

PD-ABK-647  
ISA 93615

LIMITED SCOPE GRANT PROJECT AGREEMENT

BETWEEN THE UNITED STATES OF AMERICA ACTING THROUGH  
THE AGENCY FOR INTERNATIONAL DEVELOPMENT (AID)

AND

THE GOVERNMENT OF HONDURAS  
THE HONDURAN FORESTRY CORPORATION (COHDEFOR)

(GRANTEE)

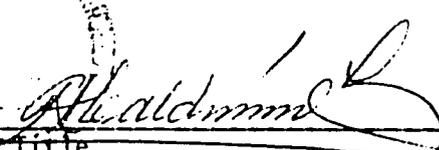
1. Project Title	2. AID Project Number
Bonding of Portland Cement with Honduran Wood Biomass and other lignocellulosics for structural materials.	AID/SCI 2E-17

The above-named parties hereby mutually agree to carry out the Project described in this agreement in accordance with (1) the terms of this Agreement, including any annexes attached hreto, and (2) any general agreement between the two governments regarding economic or technical cooperation.

3. Amount of AID Grant Not to Exceed	4. Grantee Contribution to the Project	5. Project Assistance Completion Date
174,940	Facilities and Services	December 30, 1985

6. This agreement consist of this title page, Annex A, Project Description; Annex B, Implementation Plan; Annex C, Standard Provisions.

7. For the Grantee	8. For the Agency for International Development
Typed Name	Typed Name
Rafael Calderón I.	Anthony J. Cauterucci

Signature	Signature
	
Title	Title
General Manager, COHDEFOR	Director, USAID/H

Date	Date
September 30, 1985	September 30, 1985

## ANNEX A - PROJECT DESCRIPTION

### Project Title:

Bonding of portland cement with Honduran wood biomass and other lignocellulosics for structural materials.

AID Project Number: 2E-17

### Project Purpose:

The purpose of this project is to devise methods to utilize particulates of some Honduran wood species and of sugar cane bagasse for the production of cement-bonded construction boards of high density and durability.

### Project Description:

This project consists of two phases:

1. The bond between chemically treated/untreated wood/bagasse and cement shall be examined by establishing hydration curves and by scanning electron microscopy (University of Idaho, U.S.A.)
2. Lignocellulose-cement boards shall be made and their strength properties tested using a universal testing machine (University of Idaho). The performance period of this project is estimated at 24 months from signing of this agreement or the cooperative agreement between the ESNACIFOR and the University of Idaho whichever is latter.

The implementing agency for the Government of Honduras shall be the Corporación Hondurena de Desarrollo Forestal (COHDEFOR) through the Escuela Nacional de Ciencias Forestales (ESNACIFOR).

Technical assistance and research co-responsibility is drawn from personnel of the University of Idaho. The roles and responsibilities of the participating parties, estimated resources and implementation schedule are outlined in Annex B - Implementation Plan.

ESTIMATED RESOURCES

	Funding (Thousands of U.S. Dollars)		T O T A L
	U.S.A.I.D. LOP	GRANTEE Annual	
<u>Direct Materials:</u>			
	24.0		
<u>Direct Labor:</u>			
Scientists, technician, assistant, secretarial (including benefits)	89.5	11.4*	
<u>Travel:</u>			
Airfare, per diem, local transportation	23.5	(See Annex B1-C)	
<u>Other Direct Costs:</u>			
Lab equipment, and supplies, electron microscopy services, consultancies, computer expenses, miscellaneous	16.5	21.8**	
<u>Institutional Overhead:</u>			
	21.5		
<u>Contingency:</u>			
	0	N.A.	
<b>T O T A L S</b>	<b>175.0</b>	<b>33.2***</b>	

- \* ESNACIFOR/COHDEFOR direct labor costs are included in CY 1983 annual budget.
- \*\* ESNACIFOR/COHDEFOR CY 1983 annual budget (exclusive of direct labor costs for AID/SCI 2E-17).
- \*\*\* Total CY 1982 annual budget programmed by ESNACIFOR/COHDEFOR for AID/SCI 2E-17. Total doesn't include costs related to physical infrastructure (lab facilities, water, electricity, and housing).