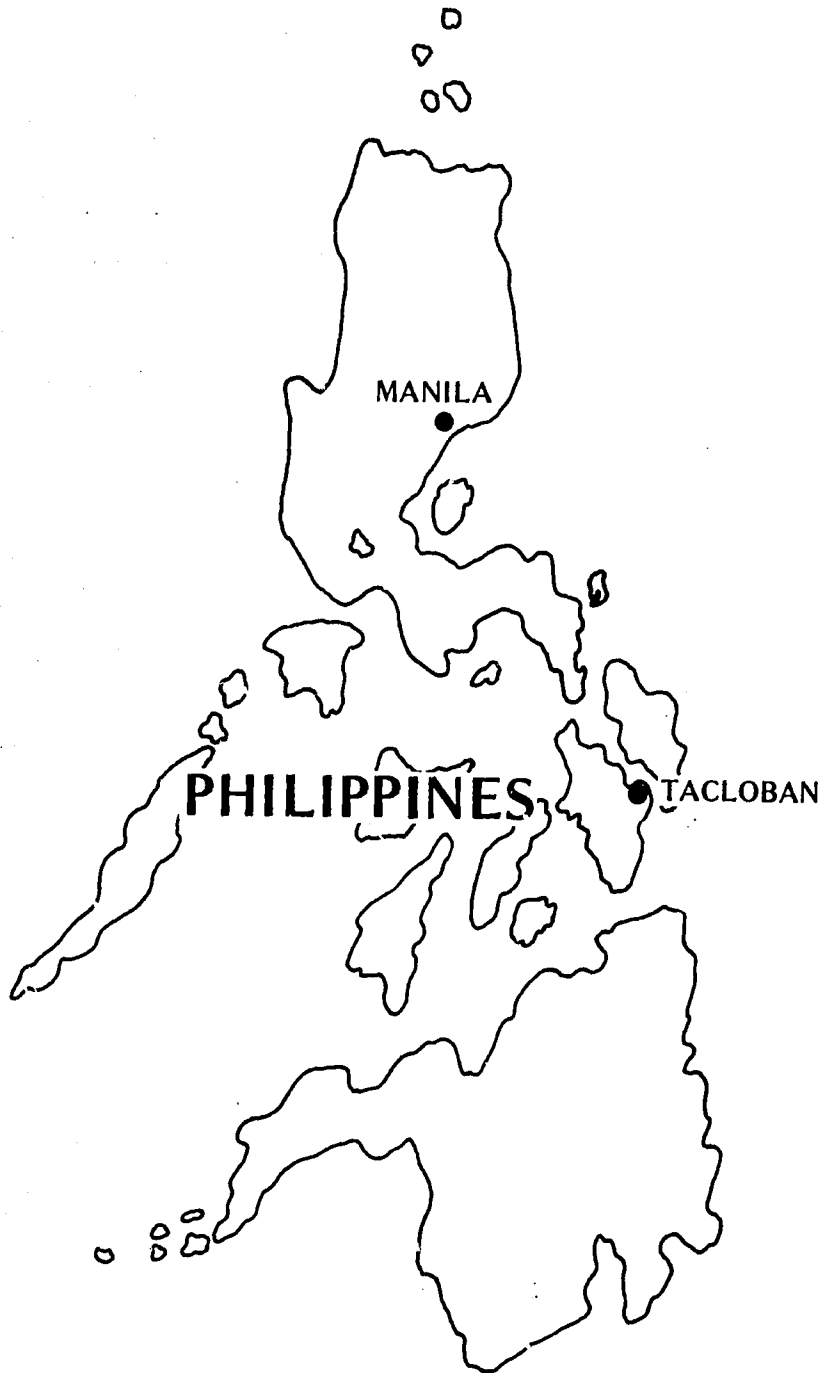


# SMALL-SCALE INDUSTRY GRANT YEAR II



UNIVERSITY OF THE PHILIPPINES  
INSTITUTE FOR SMALL-SCALE INDUSTRIES ACTIVITIES

Grant Period: January 10, 1977 to January 9, 1978



A PROGRAM FUNDED BY THE U.S. AGENCY FOR  
INTERNATIONAL DEVELOPMENT

FINAL REPORT  
YEAR II

UNIVERSITY OF THE PHILIPPINES  
INSTITUTE FOR SMALL-SCALE INDUSTRIES  
SMALL-SCALE INDUSTRY GRANT

by  
Chito Alvizo  
and  
Donald E. Lodge

Contract No. AID/ta-c-1062

Office of International Programs  
Engineering Experiment Station  
GEORGIA INSTITUTE OF TECHNOLOGY  
Atlanta, Georgia 30332, U. S. A.  
January 1978

## Table of Contents

	<u>Page</u>
INTRODUCTION	1
PROGRAM PLANS FOR YEAR II	5
Background	5
General Objective	7
Total Project Goals of the AID/ta-c-1062 Contract	8
Program of Work	8
Use of Grant Funds by UP/ISSI	10
UP/ISSI EXTENSION OFFICE ACTIVITIES DURING PROGRAM YEAR II	11
Program of Industrial Development	11
Seminar on Entrepreneurship	11
Working Agreement with Divine Word University	12
Contact with Existing Industry	12
Training of Extension Office Staff	12
Linkages with Other Agencies and Organizations	14
Broadening of Area in Which Extension Services Are Provided	17
Appropriate Technology	17
Other Activities	21
GEORGIA INSTITUTE OF TECHNOLOGY ACTIVITIES DURING PROGRAM YEAR II	25
RESULTS AND CONCLUSIONS	29
APPENDICES	31
1. Economic Development Program for Eastern Visayas (Region VIII), Philippines	33
2. Profile of Participants in Entrepreneurship Seminar	35
3. Summary of Technical Assistance Cases, 1977	37
4. Industrial Extension Training Program for Mr. Gotico, UP/ISSI, November 7-25, 1977	49
5. Problems of Rural Small-Scale Industries by Industry Group, Region VIII	51
6. Employment Level of Industries Contacted by Province, 1977	57

Tables

1. Disbursement of Grant and Other Project Funds, UP/ISSI - Year II	10
2. Employment Generation within Assisted Firms, Year II	13
