantially larger number of communities, and strengthening the structures necessary to technically and financially sustain the effort.

F1. Impacts to Date

In 1998, Namibia's first four communal conservancies were registered with the Ministry of Environment and Tourism. Now that a favorable policy environment exists, and NGOs and government have gained experience and capability in supporting conservancy development, the pace of conservancy registration is expected to rapidly increase. Currently, there are 22 emerging

A Promising Beginning

In 1998, a total of nearly $38,000 was earned from tourism and sustainable trophy hunting within the Nyae Nyae Conservancy — over $20,000 was earned by the conservancy itself, and an additional $17,5000 was earned in wage income by members of the conservancy. With input from its membership, the conservancy committee decided to set aside $7,000 of its funds to cover a portion of its operating costs, and then distributed its remaining funds among member households. Thus, a total of nearly $30,000 in direct income was earned by households in Nyae Nyae as a result of conservancy activities. For the residents of Nyae Nyae, a majority of whom have no source of regular income, this has significantly increased their purchasing power. A monitoring of how conservancy income distributions were used revealed that over 60 percent of the funds were used to purchase food, with remaining funds mainly used for clothes, beads for crafts, and to purchase agricultural and woodworking tools.

communal conservancies under development in Namibia, and at least four of these are expected to become registered during 1999. By 2005, the number of registered conservancies in Namibia is expected to reach 24.

For the many who have been involved in Namibia's CBNRM program, the registration of the country's first four conservancies has brought a sense of significant accomplishment, but also a reminder that registration is only a beginning. Following a conservancy's registration, a concerted effort must be made to improve natural resource management, generate NRM-based revenue, and increase a conservancy's ability to operate autonomously. The LIFE project is currently planning its phase-out from Namibia, and is aggressively going forward with plans to transfer its responsibilities to Namibian partner organizations. In addition to transferring skills and responsibilities, the project is intent on clarifying and testing the processes that are necessary to enable conservancies to attain sustainability. If this can be achieved then the Namibian CBNRM program will have a clear path to follow in its continuance of CBNRM efforts, and this should eventually lead to 20 or so sustainable communal conservancies in Namibia, a large number of CBNRM beneficiaries, and dramatically improved conservation practices in much of Namibia's communal areas.

Toward demonstrating the viability of the CBNRM approach in Namibia, the following accomplishments have so far been realized.

Conservancies are beginning to earn significant income from NRM-related activities. In 1998, nearly $200,000 was earned within conservancy areas from NRM-related activities, up from $35,000 in 1996. This income was earned from the sale of thatching grass (33 percent), agreements with tourism lodges (24 percent), from the sale of crafts (17 percent), and through hunting contracts (15 percent). The LIFE project projects that direct conservancy-generated revenue will increase to nearly $1 million per annum by 2005, with most of the increase coming from the development of tourism lodges. It is expected that the income being earned by conservancies can be indefinitely maintained, and will not be dependent on continued NGO support.

Toward Sustainability

Torra Conservancy earned approximately $28,000 in 1998, which is what is estimated to be necessary to sustain a average conservancy"s basic operations. The conservancy recently decided to use some of its self-generated revenue to cover half of its 1999 running costs, which had formerly been paid in full by a support NGO (IRDNC). These costs include the salaries of six community game guards, the running costs of a conservancy vehicle and the costs of committee activities, including a modest allowance to be paid to committee members. Torra Conservancy is expected to be 100 percent financially self-sufficient within three years.

Structures are being created that will enable conservancies to manage their own finances. All conservancies currently have a financial manager/bookkeeper on staff, with support NGOs paying the salaries of these individuals until such time that the conservancy is able to cover the costs. In addition to LIFE-supported financial management workshops, the Namibian Nature Fund has recently committed to provide all members of conservancy management committees intensive financial management and sustainability planning assistance.

Newly registered conservancies are proving capable of securing joint-venture business agreements with private sector operators. Three of the four recently registered communal conservancies already have entered into trophy hunting contracts with private sector operators; a joint-venture tourism lodge currently operates in one of the conservancies; and a second conservancy has signed a Memorandum of Understanding with a tour operator that will result in an up-market tourism lodge being built within the next 18 months.

Progress is being made in moving conservancies toward financial self-sufficiency. Although it was only last year that Namibia's first four communal area conservancies were formed, two of these conservancies (Torra and Nyae Nyae) are already contributing self-generated funds toward their operations. The LIFE project encourages conservancies to reach financial self-sufficiency over a period of up to five years, as income earnings increase, and in the interim use surplus income for community development activities or household income distributions. It is expected that most conservancies in Namibia will be able to self-finance their operations as well as earn net revenue to support household-level income distribution or community development projects.

A New Era for Community Tourism

Recent joint venture tourism developments in Namibia set a precedent for a new era of cooperation between communities and tourism operators. This new precedent moves away from still common-place informal paternalistic relationships, toward the establishment of formal business partnerships: partnerships that are based on contractual revenue sharing, co-management, and complete business transparency between communities and tourism operators.

A new and more equitable model of community-private sector tourism partnership is emerging in Namibia. Also in Torra Conservancy, there is a model joint-venture tourism development co-managed by the conservancy and a private tour operator, Wilderness Safaris. The venture consists of an up-market tented tourism camp, and is managed under an agreement that stipulates: 10 percent of annual revenue goes to the conservancy, and this contribution is verified through a transparent system of accounts; the current lodge operator will train locally-hired staff to take over the lodge's management; and, after a ten year period, the ownership of the lodge will be transferred to the community. Within two years of start-up, this joint venture tourism lodge was voted the second best ecotourism destination in the world by the British Guild of Travel Writers. More recently, a tourism developer and the emerging Mayuni Conservancy completed a joint-venture agreement to build an up-market tourism lodge. This agreement is for a period of 20 years, and stipulates that, in addition to annual guaranteed lease income, the tourism operator will share a percentage of annual income with the community — initially 3 percent, but climbing to 8 percent once the lodge is able to average a 60 percent occupancy rate. Both of these agreements have set-up joint management committees to oversee operations.[9]

F2. Constraints Encountered

In the process of building sustainable conservancies in Namibia, the following constraints have been encountered.

The Scope of Namibia's Nature Conservation Act is too limited. Namibia's Conservancy Policy, while certainly one of the best of its kind in the world, is currently limited to providing communities rights over wildlife and tourism, and does not grant communities the right to manage other resources,

[9]. In both of these cases, joint venture agreements were concluded prior to the conservancies having been officially registered. However, both agreements are between the lodge operator and the conservancy committee, and were only possible because the conservancies were well organized, and on the verge of becoming registered. The agreements require the government's approval, in the form of a Permission to Occupy consent, as they are located on state-owned communal lands. The Namibian government has agreed not to provide approval for the construction of new lodges in emerging or established conservancy areas unless conservancy committees are in agreement.

including grazing land, timber, and fisheries. This causes a certain lack of clarity in regard to conservancy rights, and can undermine conservancy programs when individuals undertake activities that come into conflict with wildlife management, for example timber harvesting or cattle grazing.

Traditional common property resource management regimes, such as those that operate in Namibia's communal areas, are often at odds with the requirements of building and operating market-driven private sector businesses. Community norms and resource ownership rules often discourage any individual from becoming too successful, or too wealthy, and therefore can inhibit individual initiative and undermine a sense of responsibility to the business. These conflicts can also make it difficult to appoint business managers who are the most qualified within a community to run a particular enterprise, or to dismiss those who are not. To overcome this constraint a careful mix of community benefits and individual opportunities must be maintained in all enterprise developments.

There is a large chasm between the experience of Namibia's communal area communities and the requirements of operating a tourism facility that caters to international tourists. Traditional subsistence societies do not have the background, experience and skills to be able to understand the expectations and requirements of international tourists. In Namibia's rural communal areas only a very small percentage of the population have had any formal sector work experience. This makes the task of tourism development in many rural areas much more difficult than the challenge faced by typical enterprise development programs, which generally have the advantage of being able to provide assistance to experienced entrepreneurs. Closing the gap between communities and tourism operators requires a long-term effort to increase community knowledge and awareness of tourism, and to build-up skills in marketing, financial management, business management, facility management and the host of other skills required to manage a modern-day tourism business. The target beneficiaries of Namibia's CBNRM program are rural populations who live on some of the country's most marginalized land and practice traditional subsistence-level agriculture. This scenario presents enormous challenges. Yet it is critical to work in these areas in order to conserve the country's remaining wildlife habitat, and to ensure that populations who are already on the edge of survival do not slip into situations that will require permanent and costly emergency aid - as happens when poor communities practice subsistence activities that ultimately deplete the resource base upon which they are dependent.

