

## V. AGRICULTURAL TECHNOLOGY

### Project Title: DESIGN, CONSTRUCTION & TEST OF A MULTI-CROP BARRIO LEVEL THRESHER

Name and Address of Principal Investigator: Leovigildo A. Manalo, et al.

Description of the Project: This thresher is intended for farmers. This device can be carried from one place to another where the crop is to be harvested and threshed. In that way, losses that may be incurred in series of handling the crop harvested can be minimized if not totally lessened.

Project Cost and Source of Funding: Total Cost including labor and miscellaneous expenses = ₱ 3,665.35

Cooperating Agency: Gregorio Araneta University Foundation

Date Started: July, 1979

Date of Completion (for completed projects): March, 1980

Other Relevant Information: This multi-crop thresher was found to be effective in threshing palay and sorghum. It provides labor efficiency, low cost investment and less threshing losses compared to the previous 2-7 % when using manual methods

### Project Title: DESIGN, CONSTRUCTION & TEST OF A SOIL AUGER

Name and Address of Principal Investigator: Cecil P. Perez, et al.

Description of the Project: The design is based on screws with the tip acting as the shearing mechanism and the helix of the auger as the conveying mechanism of the soil that was dug. The higher the resolution per minute (rpm) the greater is the volume of the soil conveyed. However, the shearing of the soil depends on the soil type and the application of compressive force towards the soil.

Project Cost and Source of Funding: Cost including labor & miscellaneous expenses is ₱ 4,155.13

Cooperating Agencies: Gregorio Araneta University Foundation

Date Started: Dec. 1978

Date of Completion (for completed projects): Feb. 1979

### Project Title: DESIGN, CONSTRUCTION AND TEST OF A KILN WITH GRAVITY FLOW TYPE COPRA DRYER (SECOND STAGE)

Name and Address of Principal Investigator: Jaime G. Gundayao, et. al.

Description of the Project: The design, construction and test of a kiln with gravity flow type copra dryer aimed to improve the quality of copra, to produce a high grade charcoal derived from coconut shells which are utilized as fuel and to recover some coconut by-products, such as crude tar, ashes, and pyraleagueous liquor.

Project Cost and Source of Funding: Total cost of the project with shade & including the miscellaneous and labor cost is ₱ 3,432.00

Cooperating Agencies: Gregorio Araneta University Foundation

Other Relevant Information: As shown during the actual test, the average drying times ranges from 15 to 15 hours at a capacity of 50 to 60 splitted nuts/loading. The efficiency of the dryer and kiln are 59.4% and 56.37% respectively.

Project Title: PRELIMINARY STUDY ON COIR DUST: PROXIMATE ANALYSIS

Principal Investigator: Prof. Rogelio Bandojo

Description of the Project: This is a study on the basic components of coir dust and how it compares with other known materials for non-conventional source of energy.

Project Cost: P 10,000.00

Source of Funding: MSU-Iligan Institute of Technology

Date Started: September 14, 1979

Date of Completion: December 20, 1979

Other Relevant Information: Volatile combustible matter, Fixed carbon, moisture and B.T.U. of coir dust is compared with cocoshell charcoal, Bagasse, sawdust, coal and wood bark.

Project Title: VAPOR HEAT TREATMENT OF FRUITS AND VEGETABLES

Name and Address of Principal Investigator: Dr. Ignacio S. Pablo  
PINFST-Batek PWU

Description of the Project: Vapor heat treatment, treatment using steam inside a heat chamber can be used as a disinfestation treatment for fruits. Papaya, mango, and tomatoes were inoculated with fruit fly eggs and subjected to vapor heat treatment at various time-temperature combination. Pilot trials on papaya indicated a treatment at 81-110°F for 10 hrs. approach period and holding for another 10 hrs. as necessary to kill the inoculated fruit fly eggs without damage to fruit quality.