3. Geographical Distribution of Inquiries Served, 1977	18

Figures

1. Organizational Chart of the University of the Philippines Institute for Small-Scale Industries, January 10, 1977	6
2. Wagon-Type Cart Designed by UP/ISSI-PEO, Side View	19
3. Wagon-Type Cart Designed by UP/ISSI-PEO, Front View	20
4. Wood Lathe Designed by UP/ISSI-PEO	22
5. Project Plan, Year II	26

## INTRODUCTION

On January 31, 1977, the Agency for International Development (AID) funded, for the fourth consecutive year, Contract No. AID/ta-c-1062, through which the Georgia Institute of Technology (GIT) was to make available \$45,000 grants for small-scale industry development programs to four institutions of higher learning in different geographic regions of the world. Three of the four grants would be for the continuation of existing programs with counterparts selected in 1974 and 1975; the fourth grant was for a new counterpart selected in 1977.

Of the three grants for the continuation of existing programs, one went to the University of the Philippines Institute for Small-Scale Industries (UP/ISSI) in Quezon City, Philippines. This document is the final or end-of-the-year report for the work jointly performed by the staffs of UP/ISSI in the Philippines and the Office of International Programs (OIP) of Georgia Tech in Atlanta, Georgia.

When the grant was initiated in 1974, the administration of GIT and the sponsor established the following criteria for the selection of grantee institutions:

1. Suitability of the national macroeconomic framework for local business conditions.
2. Existence of practicing or potential entrepreneurs.
3. Community concern over unemployment.
4. Existence of potential markets for additional products.
5. Linkages (current or potential) with educational, financial, and business communities.
6. Quality of the staff.
7. The institution's potential for utilizing the grant effectively.
8. Potential multiplier effects.
9. Host government commitments.

