ANNEX C

BACKGROUND INFORMATION ON THE TROPICAL FORESTRY ACTION PLAN (TFAP) FOR GUATEMALA

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The TFAP/Guatemala includes some 40 actions and 17 projects, with an additional 16 projects appended to the list between the March 1991 printing of the TFAP document and the January 1992 meeting of the International Round Table. The total amount of investment necessary to implement the TFAP/Guatemala (excluding appended projects) amounts to US$ 128.6 million over a 10-year period. Itemized by the five TFAP program areas, the distribution appears as follows:

Program	Actions	Projects	U.S.$(million)
Land Use Planning	10	4	33.3
Industrial Development	9	3	9.4
Firewood & Energy	0	3	10.5
Forest Conservation	1	3	8.7
Forestry Institutions	20	4	66.7

As is common to TFAP exercises worldwide, donor organizations frequently prefer to adhere to their internal project development procedures rather than purchasing specified TFAP projects. Nonetheless, the coordination and analysis performed by the TFAP is invaluable to project design.

Of 11 donor agencies that have declared collaboration with the Guatemalan TFAP, only four projects were sponsored outright, and this was due to their existing design during the TFAP exercise. The four projects are: 1) the Forestry Development Project for the Sierra de los Cuchumatanes (Holland, US$ 2.5 million, Land Use Planning Program/Project #2); 2) the Northeast Guatemala 5000 ha./year Reforestation Project (USAID, US$ 7 million, Forest Industry Development/Project #1); 3) the Coniferous Forest Management Project (FINNIDA, US$ 1.4 million, Forest Industry Development/Project #2); and 4) the Forest Management and Agroforestry Development Project in Manos Unidas (Germany, US$ 2.9 million, Land Use Planning Program/ Project #4). Although largely non-project specific, all declared TFAP assistance by donor organizations can be see in Table 1.

TABLE 1.
SUMMARY OF DECLARED SUPPORT BY TFAP/GUATEMALA INTERNATIONAL ROUND TABLE PARTICIPATING AGENCIES

Agency/country (millions)	**Action/project**	**$Quetzales**
Holland	Forest development of the Sierra de los Cuchumatanes	12.5
	Support for the continuation of the TFAP/Guatemala	20.0
	Fuelwood and energy program, applied to the regions of Zacapa and Chiquimula.	15.0
	Environmental education for forest ecosystem conservation	10.0
	Support for Guatemala's system for protected areas	undefined
	Various projects for forest management and community forest development in the Peten	undefined
	Support for projects stemming from the Mayan forestry workshops	undefined
USAID	East and Northeast Guatemala reforestation project 5000 ha/yr.	35.0
	Sustainable Use of Renewable Natural Resources Project	75.0
	Technical assistance for the review of forestry and environmental laws and regulations	0.075
	Environmental education materials including Mayan languages	0.075
FINNIDA	Coniferous Forest Management	8.0

WRI/WWF	Mayan Forestry Workshops	0.4
Germany	Forest Management and Agroforestry Development Project in Manos Unidas (Peten)	14.5
	Support for Mid-level Forestry Training Centers	5.0
	Support for the TFAP/Guatemala Continuation	0.3
	Emergency program for the Peten tropical forests	72.0
	Archeological site protection for the Peten	6.2
	National reforestation (forests for peace, firewood and energy, PRAUM)	3.7
Spain	Agroforestry projects	undefined
	Support for a forest engineer academic degree in Guatamala	undefined
	Support for mid-level forestry studies/curriculum	undefined
	Support for the global TFAP	undefined
IDB	Support for pre-feasibility studies of TFAP projects	0.125
	Energy plantations, agroforestry, watershed management, and biological diversity	undefined
UNDP	Social agroforestry	undefined
IUCN	Technical assistance	undefined

CATIE	Technical assistance	undefined
PMA	Support for agroforestry and reforestation projects	undefined

Although donor agency natural resource strategies and project design procedures may differ, most share common goals and objectives. Consequently, any given USAID natural resource project may address a number of specific overlapping actions and projects as outlined by the TFAP document. In this manner, the overall TFAP program agenda and strategy is supported, and furthermore, USAID is using extensive TFAP analysis in its own project design. In his International Round Table final declaration, Edgar Pineda of USAID/Guatemala indicated that USAID participation in the TFAP/Guatemala (in addition to having supported the TFAP exercises to date), consists of the following:

Forestry Activities in Land Use Planning

Action #6. USAID, in conjunction with the government of Guatemala (GOG), is revising the Altiplano Agricultural Development Project to strengthen the integrated watershed management component in 20 selected micro-watersheds.

Action #8. USAID is designing a new natural resources project whose design guide will be the TFAP/Guatemala document and which will include a social forestry component. In 1990, AID financed the design of the intensive reforestation program with multiple-use trees know by the acronym, PIRAMIDE (TFAP Project #3). Many of the concepts and recommendations of this feasibility study will be included in the new design.

Forest Based Industry Development

Action #2. USAID supported the East and Northeast Reforestation Project, better known as the project of 5,000 ha/yr. However, the last two planting seasons have produced obstacles, placing project completion at risk. Since USAID maintains an interest in reforesting the country, it is suggested that the project be revised to broaden its geographic focus and include broad-leafed species, rather than simply conifers. Credit mechanisms will also be restructured to allow greater participation of the private sector.