Project Cost and Source of Funding: P 66,000.00

National Science and Development Board

Cooperating Agencies: PINFST — BATEK — PWU

Date Started: June 1979

Duration or Expected Date of Completion: Dec. 1980

Present Status of Project: Pilot trials to be conducted on mango and tomatoes

Project Title: PROJECT CLIMATE: COUNTRYSIDE DEVELOPMENT THROUGH CLIMATE-BASED AGRICULTURAL TECHNOLOGY

Name and Address of Principal Investigators:

- 1) Climate-Based Cropping Pattern  
Dr. Maximo W. Baradas (resigned)  
c/o UNDP  
Jakarta, Indonesia

- 2) Agricultural and Domestic Water Supply System  
Dr. Petronio S. Ongkingco  
Dept. of Agrometeorology, INSAET  
U.P. at Los Baños  
College, Laguna
- 3) Climate-Based Crop Protection System  
Dr. Florendo C. Quebral  
Dept. of Plant Pathology  
U.P. at Los Baños  
College, Laguna

Description of the Project: Water Impounding Project  
Identification of Cropping System  
Identification of Crop Protection System  
Project Cost and Source of Funding: ₱ 40,846.00/Technology Resource Center  
Cooperating Agencies: UPLB, TRC  
Date Started: November 16, 1977  
Duration of Project — one year and two months  
Date of Completion or Expected Date of Completion: January, 1979  
Present Status of the Project: Completed

Project Title: QUANTITATIVE EVALUATION OF CLIMATE FOR OPTIMUM  
CROP PRODUCTION IN THE PHILIPPINES

Name and Address of Principal Investigator: Dr. Maximo W. Baradas (resigned)  
WMO Project  
c/o UNDP  
Jakarta, Indonesia

Description of the Project: Evaluation of Climate throughout the Philippines  
Project Cost and Source of Funding: ₱ 54,000/PCARR  
Cooperating Agencies: PAGASA, PCARR, UPLB  
Date Started: May 1, 1976  
Duration of Project: two years  
Date of Completion or Expected Date of Completion: May, 1978  
Present Status of the Project: Finalization of Write-up

Project Title: DESIGN AND FABRICATION OF LOW-COST EQUIPMENT  
FOR COCONUT

Name and Address of Principal Investigator: Prof. Ciriaco A. Darunday, Jr.  
OIC, Indigenous Crafts & Techno-  
logy Research Center (ICTRC)  
MSU-Iligan Insitute of Techno-  
logy, Iligan City

Description of the Project: The main activity of this project will involve actual design and fabrication of a series of machines needed for the production of coconut shell buttons, which will serve as raw materials for the production of different types of coconut-shell based articles such as handbags, lampshades and dividers. Since commercial

models of this type of machine are unknown, the proponents have to develop their own prototype -designs, fabricate and test them. The main bulk of the activity involving machine parts fabrication is being undertaken in collaboration with the School of Engineering Technology (STET) specifically with the Department of Mechanical Engineering Technology (DMET). The Coordination Center for Research Center (CCRD) through the ICTRC finances the personal services and materials/supplies requirements of the project, whereas the Department of Mechanical Engineering Technology extends the use of the facilities and equipment of the machine shop and shares the technical expertise of its staff.

The expected output of the project will be a set of equipment consisting of four-motor driven machines — which is projected to be completed within a period of twelve (12) months.

These machines include the following:

- a) Rough Cleaning Machine
- b) Shell Cutting Machine
- c) Surface Finishing Machine
- d) Self-Indexing Drilling Machine

Project Cost: ₱ 19,618.50

Source of Funding: MSU-IIT

Cooperating Agencies: NACIDA

PCA (Philippine Coconut Authority)

MHS (Ministry of Human Settlements)

Date Started: January 1, 1980

Duration or Expected Date of Completion: Twelve (12) months

Date of Completion or Expected Date of Completion: December 30, 1980

Present Status of the Project: The project duration is twelve (12) months to consist of the following phases: Phase I — Design Phase for three (3) months, Phase II — Fabrication Phase for six (6) months and Phase III — Performance Testing Phase: Phase I of the project was accomplished in accordance with the approved timetable. The detailed design and working drawing of the set of equipment to be fabricated was completed by the end of March. Presently the project is undertaking the fabrication of the machines and recently it has finished two of the four-targeted machines consisting of the Rough Cleaning Machine and Shell Cutting Machine. Work on the remaining machines is on-going and is targeted to be finished by the end of September, 1980.

Other Relevant Information: The major consideration adopted in the implementation of the project is that the project will utilize the existing resources of the MSU-Iligan Institute of Technology. Thus in the fabrication of the target equipment, the project utilizes the equipment of the Machine Shop and Welding Shop of the Departments of Mechanical Engineering Technology and Metallurgical Engineering Technology which are being fully utilized for instructional or training purposes. In order that the project will not affect the operation of the departments involved, the project has to limit its

activities and personnel. Thus the project is programmed to be completed within a period of one year with the assistance of only one technical aid serving as the mechanist and welder.