At the end of the second year of this program, the following results are indicative of the work performed:

1. Work was begun on a program of industrial development for Region VIII.

2. A seminar on entrepreneurship was held, with 16 persons graduating.
3. A working agreement was signed with the Divine Word University for the sharing of resources by the two schools. This gives the pilot extension office staff access to a machine shop.
4. Twenty-two firms were provided with technical assistance during the year.
5. A survey of firms receiving technical assistance during 1977 shows a gain of 47 jobs -- a 31% increase over the period during which technical assistance was being provided.
6. The members of the pilot extension office staff participated in the Industrial Extension Training Course held on the main campus of the University of the Philippines.
7. One member of the pilot extension office staff received training from the Office of International Programs, Georgia Institute of Technology.
8. A five-day workshop/seminar on the concept and practice of entrepreneurial development was proposed and coordinated by the staff, in cooperation with nine private and government agencies and ten colleges and universities. Twenty-three college and university faculty members were graduated from the workshop/seminar.
9. Work was begun during the second quarter of 1977 on a training program on fermentative food processing and food preservation. The pilot extension office will receive ₱15,000 for studies related to this program.
10. A trade organization of automobile and metalworking shops located in Tacloban was formed, due to the work of the pilot extension office. Representing 48 firms, it is called the Tacloban Ironworks and Engineering Industries Association.
11. One hundred thirty six apprentices were graduated from a skills training program for automotive and machine shop workers. This program was conducted by the Tacloban Ironworks and Engineering Industries Association with assistance from the pilot extension office staff.

12. The staff designed a cart for handling material and waste in a wood products plant. The carts will be acquired upon approval of a bank loan.

13. The staff designed and constructed a wood lathe which is being used successfully in a furniture plant. This has eliminated the need to purchase turnings from off Leyte Island and has increased this manufacturer's capability for product diversification.

14. Work has begun to adapt an improved band-saw design for use in the wood products plants located in Region VIII.

15. The audiovisual documentation for Year II was completed.

16. Five project feasibility studies were prepared.

17. The staff completed a survey of small industry in Region VIII which included data on employment and problems encountered by these firms.

## PROGRAM PLANS FOR YEAR II

### Background

The University of the Philippines Institute for Small-Scale Industries (UP/ISSI) has directed its efforts since 1966 to the support of small-scale industry and entrepreneurial development in the Philippines, concerning itself particularly with appropriate support for rural development.

In behalf of Philippine small-scale industry, the UP/ISSI activities have included management training, in-plant technical assistance support, entrepreneurial development, management and technical data development and dissemination, as well as the continuing and successful advancement of its own professional and executive capacities.

In August 1975, a request for assistance in the establishment of a pilot rural extension office for small and medium-scale industries was made by UP/ISSI to the Economic Development Laboratory (now the Office of International Programs) of the Georgia Institute of Technology. This widening of the ISSI professional capacities, particularly the intensification of its programs for direct rural development activity, was in response to government executive directives to government operating agencies to intensify efforts for the establishment of appropriate industries in regions outside the Greater Manila area.

The beneficiaries of the successful Institute programs for the development of small and medium-scale industries had been limited largely to urban areas, essentially to the Manila urban area. The inability of UP/ISSI to effectively reach rural areas resulted from a continuing lack of both manpower and budget resources.