Action #5. USAID's largest forest management project, the Natural Resource Management Project (MAYAREMA), is located in the Maya Biosphere Reserve in the northern Peten. The principal component of the project includes community income generation by means of forest resource management. Production demonstration plots are foreseen whereby communities could collaborate with the Peten Industries Association, the Forestry Union, DIGEBOS and CONAP.

Conservation of Forest Ecosystems

Within this program USAID is interested in supporting the GOG and the NGOs in strengthening the system of protected areas. Rather than continuing to declare additional areas as protected, USAID believes in strengthening institutions that administer and manage existing protected areas, particularly CONAP (Project #1). To these ends, USAID has obligated $10 million for the management of the Maya Biosphere Reserve. The GOG and certain NGOs have responded by contributing $7.5 and 3.5 million respectively, for a total of $21.5 million over the five year life of the project.

Institutional Development

Action #3. The strengthening of local organizations with the objective of self-sufficiency in community forest management, conservation of ecosystems, agroforestry, and reforestation is a principal objective of the USAID natural resource/agriculture project currently under design. Associated national NGOs will also be strengthened.

Action #5 USAID, as mentioned earlier, is interested in continuing to support the project of reforesting 5,000 ha/yr in the eastern region of Guatemala. Technical assistance is being provided for development of mechanisms by which small and medium-sized landowners can gain access to credit.

Action #8. Just as support is provided for the analysis of forestry laws and regulations, USAID is willing to offer technical assistance for the organization of multidisciplinary teams to initiate a national forum for discussion of the proposed legislation.

Action #15. In conjunction with USAID education programs, natural resource programs could contribute to TFAP action by curriculum design and the provision of written environmental education materials (including Maya dialects)(Forest Ecosystem Conservation Project #2).

Action #17. In reference to the strengthening of mid-career-level forestry education and training centers, USAID is considering support to the Centro Universitario del Peten (CUDEP/Project #3) through its MAYAREMA project. Additional academic institutional strengthening is under consideration for high-level forestry career development in Guatemala in conjunction with the USDA Forest Service (Project #2).

USAID sectoral problem identification, program themes, and project goals and objectives parallel those identified by the TFAP/ Guatemala. Although the projects and priorities themselves often differ between the two organizations, the cross-cutting project themes are easily attributed to the common foundation. The design team for the new USAID natural resource/agriculture project will look to the Guatemalan TFAP for its sound analysis and incorporate the recommendations as they best serve the USAID area and sectoral strategies.

Supporting Data for Problem Description

"The symptoms and indicative scale of dramatic natural resource decline for short-term gain are well documented and include":

1. Unprecedented declines in forest cover and attendant biological diversity.

* Annual deforestation rate (BID, Chixoy) 90,000 ha/yr

* Annual deforestation rate (TFAP): 50,000 - 60,000 ha/yr
  -in coniferous forest (23%,Escobar,1990) 12,600 ha/yr
  -in broadleaf forest (77%,Escobar,1990) 43,000 ha/yr
  (causes: agricultural production (90%),
  fire (8%), forest industry (2%), Camino De, 1990)

* Annual deforestation rate (Casteneda Amaya,1990)
  22,500,000 $m/^3yr$
  Annual incremental volume increase (ibid) 16,000,000 m^3/yr
  Annual incremental volume increase
  (Escobar & Rodriguez, 1989) 15,300,000 m^3/yr

* Home fuelwood consumption (TFAP/1990): 12,875,286 m^3/yr
* Home fuelwood consumption (Martinez, 1984): 15,000,000 m^3/yr
* Industrial fuelwood consumption (TFAP/1990): 2,166,666 m^3/yr
* Charcoal consumption (TFAP/1990): 45,475 m^3/yr
* Industrial wood consumption (TFAP/1988): 114,000 m^3/yr

* National balance of energy consumption
  (Bogach 1981, Martinez 1982, Torres y
  Moscoso 1986, Trocki, et al. 1988)
  - fuelwood 63%
  - petroleum-based 28%
  - hydroelectric 2%
  - herbaceous residue 7%

* Fuelwood use in petroleum barrel equivalents (pbe.)
  - 1970, 12 million pbe. (Trocki, et al. 1988)
  - 1985, 19 million pbe.

* Fuelwood use (Martinez 1982):
  - rural households, 80%
  - urban households, 52%
  - (Torres y Moscoso, 1986) 78.5% population uses fuelwood.

2. Epidemic soil loss and degenerating fertility resulting in crop yield declines.

3. Acute loss of vital water production for agriculture irrigation, domestic needs and energy generation.

4. Escalating prices for natural resource commodities such as fuelwood, construction materials, natural resins and forest pharmaceuticals.

* Fuelwood sales:
  - (Martinez 1982, CEMATMERCAPLAN 1990)
    51% fuelwood used is purchased from intermediaries
  - (Martinez y Musalem 1987)
    1984 total cost of commercialized fuelwood:
    $US 56.1 million

* Unprocessed wood product sales (PIRAMIDE 1990)
- chopped wood = Q$36 - 50 "por tarea" (1.2 m^3)
- poles for standing crop support (tutores) = Q$55/thousand
- fence posts = Q$50 - 150/unit
- charcoal = Q$21 - 28 per "red" (150 lbs, red grande)
- fuelwood expenses as percent of annual income = 30%

5. Spiraling declines in health, spreading poverty, violence, social turmoil, and urban migration.

ANNEX D

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