

DISCUSSION:

1. Rationale for a Rodale Research Institute Cooperative Agreement to Develop Centro Maya

The recently created Maya Biosphere Reserve is an important step toward the protection of the region's natural resources and archaeological treasures. But in order to stabilize this region, we must find a way to improve the livelihood of the current residents as well as those who will continue to migrate from the highlands while working to preserve the biosphere. There is an urgent need for land use systems that are both economically viable in the short-run and yet are ecologically sustainable in the long-run. Systems that maintain and/or enhance the productive potential of the natural resource base are a high priority. This project can make an important contribution to the development and maintenance of the Maya Biosphere Reserve and the Peten by developing these systems.

2. Project Components and Phased Implementation

Over the three year life of project, the Centro Maya project will be implemented as four component sets of activities (a detailed description of project strategy and components is found in Attachment 1):

1. Project Administration
2. Community Networks
3. Improved Milpa System Research
4. Institution Building

In recognition of the need to resolve certain critical questions affecting the legal status of the Centro Maya and the full implementation of the project, project implementation will be carried out in two phases. The first phase consists of a first year's set of activities and outputs (described in detail in Attachment 2), against which an evaluation of accomplishments and the project development plan will be made. If, in the Mission's judgement, satisfactory progress has been made against the expected outputs, then the second phase of the project, encompassing the full development of the four components above as well as the funding necessary to carry them out, will be approved.

2. Financial Plan for the Cooperative Agreement

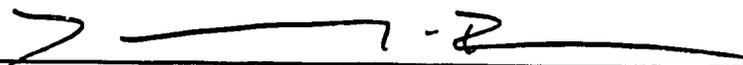
Total LOP funding authorized for this activity would be US\$564,882 against which Rodale Research Institute is putting US\$681,280 as counterpart contribution (See Attachment 3 for a detailed LOP budget). As described above, a budget for the first year totaling US\$278,597 with a Rodale counterpart of US\$280,043 would be obligated in the first tranche (See Attachment 4 for a detailed budget for the first year's activities). The second tranche would be obligated upon AID's positive determination that satisfactory progress had been made against the expected outputs and the project development plan for the first year's activities.

As indicated at the outset, the GOG is contributing approximately Q5 million from 416 local currency generations as GOG counterpart to be used to finance complementary activities of CATIE, USC, and ICTA in the Centro Maya. These funds will be turned over to CATIE for management, and will be subject to both GOG and AID audit (See Attachment 5 for a detailed description of the procedures for management of the 416 funds being contributed to Centro Maya).

RECOMMENDATION:

Decision - That you authorize the Rodale proposal for establishment of the Centro Maya and that you instruct the RCO, John McAvoy to sign a cooperative agreement with Rodale Research Institute, obligating US\$278,597 for the first year's activities. The remaining US\$286,285 would be obligated the following year, contingent upon successful performance-- measured against established bench marks--during the first year, and review of the project development plan.

APPROVE



Terrence J. Brown, DIR

DISAPPROVE

Terrence J. Brown, DIR

DATE:

May 30, 1991

ATTACHMENT 1

PROJECT STRATEGY AND COMPONENTS

1. Project Strategy

The development of Centro Maya will require an integration of local, national, and international activities. A key objective of the local activities will be to develop the commitment and sense of "project ownership" by local residents and institutions of the Peten. Rather than organizing meetings in local communities to hold abstract discussions about the potential of a future cooperative program, this project will begin with on-farm research to improve the Milpa cropping system, an indigenous production system developed by the Mayan and the present source of food. The initiation of participatory research to improve the Milpa system should lead to a community-based organization structure that will be a key component of Centro Maya.

A key objective of the national-level activities will be to make the necessary legal, administrative, and financial arrangements to create a Center (Centro Maya). This will involve activities such as identifying and buying or leasing a site for the reconstruction of Mayan agricultural systems, developing cooperative arrangement between the Rodale Institute, ICTA, CATIE, and the Universidad de San Carlos, and making legal arrangement and negotiating financial support for future activities. Here too, it is critical that a local institutional sense of ownership be developed.