Tourism investors can easily become deterred from working in communal areas because of the multitude of actors and organizations with which they must deal. Aside from causing confusion, this situation also increases their transaction costs. When investors select an area in which they would like to develop tourism facilities they typically begin their development process by opening discussions with local residents. However, often local communities are not organized to respond to investment opportunities, and investors may find themselves dealing with different groups of "representatives" at each subsequent meeting, and often these different sets of community "representatives" propose different rules. Further, as word of investor interest begins to filter out, it is usually not long before NGO and government officials also become involved, and often each brings a new set of conditions and requirements to the negotiations. CBNRM programs need to find ways to reduce investor transaction costs by improving coordination and decision-making among different stakeholders. Otherwise, investors may find it too frustrating, expensive and time consuming to stay the course.

Communities are short of development capital. The communities the LIFE project works with are poor, and do not have funds to initiate any but the smallest of development projects. While communities can sometimes start their own campsites or cultural villages these activities do not show the most promise in terms of generating employment or income (but are still important for productively filling a tourism market niche). Therefore communities must rely on outside investors to

cover the capital costs of new tourism facilities. In most cases, this has resulted in uneven partnerships, wherein community opportunities for revenue sharing and decision-making authority are limited. It can be expected that private sector investors who contribute a majority of a development's capital costs will also insist on taking-out a majority of profit, as well as insist on controlling most management decisions.

Public sector incentives to encourage increased tourism investment in communal areas have not yet been developed in Namibia. For a variety of reasons, many investors view tourism development in communal areas to be a more risky and expensive proposition than investing in areas where property is privately owned. In order to help nurture tourism investment in communal areas, the government should provide a set of special financial incentives. Such incentives could include, for example, the provision of tax holidays, tax discounts, or helping to underwrite investment risk insurance. The government should make attempts to fast-track tourism investment in communal areas and, as such, should look for ways to play the role of an investment facilitator, and take care to avoid being viewed as a regulatory constraint.

G. Lessons Learned

The following are some of the most important lessons learned by the LIFE project under its efforts to use tourism as a means to sustain community-based conservation.

It is essential to have a legal policy foundation that allows communities to utilize and manage natural resources, and enables communities to control tourism within their jurisdictions. Namibia has developed a strong base of legislation that links a devolution of community-level resource use rights to a community's commitment to manage resources sustainably. Namibia's legislation has provided communities an incentive for practicing better conservation, and granted them a legal basis for developing resource-based economic activities. The importance of this policy foundation cannot be overstated.

A strong base of organizational and financial skills is essential to building sustainable community conservation organizations. Without this base of skills, it is unlikely a conservancy will be able to sustain itself. Strong organizational skills are necessary for dealing with outside interest groups, as well as for being able to represent the interests of the community. A strong base of financial skills is essential for a conservancy to manage its finances, negotiate with outside investors, and maintain transparent financial accountability to its members. It is important that a conservancy's skills in this area go beyond just being able to account for donor funding, and that such skills include a capability in financial management planning, as this will serve as a basis for making sustainability and business development decisions. In Namibia, the LIFE project and its partners are supporting financial management sustainability planning training for all conservancies.

Communities need support in understanding tourism, developing tourism skills, and integrating their activities into the mainstream commercial tourism sector. The Namibian Community-Based Tourism Association (NACOBTA) has been an indispensable resource in working to integrate community tourism into Namibia's commercial tourism sector. Aside from providing training in tourism and business management skills, NACOBTA has also helped to market community tourism, provided grants to improve community tourism facilities, and is undertaking efforts to integrate community tourism enterprises into Namibia's commercial tourism sector. NACOBTA uses a committee of private sector tour operators to approve the grants it makes to improve community tourism facilities, and this has proved a useful forum for strengthening the interaction between community tourism and commercial tour operators.

Communities need support to negotiate joint venture agreements with private sector operators. It is helpful to have an NGO or other entity to assist communities to negotiate contracts with private sector operators. In Namibia training assistance in tourism has been provided by a community-based tourism NGO (NACOBTA); the Legal Assistance Centre, when requested, has reviewed joint venture contracts on behalf of communities and, in particular, advised on clauses relating to dispute resolution, contract termination, bankruptcy, and employee rights; business assistance has been provided from an outside financial advisor; and negotiation assistance has been provided by the on-the-ground NGOs that support conservancy development, so far mostly by IRDNC. The LIFE project has found that the NGOs who work directly to support conservancy development are in the best position to assist communities with contract negotiation, as this is often an iterative process that may take place over a period of several months, if not longer. These NGOs, however, also need access to a broader set of legal and financial services in order to be able to most effectively advise communities on particular joint venture negotiation issues. This is particularly the case when proposals include complex revenue sharing agreements, for example, profit sharing proposals that involve equity ownership.

It is useful to develop a mechanism to encourage tourism collaboration between the government, private sector, and communities. In Namibia, the recently formed Communal Area Investment Review Committee has been beneficial to helping to build increased trust and cooperation between various stakeholders, and for improving the efficiency of stakeholder responses to investment proposals. The government, and to a lessor extent NGOs, are skeptical of private sector objectives, especially given the relationships that have historically existed between private sector tourism operators and communities. Also, both the government and NGOs have relatively little experience in dealing with the private sector, so frequently don't understand how profits are calculated or, for example, the benefits of long-term leases (i.e. improved investment incentive). For this reason, a forum which includes experienced and neutral parties has been quite helpful to bridging misunderstandings and mistrust, and for helping parties reach consensus on investment proposals.

Communities need to acquire a legal personality to be able to interact with commercial tourism operators on an equal basis, and to ensure joint venture operational and financial transparency. In Namibia, conservancies are officially approved by and registered with the Ministry of Environment and Tourism, and this has turned out to be one of the program's greatest strengths. As legal institutions, conservancies are able to sign contracts, open bank accounts, and challenge the traditional practices of communal area commercial tourism development. Establishing a legal identity has been tremendously important to providing communities the authority to negotiate with private sector operators on issues of profit sharing and co-management. This arrangement also leads to a greater transparency in business dealings, where deals are no longer the purview of traditional elites, but rather are open to public discussion and scrutiny. In the past, it has not only been private operators who have deprived communal residents the right to benefit from business transactions in their areas, but this has also happened as a result of traditional authorities signing offstage deals in which they kept some or all of the proceeds for themselves.

CBNRM Programs need to be judged more broadly than solely on their ability to generate revenue. Since community-private sector partnerships are a large feature of many CBNRM programs, and are foremost a business arrangement, there is a tendency to judge the success of CBNRM programs solely according to an analysis of direct employment creation and financial returns. While these benefits are important, there are numerous other benefits that result from such programs, including the following.

- CBNRM provides an incentive for local communities to practice improved conservation, which of itself is an important, benefit, albeit difficult to quantify.

- In turn, improved conservation helps to support a country's tourism industry, with benefits and jobs being spread more widely than just in the area where conservation activities are being implemented.

- Communities are provided an increased ability to control land practices within their areas, which helps to prevent further economic exploitation and economic marginalization of already disadvantaged populations.

- Improved management of local ecological systems can help communities to increase their food security by allowing income diversification, and by building-up a source of food that is not as prone to periodic droughts as is crop and livestock farming.

- Increased income is available to support the next generation's educational needs, thus further improving an area's future development prospects.

- Cultural linkages with wildlife are restored.

- And, perhaps most importantly, communities who are poor and marginalized are able to begin to take control of their own lives, by learning how to interact with the formal sector economy and manage economic development activities for the benefit of their broader communities. Hopefully, an increased ability to manage development will lead to communities being able to diversify their rural economies, as increased business and employment opportunities become available, for example, in the establishment of bakeries, gasoline stations and dry goods stores.

Partnerships with the private sector are necessary to establish and operate successful high-end tourism facilities in communal areas. There is an enormous gap between the experiences of rural subsistence cultures and the requirements of providing the services expected by high-end tourists. The establishment of joint venture tourism agreements can lead to on-the-job training opportunities that provide community members the practical skills that are necessary to operate a successful tourism enterprise. Over time, communities can acquire these skills and eventually can increase their role in facility and operations management. To establish a successful high-end tourism facility in a communal area initially requires a great deal of professional outside assistance, particularly in areas such as: guest management, with a focus on understanding the needs and expectations of international tourists; and marketing, to ensure an adequate volume of business, and to offer tourists a package destination that can pair rural community-based tourism locations with well-known tourism draws. In addition, private sector operators can help communities to maintain conservation infrastructure, such as windmills, water pumps and generators, until such time that communities have acquired the skills to take-over these functions as a result of having participated in on-the-job training.