Project Title: MILLING PARAMETERS FOR MAXIMUM MILLING YIELD AND QUALITY OF MILLED RICE (STUDY 1)

Name and Address of Principal Investigator: Dr. S. C. Andales, AGPET, INSAET, UPLB , College, Laguna

Description of the Project: Rice Postharvest Technology

Project Cost and Source of Funding: \$ 54,000, IDRC (Canada) International Development Research Centre

Cooperating Agencies: NGA & SEARCA

Date Started: June, 1976

Duration of Expected Date of Completion: Two Years

Date of Completion June, 1978

Present Status of the Project: Completed

Other Relevant Information: Studies 1 to 5 of Phase I of this IDRC-UPLB Project have already been completed and the compiled report was finished last June, 1980.

The approved second project (Phase II) has already started last July of this year. The objectives of this second phase are (1) to make pilot studies for testing the technology that were developed in phase I with private cooperators in the grain industry, and (2) to conduct basic research studies corollary or related to the main areas of storage and milling studied in Phase I. The same funding agency will finance this two-year second phase project.

\*Project cost covered five project studies (Studies 1 to 5)

Project Title: DEVELOPMENT OF IMPROVED VILLAGE RICE MILLING SYSTEM (STUDY 2)

Name and Address of Principal Investigator: Dr. S.C. Andales  
AGPET, INSAET  
UPLB College, Laguna

Description of the Project: Rice Postharvest Technology

Project Cost and Source of Funding: \$54,000, IDRC (CANADA)

Cooperating Agencies: NGA & SEARCA

Date Started: June, 1977

Duration of Expected Date of Completion: 2 1/2 years

Date of Completion or Expected Date of Completion: January 1980

Present Status of the Project: Completed

Project Title: PRE-DRYING HANDLING OF HIGH MOISTURE PADDY (STUDY 3 & 4)

Name and Address of Principal Investigator: Dr. S.C. Andales  
AGPET, INSAET  
UPLB College, Laguna

Description of the Project: Rice Postharvest Technology  
Project Cost and Source of Funding: \$54,000 IDRC (Canada)  
Cooperating Agencies: NGA & SEARCA  
Date Started: June, 1976  
Duration of Expected Date of Completion: 3 1/2 years  
Date of Completion or Expected Date of Completion: January, 1980  
Present Status of the Project: Completed

Project Title: PRE-THRESHING HANDLING OF WET SEASON PADDY  
(STUDY 5)

Name and Address of Principal Investigator: Dr. S.C. Andales  
AGPET, INSAET  
UPLB, College, Laguna

Description of the Project: Rice Postharvest Technology  
Project Cost and Source of Funding: \$54,000 IDRC (Canada)  
Cooperating Agencies: NGA & SEARCA  
Date Started: October 1978  
Duration of Expected Date of Completion: 1 1/4 years  
Date of Completion or Expected Date of Completion: January, 1980  
Present Status of the Project: Completed

Project Title: DESIGN, DEVELOPMENT AND FIELD EVALUATION OF AN  
EARLY WARNING DEVICE (EWD) FOR MONITORING  
HOPPER POPULATION BUILD-UP IN SMALL RICE FARMS

Name & Address of Principal Investigator: Delfin C. Sumanistrado  
Project Leader  
DAMET, INSAET/UPLB

Date Project Started: January 1, 1978  
Date of Completion: December 31, 1979  
NSDB Funded: ₱50,811.00

Project Title: DESIGN AND DEVELOPMENT OF A MICRO-HYDRO POWER  
PLANT

Name & Address of Principal Investigator: Delfin C. Suministrado  
DAMET, INSAET/UPLB

Project Cost and Source of Funding: ₱40,000.00; AMDP  
Date Started: March, 1980  
Present Status of the Project: On going

Project Title: INTRODUCTION OF APPROPRIATE TECHNOLOGY FOR  
MINI-SCALE ALCOHOL PRODUCTION FROM CASSAVA

Name & Address of Principal Investigator: Dr. Reynaldo M. Lantin  
Project Leader  
DAMET/INSAET-UPLB

Project Cost and Source of Funding: ₱ 500,000, PCARR  
Date Started: May, 1980  
Present Status of the Project: On going

Project Title: AGRICULTURAL MACHINERY TESTING AND EVALUATION CENTER (AMTEC)

Name and Address of Principal Investigator: University of the Philippines at Los Baños, College, Laguna, c/o Prof. Roberto C. Bautista, Director

Description of the Project: Objectives:

1. To establish standards of quality and performance for agricultural machinery and equipment used under Philippine conditions.
2. To conduct laboratory and field testing of agricultural machinery used in the Philippines under established standard conditions.
3. To set standards in evaluating spare parts and after-sales service capabilities of firms engaged in the sale or distribution of agricultural machinery and equipment in the Philippines.
4. To establish standardization of parts of agricultural machinery for interchangeability and possible complementing of manufacturing.