A key objective of the international-level activities will be to integrate this program into an ongoing Rodale Institute cooperative research and information exchange process that will both contribute to the development of Centro Maya and to its continuing effort to develop sustainable land use systems. Among the important international activities will be use of specialized consultants in many different areas such as soil microbiology, green manure legumes, crop/livestock interactions, systems analysis, research administration, and development of financial support strategies.

2. Project Components

The general project strategy described above will be implemented as four component sets of activities. The component strategies and specific outputs expected from each activity set are described below.

Component A: Project Administration

The purpose of this component is to manage project inputs, including both human and financial resources; to insure the integration of Components B, C, and D; and to monitor the

implementation of the project strategy and the development of the project outputs. This component will be managed by Rodale Institute in close cooperation with the USAID project office in Guatemala City.

Key activities included in this component of the project are the following.

1. The employment of long-term technical assistance.
2. A detailed workplan will be prepared that will be coordinated with activities planned by ICTA, CATIE and CUDEP.
3. Identification and approval of short-term technical assistance.
4. Administrative and technical project support will be provided by the Rodale Institute. The Project Support Coordinator will be responsible for the funds allocated to these activities. The research and information exchange activities will be integrated into the ongoing development of the International Sustainable Land Use Systems Research Network. In addition to office communications and secretarial functions, specific technical support functions such as the development of analytical methods, models, etc. will be provided as part of the home office support.
5. Project evaluation. At the end of the three-year project, the AID project manager, in coordination with the Rodale Institute, will commission an independent evaluation of the project.

Component B: Community Network

The purpose of this component is, in cooperation with ICTA, CUDEP and other local agencies, to develop a grassroots community network that can function as part of CENTRO MAYA. The expected output is a commitment by local farmers and local institutions to participate as part of Centro Maya in the development of economically viable and ecologically sustainable land use systems.

The Community Network will be organized as a result on the following activities.

1. Identifying communities in the Maya Biosphere buffer zone and south of the buffer zone that include local organizations that could be interested in participating in the project.
2. Conducting on-farm research to improve Milpa cropping systems.

3. Working with local farmers and communities to explore the development of other systems used by the Mayans or other land use systems that could be developed by applying the general principles that emerge from Centro Maya.

Component C: Improved Milpa System

This component has both a long-term and a short-term purpose. The primary long-term purpose is to convince farmers and local institutions that they are a key part of Centro Maya and that the concept of integrating the best of past and present technology is a viable development strategy. The short-term purpose is to improve livelihood of the current generation of Peteneros. A key output will be a set of guidelines for the development of more productive and ecologically sustainable Milpa cropping systems.

This component will be implemented with the following activities.

1. Analyzing the existing Milpa system (and its variations) through a rapid reconnaissance and key informant interviews.
2. Identifying various means of improving the system, such as using green manures to maintain soil productivity and lengthening the production period and/or shortening the fallow period, and improving crop/livestock interactions.
3. Conducting field station research (at CUDEP) to screen potential new technologies such as the green manure legume germplasm.
4. Initiating participatory on-farm research to compare farmers' present systems with alternatives that include new technologies.
5. Writing a general guideline for the development of a more productive and ecologically sustainable Milpa cropping system.

Component D: Institution Building

This is a critical component of the project since the principle project output will be the creation of CENTRO MAYA: a self sustaining institution that is technically, administratively, and financially capable of reconstructing Mayan agricultural systems and working with local communities to develop sustainable land use systems.

The key activities that will be implemented by this component of the project are:

1. Development of a cooperative agreement between CATIE, CUDEP, and the Rodale Institute.
2. Selection of site and purchase or long term lease of land for the reconstruction of Mayan agricultural systems.
3. Development of a construction plan for Mayan agricultural systems station.
4. Legalization of the institutional arrangement that will manage Centro Maya.
5. Development of a technical and administrative plan that Centro Maya will implement.
6. Development of a financial strategy that will sustain Centro Maya.

