PD-AAI-080

9311080004201

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS 94p. (1)

PART II

ENTITY : Development Support Bureau

PROJECT : Deforestation and Development

PROJECT NUMBER : 931-1080

A.I.D. grant financing for the amount of $250,000 is authorized for FY-78 for a PASA with the U.S. Forest Service to carry out the following activities:

(1) an inventory of forestry activities being carried out by various donors, international banks, and regional institutions,

(2) an assessment of the ecological impact of the activities in (1) above,

(3) an assessment of constraints placed upon donors other than A.I.D. in dealing with lesser developed countries' (LDCs) forestry problems,

(4) an inventory of LDC forestry obstacles and opportunities appropriate for A.I.D. project activity, and

(5) a compilation of (a) LDC "success" stories in forestry, and (b) "attempts-that-have-failed" stories highlighting pitfalls encountered by various donors in LDC forestry activities.

Signature: Sander Levin
Sander Levin
AA/DS

Date: 8-24-78

Clearance:
DS/DAA/DT:JIBruce_____
DS/PO:RCSimpson_____

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS PART I

1. TRANSACTION CODE: A (A ADD, C CHANGE, D DELETE)

PAF

2. DOCUMENT CODE: 5

3. COUNTRY/ENTITY: Interregional DS/ST RDA-20

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 digits): 931-1080

6. BUREAU/OFFICE: A. SYMBOL: DS; B. CODE: ~~08~~

7. PROJECT TITLE (Maximum 40 characters): Deforestation and Development

8. PROJECT APPROVAL DECISION — ACTION TAKEN: 10 (A APPROVED, D DISAPPROVED, DE DEAUTHORIZED)

9. EST. PERIOD OF IMPLEMENTATION: YRS. 01 QTRS 4

10. APPROVED BUDGET AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 78 F. GRANT	E. 1ST FY 78 G. LOAN	H. 2ND FY ___ I. GRANT	H. 2ND FY ___ J. LOAN	K. 3RD FY ___ L. GRANT	K. 3RD FY ___ M. LOAN
(1) ST	792	876		250					
(2)									
(3)									
(4)									
			TOTALS	250					

A. APPROPRIATION	N. 4TH FY ___ O. GRANT	N. 4TH FY ___ P. LOAN	Q. 5TH FY ___ R. GRANT	Q. 5TH FY ___ S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1)					250	
(2)						
(3)						
(4)						
TOTALS					250	

11. PROJECT FUNDING AUTHORIZED (ENTER APPROPRIATE CODE(S)) 1 - LIFE OF PROJECT; 2 - INCREMENTAL, LIFE OF PROJECT — A. GRANT: ; B. LOAN:

C. PROJECT FUNDING AUTHORIZED THRU FY 79

12. INITIAL PROJECT FUNDING ALLOTMENT REQUESTED ($000)

B. ALLOTMENT REQUEST NO ___

A. APPROPRIATION	C. GRANT	D. LOAN
(1)		
(2)		
(3)		
(4)		
TOTALS		

13. FUNDS RESERVED FOR ALLOTMENT

TYPED NAME (Chief, SER/FM/FSD)

SIGNATURE

DATE

14. SOURCE/ORIGIN OF GOODS AND SERVICES: 000 ☐ 941 ☐ LOCAL ☐ OTHER ___

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED

FOR PPC/PIAS USE ONLY	16. AUTHORIZING OFFICE SYMBOL	17. ACTION DATE (MM DD YY)	18. ACTION REFERENCE (Optional)	ACTION REFERENCE DATE (MM DD YY)

AID 1330-6 (7-76)

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR DEVELOPMENT SUPPORT

AUG 2 3 1978

THRU: DAA/DS/DT, Dr. John I. Bruce

FROM: DS/ST, Henry A. Arnold

Problem: The attached Project Paper for Project 931-1080, Deforestation and Development, was approved unanimously by the R & DC at the meeting of August 4, 1978. It is attached for formal approval so that this FY 1978 project may be implemented by obligating the fu 's this fiscal year.

Background: The R & DC approved this Project Paper but requested that certain changes be made in the text. These recommended changes have been incorporated (marked in yellow in the attached Project Paper). In addition, the R & DC asked that the Scope of Work for the project be submitted for their review. All Regional Bureaus and PPC now have approved the Scope of Work.

Recommendation: That you approve this Project Paper by signing the enclosed PAF Part II.

Approved: Sandy M Stein

Disapproved: _____

Date: 8-24-78

Attachments:
1. Project Paper
2. Minutes of R & DC Meeting

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE: A (A = ADD, C = CHANGE, D = DELETE)

PP

2. DOCUMENT CODE: 3

3. COUNTRY ENTITY: Interregional DS/ST RDA-20

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 digits): 931-1080

6. BUREAU/OFFICE: A. SYMBOL: DS; B. CODE: 08

7. PROJECT TITLE (Maximum 40 characters): Deforestation and Development

8. ESTIMATED FY OF PROJECT COMPLETION: FY 79 (10)

9. ESTIMATED DATE OF OBLIGATION: A. INITIAL FY 78; B. QUARTER 4 (Enter 1, 2, 3, or 4); C. FINAL FY 78

10. ESTIMATED COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY B. FX	FIRST FY C. L/C	FIRST FY D. TOTAL	LIFE OF PROJECT E. FX	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT)	( )	(250)	(250)	( )	(250)	(250)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST COUNTRY						
OTHER DONOR(S)						
TOTALS		250	250		250	250

11. PROPOSED BUDGET APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 78 F. GRANT	E. 1ST FY 78 G. LOAN	H. 2ND FY ___ I. GRANT	H. 2ND FY ___ J. LOAN	K. 3RD FY ___ L. GRANT	K. 3RD FY ___ M. LOAN
(1) ST	792	876							
(2)									
(3)									
(4)									
TOTALS				250					

A. APPROPRIATION	N. 4TH FY ___ O. GRANT	N. 4TH FY ___ P. LOAN	Q. 5TH FY ___ R. GRANT	Q. 5TH FY ___ S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1)					250	
(2)						
(3)						
(4)						
TOTALS					250	

12. IN-DEPTH EVALUATION SCHEDULED: MM 12 YY 79

13. DATA CHANGE INDICATOR. WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

2 (1 = NO, 2 = YES)

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE

TITLE: Director, DS/ST

DATE SIGNED: MM 7 DD 26 YY 78

15. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AID 1330-4 (3-79)

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Recommendations:

It is recommended that a PASA be arranged with the U.S. Forest Service of the Department of Agriculture (USDA) for the total sum of $250,000 to carry out the tasks outlined in this project paper during a one year period.

PASA, US Forest Service, for one year....	$250,000
TOTAL	$250,000

Description of Project:

This project is intended to provide The Agency For International Development (A.I.D.) with critical base-line data in the area of forestry activities and deforestation problems in the lesser developed countries (LDCs.) These base-line data will be used as a starting point for A.I.D. in its design of a strategy to deal with the massive problems associated with deforestation in developing countries. Through a Participating Agency Service Agreement (PASA) with the U.S. Forest Service (USDA) base-line data will be developed in the following categories:

(a) An inventory of forestry activities being carried out by the various majors donors like the World Bank, the international development banks, the Peace Corp, Food and Agricultural Organization (FAO), International Development Research Centre (IDRC), United Nations Development Program (UNDP), regional institutions and United Nations Environment Program (UNEP). This inventory will point out which of the ecological zones of the developing countries — humid tropics, semi-arid, and high-altitude lands—need the greatest assistance in forestry problems now. It will show where within each of the ecological zones critical areas exist which A.I.D. might choose for its focussed attention.

Close coordination of forestry activities in LDCs presently does not exist between these various groups. It is essential

for A.I.D. to determine what is being done now by other donors so that A.I.D. resources are not used to duplicate what is being done but rather to fill in where critical gaps exist.

(b) An assessment of the present constraints placed upon the various other donors in dealing with the developing country problems of forestry and deforestation. For instance, the World Bank carries out activities with specific countries requesting assistance but they do not carry out inter-regional research activities that might benefit a wide range of developing countries having a similar climate and similar forest problems. A.I.D. must be aware of the types of forestry activities that each donor is authorized to undertake if A.I.D. is to determine where the gaps exist in research, in field activities, and in the various geographic zones.

(c) An inventory showing where the most critical information gaps lie in dealing with the developing countries' forestry problems, gaps which would be appropriate for A.I.D. to address through research, pilot projects, training, or other appropriate means.

(d) A compilation of success stories illustrating where and how the people of the developing countries have corrected various

land-use problems or natural resource problems related to deforestation. Such problems as soil erosion, flooding, silting of reservoirs, loss of wildlife, or the loss of local fuelwood resources would be highlighted. Many attempts at solving such problems have failed for one reason or another and we hear of these. Less commonly do we learn of the successes, and it would be useful at the start of A.I.D.'s organized approach to these difficult problems to be able to replicate such successful approaches even if they are on a small scale. A positive approach should be stressed from the beginning and should be reflected in the strategy AID ultimately develops.

These studies (inventories, reports, etc.) will not only assist AID in designing a forestry strategy which will be appropriate for itself and the developing countries with which it works, but they will also be immediately useful to those in the Regional Bureaus and Missions who are designing project activities in which forestry is a component. Coordination with other donors on new activities should be substantially improved when this project is complete. Each of the completed reports will be distributed

widely within A.I.D., to other donors, to appropriate institutions, and to LDC decision makers. Knowing what is and is not being done is an essential first step for A.I.D. in the establishment of a forestry strategy.

Summary Findings:

The time is right for undertaking this project. The project will help in formulating an A.I.D. strategy on forestry activities as recommended by the scientists and other experts at the recent A.I.D./State "U.S. Strategy Conference on Tropical Deforestation" (See Annex A). The World Bank has established a new and timely sector policy on forestry this year which has received close attention by others and is highly recommended by many donors. It is described in their publication "Forestry: Sector Policy Paper," February 1978.

This project will help A.I.D. implement LDC forestry activities mandated in the 1977 Foreign Assistance Act, Section 118, on Environment and Natural Resources. The project has no adverse environmental impacts and a Negative Determination is recommended.

The project is economically sound and will have long-term beneficial effects on the growing number of forestry projects in A.I.D. Coordination of A.I.D. forestry activities with other donors will produce greater results at less overall costs. The project is ready for implementation by the U.S. Forest Service, an agency having excellent rapport with A.I.D.,

and a sound record of successful cooperation and of high quality research in other projects with A.I.D.

The project meets all applicable statutory criteria.

Project Issues:

This project, originally entitled Wood as a Fuel Resource, was submitted early in 1976. During FY 1977 annual budget submission (ABS) reviews it was postponed to FY 1978. In 1976 energy activities were the responsibility of the Office of Science and Technology (DS/ST) but recently a new Office of Energy (DS/EY) was established within the Development Support Bureau. The original project title reflected "energy" but with the new Energy Office it was decided by DS/ST, DS/PO and DS/EY that the name should be changed and the content modified to eliminate possible duplication of effort between DS/ST and DS/EY activities. These changes have been made.

In addition, during the past two years some of the original activities that were to be carried out under Wood as a Fuel Resource are being carried out by others and no longer need to be included in this project. For example, information was to be gathered worldwide to determine the rate of tropical deforestation for each country. Earlier this year the National Science Foundation (NSF) awarded the National Academy of Sciences (NAS) a $200,000 grant to carry out that precise task within one year. Further, a year ago President Carter requested that a study be made which would

assess the potential environment and natural resources problems that will be affecting the world by the year 2000 as a consequence of the world's population growth. That study which will be released soon, contains considerable new information on the rates of deforestation in developing countries.

A.I.D. and State held a joint U.S. Strategy Conference on Tropical Deforestation during June 12-14 of this year which assembled about 100 U.S. scientists and other specialists to provide guidance to the U.S. generally and to A.I.D. and State particularly in developing a strategy for addressing the massive problem of deforestation in developing countries. Numerous recommendations were generated at the conference and many of these will take much thought and planning before action can be taken. Certain other recommendations of importance to A.I.D. and State can and should be addressed here and now. These recommendations are the basis for the basic inventories that will be carried out under this project.