Project Cost and Source of Funding: ₱ 7 Million for building and equipment outlay. Yearly budget: ₱ 400,000

Cooperating Agencies: Ministry of Agriculture & Central Bank of the Philippines

Date Started: July 11, 1977

Duration or Expected Date of Completion: Renewable

Date of Completion or Expected Date of Completion: Renewable

Present Status of Project: On-going

Other Relevant Information: Several agricultural machinery test work have been undertaken.

Project Title: PILOT PLANT PRODUCTION OF PULP FROM ABACA AND BANANA

Name and Address of Principal Investigator: Eduardo Serra  
NIST  
Pedro Gil, Manila

Description of the Project: The objectives of this project is to establish a pilot plant for abaca pulp. The main object of the project was diverted to the preparation of abaca as raw material because the problem lies in the preparation of raw material in abaca pulping. So a crusher was designed & fabricated. Several experiments were conducted on the pulping of abaca stalks.

Project Cost and Source of Funding: ₱ 92,284.89, NIST

Cooperating Agencies: None

Date Started: July 1, 1969

Duration or Expected Date of Completion: 3 years  
Date of Completion (for completed projects): June 30, 1972  
Present Status of Project: Suspended as of July 1972

**Project Title: STUDIES ON COCONUT TIMBER UTILIZATION**

Name and Address of Principal Investigator: R. N. Palomar, U. K. Sulo, W. Killmann and R. A. Juson; Zamboanga Research Center, Philippine Coconut Authority, San Ramon, Zamboanga City

Description of the Project: The project is aimed to explore the potential and economic uses of coconut palm timber. The areas of research currently being undertaken include logging, saw milling, machining, seasoning/drying, preservation field and service testing design and construction making, and other aspects of utilizing the coco trunks.

Project Cost: Approximately P 1M

Source of Funding: Philippine Government, UNDP/FAO and New Zealand Government

Cooperating Agencies: UNDP/FAO and New Zealand Government

Date Started: May 1976

Duration: 10 Years (App.)

Present Status of Project: On-going

**Project Title: DEVELOPMENT OF GRASS SEED HARVESTER AND SEED SACRIFIER**

Name and Address of Principal Investigator: Arsenio Resurreccion

Cooperating Agencies: University of the Philippines at Los Baños (UPLB)

Date of Completion (for completed projects): 1976

**Project Title: DESIGN, CONSTRUCTION AND TEST OF CENTRALIZED CURING BARN**

Name and Address of Principal Investigator: Ernesto Lozada

Cooperating Agencies: University of the Philippines at Los Baños (UPLB)

Date Started: 1975

Duration or Expected Date of Completion: 1981

Present Status of Project: on-going

**Project Title: MODIFICATION OF HAND TRACTOR FOR CANE CUTTING**

Cooperating Agencies: Philippine Sugar Commission (PHILSUCOM)

Present Status of Project: on-going



Project Title: EX-POST PROJECT ANALYSIS OF SELECTED GRAVITY  
IRRIGATION SYSTEMS IN THE PHILIPPINES

Name and Address of Principal Investigator: Remigio D. Torres  
College of Agriculture

Cooperating Agencies: University of the Philippines at Los Baños (UPLB)

Date Started: January 1, 1974

Date of Completion Dec. 1975

Project Title: INTEGRATED RESEARCH IN MULTIPLE CROPPING WATER  
MANAGEMENT OF UPLAND CROPS IN MULTIPLE CROPPING  
SCHEME

Name and Address of Principal Investigator: Pantaleon B. Tabanao  
College of Agriculture

Cooperating Agencies: University of the Philippines at Los Baños (ULPB)

Date Started: 1976

Duration or Expected Date of Completion: 1980

Present Status of Project: on-going

Project Title: SUPPLEMENTARY IRRIGATION TRIAL

Name and Address of Principal Investigator: Eduvigas B. Pantastico

Cooperating Agencies: Philippine Council for Agriculture and Resource Research  
(PCARR)