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Summary

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A. Abstract

In 1987, the Winrock International Institute for Agricultural Development launched the On-farm Seed Project (OFSP) in Senegal and The Gambia. The goal was to improve the nutrition, incomes, and wellbeing of smallholder farmers by helping them gain access to good seeds of improved varieties of basic food crops. Winrock obtained the cooperation of the Center for PVO/University Collaboration in Development (the Center), at Western Carolina University, Cullowhee, NC and the seed technology program at Mississippi State University. Principal financial support came as a matching grant from the United States Agency for International Development (USAID/PVO). Success led Winrock and the Center in 1992 to include in a new seed activity an emphasis on soil fertility and crop management. This was renamed the On-Farm Productivity Enhancement Program (OFPEP). The program grew rapidly with the addition of Kenya and Uganda and, when USAID discontinued support in The Gambia, a transfer of funds to add Ethiopia. OFPEP works with farmers through NGOs, similar groups, and local extension services. OFPEP introduces technology options for farm trials; and farmers choose and adapt the technology to their circumstances. A combination of activities by government agencies, nongovernment organizations (NGOs), groups or associations, and the private sector supports field actions, the relative emphases varying by country and region within a country. Impacts far exceeded expectations; the OFPEP approach is being included in other Winrock-implemented programs. OFPEP provides information, training, and links with public and private sources of information, assistance, and materials, but OFPEP staff and the organizations through which it works (now more than 160 in the four countries) do not promote specific technologies.

B. Impact

- Increased production of basic food crops shortened or eliminated the “hungry season” in many villages, e.g., providing households with food for an additional 3 to 4 months.

- Prestige of women as agricultural producers increased; the capacity of women’s groups to plan, implement, and advocate programs strengthened.

- For each one of the some 250,000 farmers directly participating in the program, OFPEP estimates that another three farmers adopt program options by observing.

- In six Senegalese villages, women established village seed and cereal banks with 52,560 kgs. of millet from the 1995 crop, distributing 3,500 kgs. in total to 750 farmers for planting the cereal crop; 30 others each used 1 kg of seed to multiply seed for 1996 planting.

- Local groups, now numbering more than 160, demonstrate increased capacity to address obstacles to production, to organize collaborative work, and to mobilize resources.

- Increased awareness of gender issues and marked changes in some traditional male-female roles, e.g., weeding, processing cassava, land preparation.

- Female farmer demand for less labor-intensive methods of weed control led to cooperation with the manufacturer, Monsanto, in farm trials with Roundup, a non-toxic herbicide.

- Some farmers now market or barter farm surpluses, and others produce seed for sale.

- OFPEP has incorporated these approaches into programs in other countries, including Tanzania, Guinea, Côte d'Ivoire, Mozambique, Malawi, Nigeria, The Gambia, and Indonesia.

C. Constraints, or Ways Impact Could Have Been Increased

- If such programs are to help smallholder farmers move from subsistence to commercial production, less labor-intensive technology options are needed and farmers require access to readily available credit on reasonable terms.

- Obtaining acceptance and understanding of local groups, early on, of the value of participatory rural appraisals and in providing adequate training in how to conduct these.

- Providing a broader range of training for local NGOs and similar groups, particularly in such areas as post-harvest processing, storage, marketing, and integrated pest management.

- Getting local project staff to understand that effective execution of their role is in training NGOs, associations, and extension groups, not in doing extension themselves.

- Early involvement of private sector interests would increase supportive individuals.

- Recognizing that use of new technology generates need for further technological changes.

- Avoid problems for which neither farm-ready solutions nor competent staff are available.

- When production exceeds local subsistence needs, markets for surpluses become necessary.

D. Suggestions for Future Implementation

If smallholder farmers are to move successfully from being subsistence to market-oriented producers, these factors must be taken into account:

- Intense and continuing participation of farmers — women and men — in problem identification, program planning, activity implementation, and evaluation.

- Informed and continuing participation of public and private sector agencies in agricultural and community policy, research, education, extension, and supply and marketing roles.

- Increased and continuing support of national programs of agricultural research to complement the work of international centers, and to address locale-specific problems.

- Agricultural production that can generate regular cash flow with emphasis on commodities that offer the best income opportunities for smallholders, particularly women.

- Renewed and continuing awareness on the need to be competitive.

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Detailed Description

A. Purpose of the Program

Millions of smallholder farmers of sub-Saharan Africa experience food shortages each year. Most live in places not readily reached by roads, or even mass media. They lack access to viable seeds of improved varieties, fertilizers, tools, and other inputs because these are not available locally or they lack funds or credit to buy them. These, and related factors (climate, topography, rainfall, lack of information) lead to decreases in already low yields and to increased degradation of soil resources. Moreover, depending on location, ethnic background, and crop(s) grown, women produce up to 80% of the agricultural products of sub-Saharan Africa. Given their already heavy work load of tending the household, bearing and caring for children, carrying water, and scavenging for fuel, women have little time or energy to invest in crop production. Local culture or religious norms may restrict some women to the homestead, making it difficult for them to obtain training. Their greatest opportunity for interaction with other women is through formal or informal nongovernmental organizations or associations.

B. Implementation

B1. Who Implemented the Program?

OFPEP was implemented by Winrock International, with the Center for PVO/University Collaboration in Development as a sub-contractor for project communication, monitoring, evaluation, and related training. Within each participating country, a small staff of local nationals (employed by Winrock or the Center) works with and through NGOs, community-based organizations (CBOs), farmers associations (FAs), and local extension workers to establish participatory relationships with farmers. An informal advisory group comprised of representatives of donors and major collaborators met semi-annually to review progress and problems. In each country, a local advisory group actively participated in program planning, review, and internal coordination.

OFPEP integrates sound technical knowledge with social, cultural, and educational conditions at the farm level. Unlike most agricultural extension projects that are top-down, OFPEP is bottom-up. It uses a participatory, request-driven approach where farmers, with assistance from OFPEP and implementing partners, use participatory rural appraisal (PRA) techniques to identify problems and potential solutions. OFPEP serves as a liaison between NGOs, community-based organizations (CBOs), and other community groups and research institutions that provide training and information about tested techniques to stem the decline in soil fertility and improve crop yields through improved varieties and management practices.

OFPEP collaborates at the management level, and in the field, where small technical teams work with networks of local and international organizations and other groups. They use a participatory approach through which farmers learn about new technologies and select and use those they find appropriate. This collaboration mirrors the basic roles at the coordinating level with Winrock International as a source of agricultural expertise, with the Center specializing in collaboration and participation as components of successful approaches to development projects. These complementary roles were defined in the original proposal with Winrock being the overall lead agency for technical implementation (product), and the Center providing staff and resources in communication, linkages,

and information-sharing/networking (process). Coordination of field implementation, in turn, is the responsibility of lead agencies nominated for each country

The Center provided technical assistance on a variety of topics. Local consultants were engaged, when possible, because of their ability to respond to country-specific needs, their availability after the consulting assignment was over, as well as fulfilling the commitment to promote linkages and locally appropriate solutions. OFPEP also capitalized on talents of "volunteer consultants," i.e., local students, graduate students from universities abroad, and former Peace Corps Volunteers.

Where available, local consultants were engaged early in the program to assist in start-up activities relating to databases for information, collection of resource materials, economic analyses of markets for specific crops, and problems related to soil erosion and salinization of rice fields. In East Africa, a local computer expert provided training and ongoing support to local staff and partners for their monitoring survey system, and to do a field impact study.

B2. Geography

In each country, one organization, usually a NGO, serves as the local coordinating and supervising body. OFPEP has operated in four countries with local coordinators as indicated: Senegal (Winrock); Uganda (Agricultural Cooperative Development International); Kenya (Winrock in collaboration with LAGROTECH); and Ethiopia (Winrock in collaboration with Private Agencies Cooperating Together [PACT]). With experience and approval of host governments/local partners, OFPEP turns coordination/supervision over to a local organization.

The agricultural problems OFPEP addresses in each country are a function of the areas where indigenous partners have ongoing activities and identifiable leadership, as well as the expressed interest of farmers. As a result, the program has increased productivity of many crops, including rice (flooded and upland), sorghum, millet, groundnut, maize, cowpea, cassava, wheat, teff, barley, and vegetables. Not all of these crops were grown in any single country. In addition, in Kenya the program also was engaged in extension work dealing with dual purpose goats.