The redesign of the original Project Identification Document (PID) Wood as a Fuel Resource at this time, with the recommendations of DS/ST, DS/PO, and DS/EY, provides A.I.D. with a mechanism for quick response to some of the important recommendations from the Tropical Deforestation Conference. The recommendation that A.I.D. and State, in cooperation with other U.S. agencies promptly develop a U.S. strategy

requires that the kinds of information to be assembled by this project be available soon.

Many of the developing countries will have largely or completely destroyed their forest or vegetative cover within the next 20 to 25 years. We no longer have the luxury of time in addressing this serious problem. (See Annex B) This project will expedite the development of a U.S. strategy for addressing the developing countries' problems of tropical deforestation.

It seems that A.I.D. finally is realizing the importance of forests in the lives of the LDC peoples, particularly the rural poor. As late as 1976, A.I.D. was giving limited attention to the problem of tropical deforestation. (Tropical refers to the tropical latitudes which include both humid tropic and semi-arid lands. Most developing countries lie within or near the tropical latitudes.) Now, recognition of the problem and the need to try to solve it is evident in many parts of A.I.D. headquarters as well as in the Missions. Annex C is a compilation of information taken from FY 1978 and FY 1979 PIDs reflecting the growing concern within A.I.D. and the developing countries of this serious environmental and natural resource problem. As the price of oil has risen and as the population of most developing countries skyrocket the deforestation problem now looms as one of the most serious problems within as well as outside of the developing countries. Mr. Sullivan,

Assistant Administrator for the Asia Bureau, recently stated that "trees" will be one of the important areas of effort for the Asia Bureau in its program activities from now on. In June of this year, the Africa Bureau held a Firewood Conference to develop approaches to the African firewood problem (See Annex D). The Program and Planning Coordination Bureau (PPC) recently compiled A.I.D. proposed expenditures for FY 1979 in the area of forestry as it relates to solving environmental problems and showed that about $25,000,000 has been assigned to it.

The World Bank states that there has been a significant change in the tempo and emphasis of their activity in developing new forestry projects. Whereas only four of the 17 projects financed between 1953 and 1976 were specifically intended to benefit rural people, over half of the 40 projects in the Bank's forward lending program are people-oriented as opposed to industry-oriented.

Project Background:

The rate at which deforestation is accelerating in developing countries is a new and startling phenomenon brought on primarily by rapid population growth and the need to clear forests to make available more agricultural land to raise more food. It is probable that by the end of this century, only 22 years away, that many of the developing countries will have destroyed their forests. If the present trends continue, some will accomplish the devastation within the next ten years (See Annex B).

Ten to fifteen years ago A.I.D.'s forestry activities in developing countries centered mostly on assisting them to exploit their natural forests strictly as a wood resource. Saw mills and lumber mills were built with A.I.D. assistance as the under-utilized forest resource was developed. Many foresters from the developing countries were trained in the United States on how to manage forest resources and how to utilize them as a raw material for their countries' needs. More recently, A.I.D. sponsored research on how to use mixed tropical hardwood species for the manufacture of pulp, paper products and hardboard. But little has been done to emphasize the importance of forests for the general well-being of the LDC people and their basic human needs...water, food and the preservation of their life support systems.

The population increases in the developing world have led to accelerated clearing of the forests by the poor to provide for their food needs. The LDCs in humid tropical regions have a high proportion of poor or nearly infertile soils, therefore when the forests are cleared for agriculture the new fields are soon abandoned and more forest is cut. In the drier countries grazing animals have taken a heavy toll of the vegetation as herd sizes have grown. In both cases erosion by wind and water further complicates the problem.

Regardless of where the LDCs are located all the people need some sort of fuel. When petroleum was relatively inexpensive a few years ago firewood and charcoal were used less. Now the poor face hard times. Firewood and charcoal is their last hope if they want to cook their food and keep warm. In many LDCs as much as 90 per cent of the wood cut is used for firewood and charcoal.

The developed countries seek logs from many developing countries and LDC forests are cleared quickly. The roads into logged areas provide easy access for the poor farmer to new parts of the forest where he clears more of the forest for a place to grow food. Similarly other forests are cleared during mining, road-building, urbanization and warfare.

Deforestation has significant adverse effects on the developing countries' environment and natural resources, which has a strong impact on their problems of providing for basic human needs. Soil erosion world-wide is now about 2.3 times the natural rate. Without forest cover, runoff is rapid, floods more common, erosion accelerated and ground-water levels drop. Silt-choked streams become the breeding grounds for the malaria mosquito. The lost soil fills reservoirs reducing water available for power and irrigation, pollutes streams killing aquatic life, and hinders water transportation. Wildlife habitats disappear and thus wildlife extinctions grow. Loss of shade allows the soils to bake and to lose their workability. Trees and other plant species

disappear without our knowing what we have lost. Were they sources of medicines, foods, special chemicals, cancer cures? The forest gene-pool must be preserved if we hope to answer these questions and if we expect to reestablish the types of forests that once covered thousands of square miles of now devastated land. And now it seems that the destruction of the world's forests may be playing a significant role in allowing an increase of carbon dioxide in the earth's atmosphere which could alter global climate.

Forests still are considered as a renewable natural resource but unless the present rate of deforestation is reversed soon, LDC natural forest cover may, in fact, become non-renewable. Basic human needs like water, food and shelter cannot be met if the LDCs lose their forest cover.

Though recognition of the problem has been slow it is now understood by many who deal with the problems of development. It is now obvious that many of A.I.D.'s activities should include forestry as a major compoment and that the emphasis should be on incorporating forests in ways to provide LDCs more adequately with basic human needs rather than looking upon them solely as a wood resource. When wells go dry and A.I.D. supports drilling deeper ones are we really addressing the basic problem or just a symptom?

A prominent LDC forester from Central America commented in May of this year, during an international meeting sponsored by A.I.D. on the "Improved Utilization of Mixed Tropical Hardwoods" that the training of LDC foresters in developed countries originally was welcomed by the developing countries, but today they have realized too late that what they learned in the temperate parts of the world had little bearing on their needs in dealing with the topical forests in their home countries. The environmental and ecological issues in the developing countries cannot be handled by people thus trained. When lumber was their main concern the problems were less obvious. In a similar vein, the Steering Committee for this A.I.D. project and international meeting, which is composed of scientists and engineers from both within and outside of A.I.D., recommended recently during one of their semi-annual meetings that A.I.D. should spend at least as much time and as much money on the environmental and ecological effects on moist tropical forests from increased utilization as had been spent on developing the technology for using the mixed tropical hardwoods for the manufacture of pulp, paper and hardboard (See Annex E). What started out as research on industrial technology in this project has directed us more toward the environmental aspects of LDC forests.

The World Bank, in February 1978, published its new forestry sector policy paper, a paper that has received great attention worldwide and many positive comments on the ideas expressed therein. Comment has centered around the new stress that has been placed on the need to

consider forestry as an integral part of agriculture and an essential element in environmental and ecological stability. This publication will serve in many ways as a guide for A.I.D. during the development of A.I.D.'s forestry strategy. The term agroforestry is prominent in the paper. The word, and the idea it conveys, have received considerable attention since the International Council for Research on Agri-Forestry (ICRAF) was formed in 1977. Forestry and agriculture are not to be considered in isolation but rather they should be viewed as complementary and in many cases as one entity. Requests for A.I.D. assistance with forest/environmental problems are growing. A.I.D. lacks sufficient technical staff. We are always under the limitation of scarce resources and there are always more problems than we can handle. It is imperative that A.I.D. coordinate its efforts in forestry and the associated problems of the developing countries with the work being carried out by other donors. The problems are too large and costly to be handled by any one group alone. This is particularly true for a major development agency (A.I.D.) which has no professional foresters.

Detailed Description of Project:

The goal of this project is to stop or reverse the massive, rapid deforestation (or devegetation) that is now taking place in most developing countries. The rate at which the deforestation is taking place

is so rapid that unless solutions are found to the problem in the next ten years most LDCs will lose their forest cover by the end of this century.

The purpose of the project is to assemble data on what is now being done in the forestry area by international banks, the other donors like FAO, UNDP, UNEP, and the World Bank. About fifteen such organizations will be contacted during the study. AID will use this information to develop a forestry strategy which will not be duplicative of other's efforts but will be designed to fill important gaps in this very large problem. The assembled data will include compilations and assessments of donor activities, gaps in needed research, pilot demonstrations, training, and field projects. It will indicate constraints under which the various donors operate in the field of forestry. It will point out which geographic areas, which LDCs, and which ecological zones need the greatest assistance. It will contain a compilation of success stories from developing countries illustrating where and how the people in LDCs have succeeded in addressing various problems related to deforestation such as erosion, flooding, loss of wildlife, and loss of local wood-fuel resources.

At the project's end A.I.D. will have a published report prepared by the U.S. Forest Service which will contain data, analyses and recommendations on the categories of information listed above. The information will be in a form suitable for distribution to A.I.D's

D 10-J-2011-72)

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 78 to FY 79
Total U. S. Funding $250,000
Date Prepared: 7/10/78

Project Title & Number: Deforestation and Development

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: To stop or reverse the massive, rapid deforestation and devegetation taking place in developing countries.	Measures of Goal Achievement: Percentage of LDC forest-covered areas holds constant or increases.	UNEP satellite Global Environment Monitoring program and other meas ments by remote sensing studies, lished forest surveys. Field sur and reports.	Assumptions for achieving goal targets: Rates of population increase in LDCs are reduced soon.
Project Purpose: To assemble data on: (a) what other major donors are doing now in forestry activities in LDCs, (b) constraints under which donors operate in area of forestry, (c) info. gaps needed in LDC forestry area which A.I.D. might fill, (d) which ecological and geographic areas of LDCs need the greatest assistance, and (e) successes in addressing LDC deforestation problems.	Conditions that will indicate purpose has been achieved: End of project status. A.I.D. will have incorporated findings into development of new A.I.D. strategy on solving LDC deforestation problems. Missions will be developing forestry projects coordinated with other donors. Reports completed and delivered to A.I.D.	A.I.D. documents; Mission annual budget submissions and cables. Environmental and forestry literature.	Assumptions for achieving purpose: A.I.D. & State will have established a formal committee to develop LDC deforestation strategy. LDCs recognize consequences of deforestation problem and will take corrective action to solve. Missions respond to LDCs request for assistance in taking corrective actions.
Outputs: Published reports containing assessments, inventories, gaps, and recommendations to A.I.D. on: (a) donor forestry coordination, (b) donor constraints in forestry activities, (c) gaps in forestry needs in LDCs, (d) ecological and geographic areas needing greatest attention, and (e) a compilation of LDC success stories on forest-related problems.	Magnitude of Outputs: 500 copies of each of two reports Report I includes components (a, b, c, & d), and Report II includes component (e)	A.I.D. project manager. U.S. For Service publication records.	Assumptions for achieving outputs: U.S. Forest Service has full cooperation of other donors in obtaining needed information. Success stories exist.
Inputs: Field visits by professional U.S. foresters to major donors forestry offices worldwide to inventory forestry activities. Assemblage and synthesis of data. Make recommendations on activities appropriate for A.I.D. Collect success stories. Prepare reports & publish results of studies	Implementation Target (Type and Quantity) $250,000 of A.I.D. funds to U.S. Forest Service for 36 man-months of data collection, synthesis, evaluation and publications.	PASA documents, U.S. Forest Serv: records	Assumptions for providing inputs: PASA is processed before end of FY'78.

Regional Bureaus, Missions, other donors, the developing countries and other U.S. government agencies. A.I.D. would be ready to use these data further to design a strategy for dealing with the deforestation problem of the developing countries. The U.S. Forest Service would provide A.I.D. with 500 copies of the final report (or reports depending on the style and size) for AID's distribution.