ATTACHMENT 2

Project Implementation and Phasing of Activities

In recognition of the need to resolve certain critical questions affecting the legal status of the Centro Maya and the full implementation of the project, project implementation will be carried out in two phases. The first phase consists of a first year's set of activities and outputs, against which an evaluation of accomplishments will be made. If, in the Mission's judgement, satisfactory progress has been made against the expected outputs and project development plan, then the second phase of the project, encompassing the full development of the four components above as well as the funding necessary to carry them out, will be approved.

The implementation plan for the first year contains the following set of activities and expected outputs:

1. Legal Incorporation of Centro Maya:

A first step toward implementing the proposed project requires bringing the Centro Maya into being as an operational entity. This will require incorporation as a legal organization within the laws of Guatemala.

1.1 First year outputs:

1.1a A legal entity under Guatemala laws called the Centro Maya with all provisions such as tax status, legal obligations, maximum rights and privileges as a not-for-profit organization will be in place and under operation. Under operation means the Centro Maya will have a Board of Directors and an executive officer through which the supporting organizations will provide their input as outlined in their respective proposals.

2. Development Plan:

The Centro Maya performs two key functions. One, it initiates and operates the program elements of the institutional effort. Second, it must develop the capacity to develop and gather the support resources necessary to carry out these functions. This development function is essential for the Centro Maya to become a self sustaining institution.

Rodale Institute will have major responsibility in assisting the Centro Maya in getting in place a capacity to raise funds and other support contributing to financial self-sufficiency. This process requires considerable time as well as experience in setting forth and implementing a strategy for development.

One of the early activities of this component will be the implementation of a financial programming process to ensure the complementarity of program funds raised by the individual founding institutions (CATIE, Rodale Institute, Universidad de San Carlos). These funds include local currencies (PL 416), dollars, and counterpart funds.

Among the major expected funding streams to be developed are included private individuals and foundations. Much of this is expected to be generated in the U.S.A., with a potential also for other areas of the world being supportive.

2.1 First Year Outputs:

2.1a A development plan which includes 1) the activities for which support will be sought, 2) the sources of potential support identified, 3) an implementation schedule with associated targets or goals, 4) terms and schedules for building an internal capacity for development within the Centro Maya and 5) starting the actual process of obtaining funding support.

2.1b The process to raise potential donors awareness of the Centro Maya's purpose and goals, and to the region, will have been initiated through the various communication channels available to the Rodale Institute.

3. Program Plan

Given the Mayarema objective of improving the long term economic well-being of the "Peteneros" while maintaining the integrity of the natural resource base, it is imperative to develop economically viable and environmentally sound land use systems for the Peten region. An important program goal of the Centro Maya is to establish economically profitable and environmentally sound land use practices for the Peten region. This is consistent with the Mayarema project. The target populations include the residents of the Mayan Biosphere Buffer Zone and the Reserve, the agriculturalists south of the Buffer Zone and the private and public institutions that serve these populations.

Centro Maya will initially focus its program energies on two integrally linked program areas: Applied Research, and Community Action. By closely tying these two program areas together, each becomes more efficient and effective in maintaining it's focus.

While each founding institution of the Centro Maya has it's own funds and project plans, these will be integrated in a complimentary program under the direction of Centro Maya.

The implementation of this integration will be a major activity in Year 1.

3.1 Applied Research

3.1.1 Strategy: The initial focus of the Applied Research program is to build upon 3 "focus areas", using the lessons learned from these to develop new sustainable land use systems that combined the best from each area. The 3 "focus areas" are, 1) improved existing management and use of secondary forest products, 2) historical Mayan land use systems, and 3) experiences in the development of sustainable land use systems in other parts of the world with similar environments.

The development of these sustainable land use systems must include not only ecological and biological criteria but socio-economic criteria as well. Particular attention will be placed upon gender issues, enterprise budget and whole farm analysis, and projections of sustainability with support from modelling exercises.