B3. Time Frame

The initial OFSP was funded for 5 years, and the following OFPEP also for 5 years. With availability of increased funds (some from sources other than USAID), the original OFPEP ended in 1998 after 6.5 years of operation. In the meantime, new projects and programs, under a variety of names and with various sponsors, have been established using the OFPEP approach as an operational model. These countries include Tanzania, Côte d'Ivoire, Mali, Nigeria, Mozambique, Malawi, Guinea, Niger, and Indonesia.

B4. Counterparts

While this term or concept is not used in OFPEP, at least three kinds of "counterparts" might be referenced: (a) The local and expatriate organizations upon which OFPEP draws upon for technical information and consultation, including local research and extension institutions and universities; international agricultural research centers; foreign universities and research and training institutions, and private sector firms. The latter category participates with in-kind products or finances, e.g., Monsanto, Food Industry Crusade Against Hunger ; (b) the United States and international NGOs and similar organizations, e.g., ACDI, PACT, Christian Children's Fund; and (c) the dozens of small, indigenous NGOs, CBOs, and farmer associations that plan and implement activities. The Center, as

a continuing sub-contractor for significant aspects of project planning and implementation, serves in a substantial role, as does the McKnight Foundation, which helps finance related operations in Niger.

B5. Intended Beneficiaries

The principal and largest group of beneficiaries are the smallholder farm families whose food supply is increased, incomes raised, and prospects for a more prosperous future established. These benefits trace to the technical knowledge and understanding gained with respect to crops, seeds, agronomic practices, soil management, and environmental protection, but also to the changes participation brings in their attitudes, appreciation of democratic approaches, and concern for preserving their environment for the future. Other beneficiaries include: (a) urban residents who gain access to a wider range and more reliable source of foods at reasonable prices; (b) scientists and extension specialists who gain confidence in the technologies with which they work and more realistic attitudes about farmers and their circumstances; (c) policy makers who realize how more reliable crop yields and food availability contribute to social and democratic stability and economic growth, and (d) private sector buyers and sellers who find active clients among smallholder farmers.

B6. Necessary Preconditions or Prerequisites

Local interest always is basic, including that of the potential sponsor (e.g., USAID); of the national research and extension system; of two or more of the more established local NGOs, and of any parallel or complementary projects. Generally, concern about the lack of effectiveness of the local extension system will be expressed in a number of ways, and it is necessary to make clear that different approaches to introduction of technologies exist. Other factors include (a) status of food security, (b) potential interest in developing a market economy for present subsistence farmers; (c) availability of national research and extension system or universities as a source of germplasm, improved practices, and related information; (d) favorable government attitudes or policies with respect to working with NGOs and other community groups; (e) existence of ongoing projects as potential collaborators, and (f) one or more organizations or institutions interested in and capable of providing financial support for at least a 3-year, and preferably for a 5-year period.

B7. What We Would Do Differently

Winrock already is doing it again, but now usually as a major component of a larger, more complex program. Winrock applies “lessons learned” and discussed here. One aspect is an emphasis on training: (a) local-hire staff for program specific roles, but equally important to ensure thorough knowledge and understanding of OFPEP as distinguished from other approaches to extension; (b) local staff as trainers to work with NGOs and other local groups and to help these groups establish training methods and materials for working with farmers; and (c) NGO staffs and others in training needs assessments.

Other priority issues include: (a) early establishment and orientation of a country advisory team; (b) invitation to and mobilization at an early date of private sector participants; (c) conduct studies to determine commodities or products for which there would be a continuing market demand; (d) briefing the country advisory team on the necessity of helping OFPEP establish criteria for setting priorities for responding to the many demands for services; and (e) establishing procedures and schedules for data collection and analysis, as well as documentation and reporting of program accomplishments.

C. Impact

C1. Direct

The external evaluation, conducted in July 1997, describes a number of significant direct and indirect program impacts. Among those considered direct were:

- In all four countries, OFPEP has had a positive impact on agricultural production, food security, and farmer incomes. Yield increases in farmers' fields ranged from 22% to 238%, the variations being dependent upon the crop grown and growing conditions of the season.

- An estimated 250,000 small and mostly poor farmers, many of them women, have learned or are learning about testing and implementing improved seed varieties and soil management technologies for producing basic food crops.

- Farmers have eliminated or reduced the length of the "hungry season" and, in some cases, produce surpluses for sale.

- Farmers and farmer groups reconfirmed that seeds and soil fertility are priority issues.

- Technologies most in demand are those that address food security and income generation.

- Participation in OFPEP increased the prestige of women and strengthened the capacity of groups of women to plan, implement, and advocate programs.

- Strong links have been forged with research and technical institutions in all four countries.

C2. Indirect

These are apparent at three levels: Farmers not directly participating in the program; NGOs and other local associations, and the research and technical institutions.

- Several OFPEP-introduced technologies have spread through farmer contact and observation to farming communities adjacent to but outside target areas.

- Participating and non-participating farmers are identifying new problems and issues that they wish OFPEP to help them resolve.

- NGOs and other community organizations now more readily accept the idea and value of participatory rural appraisals.

- Farmers and farmer groups report that they now have more options and greater control over decision processes that affect their daily lives.

- NGOs and other community organizations have improved capacities to plan, organize, and provide training; participation in OFPEP increased their credibility and prestige.

- Research institutions gained access to farmers and their problems as well as opportunities to test research at the smallholder level.

- Extension workers experienced new, more effective ways to work with farmers.

C3. Sustainability

The OFPEP approach contributes directly to its own sustainability in its recognition of the dynamic role of the smallholder farmer:

- In defining the problems constraining productivity
- In developing, through research and adaptive trials, satisfactory solutions
- In demonstrating these in farmers' fields so farmers may choose among options those that meet their own criteria.

The farmer becomes an active participatory and continuing member of the research and extension team and exercises his or her roles through farmer associations or local NGOs.

OFPEP further contributes to sustainability by building effective links with universities, research stations, NGOs, farmer groups, and similar organizations in all aspects of planning, implementation, and evaluation. Such relationships serve as communication channels to and from farmers and among all participating agencies and groups. While the technology may originate with farmers, universities, or research stations; the refinements, modifications, adaptations, and transmission to farmers are made through local NGOs and (or) other farmer related organizations.

This approach through NGOs and other groups is and sustainable because such organizations:

- Remain in target areas for extended periods; this facilitates monitoring, modification, and evaluation

- Recognize the value of learning local languages and culture, or already are knowledgeable in these areas

- Develop knowledge and understanding of community social structures, including leadership, groups, and problems

- Strive to establish rapport through multiple assistance programs over time

- Gain experience and confidence in participatory approaches to learning and community action

When it was necessary to close OFPEP operations in The Gambia because of USAID funding policies, the coordinating agency withdrew its activities, but the program never stopped. Several informal groups of women formed NGOs and program activities continue. A recent doctoral dissertation documents continuation of an active program (Cole 1999).

C4. Monitoring and Evaluation

Because of different approaches to implementing OFPEP in various countries, several techniques for monitoring program activities and impact are needed. The Center gives this issue particular attention,

devising and employing a number of innovative approaches too detailed to describe here. Activities employed included the following:

- Providing local groups with simple, one-time use cameras and encouraging them to make photos of the problems, the process, the results, and the impacts as they see these

- Establishing a random sample or panel of 50 farmers per district, these farmers being visited by the OFPEP field extension staff at the beginning and end of each rainy season to gather information useful in reporting progress, problems, and impact

- Conduct of a major impact study of random samples of OFPEP farmers in five districts of Kenya by a professor and two students from Western Carolina University

- Another study, in three program countries plus The Gambia, on impact that participation in OFPEP makes on its collaborating partners

Over the life of the program, different areas of responsibility assume more or less importance as the program becomes more defined, expands into new countries, and adds more partners. The task of coordinating the monitoring and evaluation reports from each country assumes greater importance as the number of partners and farmers associated with the program grows and the impacts become more visible.

Since the OFPEP approach depends upon farmer participation early in project activities and collection of data for both planning and future evaluation, OFPEP staff must exercise patience and skills to gain the cooperation of local implementing organizations. Initially, all are eager to get to the field and help the small farmers by telling them what to do. Instilled with the concept of “technology transfer,” they are reluctant to undertake an approach that necessitates farmer involvement, initially perceiving this as a waste of valuable time.