AID would provide the U.S. Forest Service $250,000 to carry out the required studies. The funds would be used by the U.S. Forest Service for support of three full-time foresters, their U.S. and international travel, data synthesis, report preparation and publication. A.I.D. would provide the U.S. Forest Service with access to project documents which would outline present and past activities in forestry related areas.

Each of the three Forest Service foresters will visit approximately 5 donors or international banks for a two week period early in the project to assemble data on forestry activities underway and those planned. A second trip of one-week duration will be made to these same organizations later in the year to insure that the assembled data and their analyses are complete and accurate.

Before the initial visits to the donors and international bank the U.S. Forest Service will review all relevant published data

of the organizations they intend to visit to provide needed background. This literature review will be carried out through the library facilities of the U.S. Forest Service and U.S.D.A.

Technical Analysis:

The time is right for undertaking this project. The A.I.D./State sponsored Conference on Tropical Deforestation was held June 12-14, 1978 and the recommendations to AID and State were to develop promptly a strategy for dealing with the developing countries' deforestation problem. The World Bank took this step earlier this year when they published their Forestry Sector Policy Paper. Their report is timely and affords A.I.D. with a model to consider during the design of A.I.D.'s strategy. In 1977 the Foreign Assistance Act was amended and section 118 on Environment and Natural Resources was added. It directs A.I.D. to assist LDCs develop and strengthen their capacity to protect and manage their environment and natural resources, and to assist them maintain and restore their lands, waters, vegetation and wildlife. Developing an A.I.D. strategy on forestry, as it relates to LDC problems, is essential for carrying out the intent of section 118 (See Annex F). The project is sound and the probability of success is high.

This project is not designed for replication but the compilation of "success stories" may help replicate these successes elsewhere once they are distributed.

Initial Environmental Examination:

This project's purpose is to assemble data relative to coordinating future A.I.D. activities in the field of forestry with the activities of other donors. The data will be collected from personnel and published reports in the offices of the other donors, will be analyzed, compiled and published for AID's use and the use of others. Therefore, a Negative Determination is recommended for this project.

Financial Plan/Budget Table:

Listed below is the breakdown for expenditures necessary for the U.S. Forest Service (USDA) to carry out the tasks outlined in this Project Paper.

USDA Office of International Cooperation and Development overhead (8% of program cost)	$16,000
U.S. Forest Service overhead (17% of program cost)	34,000
36 man months salary	90,000
U.S. and International Travel, Per Diem, 30 trips @ total 3 weeks each	85,000
Publication costs	15,000
Miscellaneous	10,000
TOTAL	$250,000

Economic Analysis:

An illustration of the economic benefits to be gained by A.I.D. from this project is appropriate here. Currently, A.I.D. has allocated $1,000,000 for the design of two interrelated projects in Nepal. An important aspect in the design is the coordination of the efforts of the World Bank and A.I.D. on those activities involving forestry. The coordination involves only two donors and one country. The $250,000 in this project, Deforestation and Development will provide a sound basis for coordination of development activities related to forestry between A.I.D. and other major donors in all countries when the project is completed. The proposed cost of this project is very reasonable in light of its broad usefulness to A.I.D.

During the recent A.I.D./State "U.S. Strategy Conference on Tropical Deforestation" the forestry representatives from the FAO stressed the need for coordination of forestry activities by all donors. They and numerous others pointed out that coordination at present was poor. FAO representatives invited A.I.D. representatives to Rome to insure that the coordination problem is addressed early in A.I.D.'s development of a forestry strategy. They pointed out the amount of money available to address the problem was small in comparison to the size of the problem and that it made good economic sense that the various donors did not inadvertently duplicate each other's efforts. In the long term, this project

will help A.I.D. maximize the benefits derived from the expenditure of its funds for developing country forestry activities. Consequently, there is strong reason to believe that this project is economically sound.

Implementation Arrangements:

The U. S. Forest Service is the most appropriate agency to carry out the tasks of this project. They are a large, technically competent group of professional foresters many of whom have had experience in developing countries. Legislation has recently been passed which allows the U.S. Forest Service to carry out forestry research in foreign countries. This study will be mutually beneficial to A.I.D. and the U.S. Forest Service.

The project is sound and will be carried out by competent professional foresters of the U.S. Forest Service. The U.S. Forest Service wholeheartedly supports the efforts that A.I.D. and State have shown to help develop a forestry strategy for dealing with the problems of the developing countries. Cooperation between the two agencies has been constructive and beneficial to both parties.

A three-year research project "Improved Utilization of Mixed Tropical Hardwoods" will be completed this year by the U.S. Forest Service for A.I.D. Cooperation has been excellent, their research of high quality, and their work has been completed on time within the original cost estimates.

The A.I.D. Project Manager will meet with U.S. Forest Service representatives in Washington bi-monthly during the life of the project to monitor progress and to insure that any problems in the project are recognized as early as possible and that actions are taken quickly to solve them. The project has a one-year duration and a routine evaluation is planned at completion. The bi-monthly A.I.D./ Forest Service monitoring meeting support the appropriateness of a terminal routine evaluation.

The U.S. Forest Service will notify A.I.D.'s Project Manager of all proposed travel, and will notify the Project Manager at least one month in advance for any proposed travel to A.I.D. countries.

Estimated schedule for project events:

PID approved——————————July 1978

Project Paper Approved——————July 1978

PASA with U.S. Forest Service completed——————————September 1978

Project ~~initiated~~ unlikely——————~~October 1978~~

First visits to donors (begins (2 wks. each) Nov.-or Dec. 1978

Data Assemblage and Analysis Begins————Jan.-Feb., 1979

Last visits to donors (1 wk. each) ————June-July, 1979

Final synthesis and publication preparation begins July-Aug

Study completed——————————Sept. 1979

Terminal Evaluation——————————Nov. 1979

Annex A

STATE/AID U.S. STRATEGY CONFERENCE

ON TROPICAL DEFORESTATION

-RECOMMENDATIONS-

7/21/78

DRAFT

Proceedings of Tropical Deforestation Conference

PREFACE

A "U.S. Strategy Conference on Tropical Deforestation" was convened by the U.S. Department of State and the Agency for International Development in Washington, D.C., June 12-14, 1978. Principal objectives included: expanding the level of awareness and dialogue within the U.S. about tropical forest management problems and needs, particularly as they exist in the developing nations, and helping define more responsive U.S. policies and programs for the near and long terms.

These proceedings present the major conclusions, recommendations, points of view and formal statements which emerged from the Conference. It is being distributed widely within and outside the U.S. to lend support to those who have been attempting to focus increased attention and effort on the rapid disappearance of forest and vegetative cover in tropical areas; and also to expose to review, debate and (possibly) acceptance of the views, perspectives and recommendations of select groups of leading U.S. Government and non-governmental forestry and natural resource managers and scientists. The U.S. participants were assisted by representatives from the Food and Agriculture Organization and the United Nations Environment Program. (See Chapter [illegible] for attendees).

The initial chapter presents an overview of the principal conclusions and recommendations. Readers are also referred to Chapter 3 which contains the detailed recommendations developed by separate Conference workshops convened to address the unique deforestation problems of the humid tropics and the semi-arid regions. In addition, participants were invited to submit short statements conveying their personal perspectives and recommendations on the deforestation situation. Many chose to do so before, during and after the morning meeting. These personal statements constitute a valuable resource which, while not included in the Proceedings, will be made available to interested parties on request. (NOTE: The source of additional information on the Conference is cited in the inside back cover).

The descriptions of "conclusions, recommendations and next steps" presented in Chapters 2 and 4 are the sole responsibility of the Conference organizers in the Department of State and the Agency for International Development. As some important differences of opinion were expressed on a number of key issues, the communications should not be interpreted as representing views agreed to by every participant.

Special appreciation is extended to Mr. Douglas Shane who served as principal editor; and to the Associates for Renewal in Education (Washington, D.C.), and especially to Ms. Lana Smith of that organization, for organizing and publishing this document (under a U.S. Department of State/ AID Contract).

Second Draft
7/17/78

U.S. STRATEGY CONFERENCE ON TROPICAL DEFORESTATION

1. Principal Conclusions and Recommendations

This section presents the principal conclusions and recommendations which emerged from the U.S. Strategy Conference on Tropical Deforestation (as determined by its organizers and the editors of this Proceedings). The inclusion of a particular item should not be interpreted as implying endorsement by every participant in the Conference, and differences of opinion did exist on a number of them. However, the following compilation does indicate where the predominance of concern and discussion was focused and identifies specific issues, problems and possible next steps which deserve serious analysis and consideration by countries which are suffering from or are threatened by deforestation problems as well as by international organizations and other nations which seek to provide assistance. The reader is also referred to Section 3 (Conference Workshops) in which specific recommendations developed by each of the two Workshops are reproduced.

Even though participants did differ on some aspects of problem priorities and possible solutions, the Conference discussions clearly indicated that the world is being

confronted by an extremely serious problem with immediate and long-range socio-economic and ecological consequences as the result of the accelerating loss of forest and vegetative cover in the humid tropics and semi-arid regions of the world. Further, the community of nations must quickly launch an accelerated and coordinated attack on the problem if a greatly-undervalued and probably irreplaceable world resource is to be protected from virtual destruction by the early part of the next century.

CAUSES AND EFFECTS OF DEFORESTATION

1. Throughout all areas of the tropics, forests are disappearing at a rapid and alarming rate. Efforts to justify and mobilize preventative and remedial actions are, to a degree, being stifled by the present lack of information about: actual deforestation rates and trends; the impact of the losses on the local, regional and global environments; the quality and value of the species of trees, wildlife and other genetic materials being lost; and whether and how such forests can be effectively and economically sustained. Continuing devastation of the forest resource in the face of such serious defeciencies in our knowledge of its economic, ecological and environmental importance is extremely short-sighted and potentially tragic.

2. Without much greater recognition of the value of the forest resource and much improved stewardship, the tropical forests of the world will be lost over large areas by the end of the century. In the absence of better information about their character and value to man, upgraded management capabilities and the will to maintain and protect them, tropical forests should be perceived and treated as being non-renewable in character.

3. Unchecked population growth is a basic driving force in loss of forest cover. . .spawning extensive clearing of forests for cattle ranching, large-scale agriculture and human settlements. Other causes--often locally severe but of lesser magnitude on regional and global scales--are shifting cultivation and commercial forestry based on selective cutting of timber. Logging roads do have the effect of opening up the forests to other destructive deforestation practices, however.

4. In the semi-arid regions, demand for wood by families and by the charcoal industry has already created critical economic and social problems for tens of millions of people, principally in Africa, Asia and the Caribbean region.

5. The cumulative national and worldwide economic and social costs of uncontrolled deforestation are unmeasured, but are clearly enormous. . .and rising. Ecological impacts, in terms of loss of soils, genetic materials and wildlife species may, ultimately, be one of the most serious consequences. Climate changes (global) are postulated, but lack of information on the role of forests in the carbon dioxide cycle is presently insufficient to permit a conclusive determination about climate implications. The inadequacy of our ability to identify and quantify the short and long term economic and social impacts of deforestation, coupled with developing country preoccupation with more immediate and more readily perceived development imperatives, are constraining efforts to launch expanded attacks on the problem.

CURRENT CAPABILITIES AND NEEDS

6. Institutional capabilities for addressing and controlling deforestation need strengthening at all levels. Forest management planners and practitioners, particularly in tropical developing countries, must be trained and supported. The same is true with respect to international organizations and donor countries which desire to assist

since expertise on unique problems of the tropical environment continues in short supply. Institution building and training in the forestry sector---apart from the commercial aspects--has, to date, been highly neglected.

7. Responsibility for proper forest management, and implementing reforestation and other corrective measures, cannot be left solely with professional forestry types who historically have often been viewed as antagonists by rural people who feel they are being prevented from utilizing a necessary resource.