Date Started: March 1, 1975

Duration or Expected Date of Completion: 1980

Present Status of Project: On-going

Project Title: DIFFERENT ENGINEERING STRUCTURES TO CONTROL  
GULLY FORMATION IN THE PINE FOREST WATERSHEDS

Name and Address of Principal Investigator: Felipe Pameron

Cooperating Agencies: Forest Research Institute (FORI)

Date Started: 1976

Duration or Expected Date of Completion: 1981

Present Status of Project: on-going

Project Title: WATER MANAGEMENT ON CROPS AND CROPPING SYSTEMS

Name and Address of Principal Investigator: Wilfredo David, INSAET

Cooperating Agencies: University of the Philippines at Los Baños (UPLB)

Date Started: January 1975

Duration or Expected Date of Completion: 1980  
Present Status of Project: on-going

Project Title: IRRIGATION AND FIELD WATER MANAGEMENT STUDIES  
FOR LEGUME CROPS

Name and Address of Principal Investigator: Abraham A. Caoilo  
Cooperating Agencies: University of the Philippines at Los Baños (UPLB)  
Date Started: 1980  
Duration or Expected Date of Completion: 1980  
Present Status of Project: on-going

Project Title DESIGN AND DEVELOPMENT OF A LEGUME DRYER USING  
AGRICULTURAL WASTE AS FUEL

Name and Address of Principal Investigator: Emerico Mendoza  
Cooperating Agencies: University of the Philippines at Los Baños (UPLB)  
Date Started: 1978  
Duration or Expected Date of Completion: 1980  
Present Status of Project: on-going

Project Title: DESIGN AND DEVELOPMENT OF PLANTERS FOR LEGUME  
CROPS

Name and Address of Principal Investigator: Edgardo Uy  
Cooperating Agencies: University of the Philippines at Los Baños (UPLB)  
Date Started: 1980  
Duration or Expected Date of Completion: 1982  
Present Status of Project: on-going

Project Title: DESIGN AND DEVELOPMENT OF A THRESHER FOR SOY-  
BEANS

Name and Address of Principal Investigator: Wilfredo Montes  
Cooperating Agencies: University of the Philippines at Los Baños (UPLB)  
Date Started: 1980  
Duration or Expected Date of Completion: 1982  
Present Status of Project: on-going

Project Title: DESIGN AND DEVELOPMENT OF A THRESHER FOR  
PEANUTS

Name and Address of Principal Investigator: Felimar Torrizo

Cooperating Agencies: University of the Philippines Los Baños (UPLB)  
Date Started: 1980  
Duration or Expected Date of Completion: 1982  
Present Status of Project: on-going

Project Title: UTILIZATION OF DRIP-IRRIGATION EQUIPMENT FOR LEGUMES

Name and Address of Principal Investigator: Pantaleon Tabanao  
Cooperating Agencies: University of the Philippines at Los Baños (UPLB)  
Date Started: 1980  
Duration or Expected Date of Completion: 1982  
Present Status of Project: on-going

Project Title: DESIGN OF AN EFFICIENT COPRA DRYER AND DEVELOPMENT OF A STORAGE TECHNIQUE

Name of Principal Investigator: Ernesto Lozada  
Cooperating Agencies: University of the Philippines at Los Baños (UPLB)  
Date Started: January 1978  
Duration or Expected Date of Completion: 1981  
Present Status of Project: On-going

Project Title: DESIGN, DEVELOPMENT AND TESTING OF LOW-COST PLANTER THRESHER AND DRYER FOR SMALL-SCALE SORGHUM PRODUCTION

Name and Address of Principal Investigator: J. Castañeda  
Cooperating Agencies: Bureau of Plant Industry (BPI)  
Date Started: 1978  
Duration or Expected Date of Completion: 1980  
Present Status of Project: on-going

Project Title: DESIGN, TESTING AND DEVELOPMENT OF MINIMUM TILLAGE EQUIPMENT FOR CORN AND SORGHUM IN MINDANAO

Name and Address of Principal Investigator: Jose T. Lorenzana  
Cooperating Agencies: University of Southern Mindanao (USM)  
Date Started: 1978  
Duration or Expected Date of Completion: 1980  
Present Status of Project: on-going

Project Title: DESIGN AND DEVELOPMENT OF HULLING MACHINES FOR CASTOR BEANS

Present Status of Project: on-going (as of 1980)