Thus, the Center emphasizes monitoring and evaluation in all of its formal and informal field training. It also provides training in participatory rural appraisal, gender analysis, and basic computer literacy, all issues relevant to monitoring and evaluation and directly applicable to sustainability. The widespread diffusion of OFPEP-introduced technologies beyond OFPEP farmers has led to increased emphasis on design, preparation, and publication of written and pictographic resources so that farmers not reached with direct training are able to learn more about and adopt at their option a “package” of technology techniques.

The Center also established resource libraries in each country to provide current information to both OFPEP staff and the partner agencies. Books and periodicals relevant to each site were provided, subscriptions to both free and subscription-only newsletters arranged, and, where possible, sent to staff members based away from the main office. The Center periodically engaged in library and electronic searches, identifying articles that were reproduced and distributed.

D. Constraints

D1. General

If agriculture is to meet projected worldwide demands for food at reasonable prices, nations and development agencies must address at least two key issues: (a) support and management of research that addresses the technology constraints to productivity, and (b) the policy, economic, and social issues and incentives that will facilitate production, encourage processing and distribution, and

ensure availability to consumers. The situation becomes more complex over time as increases in agricultural production must occur in environments where:

- Most producers will depend upon efficient use of land already under cultivation.
- Farmers no longer produce in isolation; agricultural production is a global enterprise.
- Food demands and diets are changing, as are consumers' abilities to purchase.
- More, stronger food safety controls will influence production/marketing practices.
- Degradation of natural resources (land and water) lowers productive capacity.
- Environmental protection concerns limit use of marginal lands and forests.
- Essential inputs, and credit to acquire them, are difficult to obtain.
- Inefficient markets and inadequate infrasructure increase marketing costs.
- Predictability, transparency, and continuity in policy making and enforcement are missing.

In essence, the above describes the context in which OFPEP has worked and will continue to be active. Other constraints include those discussed in the following sections.

D2. Social

Expectations, based on top-down approaches to extension, continue to be a constraint in working with new groups or in new areas. Smallholder farmers have had little or no experience in participation at the levels the OFPEP approach encourages. Their experience with new technology, and with extension agencies, has been as passive receivers of information, much, of which they ignored or rejected as lacking relevance to their problems. Likewise, most NGOs and other local groups, including extension, initially try to diffuse specific technologies by operating in active, promotional roles. They tend to make statements rather than ask questions. They seek to "convince" farmers of the value of the new technology rather than letting farmers try it and find out for themselves. They measured progress in terms of numbers of farmers contacted and activities held, not in terms of results or impacts. Consequently, OFPEP management is confronted with changing the behaviors and perceptions of two groups — of farmers and of "change agents," formal and informal.

Another constraint, social or cultural, relates to division of responsibilities and decision making on a gender basis. This will vary by crop and by region. A rather universal constraint is that control and use of animals for power usually rests with the men. This restricts the access women have to animals for such tasks as land preparation and transport of inputs and harvests. In some areas, women are responsible for crops grown for subsistence, while men handle commodities grown for market. This may generate tensions within household when the yields women begin to achieve with basic food crops lead to marketable surpluses.

D3. Environmental

The major constraint in this area is to find ways to conserve and build soil fertility through crop and soil management practices and fertilization (organic and inorganic). Farmers recognize the problems but need guidance and encouragement to practice contouring, make and use compost, install living fences to protect crops from livestock and wind erosion, and to finance limited purchases of commercial fertilizer or herbicides. Continued research on the use of rock phosphate is needed. Introduction of simple stoves in some areas has cut the time and labor women must invest in gathering fuel, and, at the same time, reduced pressures on destruction of shrubs and trees for fuel.

D4. Political/Policy

Few constraints have been encountered in these areas as OFPEP management has tried to maintain the participatory approach in dealing with those who make and implement political and policy decisions. In one country, the government made clear that operations first be cleared with the national extension service. This posed no problem as extension managers recognized that the program was helping the service do its job. Another issue arose that made it imperative that OFPEP make sure that participating NGOs and similar groups were registered appropriately with the government. While there may be a near invisible line between demonstration and diffusion of technologies and the generating of grassroots advocacies for changes in policies affecting government, OFPEP has avoided carefully generation of perceptions that it has crossed the line.

D5. Infrastructure

The major constraints here relate to keeping the in-country program at a level of activity that existing budget can support. This relates to size, composition, and training of local-hire individuals to work with the local groups. As the number of participating local partners increase and the operational sites become more scattered geographically, transportation becomes a major issue While the principal job of local staff is training, initially most feel more comfortable working as traditional extension specialists. Observations in the field and staff workshops have identified five categories of capacity building that are needed from time to time:

- Organizational management for sustainability
- Specific agricultural production and harvesting technologies
- Farmer participatory methods
- Organization and management of small scale credit programs
- Specific post-harvest, processing, marketing, and storage technologies

In addition, the local staff must be competent in training needs assessment, in organizing and carrying out participatory rural appraisals, in developing and maintaining liaison with public and private sources of information and support, and in documenting and reporting program activities and accomplishments.

D6. International

Few constraints of an international character have been encountered. Initially, there was some confusion as to whether the OFPEP and its partners in a country could or should communicate directly with an international agricultural research center with respect to seed of a new variety or for recommendations on cultural practices. OFPEP maintains the policy that such contacts be developed with and through the national agricultural research system of the country. This was in line with the standing policy of operation throughout the international agricultural research network at the time. Subsequently, individual international centers began to develop special arrangements with country organizations for specific types of work, particularly how they might collaborate effectively with in-country NGOs. OFPEP has continued to operate as it did initially, believing that local groups will find it easier to communicate with the national system, and, in so doing, contribute directly to the strengthening of that operation.

D7. Serendipities

Given the definition of serendipity *"The faculty of making fortunate discoveries by accident,"* it seems difficult to consider constraints. But with OFPEP, there is at least one. This is best expressed in a recommendation of the evaluation team:

> *"Because of its appeal and achievements, and the fact that it fills a wide gap, OFPEP is in great demand by farmers and partner institutions. This demand, plus the request-driven aspect of the program, have led OFPEP to expand at such a rapid rate that OFPEP's small staff is over-extended and there is a risk that the impact of the program will be diluted. Working with new and nascent groups has been especially time-consuming and demanding To maintain program quality and not over stretch staff capacity, it is recommended that OFPEP country activities be consolidated geographically to fewer regions and districts as well as to 'mature' implementing partners that have some demonstrated capacity for training and program implementation."*

E. Lessons Learned

Following is a summary of the more important lessons learned and best practices identified that the Winrock and Center staff have extracted from the experiences of launching and managing OFPEP activities in West and East Africa.

About "new" technology:

- It must be simple.
- It must not increase farmer's labor or time involved.
- It must satisfy household needs, including cash.
- It must conserve or build soil fertility.
- Initial investments must be minimal.
- There must be farmer-relevant incentives

About the smallholder farmer:

- Knows how to recognize a good technology.
- Knows his/her socioeconomic context and inherent constraints better than anyone else.
- Welcomes assistance in gaining access to information on new technologies.
- Can be entrepreneurial if well-identified incentives are present.
- Gives priority to risk-adverse strategies.
- Diffuses technologies efficiently.
- Will reassign gender responsibilities when appropriate.

About the OFPEP process:

- Must encourage and facilitate community participation.
- Must involve farmers at all stages from problem identification to evaluation.
- Must identify present, prospective stakeholders, public and private, formal and informal.
- Those who introduce and manage the process must have and maintain community credibility.

- Must be gender sensitive and responsive.
- Recognize and respect local and regional consultants.

About prerequisites to participation:

- Must have time to participate before action is required; not appropriate in emergency.
- Financial cost must not exceed the values, economic or otherwise, that come from it.
- Subject must be relevant to participant's organization or occupation; not busywork.
- Participants have relevant interest, ability, experience, and(or) knowledge.
- Participants must be able to talk each other's language to exchange ideas.
- None of the participants should feel his/her position is being threatened.
- Decisions on action can take place only within the group's area of job and decision freedom.

About implementing agencies:

- NGOs, CBO, and FAs initially are skeptical of the private sector.
- NGOs have unwarranted confidence in the NGO sector and many have false assumptions or information about technology and their abilities.
- Some NGOs employ and retain agriculturally competent personnel.
- Most NGO personnel respond rapidly to sharply focused training.
- Most NGO personnel speak site-specific languages and dialects.
- NGOs perform critical first step in introducing PRAs and technology to farmers.
- Experience with U.S. Peace Corps Volunteers generally excellent.