8. There is adequate knowledge of forest management principles and practices presently available to make significient inroads on curtailing or preventing deforestation in countries where there is also the political will and general desire to do so. This is notwithstanding the fact that knowledge of how to manage tropical rainforests falls far short of what is required for sound and effective management over the long term. Major scientific and technological challenges remain. These include (a) establishing and implementing deforestation monitoring and assessment systems at the global, regional and national levels; (b) identifying and quantifying the range of

economic, social and environmental costs associated with deforestation, particularly climate relationships, and also the benefits of proper forest management, including the economic importance of drugs, genetic materials, and wildlife; (c) improving the understanding of basic physico-chemical, biological and ecological processes, particularly in tropical rainforests, as a prerequisite to predicting the impact of large-scale clearing of vegetation or making decisions on the best use of the land; and (d) developing alternatives to the present use of forests (e.g., fuel substitutes, agroforestry, firewood lots), as well as improved techniques of reforestation and afforestation, including use and adoptation of faster-growing species.

9. International organizations have, in the past few years, become much more aware of the problem, in large part become deforestation is undercutting and offsetting development gains sought through traditional development programs. Examples such as siltation of reservoirs and irrigation canals from eroded watersheds and the exacerbation of basic human needs problems are all to common. The World Bank has recently released a sector study on forestry which stresses the need to give much higher priority to protecting the forest resource over the long term, and urges

inclusion of forest ecosystems as important components of new integrated rural development programs. UNESCO, UNEP, Canada and Sweden all have tropical forest management programs and interests, but to date their efforts have been quite small. The International Union For The Conservation Of Nature And Natural Resources (IUCN) is preparing a World Plan of Action on Conservation and Wildlife which should be of considerable assistance to governments, international organizations and foreign institutions in raising awareness and in designing new programmatic responses.

10. Many commercial forestry ventures are devoting increased attention to protecting and sustaining the resource, both because of enlightened self interest and because of local government regulations in certain countries. While traditional (selective) logging does not directly cause deforestation, the trend toward use of secondary species and clearcutting practices could have serious ecological consequences if carried out on a large scale. Further, the introduction of mono-cultures also has potentially significant drawbacks. However, forestry plantations and the introduction of new faster growing species

offer promising alternatives to the opening up of yet-untapped native forests for commercial exploitation.

11. The deforestation of the Panama Canal's upland watersheds, largely by squatters, and the secondary impacts on water availability, poses a special and serious challenge for the U.S. Measures must be taken now to avoid undesirable, permanent changes in the Canal's water regime.

RECOMMENDATIONS FOR FUTURE ACTION

12. Upgraded forest management policies and strategies (including anti-deforestation, afforestation and reforestation and re-vegetation aspects) should be designed and vigorously pursued by the U.S., other nations and international organizations to counter an emerging set of critical natural resource and environmental management problems with global implications.

13. Such policies and strategies must be designed and implemented within an economic development context; and be particularly sensitive and responsive to the "development imperative" of the poorer nations. The concern of the United States should be with helping to conserve and develop responses for the benefit of the people living in the tropics, and the world community as a whole, and not just to save the tropical forests from any use.

14. Forestry should be elevated in importance within national economic development planning to place it on a par with with agriculture and mining. It should become an integral component in the overall planning and development of indigenous natural resources.

15. In attempting to assist, the U.S. and other donor nations and organizations should be aware that their efforts are doomed to failure if the nations directly impacted by deforestation are unprepared or unwilling to give high priority to the problem; or if the local populace is unprepared to deal with it because of either a lack of awareness or the absence of alternatives to long-standing patterns of behavior destructive to the forest resources.

16. Strong national population policies backed by effective programs is an imperative for finding long-term solutions to deforestation problems in most areas of the world.

17. Broad-based, integrated and coordinated programs and approaches should be mobilized. Education and manpower training, scientific research, resource inventorying and assessment, technology demonstration and application, policy planning and implementation, and building local awareness and support all require attention. Integration of forest management and protection concerns into broader rural development (and economic development programs in general) should become routine. And, mechanisms need to be developed for coordinating the variety of international efforts being planned to cope with the tropical deforestation problem.

18. Energy requirements and alternatives sources should be carefully evaluated when new development programs and projects are concerned and implemented to assess the potential impact on the local and regional forest resource. This is particularly important in firewood-short areas.

19. Global, regional and local monitoring and assessment systems and programs are needed to provide better information on the rate, trends and impacts of forestry and deforestation operations. The use of satellite imagery should be expanded, and the feasibility examined of establishing coordinated global and regional programs within UNEP's Global Environmental Monitoring Program (GEMS).

20. The U.S. should press for a better representation of tropical forest ecosystems in the biosphere reserve programs of the UNESCO Man and the Biosphere Program.

21. High priority should be given by governments and international organizations to accelerating country and subnational land use classification and survey activities; and land management planning, as prerequisites for future decision-making in economic development activities which will, or may, impact on the forest resource. Development programs must be conceived and implemented as part of of a broad look at the best possible uses of the land, in a fashion that considers and seeks to optimize the use of available natural resources over a large areal extent, and so that important natural resources are not indiscriminately and unknowingly forfeited or lost.

22. The concept of establishing regional Centers of Excellence for forestry research in the major forest zones of the world should be seriously examined.

23. Forest protection and management should be an integral part of general environmental education and training programs.

24. The training of developing countries experts, in their own countries to the extent possible, is an important area for expanded development asssistance to those countries with a commitment to protect the forests through allocation if policy, institutional, legislative and scientific-technical support (financial and manpower).

25. Improved techniques and systems for information exchange are urgently required to bridge the needs of the nations having a tropical forest resource. State-of-the-art publications on the sylviculture and management of tropical forests should receive high priority, along with compilations of "how to" success stories on various approaches to watershed and forest management for international distribution as a means of providing hope, incentive and guidance to affected countries and development planners.

26. The feasibility of global or regional conferences should be explored as one mechanism to raise the level of awareness of deforestation trends and implications, and to help mobilize a coordinated international response.

27. The U.S. should lead by example with respect to the protection and management of its own tropical forest ecosystems (albeit comparatively small in size), and also

those of other countries where the U.S. is carrying out various programs and actions. This includes, in particular, the Panama Canal Zone, Puerto Rico, and countries and regions in which AID is sponsoring development programs.

28. A U.S. Government-wide tropical forestry policy and strategy should be jointly developed by State, AID, the USDA, Peace Corps, CEQ, NSF, and other appropriate agencies. This should identify priority programs and activities for support by the U.S. bilaterally and multilaterally, define the types of destructive actions which should be avoided or modified, set forth policies toward U.S. firms and agencies operating abroad, and enunciate research and demonstration needs.

29. A U.S. interagency committee should be established for consultative and cooperative program planning purposes (particularly given the USDA's new and expanded mandate in the international forestry area. Such a body could begin its work by reviewing in depth the recommendations and suggestions presented at the Conference.

30. AID should develop an operational policy paper on forestry along the lines of the World Bank sector paper; and also increase significantly its staff capability and programming in the areas of forestry and watershed management and land use classification and planning.

31. AID, and other donors, should plan for and include reforestation, revegetation and anti-deforestation activities within their rural development programs. Existing rural development and other appropriate programs should be reviewed to determine whether they are compatible with sound forest management objectives, and whether stronger or new anti-deforestation components can be added.

32. AID, and other donors, and governments should routinely address forest management considerations within the framework of their environmental assessment policies, procedures and reviews. . .besides a wide variety of well-intended development programs, such as beef export promotion, veterinary medicine, and population resettlement, can place great pressures on the forest.

33. Given the close relationship between the drive for expanded agricultural production and deforestation, AID and other donors should increase their support for programs designed to advance the state-of-the-art and application of agroforestry. . The new International Center for Research in Agroforestry offers promise in this regard, and should be given encouragement and support by the United States.

34. The U.S., other nations and the international organization should greatly expand their support for: (a) biological and ecological research on tropical forest ecosystems, including mineral cycling, genetic materials and wildlife ecology; (b) environmental research on the impact of deforestation on global climate, local and regional weather, and the ability of the land to be reforested or to sustain various development patterns and practices; (c) socio-economic research to determine patterns of land use, attitudinal factors, and the socio-economic significance of deforestation as a basis for justifying and implementing expanded investments in anti-deforestation and forest management programs; and (d) research and development to find alternatives to traditional practices, including firewood substitutes, more efficient use of wood as a fuel, improved varieties of quick-growing species for reforestation and afforestation, and ways to improve postures and crop yields to take pressure off forest land.

35. Detailed analysis of the use and implications of forest clearcutting is needed, particularly in view of the expansion of interest in, and technology for, economic use of secondary species. At a minimum, clearcutting approaches should be applied only within the framework of a broad and sound strategy for long-term use and management of a forested area.

36. U.S. commercial firms should take the lead in carrying out improved forest management and protection programs, including introduction of the soundly conceived plantation forestry which has the potential for expanding yields from 4-10 times without opening up new areas. Such initiatives should help U.S. companies protect their long-term investment; and the host government would quite likely request the same approach from other foreign investors since it would clearly be in their nations' interest.

ANNEX B

LDC DEFORESTATION PROBLEM:

A PRELIMINARY DATA BASE

LDC Deforestation Problem

- A Preliminary Data Base -

This summary is intended to provide the reader with a rough measure of (a) the rate at which LDC forests are being lost, (b) the areal extent of the problem, and (c) the broad gaps in the overall data base. The quality of much of the data is unknown, however, the general picture the total references provide is one to cause concern.

In many LDCs as much as 90 percent of the wood used is for firewood and charcoal; in others much of it is burned in place. The rate of increase of the use of wood for fuel in LDCs nearly parallels their rate of population growth. However, LDC populations are projected to double in about 25 years while during the same time most of their forest cover is projected to be removed. Clearly, the LDC deforestation problem has a direct impact on their energy problems, but it is equally clear that deforestation is having significant negative effects on their physical and biological resources by increasing soil erosion and flooding, decreasing water quality and its availability, by causing extinction of wildlife and plant species, and by eliminating a source for building materials, paper products and chemicals, and possibly by causing climatic change.

Dr. Walter Parham
DS/OST
March 8, 1978

COUNTRY OR REGION	PERCENT OF FOREST REMAINING	RATE OF DEFORESTATION	OTHER DATA	REFERENCE
All tropical moist forests	58.4%	At least 11,000,000 ha/yr.	16,000,000 sq. km. of forest originally. 9,350,000 sq. km. left.	(1)
Latin America	63%	--	--	(1)
Amazon Basin Lowland Forests	75%	As much as 4 percent year.	3,500,000 sq. km. of forest. 2,650,000 sq. km. left.	(25)
Bolivia	--	Projected Loss of 187,000 ha/yr from 1962 to 1985.	--	(1)
	--	250,000-300,000 ha loss in 1978.	--	(37)
Brazil	--	Projected loss of 743,000 ha/yr from 1962 to 1985.	--	(1)
	5,200,000 sq. km. forest originally. Less than 3,500,000 sq. km. remaining.	At present rate of deforestation forest will disappear in less than 30 years.	About 80% of wood goes for firewood or charcoal. 24% of Amazon region's forest lost.	(36)
Colombia	--	2,500,000 acres deforested/yr. 80 percent forest loss in 25 last years.	--	(3)
	74%	Projected loss of 330,000 ha/yr from 1962 to 1985.	--	(1)
	--	Present rate of deforestation 3.2 million acres/yr.	87.5 million acres of forest cover remaining. Projected total deforestation in 30 yrs. 10,000 acres replanted annually	(26)

COUNTRY OR REGION	PERCENT OF FOREST REMAINING	RATE OF DEFORESTATION	OTHER DATA	REFERENCE
Colombia		About 900,000 ha of natural forest land lost each year.	5,000 ha/yr reforested	(35)
Costa Rica	38%	50,000 ha/yr. Elimination of forests by yr. 2000.	Replanting 1,000 ha/yr.	(5)
	--	60,000 ha/yr.	--	(1)
Ecuador	52%	Projected loss of 52,000 ha/yr from 1962 to 1985.	--	(1)
Haiti	--	50 percent in last 4 years. Elimination of forests in 15 years.	--	(2)
Nicaragua	--	11.8 percent of forest loss from 1968 to 1975.	Pacific, Central/North and Atlantic regions lost 20 percent of forests from 1963 to 1975. Agricultural frontier growing at 500 sq. km./yr. but rate of 600 sq. km/yr. by 1980's.	(15)
Panama	50%	15,000 ha/yr.	16 percent of total land area deforested by slash-and-burn in central and western pacific watershed alone.	(4)
	--	--	80% of Gatun Lake watershed as well as about 40% of Madden Lake watershed deforested since 1952.	(22)