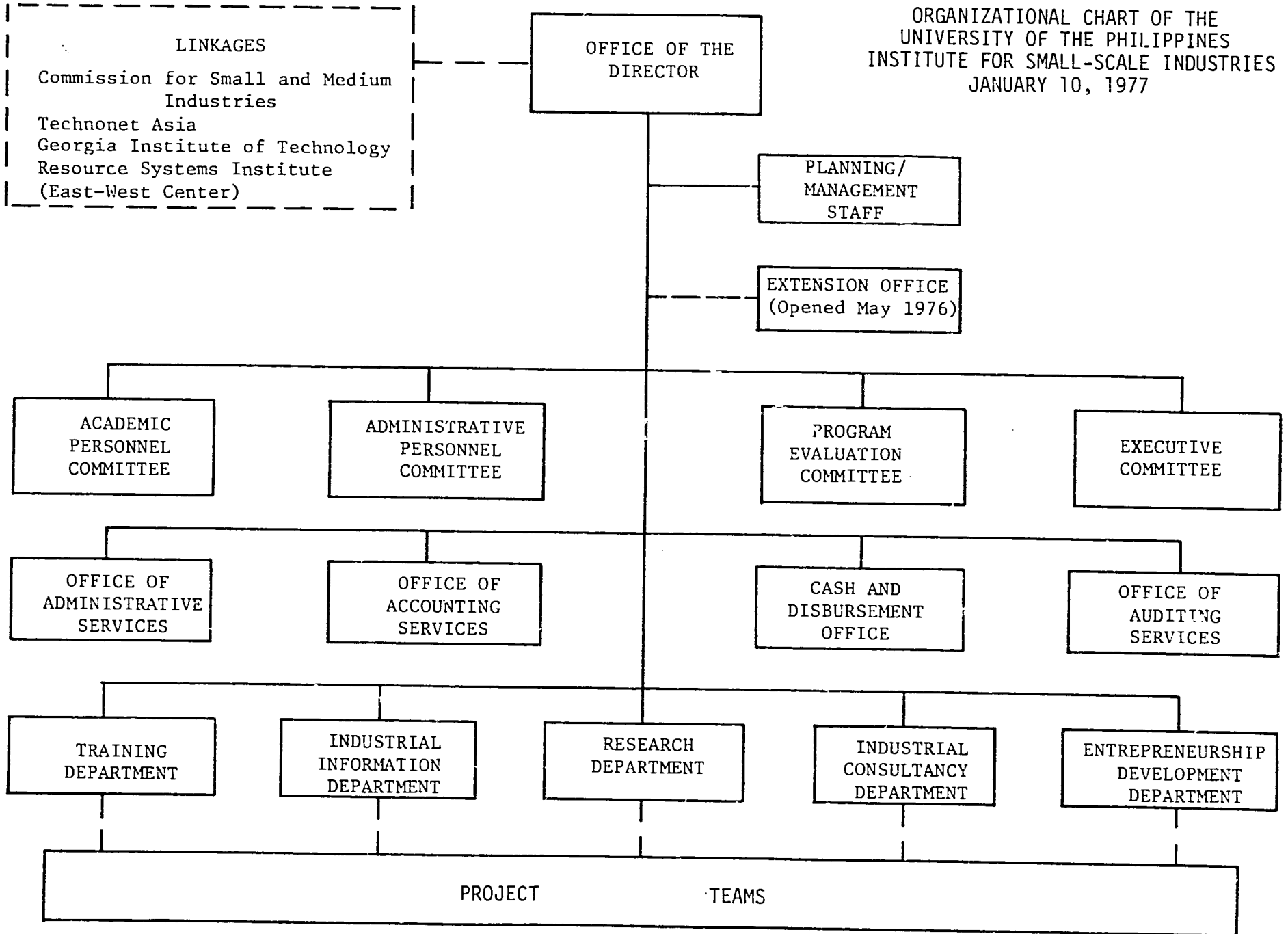
The development of further Government of the Philippines support to permit UP/ISSI to widen and direct its capacities to rural objectives has been abetted by this grant and by the technical cooperation of the Georgia Institute of Technology (GIT).

At the time the Year II program was initiated, the UP/ISSI organizational structure was as presented in Figure 1. For UP/ISSI, Mr. Paterno V. Vilcrista has been designated Counterpart Project Director. Mrs. Sonia Aquino is Counterpart Project Coordinator. Mr. Nelson C. Wall is Project Director for the Georgia Tech support activities to this program and Mr. Donald E. Lodge is the Project Coordinator for Georgia Tech.