About government agencies:

- Essential to work closely with national research and extension system.
- Include locally developed varieties and practices in field trials, demonstrations.
- Link NGOs and FAs with experiment stations and research staff.
- Welcome extension participation in all training, trials, and demonstrations.
- Invite educational institutions, at all levels, to participate in activities.
- Can provide facilitating policies and incentives.

About private sector:

- Farmers have difficulties getting credit because of interest rates and lack of collateral.
- Focuses on specific products and services, less on production or marketing system.
- Maintain weak rapport with NGOs and extension services.
- Needs intermediaries, such as NGOs, to develop product demand.
- Some small farmers become commercial seed producers directly, or on contract.

About Winrock International:

- Science/knowledge-based approach to technology appreciated
- Demonstrated ability to operate successfully as non-biased catalyst
- Provides important strategies through long-term commitment and continuity
- Serves as a communication link to sources of technology

- Brings conscience issues to technology assessment and diffusion
- Introduces participatory approaches into all of its programs and project

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LOCAL GOVERNANCE AND PARTICIPATORY NATURAL RESOURCES MANAGEMENT: USAID'S GOLD PROJECT IN THE PHILIPPINES[1]

Summary

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A. Abstract

Major authorities and responsibilities for agricultural extension and environmental planning, monitoring and management have been devolved to local governments in the Philippines under recent decentralization legislation. Such legislation has placed substantial decisions in the hands of local governing institutions with high levels of citizen participation. This is a major departure from more conventional resource management systems premised on macro policy-based "command/ control" formulas applied by central agencies that typically optimize technical solutions and minimize — or altogether bypass — formal local governing institutions.

USAID's Governance and Local Democracy Project has, as one of its principle action areas, the task of assisting provinces, cities and municipalities to take an active role in assessing, monitoring and managing natural resources in their jurisdictions in collaboration with civic institutions. GOLD developed a "toolbox" of participatory techniques and technical assistance events that could be applied to a wide variety of urban land-use, communal forest, coastal resource management and agricultural development challenges faced by local governments. Seven basic techniques emerged:

Local government strategic planning workshops
Multi-sector technical working groups
Community environmental action planning workshops
Environmental summits
Participatory environmental transects
Co-management agreements
Technical review/training workshops

B. Impact

The GOLD Project's impact on environmental management in the Philippines may be described in several ways:

- Annual public opinion measures of satisfaction with local government services steadily rose over each of three periods.

- Approximately 90 local government partners availed of one or more of the tools noted above related to environment and a significant numbers budgeted self-generated revenues for environmental purposes.

- All provincial and city governments filled the Code-mandated Environmental Officer position.

[1] This case study was developed by the ARD-RAISE Consortium for USAID's Rural and Agricultural Incomes with a Sustainable Environment Program – a jointly managed G/EGAD-G/ENV project.

- Sixty percent of the 2,500 facilitators trained by GOLD use facilitation methods after training without further assistance from the project.

- GOLD has demonstrated that local governments have basic capacities to identify environmental issues, organize community solutions, commit local revenues and sustain local actions.

C. Constraints

Four principle factors constrained GOLD activities in support of improving local environmental management.

- First and foremost, the Local Government Code did not go far enough in devolving environmental management authorities and functions to local government.

- Closely related to the first, is that the national Department of Environment and Natural Resources placed considerable emphasis on a Code caveat that all environmental activities are "subject to the supervision and control of DENR".

- The profoundly different perspectives from which each entity views the problem complicate the interface between national and local government.

- Lastly, *institutional incentives* have a dramatic impact on what actions get priority by field personnel of a given agency.

D. Lessons Learned and Success Factors

- Do not focus exclusively on optimizing technical solutions. Give equal attention to normalizing governance processes by demonstrating *tools* and training locals in *methods* which could be used to address their own problems on an ongoing basis.

- Where possible, shift the locus of responsibility for environmental management to local government and broad-based civil society groups.

- Reverse the conventional sector-oriented, expertise-driven process by addressing environmental problems through a governance perspective, rather than from a technical (sector) perspective.

- Focus less on trying to get people to support optimal technical strategies in total and more on enabling people to accomplish doable actions one step at a time.

- Sustainability should not be misconstrued as the ability of a "beneficiary" to sustain "projectized" activities. Rather, sustainability is the ability of local institutions to manage processes and methods by which issues are continually acknowledged and for which doable solutions are continually experimented with by involving all stakeholders.

Detailed Description

A. Background and Purpose of Project

Following the downfall of the Marcos regime and promulgation of a new Constitution emphasizing local autonomy, the Philippines Congress enacted a sweeping reform package known as the Local Government Code of 1991. The Code decentralized major authorities, responsibilities, and financial resources to local government units comprised of 76 provinces, 74 highly urbanized cities, 1,580 municipalities and even the +/- 42,000 grassroots units known as "barangays." This legislation — and its subsequent implementation — may be singled out as one of the most aggressive and successful reform efforts in the developing world aimed at deconstructing a moribund and overburdened centralized system by means of decentralization. Major breakthroughs occurred as a result, including in the area of natural resource management.

Since 1991 USAID has been assisting this process of policy and operational reform through two projects managed by ARD, Inc. as prime contractor in partnership with a grants program involving numerous Philippine NGOs. ARD first implemented the *Local Development Assistance project* (1991-94) which focused on policy reform and institutional change processes during the early stages of Code implementation. This was followed by the *Governance and Local Democracy project (GOLD)* (1995-2001) which currently focuses on forcefully demonstrating how local governments can achieve more effective development by using the opportunities afforded by the Code.

The origin of the GOLD project's accomplishment is to be found in the "enabling environment" in which it works; it is necessary to understand the Code if one is to understand why such useable innovations resulted from it. The Code is a radical step relevant in numerous respects to the issues of agriculture-based rural development and sustainable environmental management.

First, it completely decentralizes to local elected officials the operations, personnel supervision and responsibility for delivery of health, social welfare, community development, agricultural extension, elements of environmental management and many other services. It went far beyond mere deconcentration of selected functions by fully devolving about 75,000 employees and major physical assets of central government agencies to local governments. The planning and management of these services, supervision of employees and maintenance of assets are now fully controlled and directed by local authorities.

Centralized delivery systems were tossed out and decentralized delivery systems allowed to flourish. In this process the role of national government agencies has shifted to a technical assistance role supporting priorities of local government. This is, of course, a reversal of the typical system wherein national agencies basically make and interpret priorities, set policy, define strategy, assign roles, control budgets and direct how, where and when services are delivered to whom, often with minimal or no substantive participation by local governing institutions.

Second, the Code allocates 40 percent of all internal revenue collections to local authorities and has a system for sharing national wealth extracted from local environments. Revenue shares are *automatically released* on a quarterly basis. Unlike many systems that assign locals more responsibility, but keep control of resources at the center, the Philippine's model legally provides that

revenues and resources are no longer controlled in whole or part, directly or indirectly, by central authorities. So the local is more genuinely in charge of all elements of service delivery.

Third, the Code gives local authorities latitude within broad national guidelines to set and collect fees-for-service and use-charges, to develop their own management methods and rules, and to collaborate with the non-governmental sector to deliver services. It is important to understand what this latitude means. We are too often accustomed to thinking that "local participation" is the enlistment of local authorities and communities to implement systems designed, directed, financed by and ultimately managed at a higher level. Under the Philippines Local Government Code, local governments assign development priorities, set fees, and decide how to manage resources. These tasks are accomplished via various local development committees, of which a minimum of 25 percent membership must be from non-governmental or community-based organizations. So local governments, in collaboration with their civic partners, are at the *center* of a process in which they decide how to do things, rather than at the *periphery* of a process reacting to how others have decided how to do things. As we shall see, this significantly impacts the way such things as environmental planning and management are accomplished.

B. Project Design and Implementation

The GOLD project has been under implementation in the Philippines since July 1995. Originally intended to end September 1999, it has recently been extended to April 2001. The Project Implementation Team works in collaborative partnership with nine provinces and two highly urbanized cities, but this is a bit misleading. In fact, GOLD works with well over 200 local governments because it provides distinct technical assistance to municipalities and component cities of all nine provinces (as well as the provincial administration itself) and to subordinate barangays of the two urbanized cities. As a percentage of all local governments, GOLD is addressing the demands of about 11-12 percent of the nation. Our emphasis during the extension phase will be on taking the innovations of the last three years and rapidly expanding outreach. We intend to at least double our numbers over the next two years; GOLD will thus have reached around 22-25 percent of local governments in the Philippines.