COUNTRY OR REGION	PERCENT OF FOREST REMAINING	RATE OF DEFORESTATION	OTHER DATA	REFERENCE
Paraguay	--	--	7 of 16 Departments had average of 31% forest cover in 1945, and only 18% in 1976. A 58% loss in 31 years.	(14)
	66%	Projected loss of 170,000 ha/yr from 1962 to 1985.	--	(1)
	--	60,000 ha/yr.	--	(27)
Peru	--	Projected loss of 48,000 ha/yr from 1962 to 1985.	--	(1)
	--	220,000 ha deforested/yr. 200,000 of these ha thinned and 20,000 cleared.	As of 1976 only 106,140 ha reforested. 95% eucalyptus.	(38)
Venezuela	--	Projected loss of 174,000 ha/yr from 1962 to 1985.	--	(1)
	--	--	Forest covered 45 percent of Western Llanos in 1950, 30 percent in 1975, and is projected to cover 16 percent in year 2000.	(23)
Southeast Asia, South Asia, Pacific	58%	--	--	(1)
Bangladesh	--	10,000 ha/yr.	--	(1)
Borneo	--	--	As much as 1/3 of rain forest lost between 1945-1970.	(9)

COUNTRY OR REGION	PERCENT OF FOREST REMAINING	RATE OF DEFORESTATION	OTHER DATA	REFERENCE
India	--	--	Reportedly 3,400,000 ha. of forests have been destroyed in India in last three decades for agricultural purposes, river valley projects and as a result of industrial and urban expansion.	(24)
Indonesia	--	Total deforestation in about 100 years.	--	(12)
	--	--	500 timber firms have obtained concessions for 10,000 sq. miles of forest with the agreement that all be cut within 20 yrs.	(13)
	--	About 400,000 ha deforested each year.	--	(33)
Indonesia and New Guinea Lowland forests	--	Total deforestation in 15-20 years.	--	(25)
Java	12% (Satellite Data)	--	--	(10)
Laos	--	300,000 ha/yr.	--	(1)
Malaysia	--	150,000 ha/yr	--	(1)
		280,000 ha/yr	225,000 ha replanted over last 20 years.	(29)
		Malaysian timber resources will be exhausted in 12 years at present rate of depletion.	--	

COUNTRY OR REGION	PERCENT OF FOREST REMAINING	RATE OF DEFORESTATION	OTHER DATA	REFERENCE
Nepal	--	--	About 10,000 sq. km. so devoid of vegetation that area has entered the desertification process.	(11)
	--	--	Forest lands in the Terai and adjoining regions reduced from 30 to 22 percent over last decade.	(27)
Papua New Guinea	70% - 94.9%	20,000 hr/yr.	--	(1)
Philippines	Less than 20% (Satellite data).	--	Was thought to have 35-50% forest cover remaining before satellite survey.	(10)
	57%	9% decrease in 25 years.	--	(16)
	--	--	Some 1,650,000 household heads involved in slash-and-burn agriculture.	
	--	--	Now 19,500 sq. miles of denuded forest land, and is increasing at 1,000 sq. miles/yr.	(17)
	--	260,000 ha/yr.	--	(1)
Philippines and Malaysia Lowland forests	--	Total deforestation in 5-10 years.	--	(25)
Singapore	6%	--	--	(8)

COUNTRY OR REGION	PERCENT OF FOREST REMAINING	RATE OF DEFORESTATION	OTHER DATA	REFERENCE
Thailand	35%	300,000 ha of forests lost/yr.	--	(1)
	37%	60% forested in 1960. 50% forested in 1970.	--	(7)
	--	39% forested in 1973 (Satellite inventory) Total deforestation by 1987, 1993 at latest.	--	(31)
	--	Northern Thailand losing 5-7 percent of forests/yr.	--	(10)
Vietnam	--	North Vietnam losing 10,000 ha/yr.	--	(1)
West Sumatra	64%	--	--	(6)
Africa	48%	--	--	(1)
Burundi	--	Total deforestation in 7 years.	--	(19)
Ethiopia	--	200,000 ha. deforested a year. Total deforestation in 20 years.	--	(20)
Gambia	4%	8% forest cover remaining in 1968. 56% remaining in 1946.	--	(18)

COUNTRY OR REGION	PERCENT OF FOREST REMAINING	RATE OF DEFORESTATION	OTHER DATA	REFERENCE
Ghana	--	50,000 ha/yr.	--	(1)
Ivory Coast	--	Losing 400,000 ha/yr.	--	(1)
	--	--	30% forest loss between 1956-1966 determined by aerial surveys.	(10)
Madagascar	--	300,000 ha/yr.	--	(1)
Mauritania	--	--	Only known reforestation area in country covers 325 ha.	(39)
Morocco, Tunisia, Algeria	11% (around 1950)	--	--	(10)
Rwanda	--	--	Wooded areas under strong population pressure and occupy presently only 5% of total country area.	(28)
Senegal	--	--	320 sq. miles of woodlands destroyed by fire in 1973 alone.	(21)
	--	All forests will be depleted in 30 years at present rate of removal.	--	(30)
Sudan	--	About 3,000,000 acres of forests are cleared annually.	50,000 acres reforested each year	(32)

COUNTRY OR REGION	PERCENT OF FOREST REMAINING	RATE OF DEFORESTATION	OTHER DATA	REFERENCE
Togo	--	--	Agricultural expansion has led to practical disappearance of primary forest.	(28)
Upper Volta	--	--	Forests characterized as "severely stressed".	(34)

REFERENCES

(1) Sommer, A., 1976, Attempt at an assessment of the world's tropical forests: Unasylva, v. 28, p. 5-25.

(2) World Environment Report, 1976, March 1, Haitian President appeals for less dependence on Charcoal: p. 6

(3) World Environment Report, 1976, (reference incomplete).

(4) USAID Panama PID for FY79, Watershed Management, No. 525-0191.

(5) USAID Costa Rica PID for FY78, Remote sensing pilot project, No. 515-0144.

(6) Bustami, S., 1975, in Symposium on the long-term effects of logging in Southeast Asia, June 24-27, Bogor, Indonesia, conducted by BIOTROP (SEAMEO Regional Center for Tropical Biology) Secretariat: Faculty of Forestry, Bogor, Agricultural University, P.O. Box 69, Bogor, Indonesia.

(7) Sono, P., 1975, in (see reference 6 above).

(8) Rao, A. N., 1975, in (see reference 6 above).

(9) Anon., 1970, Conservation in the tropics: Nature, v. 228, p. 505.

(10) Eckholm, E. P., 1976, Losing Ground: W. W. Norton & Co., Inc., New York, 223 p. (original references cited in Chapters 2 and 3).

(11) USAID Nepal PID for FY79, Resource conservation and utilization, No. 367-0132.

(12) USAID Philippines PID for FY78, Agro-reforestation, No. 492-0305.

(13) Perry, J., 1976, The rocky road to survival: Internat., Wildlife, May-June, p. 4-11.

(14) USAID Paraguay operations memo, July 1, 1977. Report on depletion of Paraguayan forests.

(15) USAID Nicaragua memo, October 15, 1976, Deforestation rates in Nicaragua.

(16) Blanche, C.A., 1975, in (see reference 6 above).

(17) Hamzah, Z., 1975, in (see reference 6 above).

(18) USAID ADO/DAKAR PID for FY79, Reforestation in the Gambia, No. 635-0204.

(19) Unclassified cable No. 0783 from USAID Burundi to Washington, D.C., July 8, 1977.

(20) Sohns, E. R., Science Attaché, U.S. Embassy Stockholm: data from Prof. Olov Hedberg, Institute of Systematic Botany, University of Uppsala.

(21) USAID ADO/DAKAR PID for FY78, Bush Fire Control, No. 685-(?).

(22) Hydrographic Division, Panama data: in letter from N.B. Gale, DVM, Chairman, Scientific Committee, Panama Audubon Society, September 26, 1977.

(23) Hamilton, L.S. 1976, Tropical rainforest use and preservation: A study of problems and practices in Venezuela: Sierra Club, Special Pub., Internat., series No. 4, 71 p.

(24) Anon., 1977, Development claims Indian forests: Financial Express, Delhi, in Unasylva, 1977-I, v. 29, no. 115, p. 34.

(25) Dr. Peter Raven, Director, Missouri Botanical Garden, St. Louis, Mo.

REFERENCES

(26) World Environment Report, Nov. 22, 1976, Colombia funds ambitious reforestation project: 8 p.

(27) Man and the Biosphere (MAB) Report Series, No. 28, 1977, Regional meeting on integrated ecological research and training needs in Latin America with emphasis on tropical and sub-tropical forest ecosystems: UNESCO, 81 p.

(28) MAB Report Series, No. 33, 1977, Regional meetings on integrated ecological research and training needs in the humid tropics of West and Central Africa: 49 p.

(29) IUCN Bull. V. 8, No. 10, Oct. 1977, P. 64, Logged out by 1990.

(30) Cable from U.S. Embassy Dakar, to U.S. Dept. of State No. 0356, Jan. 1978, (Unclassified).

(31) Cable from U.S. Embassy, Bangkok, to U.S. Dept. of State, No. 2262, Jan. 1978, (Unclassified).

(32) Cable from U.S. Embassy, Khartoum, to U.S. Dept. of State, No. 0290, Jan. 1978, (Unclassified).

(33) Cable from U.S. Embassy, Jakarta, to U.S. Dept. of State, No. 1118, Jan. 1978, (Unclassified).

(34) Cable from U.S. Embassy, Ouagadougou, to U.S. Dept. of State, No. 0347, Jan. 1978, (Unclassified).

(35) Cable from U.S. Embassy, Bogota, to U.S. Dept. of State, No. 1137, Feb. 1978, (Unclassified).

(36) Cable from U.S. Embassy, Brasilia, to U.S. Dept. of State No. 0691, Jan. 1978, (Unclassified).

(37) Cable from U.S. Embassy, La Paz, to U.S. Dept. of State, No. 1447, Feb. 1978, (Unclassified).

(38) Cable from U.S. Embassy, Lima, to U.S. Dept. of State, No. 1228, Feb. 1978, (Unclassified).

(39) Cable from U.S. Embassy, Nouakchott, to U.S. Dept. of State, No. 424, Feb. 1978, (Unclassified).

ANNEX C

DEFORESTATION INFORMATION TAKEN

FROM FY 1978 AND FY 1979 PIDs.

DEFORESTATION INFORMATION TAKEN FROM FY 1978
PROJECT IDENTIFICATION DOCUMENTS (PIDs)

1976, Sierra Leone (Crops & Soils Research & Training Station)

Slash-and-burn agriculture is prevalent throughout much of the country. Increased population pressure is showing its effect on shifting cultivation. Fallow periods are shorter now and low soil productivity has made shifting cultivation less effective.

1976 Chad (Development of a New Fishing Canoe Construction Method for Use at Bol, Chad.)

Fishermen traditionary use large hollowed-out logs for fishing canoes. They last about ten years. Large trees are disappearing because of overcutting and now many of the canoes are being made from papyrus. But these last only 2-3 months. Cutting trees for canoes also increases problems related to reforestation projects.

1976, Senegal (Bush Fire Control)

Fires started mostly by slash-and-burn agriculturists are destroying forests and grazing lands, and causing erosion. 82,000 ha (320 sq. mi.) were destroyed in 1973 alone from uncontrolled forest and bush fires. They want to build 1000 km of fire breaks and to train firefighters.