3.1.2 Year 1 Activities: Diagnostic Phase to elucidate the limiting factors to the design and implementation of sustainable land use systems. Research using both primary and secondary sources of information will be used as follows:

3.1.2a Identification and analysis of existing research, surveys and data. Focus would be on existing land resources, land use systems, production practices, and product markets.

3.1.2b Design, administration and analysis of new single point surveys as needed, based on above. Focus would be on identified gaps in important information. Examples include the investigation of importance of gender issues in current land use practices of immigrants.

3.1.2c Design, implementation and analysis of limited on-farm field trials to further identify biological constraints to sustainable land use systems. Examples might include screening of green manures etc.

3.1.3 Year 1 Products: The successful completion of the Year 1 Applied Research activities will provide a description or diagnosis of the existing constraints to the development of sustainable land use systems that need to be addressed by future research. The primary Year 1 product of the of the Applied Research will be:

3.1.3a Implementation design for Years 2 & 3 to be presented to the Board of Centro Maya for approval. This work plan will include such key points as:

- coordination with ongoing research by other institutions,
- site selection for research activities,
- key activities and products required,
- parties responsible,
- budgets required.

3.2. Community Action

3.2.1 Strategy: Centro Maya has a commitment to promoting Community Action programs to complement the Applied Research program. This program will work in selected communities to develop replicable mechanisms for integrating local communities into development, implementation and, if practical, regulation of sustainable land use systems.

3.2.2 Year 1 Activities:

3.2.2a Selection of target communities,

3.2.2b Identification of collaborating NGOs.

3.2.3 Year 1 Products:

3.2.3a An implementation strategy for years 2 and 3 for presentation to AID and the Centro Maya Board for their approval. Work plans will define and clarify such components as:

- selected communities,
- collaborating institutions,
- key activities and required products,
- parties responsible,
- required budgets.

ATTACHMENT 3

PROJECT BUDGET FOR LOP

ITEM	YEARS 1--3

Personnel	Total

Long Term	\$96,460
Fringe (.23%)	<u>\$22,186</u>
Sub-total	\$118,646
Short Term	(Days)
Soils	15 \$3,750
Crops	20 \$8,750
Systems	105 \$26,250
Crop/Lv	15 \$3,750
Inst.Devlp	20 \$5,000
Info Exch	20 \$5,000
Soc. Scien	15 \$3,750
CUDEP	<u>\$24,000</u>
	225 \$80,250
Direct Home Office Support	
(Technical)	\$126,020
(Fin & Netwkg)	<u>\$ 69,816</u>
	\$195,836
Direct	
Jeep	\$ 19,000
Reloc/Educ/Hsing	\$ 42,000
Travel (Air)	\$ 17,000
Travel (In-Count	\$ 18,000
Supplies	\$ 9,600
Computer	\$ 12,000
Farmer Particp.	\$ 20,000
Per Diem	\$ 22,950
Farm Materials	<u>\$ 9,600</u>
	\$170,150
TOTAL USAID FUNDS	\$564,882

RODALE COUNTERPART CONTRIBUTION	
Qualifying	
Direct Off. Sup	\$ 73,685
Indirect .85 Per	\$242,595
Public Awaren	\$125,000
Proj. Fund Rsg	\$150,000
Devel. Acti.	<u>\$ 90,000</u>
TOTAL	\$681,280
TOTAL RODALE INPUT	\$681,280

ATTACHMENT 4
CENTRO MAYA BUDGET
FOR YEAR 1

ITEM	AMOUNT
Personnel	

Long Term	\$59,010
Fringe (.23%)	\$13,572

Subtotal	\$72,582
Short Term (Days)	
Soils 15	\$3,750
Crops 15	\$3,750
Systems 45	\$11,250
Inst. Devlp 5	\$1,250
Soc. Scien 15	\$3,750
CUDEP	\$6,000