From the outset we had no interest in working within the confines of what Filipinos shrewdly label as a "trad-pol" milieu (i.e., a situation dominated by *trad*itional *pol*itics). We felt that would only lead to futile efforts to prop up project activities in unwinnable circumstances. Thus, all local government partners involved in GOLD have been chosen via a process of self-selection using screening criteria that aim to unearth the more progressive, less traditional leadership throughout the archipelago. Some would say this makes things easy; we would say that in a client-oriented paradigm it makes good sense to work with clients that want the service you are providing! It is important to note that we do not speak of these reform-minded local governments and their constituents in the language of "target beneficiaries," but rather as "partners" or "clients." We are determined to shift our thinking — and language — toward a client-oriented alliance.

Because of the unique demand-driven nature of the project and its highly flexible design, our partners also include dozens of national and local NGOs, three Leagues of Local Government (for provinces, cities and municipalities) and the staff of various line and execute agencies. ARD and its partners work closely with several local NGOs whose task it is to support the development of civil society and non-governmental participation in local affairs. This approach is especially important in that the Code mandates a minimum of 25 percent of the membership of various government committees be from NGOs and/or community representatives, a commitment to civic participation that few, if any, governments exceed anywhere else in the world.

We are involved in several major activity areas addressing institutional capacity building and governance. Our primary mission was to respond in innovative ways in three local government action areas:

- Revenue generation and financial management
- Investment prioritization and promotion
- Environmental planning and management

In addition, we were to concern ourselves with three other dimensions of the transition to local autonomy and decentralized service delivery:

- Strengthening of participatory mechanisms
- Supporting policy reform and advocacy through the Leagues of Local Government
- Developing an information sharing and feedback system

We were able to make significant in-roads in each of these areas, but I shall focus the rest of the discussion on GOLD's approach to the challenges of environmental management using the mechanisms of governance.

C. Innovations in Environmental Planning and Natural Resource Management

Many of the innovations of GOLD are in the area of environmental planning and management. When the project began in 1995 with community-wide strategic planning workshops each site could decide — via a participatory planning process culminating in a public vote — the action priorities they wished to pursue with GOLD assistance. They had a virtual smorgasbord of possibilities from which to chose. We were surprised to find that addressing environmental issues was the one priority *always* identified by *all* local governments at *all* levels. No other priority came close.

We at first found that curious inasmuch as neither local governments nor most multi-purpose civic institutions were accustomed to working in this area. Environmental management had always been the relatively exclusive domain of the Department of Environment and Natural Resources (DENR) and a few favored environmental NGOs. Historically, when DENR worked at local levels it did so via the familiar "projectization" model. It created local "project management offices" (frequently with the encouragement of donors) that accomplished most technical inputs, perhaps with the assistance of NGOs. This model typically bypassed or relegated local government to pretty insignificant roles. At the end of the day most activities were largely executed by project offices staffed by expats and capital-city based experts, neither of which remain in the geography after the project completion date.

However, it did not take long to understand that the reason the environment emerged as a consistent priority issue is the same reason it is an issue everywhere else in the developed and developing world… because people are genuinely troubled. Both local elected officials and the wider civil society are deeply alarmed at the destructive rate of environmental degradation taking place before their eyes and the gross inadequacies of national authority's efforts to address the crisis. Although there is in the Philippines, as in many places, much rhetoric and many good macro policies, there is very little effective natural resource management at the local level by an overwhelmed, understaffed and frequently corrupt national agency addicted to promulgating policy without any real ability to follow-through. Local communities and their officials intuitively sense the seriousness of the crisis and know by experience that if it is to be solved it will need their active participation. That is where the GOLD project could offer help.

D. What GOLD Did for Local Management of Natural Resources

GOLD has been since its inception profoundly demand-driven, taking its queue for both priorities and strategy from the local situation itself. For instance, GOLD did not have a "plan" or a "strategy" for how to assist local governments with natural resource management issues. We possessed very few technical assumptions about what needed to be done. We did not see ourselves as an environmental project, but as a project assisting local governments to do a better job of addressing their own self-determined issues. This was not a front-loaded, pre-designed, input/output type of approach.

What GOLD did have was reliable methods for accomplishing rapid, pro-active, results-oriented, participatory strategic planning leading to implementable action agendas. And we had some resources to provide technical assistance in support of actions local communities chose to implement. We called these "doables", because in very few instances were local officials and civic partners interested in undertaking massive, technically complex planning efforts. They were, in fact, somewhat exasperated with "projectized", donor-based programs which sought grand accomplishments, but delivered mostly technical talk. More often, they wanted to *accomplish something* within a reasonable timeframe, for a reasonable amount of expenditure in both money and people's time. Typically, local strategic planning workshops yielded a desire for the community to undertake a simple resource inventory and management planning process by which they could begin to impose some discipline on the use of natural resources.

Most especially, this desire was clearly driven by the need for resources to sustain rural incomes. Whether it be depletion of coastal fisheries used by small fisher-folk, forest timber sources relentlessly harvested by small-to-large users, or the lack of urban solid waste management, local governments sense an impending crisis. They demanded help to define that scope of that crisis and assistance to ameliorate the immediate effects of these problems.

E. Seven Innovative Participation Methods

What emerged over time were five methods, all of which are based on participatory events which tap community wisdom and which immediately link citizen decisions to local budget and planning decisions by government officials. We used what might be called an "event-based" approach in which we constantly brought together various elements to discuss, analyze, review and decide how the community could address problems. The idea was and is: tap the widest and most diverse community of stakeholders, assist them to identify what is doable by them and their local government to address problems they want solved, and enable those very same stakeholders to self-assign responsibilities through immediately implementable action plans. These were local, winnable public-private partnerships. Our seven methods emerged as

1 Strategic planning workshops. All sites began by involving a broad representation of the community in a strategic planning workshop (two days) that accomplish the following:

- Analysis of the *"Current Situation"* of the community using an abbreviated version of the classic SWOT method (i.e., Strengths, Weaknesses, Obstacles and Threats). We replace "threats" with an analysis of challenges and we reduce the process to a two-hour scanning discussion.

- Development of a "*Practical Vision*" reaching up to five years. We find that going much beyond five years reduces the realism of the exercise. In fact, considerable effort is given to making sure that the vision is doable and realistic, thus the focus on a *practical* vision.

- Definition of the "*Strategic Direction*" in which the community wishes to move over a period of about two to three years. Here the emphasis is on getting a direction defined that will guide activities so that the community will move in one basic direction. We de-emphasize the notion of comprehensive strategy effecting all sectors, as we find that leads, again, to unrealistic goals and a sense that the burden is too great… it trivializes an otherwise useful exercise in planning.

- Creation of "*Action Plans"* for those activities that should get top priority over the first year. Here the objective is to illustrate how one can move from a vision to practical implementation steps that are immediately doable. It is also to get leadership to commit to action.

2. Multi-sector technical working groups. It has been mentioned that strategic planning workshops identified priority actions in a variety of task areas, including environment. We found it extremely important to immediately organize Technical Working Groups (TWGs) around each of the priority issues. The composition and even nomenclature for each TWG varied among communities in relation to the manner in which each viewed the solution. For instance, one community saw environmental management primarily in terms of preserving pristine resources for purposes of tourism, so their TWG was chaired by a trusted local businessman. That same community had a particular environmental issue with fresh water resources, so it organized yet another TWG with a local activist priest at the helm. Both committees shared members. The important element of each situation was that the TWGs were organized in response to demands identified and prioritized locally; no "design" or "template" was overlaid and insisted upon by project management.

3. *Community environmental action planning workshops.* GOLD designed and facilitated two-day environmental planning workshops, with follow-up technical assistance events and community meetings. We used highly effective methods modified from the strategic planning and citizen dialogue approaches known as the "Technologies of Participation". These techniques were easily and successfully adapted to the task of environmental planning. The key innovation in these workshops were that they were quick, they were facilitated by local officials and citizens, and they resulted in "doable" actions which could be accomplished primarily with local financial and manpower resources.

Over the course of the last three years GOLD has trained more than 2,000 Filipinos in these methods, so virtually all community environmental workshops were facilitated by local government officials and/or community members drawn from the local government unit itself. It is noteworthy that of the hundreds of workshops held for environmental management and other purposes, only one expatriate was used to initiate training of trainers in the project's first six months. Grassroots citizens have done all else.