1976, Senegal (Reforestation Project)

Destruction of forest and vegetal cover by people who need firewood. Dakar alone uses 75,000 tons/yr of charcoal and this must be trucked in from afar. Deforestation is increasing desertification. They want to plant forest green-belts around Dakar for charcoal and firewood, other reforested areas for cattle shelter, and to stop erosion.

"There is sometimes difficulty in analyzing reforestation projects according to traditional methods which weigh strictly economic/ financial factors more heavily than environmental factors. It is difficult to present a reforestation project with a high rate of return using traditional economic analysis. Paradoxically one could probably devise a project to systematically cut and exploit remaining forests in the Sahel thus denuding the area completely. Such a hypothetical project might be developed to have a good economic rate of return, yet would be devastating from an environmental standpoint."

1976, Cape Verde Islands (Ground-Water Development)

The islands gradually have been denuded of vegetation by grazing livestock and cutting firewood. Exposure of soil to direct sunlight is causing further damage. Water supply a major problem. They want to drill water wells.

1976, Bolivia (Renewable Natural Resource Protection)

Altiplano and the Central and Southern Valley Regions have been all but stripped of protective tree and plant cover. Overutilization for agriculture and grazing has led to extremely high rates of soil erosion and water loss. Excessive runoff is damaging lands, causing floods, destroying roads and bridges and silting-up rivers. Farming of over-steep slopes is also a problem. They want to strengthen government's erosion-control program, inventory country's resources and start some community projects.

1976, Panama (Reforestation and Resource Protection)

1 million hectares (or 23% of Panama's area) seriously affected by slash-and-burn agriculture. Virtually all forest cover has been removed from some 16 per cent of Panama's land mainly in the central & west watersheds. Erosion has become irreversible in some parts and is threatening to become so in others. Repeated burning in some areas has precluded natural recovery of vegetation, except perhaps over hundreds of years. Panama City and other cities water supplies are endangered, streams and hydro-electric facilities threatened by siltation; irrigation also. They want to reforest worst areas and help protect the remaining virgin forests.

1976, Nicaragua (Renewable Resources Development)

Uncontrolled slash-and-burn agriculture is resulting in ever-widening depletion of timber, watershed resources and soils. Clear cutting of public-land forests and grazing areas. They want to improve natural resource policies.

1976, Honoduras (Water Resource Development)

Slash-and-burn agriculture, overgrazing, unregulated logging, range-land burning, and other land misuses have produced severe erosion problems. Watersheds have been damaged resulting in flooding of lowlands and silting of streams. They want to strengthen government's water resources management program.

1976, Costa Rica (Land Productivity & Rural Employment)

Shift to cattle raising has resulted in deforestation to develop pastures and is posing threat to nation's natural resource base.

Land-use planners will have to broaden their considerations to include the long-term impacts on such uses on natural resource base. If the current destruction of natural resources continues, the long-term prospects for all farmers and particularly small farmers are obviously threatened.

Much of the pasture land is undergoing sheet erosion. 40,000 hectares/yr (156 sq. mi./yr) currently are being deforested. They want to start tree farms in eroded land for pulp, and do a resource inventory of the country. They say that tree farms are by no means a substitute for rational and scientific management of the remaining natural forests.

1976, Philippines (Agro-Reforestation)

Population pressure resulting in cultivation of marginal, hilly lands by slash-and-burn farmers. Some 1,650,000 households involved in this kind of agriculture. Loss of forest and grass cover due to burning and illegal and improper logging practices is resulting in acute problems relating to soils, watersheds and timber depletion. Squatters cultivating steep-slope lands. Philippine population will double by end of century.

There is now more than 5 million hectares (19,500 sq. mi.) of denuded forest lands, and the denuded area is increasing at 270,000 hectares/yr. (1,050 sq. mi./yr). GOP has a present capability of reforesting only 17,000 ha/yr (66 sq. mi./yr). They want to work out system whereby trees and shrubs would be planted with crops.

Dr. W.E. Parham,DS/OST-7/19/78

DEFORESTATION INFORMATION TAKEN FROM FY 1979
PROJECT IDENTIFICATION DOCUMENTS (PIDS)

Niger: Forestry and Land-Use Planning

People here cut down trees to deny millet-eating birds a nesting place, and to plant crops, and let cattle destroy trees for fodder. Wood becoming scarce.

Guinea-Bissau: Forestry Development

Present consumption of young trees for heating and charcoal is high and is being carried out in an unplanned and destructive manner thus having a detrimental effect on the environment. They have set up nursery, trial plantings of rapidly growing species.

Nepal: Resource Conservation and Utilization

About 10,000 sq. km so devoid of vegetation that they have entered the desertification process. Less soil nutrients available, heavy erosion, landslides, farming steep slopes; development of new multi-purpose energy sources, test new approaches.

Gambia: Reforestation in the Gambia

Gambia woodland in 1946 .... 56 percent
1968 .... 8 percent
1976 .... 4 percent

Problem due to increased use of ox-plowing equipment, fuel wood and charcoal use led to widespread forest cleaning. 93 percent of wood consumed as fuel wood or charcoal. A fuel wood crisis is pending. Increased environmental degradation. Plantation program. Test exotic species, and multi-purposed trees.

"Issues of a Policy or Programmatic Nature

A basic policy issue comes to mind. In purely economic terms one suspects that a good case could be made to continue degradation of the woodland cover and rely on other means for energy and income. A forestry program may have a poor internal rate of return, especially over the short and medium term. It is suggested, however, that the larger concerns of environmental deterioration militate against purely economic considerations. A.I.D. must determine whether reforestation is a priority. If so, the relative ease of communications in The Gambia, the smallness of the territory, and the forest coverage in recent times all suggest that The Gambia offers a relatively good opportunity to mount a multifaceted reforestation program."

Haiti: Environmental Preservation

Listed under Technical Support Requirements is a study on the technology, economics and social implications of charcoal production.

Overall Environmental Preservation project aimed to slow erosion of high-land farming.

Haiti: Baseline Data Aerial Photography, Photos to be used for, among other things:

- extent of deforestation.
- identification of forests.
- location and types of erosion.
- location, identification and estimate of available water resources.
- degree of stream and river sedimentation.

Panama: Watershed Management I

"1 million hectares (or 23% of Panama's area) seriously affected by a slash-and-burn agriculture. Virtually all forest cover has been removed from some 16 percent of Panamanian land mainly in the central and west watersheds. Erosion has become irreversible in some parts and is threatening to become so in others. Repeated burning in some areas has precluded natural recovery of vegetation. except perhaps

over hundreds of years. Panama City and other cities water supplies are endangered, streams and hydro-electric facilities thretened by siltation; irrigation also. They want to reforest worst areas and help protect the remaining virgin forests.

ANNEX D

MEMORANDUM ON AFRICA BUREAU

FIREWOOD WORKSHOP

MEMORANDUM

TO : AA/AFR, Mrs. Goler T. Butcher

THRU : AFR/DR, Mr. ~~John W. Koehring~~ JWKoehring

FROM : AFR/DR/SDP, John D. Blumgart for JDBlumgart

SUBJECT: AFR Firewood Workshop

At the request and with financial assistance of the Bureau for Africa, the Overseas Development Council organized a Firewood Workshop, June 12-14. More than 30 persons were present throughout, representing AID, the World Bank, Africare, the Department of Energy, Peace Corps, the Department of Agriculture, the National Academy of Sciences, VITA, the al Dir'Iyyah Institute, and the Overseas Development Council, along with several universities and private consulting groups. In addition, several congressional staffers and four African foresters in Washington on an ICA travel grant attended the Workshop's opening session. Discussions of the Workshop were guided by the working paper that David French had prepared for the meeting (Attachment D). A complete list of participants is included as Attachment A.

A. Conclusions

The Workshop ended with strong agreement on three summary points:

1. Situation. Firewood and charcoal are becoming less available and more expensive throughout Africa, presenting an immediate threat to the well-being of both rural and urban poor.

2. Knowledge. Unfortunately, there remain conspicuous gaps in our knowledge of the firewood situation, making it difficult to plan effective projects. Especially acute is the lack of information on such questions as villagers' perceptions of the problem; appropriate tree species for projects in the Sahel; availability of local institutions to manage village woodlots; and present efficiencies of wood use, given current techniques of cooking and charcoal-making.

3. Action. While gathering of basic information is essential, not all firewood activities need wait until this process is completed. Given the urgency of the situation, attention might immediately be given to local testing of wood stoves, pilot experiments with village woodlots, and other activities for which a clear need now exists in particular countries.

A more detailed summary of Workshop conclusions is provided in Attachment B.

B. Workshop Follow-up

At a minimum, the Africa Bureau should immediately take two follow-up actions: (1) Inform the Field of Bureau concern, and (2) Contract for an action-oriented study of firewood issues in several countries.

1. Message to the Field. I recommend that you send a circular firewood message to all Field posts. This message would summarize results of the Firewood Workshop and would express the Bureau's interest in actively pursuing firewood projects as part of our bi-lateral programs. Specifically, Missions should be encouraged to consider:

- inclusion of firewood components (e.g., village woodlots) in rural development projects already being prepared;

- support for local experiments with improved wood stoves and charcoal kilns (small grants for this purpose could be made available quickly through the Improved Rural Technology project managed by AFR/RA);

- initiation of talks with officials from forestry and extension services, energy agencies, etc., in order to consider new projects ranging from large-scale firewood plantations near urban areas to national programs in support of village woodlots;

- participation in the firewood study outlined below.

2. Firewood Study. To assist our Missions in considering firewood activities, AFR/DR should contract for a firewood study to be carried out in approximately six countries. (A draft scope of work is included as Attachment C.) In each country, purposes of the study would be to:

- establish local networks of people and organizations concerned with firewood issues;

- collect basic data necessary to understand the dimensions and nature of the problem in various areas;

- use these data as the basis for discussion among interested officials and organizations within the country on next steps to be taken including, whenever possible, preparation of PIDs for AID/W review.

Nearly 40% of funds under this contract would go to local African institutions, which would be primarily responsible for collection necessary data. African participation in the study and project development process would therefore be maximized from the outset.

Your message to the Field which we propose would describe the proposed study, request Mission comments and salient expressions of willingness to participate in the survey.

As soon as I return from leave (July 17), I would like to schedule a meeting with you to discuss workshop follow-up.

cc:
DAA/AFR:WHNorth
SAAA/AFR:GCobb
AFR/DP:CWard (4 copies)
AFR/DR:JKelly/LDurso (2 copies)
AFR/DR Project Divisions (16 copies)
AFR/DR Technical Divisions (20 copies)
AFR/RA:DConroy (5 copies)
AFR/SFWA:DShear (5 copies)
AFR/EA:TQuimby (5 copies)
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AA/PPC:CPaolillo (3 copies)
DS/EY:AJacobs (3 copies)
DOE:NBrown (5 copies)
ODC:JHowe (5 copies)

ATTACHMENT A

PARTICIPANTS IN AFRICA BUREAU FIREWOOD WORKSHOP

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John Tatom
Consultant

Carol Ulinski
Consultant

ATTACHMENT B

SUMMARY OF PROCEEDINGS, AFRICA BUREAU FIREWOOD WORKSHOP

12-14 JUNE 1978

Summarized below are major conclusions of the Africa Bureau Firewood Workshop. Proceedings closely followed the organization of material in David French's background paper, which served as the basis for discussion throughout the meeting.

I. ISSUES

A. Vanishing Firewood

1. Patterns of Loss. Participants agreed that firewood and charcoal generally are becoming less available and more expensive throughout Africa. Even within a given country, however, the situation may vary greatly from area to area. Unfortunately, detailed information is almost everywhere unavailable. There is an urgent need to collect data on patterns of deforestation.

2. Reasons for Loss. The depletion of firewood reserves has a number of causes, including: clearing of land for agricultural settlement; urbanization; increased petroleum prices (reversing the shift from wood to kerosene and other "modern" fuels); grazing of animals in marginal ecological zones; drought. Again, we have little information on which of these factors are dominant in particular areas.