Project Title: DESIGN AND DEVELOPMENT OF HARVESTING EQUIPMENT FOR UNDRAINED AND MUDDY RICE PADDIES

Name and Address of Principal Investigator: Jose A. Silva  
Cooperating Agencies: National Grains Authority  
Date Started: 1979  
Duration or Expected Date of Completion: 1981  
Present Status of Project: on-going

Project Title: DEVELOPMENT OF A BRICKETING MACHINE FOR RICE HULL & OTHER WASTES

Name and Address of Principal Investigator: Antonio Mercado Jr.  
Cooperating Agencies: Bureau of Plant Industry (BPI)  
Date Started: 1978  
Duration or Expected Date of Completion: 1980  
Present Status of Project: on-going

Project Title: DEVELOPMENT OF A PINIPIG MILL

Cooperating Agencies: Bureau of Plant Industry (BPI)  
Present Status of Project: on-going

Project Title: DESIGN AND DEVELOPMENT OF A PNEUMATIC SEPARATOR FOR GRAIN CEREALS

Name and Address of Principal Investigator: T. Castañeda  
Cooperating Agencies: Bureau of Plant Industry (BPI)  
Present Status of Project: on-going

Project Title: DESIGN AND DEVELOPMENT OF FARM TOOLS FOR PRODUCTION OF ROOT CROPS AT THE FARM LEVEL

Name and Address of Principal Investigator: Mariano R. Villanueva  
Cooperating Agencies: Visayas State College of Agriculture (VISCA)  
Present Status of Project: on-going

Project Title: DRIP IRRIGATION

Name and Address of Principal Investigator: Francisco Mercado  
La Granja Expt. Station  
La Carlota City

Description of the Project: A Drip Irrigation System is composed of a header, main line, submains and laterals. The header, serves as the general control of water entering the system. The main line serves as a conveyance system for delivering the total amount of water

entering the system. Submains act as control that will adjust water pressure in order to deliver the required amount of flow into each lateral and they are also used to control irrigation time for individual fields. Laterals are designed to distribute water into the field with an acceptable degree of uniformity.

Project Cost and Source of Funding: Cost is undetermined, Source is PHIL-SUCOM

Cooperating Agencies: None

Date Started: March 1979

Duration or Expected Date of Completion: 2 years

Date of Completion (for completed projects): None

Present Status of Project: In progress

Other Relevant Information: For further details of the study, contact Mr. Mercado in the indicated address.

Project Title: DEVELOPMENT OF STUBBLE SHAVER

Name and Address of Principal Investigator: Francisco Mercado  
La Granja Expt. Station  
La Carlota City

Description of the Project: This study attempts to develop a stubble shaver using local materials mounted on a 13 hp tractor. The main objective is to mechanize cutting of sugarcane stubbles which is generally done manually.

Project Cost and Source of Funding: Undetermined  
Source — PHILSUCOM

Cooperating Agencies: None

Date Started: March 1979

Duration or Expected Date of Completion: 2 years

Present Status of Project: In progress

Other Relevant Information: If further details are necessary, please contact Mr. Mercado in the indicated address.

Project Title: FIELD TESTING OF THE WATERLOO HANDPUMP PROJECT

Name and Address of Principal Investigator: IRDC

Description of the Project: Technical Economic Evaluation of the Waterloo Handpump

Project Cost and Source of Funding: International Research and Development Centre (Can\$69,500)  
FOREX: Can. \$1 = ₱6.2

Cooperating Agencies: UP ISSI

Date Started: January, 1979

Duration or Expected Date of Completion: April, 1981

Present Status of Project: 60%

Other Relevant Information: The project is supposed to be for 24 months only. However, we were able to negotiate for an extension of 4 months.

Project Title: A. DESIGN AND ANALYSIS OF SOLAR BATCH TYPE DRYER  
B. DESIGN, CONSTRUCTION AND PERFORMANCE TEST OF MINI-TYPE RICE THRESHER.  
C. DESIGN, AND CONSTRUCTION AND PERFORMANCE TEST OF LOUVER BATCH TYPE DRYER

Name and Address of Principal Investigator: College of Engineering, faculty and students of Cabanatuan City Colleges. With the coordination of local inventors group. Burgos Ave., Cabanatuan City Philippines.

Date Started: June 15, 1980

Duration and Date of completion: One year (or on March 30, 1981)

Present Status of Project: In the process of making the outline and the design.

Source of Funding: Founded by institutions from the special project allotment as well as concerned citizens.

Brief Discriptions: To familiarize the students on the constructions of the different machineries and equipment that are needed in the farm.