4. Environmental summits. Whereas environmental workshops were typically held at the municipal level, there emerged the challenge of dealing with issues which involved multiple local government units, such as those typical of coastal waters, large watersheds and rapidly growing, highly urbanized population centers. This challenge was met by a device known as an "Environmental Summit", using the nomenclature of diplomacy in which entities come together to forge treaties and, where possible, joint strategies. GOLD's Environmental Summits had the same purpose: to assemble the various

plans and visions of contiguous local communities and forge from them agreements and joint undertakings to solve environmental problems. Notice that the purpose was not to develop larger, more inclusive, more technically sophisticated environmental plans. That is because we found that once numerous local communities had viable plans, albeit simple and sometimes wanting for technical sophistication, it was imperative that some actions start flowing from a consensus as to how to achieve common goals imbedded in these plans. There never were instances in which there where not many common goals among communities, although there were certainly instances in which there were some conflicting goals. In these cases, the Environmental Summit served to either resolve conflicts or, at a minimum, clearly separate common interests from individual conflicts. This allows stakeholders to move forward with what is possible rather than stay put arguing over what may be the impossible. Conflict resolution techniques were used within the larger structure of the Environmental Summit to great effect.

5. Participatory environmental transects. In a number of instances communities and local governments were well served by going through a process of creating a graphic environmental "transect" of their natural resource management situation. An environmental transect is simply a visual illustration of the inter-linked environmental dynamics and problems in a community. Communities can identify and plot "hot spots" and lower degree problem areas. The result is a workable picture of environmental management challenges. Transects benefit from having a technical person shepherd their creation in conjunction with participatory events in which local officials and other stakeholders discuss, alter, add to, subtract from and generally enhance the picture of the natural resource panorama. These are especially useful in a location like the Philippines, wherein many local communities encompass upland, lowland and coastal areas in one jurisdiction.

6. *Co-management agreements*. This tool is particularly helpful in creatively addressing the problem of the breakdown of centralized "command/control" systems that do not in practice have much ability to halt de facto open access to natural resources. There exist a number of laws and administrative arrangements that, in the Philippines context, allow resource users, local communities or governments, and public/private partnerships to enter into agreements to manage natural resources locally, but according to national standards. GOLD found that while such possibilities existed, relatively few were underway. The problems with getting them underway were those typical when a centralized bureaucracy seeks to monopolize essentially localized operations: high transaction costs, overly ambitious control mechanisms and impractical technical requirements. The DENR "stake" in resource management frequently turned on the question of whether their own institutional equilibrium could be maintained if they really set to doing the task at hand. Could internal reporting requirements be met? Could the primacy of their control be assured? Could their staff continue to appear in charge? GOLD's assistance therefore centered on bringing national and local players together to work through agreements in a participatory, negotiation-rich event that had the objective to reduce or altogether remove unnecessary bureaucratic constraints to getting local resource management actions underway and functioning, while at the same time catering to finicky institutional insecurities. We cannot claim immense success in this effort, but in a few instances we found workable ways to unwind the system to make it really work for all stakeholders.

7. *Technical review/training workshops*. We found that the notion of participation meant many things to people, but there was usually a fairly predicable scenario as regards the manner in which participation is used in project management. Technical bureaucracies (i.e., the staff of national agencies) tend to see participation as something that happens at the beginning and maybe at the end of a technical process. They tend to separate participation from technical perspectives. NGOs, community leadership and many local government staff tend to see participation as a process that includes technical, as well as other input. It is this later approach which is most useful if you are

attempting to link up technical activities with stakeholder commitment. GOLD thus designed a number workshops and facilitated group discussion formats which allowed non-technical stakeholders to not only view technical activities, but control how such activities interact and integrate with other community needs and values. Issues addressed include: solid waste management, coastal resource management, fisheries oversight for municipal waters, river basin management, urban river clean-up, user fee systems, agricultural infrastructure prioritization, agricultural marketing designs, small scale mining management, etc. This tool is helpful in that it requires transparency and pragmatism on the part of technical consultants while enabling governing and civic institutions to be involved with realistic expectations.

F. Impact

The GOLD project's impact on environmental management in the Philippines may be described in several ways:

- Annual public opinion measures of satisfaction with local government services steadily rose over each of three periods. Since environmental issues topped the list of governance reform activity in every site, it may follow that the public saw some level of accomplishment.

- Approximately 90 local government partners availed of one or more of the tools noted above related to environment. Most developed environmental management plans and hosted technical reviews, many participated in Environmental Summits and significant numbers budgeted self-generated revenues for environmental purposes.

- All provincial and city governments filled the Code-mandated Environmental Officer position; a number of municipal local governments elected to recruit and appoint a full-time Environmental Officer (the Code left this optional at the municipal level).

- Nearly 2500 facilitators have been trained, most from local governments and NGOs. Of these, 60 percent use facilitation methods after training without further assistance from the project. A significant, though yet unmeasured, number facilitate events dealing with community-based environmental planning and management issues without further assistance from the project.

- GOLD has demonstrated that local governments do have basic capacities to identify environmental issues, organize community solutions, commit local revenues and sustain local actions.

G. Constraints

Four principle factors constrained GOLD activities in support of improving local environmental management.

First and foremost, the Code did not go far enough in devolving environmental management authorities and functions to local government. As noted, local governments and their civil society partners were and are keen to engage environmental issues affecting their locale. But of all the major services devolved to local authorities, those effecting the environment were least aggressively mandated and pursued. As a result, local governments felt reluctant to move forward in areas that were only their prerogative in the context of the "public good" mandate of the Code.

Second, and closely related to the first, is that the national Department of Environment and Natural Resources placed considerable emphasis on a Code caveat that all environmental activities are "subject to the supervision and control of DENR". Practically, this meant that DENR devolved to local governments only lower level personnel (e.g., forest guards), few assets and no resources. Or again, when compiling guidelines for some devolved functions DENR tended to treat local governments as *subordinate to itself* by demanding frequent reports, prescribing fees and unilaterally limiting powers which the Code had legally assigned elected officials. Seeing themselves as constitutionally separate authorities, local governments naturally took exception to this paternalistic attempt to limit their role by means of administrative fiat.

Third, the profoundly different perspectives from which each entity views the problem complicate the interface between national and local government. National agency personnel tend to see the environment as a *sector* demanding technical inputs*;* while local governments and civil society view the environment in terms of *area development* demanding policies and practices coordinated with other elements operating in a geographic area (e.g., agricultural practices, revenue sources, etc). Practically, this means that sector-oriented agencies rarely coordinate with one another in a meaningful way, while local governing institutions rarely have the technical know-how to support their efforts to coordinate policies and practices effecting their jurisdiction.

Lastly, *institutional incentives* have a dramatic impact on what actions get priority by field personnel of a given agency. Most DENR field personnel maintain institutional allegiance to the national government and thus gave little attention to local priorities and locally generated solutions if these do not closely parallel perceived preferences of national authorities. As a consequence, strategies conceived at the national level received little modification in response to local reality, with the consequence that impacts were considerably diminished.

H. Lessons Learned and Success Factors

- *Do not focus exclusively on optimizing technical solutions*. Give equal attention to normalizing governance processes by demonstrating *tools* and training locals in *methods* which could be used to address their own problems on an ongoing basis. While many problems, such as environmental ones, have technical dimensions, their solution relies equally on institutional capacities and sustainable methods for maintaining long-term stakeholder commitments. The habit of donors and national governments to organize activities around technical solutions imposed by an "expertise elite" tends to bypass or obscure these essential institutional issues.

- *Where possible, shift the locus of responsibility for environmental management to local government and broad-based civil society groups.* While macro environmental policies need to be well crafted, their practical implementation is almost entirely local. A conventional "stream flow" model of policy implementation will rarely achieve widespread, localized impact because the issues and solutions are simply too complex to be amendable to generalized solutions. (A "stream-flow" model is one that asserts that "impact" flows from top to bottom. At the top policy makers make policy, then line agency bureaucrats design programs/projects to implement said policies, then people at the local level implement these programs).

- *Reverse the conventional sector-oriented, expertise-driven process by addressing environmental problems through a governance perspective,* rather than from a technical (sector) perspective. In this manner local government and civil society institutions

become the foundation of a long-term commitment to environmental improvement. GOLD enabled national government macro policies to have a reasonable chance of success by coupling environment-specific policies with the “public good” mandate of local governments.

- *Focus less on trying to get people to support optimal technical strategies in total and more on enabling people to accomplish doable actions one step at a time.* Sustainability should not be misconstrued as the ability of a “beneficiary” to sustain “projectized” activities. Rather, sustainability is the ability of local institutions to manage processes and methods by which issues are continually acknowledged and for which doable solutions are continually experimented with by involving all stakeholders in generating such solutions.