3. Local Perceptions. So far, we have largely dealt with firewood from our own perceptions of the problem. There is great need to determine what local perceptions are in areas where firewood projects may take place. A variety of methods for doing this were discussed, including local surveys by Peace Corps Volunteers and/or PVOs and the use of established videotape techniques for probing perceptions of villagers themselves. There was general agreement that further exploration of such methods is extremely important.

Also important is to determine governmental perceptions. Measured by resources committed, African governments historially have accorded a modest priority to forestry, and practically none in firewood. Before proceeding further in particular countries, we need to know whether firewood is now perceived by national planners as a serious problem to which serious attention will be given.

B. Patterns of Acquisition and Use

We have little information about how energy actually gets from tree to cooking fuel in specific areas. Major questions to which we need answers for effective firewood programming include: Do people

now gather (or make) their own supplies of wood (or charcoal), or do they rely on traders? How much fuel do people actually use throughout the year? How efficiently is wood used, whether burned directly or converted to charcoal? What would be the effect of new projects on these patterns of fuel use?

A further area of inquiry is the extent to which dung or agriculatural wastes such as millet stalks are currently used for fuel. Limited evidence suggests that use of these materials is itself symptomatic of a "firewood problem", since people generally prefer wood to such fuels where wood is available.

C. Stategies: Management of Existing Forest Resources

Although not sufficient in itself, management of existing vegetation should often be a central element within national firewood programs. This is especially true in areas of the Sahel where remaining woodlands or brush are under severe pressure.

D. Strategies: Planting Trees

There is little history in Africa of tree-planting activities for the explicit purpose of providing firewood (as opposed, for example, to planting for timber or export). In fair degree, experience in this area will have to be accumulated as we go along.

1. Areas for Planting. Places where trees should be planted will depend on need, growth potential, and alternative uses of land. In most cases, adequate information on these subjects does not now exist. Before major firewood programs can be undertaken, careful data-gathering will be required to determine the specific areas most appropriate for planting.

2. Tree Species. Since the experts remain uncertain about tree species appropriate for firewood projects in the Sahel, local research into the performance of various species is urgently required. Knowledge of tree species for other climate zones in Africa is more complete.

3. Project Scale. Large-scale firewood plantations are urgently required to meet fuel needs of people in urban areas, especially in Sahelian countries. With proper management, such projects could sustain yields adequate to provide wood for up to five people per hectare planted.

Village woodlots are more appropriate for rural areas, although careful social investigation will be required before it can be assumed that necessary local support will be forthcoming. Woodlots may be less efficient than plantations in producing firewood (given allegedly less professional management) requiring as much as one hectare under Sahelian conditions for each person served.

4. Relationship to Other Development Activities. In many cases, multipurpose rural development projects could include firewood components. At a minimum, this could involve experimental village woodlots or surveys of local patterns of fuel use. In addition, firewood activities can be commingled with agricultural schemes (through intercropping) or range management programs.

E. Strategies: Wood Use

Workshop participants placed great emphasis on the importance of finding improved techniques for using wood. Even relatively simple stoves, for example, could double the efficiency with which wood is now used for cooking. Similarly, improved kilns could double the amount of charcoal produced from wood by current methods. Finally, pyrolytic techniques are being tested for producing charcoal and cooking oil from sawdust and other wood products. Widespread adoption of any of these devices could materially reduce the number of trees cut each year.

Considerably more data are needed, however, on the technical, economic and social feasibility of these systems. To have meaning, such data must be acquired through research and testing among potential users in Africa itself. Support for improvements in wood use might therefore be channelled through African institutions engaged in local experiments with small-scale technologies.

F. Institutional Development

Forestry services in Africa are of widely varying quality. Almost all, however, have a long history of devoting their energies primarily to supervision of commercial timber cutting in protected forests. Other skills are required to support activities such as village woodlots, however; and specialized training may be necessary to develop these capacities.

II. AGENDA FOR ACTION

In general, workshop participants felt strongly that the Africa Bureau should immediately establish a clear policy in support of firewood programs. Announcement of such a policy would provide an essential signal to AID personnel in Washington and the Field that serious attention should be given to firewood activities. In addition, specific initiatives were proposed in the areas of research, other project activities, and Africa Bureau staffing.

The firewood problem in Sahel West Africa has reached crisis proportions. Under the aegis of the CILSS, the Sahel countries have designated forestry activities (to meet fuelwood needs) a priority, and have designed an initial five-year Forestry Program which begins to address these needs. In response to these concerns, a number of Field Missions in the Sahel have submitted proposals for forestry

activities to AID/W. Projects are proposed, in the process of being designed, or actually underway in Mauritania, Senegal, the Gambia, Upper Volta, Niger and Chad.

A. Research

Participants strongly endorsed the idea of a project-oriented firewood study to be conducted in several African countries. This study, the central parts of which would be carried out by African institutions, would address such topics as: major areas of deforestation and growing potential; current patterns of fuel use among rural and urban poor; local perceptions of the firewood problem; available institutions for managing woodlots and other activities. Specific recommendations of workshop participants have been incorporated into the revised scope of work included below as Attachment C.

B. Other Activities

Workshop participants felt that a number of initiatives could be pursued concurrently with the firewood study. Among ideas to which serious consideration might now be given in Washington and the Field are:

- testing of wood stoves, preferably by African institutions involved in development of intermediate technologies;

- pilot experiments with village woodlots, perhaps as part of rural development projects now being prepared;

- firewood plantations near major urban centers, in areas where a clear need for such fuel supplies already exists;

- experiments with various means of determining local desires and priorities, possibly including Peace Corps questionnaires or videotape and film techniques for eliciting perceptions of Africans themselves.

C. Africa Bureau Staffing

Participants noted with concern that nobody in the Africa Bureau now has full-time responsibility for energy questions as a whole, much less firewood in particular. There was a clear consensus that effective programming could not be pursued in this area without the addition of qualified Washington staff to support new activities.

ATTACHMENT C

DRAFT SCOPE OF WORK FOR AFRICA BUREAU FIREWOOD STUDY

The project outlined here has three central characteristics:

- Although the work would be administered by a single contractor, most activities would take the form of a series of separate country studies. A summary of significant findings for these countries as a group would be provided by the contractor following completion of the studies.

- Although AID would assist with financing, the major responsibility for country studies would rest with local institutions, whether universities, ministries, or other groups. Where appropriate, the government involved might ask Peace Corps Volunteers to assist with village surveys.

- A key objective of this process would be to mobilize support for national firewood programs. Rather than being treated as "data" in the abstract, information collected would be used as an instrument for project identification.

I. ACTIVITIES

The project as a whole would consist of four major phases, spread over a period of approximately 13 months. To provide continuity, work is structured in such a way that a single project manager could supervise and work on the study throughout this period. Dates below assume that a contract to do the work would be signed by the end of September 1978.

A. Preparation (October-December 1978)

About five person-months of work would be devoted to three kinds of preliminary activity:

1. Survey Dimensions and Methodology. The contractor would prepare in draft an outline of material to be gathered through country studies. This would be modified in each country following consultations with foresters, rural development officers, and others during Stage B (below). Provision should be made in the contractor's draft for collecting the following kinds of information:

   - areas of deforestation and growing potential: In each country, maps might be prepared showing the degree of deforestation (moderate, severe, critical) by area. In addition, data on soils, rainfall, and temperatures could be combined to show areas of greatest potential for growing trees. Much of this information would be available from foresters, meteorologists, soil specialists and others within the government.

- local surveys: Information to be collected directly from villagers and townspeople would include:

  - fuels currently used (wood, charcoal, millet stalks and other agricultural residues, kerosene, etc.);

  - means by which these fuels are acquired (gathered or made for own consumption; purchased);

  - charcoal-making techniques;

  - prices;

  - trends in use of fuels, and reasons for these trends (fuel availability, price);

  - types and efficiency of fires or stoves used;

  - cooking patterns (e.g., length of time various foods are cooked in different areas);

  - local perceptions of need;

  - patterns of land and tree tenure;

  - existing institutions for cooperative action.

This information would be gathered in a sampling of villages and towns in areas where firewood projects would be most likely. The contractor's draft should propose a basis for selecting locations and methodologies for carrying out the surveys.

2. Coordination. Also during the preparation stage, the contractor would consult with other groups in North America having a research interest in African firewood problems: Peace Corps, National Academy of Sciences, International Development Research Center, etc. The objective here would be to share ideas and avoid duplication of efforts in the Field.

3. Recruitment. Finally, the contractor would recruit country coordinators to work on subsequent stages of the project. The coordinators should already be familiar both with firewood problems and with the countries to which they are to be assigned. In some cases, ex-PCVs with forestry experience in appropriate countries might be available to do this work.

B. Studies (January-June 1979)

Two lines of inquiry would be pursued during this phase, the more important being a collection of specific country studies.

1. Country Studies. It is assumed that the activities shown here would take place in each of six African countries, selected on the basis of strong interest on the part of AID Missions and host governments:

- briefing: First, the six country coordinators would meet in Washington for a week-long briefing by the contractor and AID.

- field consultations: After travelling to their assigned countries, the coordinators would spend about three weeks in consultation with host government and other officials. The objective during this period would be to establish local networks of people and organizations concerned with firewood issues, as well as to determine responsibilities for carrying out various elements of the country studies.

- scopes of work: On the average, coordinators would then spend another four weeks working on methodologies and detailed scopes of work with specific local institutions selected to undertake the studies. Draft research outlines prepared by the contractor would be modified at this point in line with local realities.

- surveys: The survey process itself would be carried out by local institutions over a period of about four months. Through the contractor, AID would pay up to $25,000 toward survey costs in each country. On the assumption that some countries would need additional technical assistance during this period, allowance is made for the coordinator to remain on throughout the survey process in each of two countries. Provision is also made for two visits of about two weeks each by the project manager, in order to check on progress and resolve specific problems arising as surveys proceed.

C. Country Reviews (July 1979)

Following completion of the studies, coordinators would return to their assigned countries for about four weeks in order to discuss study results, arrange symposia during which results would be intensively reviewed by relevant government agencies, and assist AID Missions to translate findings into concrete project proposals (PIDs). During this period, the project manager would provide necessary backstopping, discuss preliminary findings with concerned organizations, and begin work on a final report.

D. Summary (August-October 1979)

Based on the results of the various studies and on reports by the country coordinators, the contractor would prepare a final summary of project findings. Approximately three person-months of work would be devoted to this.

This draft scope of work outlined above is preliminary. AID/W welcomes, and strongly urges, Field Missions to provide recommendations

for improving this cope of work, as well as submit ideas on additional ways to strengthen the emerging forestry program.

II. BUDGET

Total budget for this contract would be about $394,900, to be allocated as follows.