Subtotal	\$29,750
Rodale Institute Staff	
Technical Support	
Subtotal	\$42,610
	=====
Total Technical Personnel	\$144,942
Direct Home Office Support (See Attachment 4a)	\$34,908
Direct	
Jeep	\$19,000
Travel-Air Consultants	\$ 9,967
Rodale techn.	\$ 9,600
Travel-In-Count: Consult.	\$ 9,000
Rodale techs.	\$ 3,600
Supplies	\$ 6,000
Computer	\$10,000
Legal Services	\$10,000
Per Diem-Consultants	\$14,280
-Rodale tech.	\$ 7,200
Other	\$ 100

	\$133,655
TOTAL USAID FUNDS FOR FIRST YEAR	\$278,597
<u>RODALE COUNTERPART CONTRIBUTION</u>	
Direct Office Support	\$36,842
Indirect (85% personnel)	\$123,201
Public Awareness	\$50,000
Development Activities	\$70,000
TOTAL	\$280,043

ATTACHMENT 4

DIRECT HOME OFFICE SUPPORT

ITEM	Monthly Cost	Annual Cost	Charged	Rodale Contribution
Adm., Fin. & Inst. Netwkg				
Communications	\$250	\$3,000	\$1,980	\$1,020
Accounting	\$900	\$10,800	\$7,128	\$3,672
Secr.	\$750	\$9,000	\$5,940	\$3,060
Proj. Sup. Coordinator	\$850	\$10,200	\$6,732	\$3,468
Int. Info. Network	\$600	\$7,200	\$4,752	\$2,448
Mgmt. & Admin. Travel	\$300	\$3,600	\$2,376	\$1,224
Supplies & Materials		\$6,000	\$6,000	\$0
Other			\$0	\$0
Other			\$0	\$0
Sub Totals		\$49,800	\$34,908	\$14,892

RODALE INSTITUTE CONSULTANTS

RI staff	days/month			
Technical:				
Infor. Mgmt.	5.0	\$10,800	\$7,128	\$3,672
Data Proc. & Storg	4.0	\$8,640	\$5,702	\$2,938
Systems Modelling	3.5	\$18,480	\$12,197	\$6,283
Soil MicroBiol.	1.0	\$3,600	\$2,376	\$1,224
Legume/Crop Inter	2.0	\$7,200	\$4,752	\$2,448
Inst. Devel.	3.0	\$15,840	\$10,454	\$5,386
	18.5	\$64,560	\$42,609	\$21,950
TOTAL SUPPORT		\$114,360	\$77,517	\$36,842

ATTACHMENT 5

PROCEDURES FOR USE OF 416 LOCAL CURRENCY

The 1991 416 program with the GOG provides that 50% of the proceeds from the sale of grain is to be provided for the development of the Centro Maya in the Peten and is to be managed by CATIE. What follows below is a brief description of the arrangement under which these funds would be administered by CATIE. The description is based upon the arrangements followed in a similar agreement between the GOG and CATIE. With minor modifications, it is expected that the same arrangements will be followed for the administration of the 416 program local currency to be used for the Centro Maya.

1. Under a ministerial decree emitted by the Ministry of Finances, a defined amount of Quetzales is transferred to CATIE to be used in the implementation of defined activities, in this case, the development of the Centro Maya.
2. In a separate ministerial decree emitted by the Ministry of Agriculture, regulations governing the administration of the local currency are defined. The pertinent regulations that apply include:
 - a. CATIE will administer the funds under its established administrative, financial, and internal controls, in support of the Centro Maya. The funds must be used within Guatemalan territory.
 - b. CATIE will provide quarterly and annual financial reports and progress reports to various agencies of the government.
 - c. CATIE will facilitate the conduct of external audits carried out by the "Contraloria General de Cuentas" and those requested by AID for any and all funds covered under the agreement.
 - d. The funds are to be placed in a bank account (in the last agreement--BANDESA) and interest earned reinvested in the defined program, in this case Centro Maya.
 - e. CATIE is allowed to charge an overhead or management fee.
 - f. The agreement is for a defined period of time, which can be extended. At the end of the agreement, remaining funds are returned to the government for use by the MAGA in related activities.