A.	Salaries (project manager @ $3,000, country coordinators and research associates @ $2,500)		$109,000
	Part A: 3 person-months @ $3,000	$ 9,000	
	2 person-months @ $2,500	5,000	
	Part B.1: 1 person-month @ $3,000	3,000	
	20 person-months @ $2,500	50,000	
	Part B.2: 5 person-months @ $3,000	15,000	
	Part C: 1 person-month @ $3,000	3,000	
	6 person-months @ $2,500	15,000	
	Part D: 3 person-months @ $3,000	9,000	
B.	Transporation and Per Diem		60,000
	Part B.1: 8 r.t. U.S.-African @ $1,500	12,000	
	86 weeks per diem @ $350	30,100	
	Part B.2: travel in U.S. and Europe	4,000	
	Part C: 4 r.t. U.S.-Africa @ $1,500	6,000	
	24 weeks per diem @ $350	8,400	
C.	Country Studies (sub-contracts with African Institutions)		150,000
	six studies @ $25,000	150,000	
D.	Printing and Other Direct Contractor's Costs		10,000
E.	Contractor's Overhead (60% of salaries)		65,400
			$394,900

ANNEX E

PES FOR UTILIZATION OF

SECONDARY SPECIES FROM TROPICAL FORESTS

Utilization of Secondary [illegible]cies from Tropical Forests

c. PROJECT NUMBER: 931-0607

d. MISSION/AID/W OFF: DS/ST

e. EVALUATION NUMBER (ENTER THE NUMBER ASSIGNED BY THE OPERATING UNIT, E.G., COUNTRY OR AID ADMINISTRATIVE CODE, FISCAL YEAR, SERIAL BEGINNING WITH NO. 1 EACH FY)

f. KEY PROJECT IMPLEMENTATION DATES

a. First PRO-AG or Equivalent FY 75

b. Final Obligation Expected FY 77

c. Final Input Delivery FY 78

g. ESTIMATED PROJECT FUNDING

a. Total $ 735,000

b. U.S. $ 735,000

h. PERIOD COVERED BY EVALUATION

From (month/yr.) June 1977

To (month/yr.) May 1978

Date of Evaluation: Mar. 15,

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

a. List decisions, including those items needing further study. (Note: Mission decisions which anticipate AID/W or regional office action should specify type of document e.g., Airgram, SPAR, PIO which will present detailed request.)	b. Name of Officer Responsible for Action	c. Date Action to be Completed
a. Steering Committee tentatively planning holding one-half day meeting with officials of DSB, Regional Bureaus and PPC to explain importance of research results and nature of needed environmental research in tropical forest ecology.	W. Parham	June 1978
b. Steering Committee recommends that AID spend at least an amount equal to this project on the environmental consequences of implementing this project's research findings and that research be carried out over at least a three year period.	W. Parham	June 1978
c. Decision to request AID utilization funds will be made after international meeting in late May 1978.	W. Parham	May 26, 1[illegible]
d. An international meeting will be held May 21-26 at Madison, Wisconsin on "Improved Utilization of Tropical Forests" and the results of the AID funded research will be presented along with other world-wide research on similar topics.		
e. This project is not encountering any problems, and I recommend the project continue.		

BEST AVAILABLE DOCUMENT

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

- [ ] Project Paper
- [ ] Financial Plan
- [ ] Logical Framework
- [ ] Project Agreement
- [ ] Implementation Plan e.g. CPI Network
- [ ] PIO/T
- [ ] PIO/C
- [ ] PIO/P
- [ ] Other (specify) _____
- [ ] Other (specify) _____

10. Decisions on Future of Project.

Alternative

a. [X] Continue Project Without Change

b. [ ] Change Project Design and/or [ ] Change Implementation P

c. [ ] Discontinue Project

11. Project Officer and Host Country or Other Participants As Appropriate (Names and Titles) Projects Steering Committee: Dr. Walter Parham, DS/ST, Chairman, and Physical Science Officer; J. Laundrie (FPL), R. Auchter (Ex-FPL, Consultant), R. Root (Weyerhauser Co), R. Skok (U. of Minn.), J. Ewel (U. of Fla), H. Mattox (USDA), E. Cliff (Consultant) [illegible]

12. Signature of Evaluator

Signature: [illegible]

Typed Name: DS/ST, Henry A. Arnold

Date

ANNEX F

FAA SECTION 118 ON ENVIRONMENT AND NATURAL RESOURCES

INTERNATIONAL DEVELOPMENT AND FOOD ASSISTANCE ACT OF 1977

ENVIRONMENT AND NATURAL RESOURCES

"SEC. 118 ENVIRONMENT AND NATURAL RESOURCES.--- THE PRESIDENT IS AUTHORIZED TO FURNISH ASSISTANCE UNDER THIS PART FOR DEVELOPING AND STRENGTHENING THE CAPACITY OF LESS DEVELOPED COUNTRIES TO PROTECT AND MANAGE THEIR ENVIRONMENT AND NATURAL RESOURCES. SPECIAL EFFORTS SHALL BE MADE TO MAINTAIN AND WHERE POSSIBLE RESTORE THE LAND, VEGETATION, WATER, WILDLIFE, AND OTHER RESOURCES UPON WHICH DEPEND ECONOMIC GROWTH AND HUMAN WELL-BEING, ESPECIALLY THAT OF THE POOR.".

ANNEX G

REVISED PID FACESHEET

PROJECT IDENTIFICATION DOCUMENT FACESHEET

TO BE COMPLETED BY ORIGINATING OFFICE

A = ADD
C = CHANGE
D = DELETE

A

2. DOCUMENT CODE 1

3. COUNTRY/ENTITY
DS/ST, RDA #20

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 DIGITS)
931 - 1080

6. BUREAU/OFFICE
A. SYMBOL: DSB
B. CODE: 08

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)
Deforestation and Development

8. PROPOSED NEXT DOCUMENT
A. 3 (2 = PRP, 3 = PP)
B. DATE MM YY: 07 78

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
a. INITIAL FY 78
b. FINAL FY 78

10. ESTIMATED COSTS
($000 OR EQUIVALENT, $1 =

FUNDING SOURCE		PASS
A. AID APPROPRIATED		$25
B. OTHER U.S.	1.	
	2.	
C. HOST COUNTRY		
D. OTHER DONOR(S)		
	TOTAL	$25

11. PROPOSED BUDGET AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. FIRST FY 78 F. GRANT	E. FIRST FY 78 G. LOAN	LIFE OF PROJECT H. GRANT	LIFE OF PROJECT I. LOAN
(1) SD	759	876		250		250	
(2)							
(3)							
(4)							
			TOTAL	250		250	

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)
877

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)
To improve LDC capabilities for environmental protection and for assessing and managing their renewable and non-renewable resources.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)
To analyze potentials for and limitations of wood as a fuel resource in LDCs, to determine implications for the environment and natural resources of accelerating deforestation, and to provide the information needed by A.I.D. and other U.S. agencies to develop a viable U.S. strategy on tropical deforestation.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)
1-½ month of DS/ST Staff time to prepare PP.

18. ORIGINATING OFFICE CLEARANCE

Signature: Henry A. Arnold

Title: Director, DS/ST

Date Signed: MM DD YY

19. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

AID 1330-2 (3-76)

ANNEX H

APPROVAL SHEET

DATE: 26 June 1978

TO : AA/DS, Mr. S nder Levin

FROM: DS/PO, Robert C. Simpson

PROBLEM: Your Approval is Requested of the Project Identification Document (P.I.D.) for Wood as a Fuel Resource (931-1080)
Proposed Project Begins: FY 1978 Proposing Office: DS/ST

A. DS/PO Review:

1. Does PID adequately Describe and Justify Project?
Yes, though certain substantive modifications are to be made during Project Paper development to broaden the socio-economic, cultural and anthropological aspects of the work.

The concluding phase of the PP will NOT be a test plantation, but a comprehensive recommendation.

2. Funding Adequate? In FY 77/78 Budget? How Compares to FY 77b C.P.?

Yes. Yes. Compatible.

3. Are Plans for PP Development, Approval and Project Initiation Realistic?

Yes.

B. This PID has been in DS/PO; staff work is incomplete because of:
_____ DS/PO work pressure; _____ Tech. Office work pressure.
Recommend you return the PID for further work prior to your final decision.

C. DS/PO recommends the following action:

_____ Approval.
X Approval subject to modification of Scope to include socio-economic and cultural factors and elimination of test plantation and substitution therefor of a comprehensive series of recommendations.
_____ Return for further work prior to AA/DS decision.
_____ Disapproval.

D. AA/DS Action:

_____ Approved.
X Approved subject to above-noted modifications
_____ Disapproved.

S. Smith for SL 7/17/78 26 June 1978
Signature Date
AA/DS, Sander Levin

Attachment:
Recommendation for Environmental Threshold Decision

ENVIRONMENTAL THRESHOLD DECISION

TO: AA/DS, Mr. Sander Levin

THRU: DS/PO, Mr. Robert C. Simpson

FROM: DS/SL Henry A. Arnold

SUBJECT: Environmental Threshold Decision

Project Title: Wood as a Fuel Resource
Project #: 931-1080
Project Manager: Mr. Walter E. Parham
REFERENCE: Initial Environmental Examination (IEE) contained in Attached PID dated _____

On the basis of the Initial Environmental/Examination (IEE) referenced above and attached to this memorandum I recommend that you make the following decision.

X 1. The proposed agency action is not a major Federal action which will have a significant effect on the human environment.

_____ 2. The proposed agency action is a major Federal action which will have a significant effect on the human environment, and:

_____ a. An Environmental Assessment is required; or

_____ b. An Environmental Impact Statement is required.

The cost of and schedule for this requirement is fully described in the referenced document.

_____ 3. Our environmental examination is not complete. We will submit the analysis no later than _____ with our recommendation for an environmental threshold decision.

Approved: [signature] SL

Disapproved: _____

Date: 7/17/78

OPTIONAL FORM NO. 10
MAY 1962 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

TO : AA/DS, Mr. Sander Levin **DATE:** June 26, 1978

FROM : DS/PO, Robert C. Simpson

SUBJECT: Recommendation for Approval of PID, Wood as a Fuel Resource, Project 931-1080, Attached

The attached PID is one for which approval in principle was obtained during ABS Review in FY'77.

We ask your formal approval by signature of the enclosed PDAF to move from PID to Project Paper development stage subject to the following design guidance already given by the Program Office to DS/ST:

> The Scope of Work in the Project Paper stage should be broadened to include consideration of socio-economic and cultural dimensions. Cultural and anthropological elements now lacking are to be added during PP design.
>
> The Project Paper should include a restatement of Step C, page 93 which should not be a plan for a test of a forest plantation but, instead, the final phase of the project should be the preparation of a comprehensive series of recommendations for further A.I.D. investments in self-renewable sources of energy. These recommendations may include a recommendation to test a self-renewable plantation.

Attachment: PID 931-1080

cc: DS/ST, W. Roseborough
DS/ST, W. E. Parham
DS/ST, R. Flynn

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

DS/PO, Robert Simpson July 11, 1978

THRU : DS/ST, William Roseborough
DS/ST, Walter Parham

Modification of the PID Wood as a Fuel Resource (No. 931 - 1080)

After discussions with Alan Jacobs and Jerome Bosken, DS/EY, and considering comments made by DS/PO, we have changed the name of the PID from Wood as a Fuel Resource to Deforestation and Development. The AID/State Strategy Conference on Tropical Deforestation held June 12-14 developed a series of recommendations for addressing the tropical deforestation problem of developing countries. One of the main recommendations was for AID to develop a strategy for its increasing forest-related activities. The recommended changes in this PID now affords us the opportunity to develop certain baseline data essential to AID in development of its strategy for forestry activities in developing countries.

The kinds of information to be developed under this modified project are directly related to several of the recommendations of the AID/State Deforestation Conference. The US Forest Service (USDA) will gather information and prepare reports for AID on the following:

(a) What activities related to forestry are being carried out by the major donors such as the World Bank, the International Development Bank, the Peace Corps, FAO, UNDP, regional institutions, etc.? This information is essential for AID to avoid duplication of the activities of others.

(b) What limitations are imposed on donors when working in the general field of forestry? For instance, are research activities allowed or must all activities be strictly in the applied fields? Again it is essential to know the various constraints imposed on these donors so that AID's role can be more clearly defined.

(c) What are the gaps in needed information and in field activities at present in the general area of forestry? Which of these would be appropriate for AID to undertake in its projects?

SUBJECT: Modification of the PID Wood as a Fuel Resource (No. 931 - 1080)

(d) Geographically, where are the field activities and research being carried out by the other donors? In which LDCs? Which ecological zones...humid tropics, semi-arid lands, or high altitude lands? Where are the gaps in the ecological zones where AID could assist in research, pilot projects, or large projects?

(e) Success stories: Where and how have the people in LDCs succeeded in addressing the various problems related to deforestation...problems like soil erosion, loss of wildlife, flooding, loss of local wood-fuel resources, etc? We want to try to emphasize LDC successes, regardless of scale, right from the beginning so that early replication may be possible.

cc: DS/ST, Henry A. Arnold

DS/ST:WParham:rk:7/11/78