FIGURE 1

ORGANIZATIONAL CHART OF THE  
UNIVERSITY OF THE PHILIPPINES  
INSTITUTE FOR SMALL-SCALE INDUSTRIES  
JANUARY 10, 1977



### General Objective

As a pilot effort, UP/ISSI, with support from GIT, is to design and establish an extension office to accommodate industrial development needs within Region VIII (Eastern Visayas) of the Philippines. Region VIII covers the provinces of Northern Samar, Eastern Samar, Western Samar, Leyte, Southern Leyte, and the subprovince of Biliran.

With intent to closely adhere to the UP/ISSI performance standards at Quezon City (UP/ISSI principal office), the specific objectives of the extension office at Tacloban City, Leyte, are to include, as stipulated by Republic Act 6041:

1. To undertake the continuous conduct of consultancy, training courses, periodic seminars, and technical studies in the field of medium- and small-scale industries, with emphasis on Philippine industries;
2. To undertake technical studies and research as requested by various government agencies concerned with industrial development, by interested private industries, and by others concerned with industry;
3. To undertake research studies for the promotion of small-scale industries;
4. To undertake the publication of studies, monographs, research papers, articles, and other written works on small and medium-scale industry, with emphasis on those related to the Institute's objectives, for distribution to government agencies, private industry, and other interested parties; and
5. To perform all other acts as may be necessary for the achievement of its objectives and functions in accordance with the rules and regulations of the University, including the granting of research awards, prizes, scholarships, and fellowships.

In the performance of these functions, the extension office is to be fully directed and otherwise supported by the ISSI senior staff at Quezon City. The extension office staff will call upon the ISSI main office and its cooperating agencies for specialized and specific areas of assistance on a project-to-project basis as required.

## Total Project Goals of the AID/ta-c-1062 Contract

At the start of the Small-Scale Industry Grant on January 23, 1974, the following total goals had been established by the Agency for International Development for the Georgia Tech Grant, to be achieved over a period of four years:

The general objective of this contract is to generate employment in developing countries, particularly outside the metropolitan centers, by: (a) strengthening the capability of a selected institution in each country to provide effective technical assistance to local small industry, (b) demonstrating and documenting the impact of alternative approaches to technical assistance to small industry, and (c) infusing the governmental, industrial, and financial sectors of the local community selected to provide employment with an understanding of the techniques of generating jobs. The above objective will be carried out through the use of grants to selected Lesser Developed Country (LDC) organizations.

Once the total project goals are reached, the sponsor anticipates the following outputs:

1. Increased job opportunities in four countries.
2. Increased viability of indigenously owned enterprises.
3. Improved capability of four LDC institutions to serve small industry.
4. Tested methodologies for strengthening LDC institutions.
5. Evaluation reports on successes and failures in assisting small industry.

All the specific program objectives for Year II in the Philippines were met, plus several additional accomplishments which were listed in the Introduction and which will be amplified in the balance of this final report. The meeting of these objectives supports the continuing establishment of project goals set forth by the AID/ta-c-1062 contract.

### Program of Work

On the basis of the program of work which had been suggested in the original UP/ISSI proposal, the project administration established the following activities for the second program year, all of which were implemented:

1. Training
  - management and technical courses (short- and long-term)
  - seminars for selected industries

- seminars on entrepreneurship
- 2. Research
  - provincial surveys
  - industry profiles/studies
  - technological studies
  - product research
- 3. Extension Services
  - general information: handouts and reports
  - general management consultancy
  - direct plant assistance
  - project feasibility studies
  - industry and entrepreneurship promotion on the regional level

More specific goals for Year II include the following:

1. Develop a program of industrial development aimed at attracting new branch plants of firms headquartered outside Region VIII. Such a program also will aid indigenous entrepreneurs who wish to establish plants or to expand existing plants in the region.
2. Conduct a seminar on entrepreneurship development to be held in Region VIII for new or potential entrepreneurs.
3. Formulate a working agreement with the Divine Word University in Tacloban City regarding the use of its engineering laboratories.
4. Continue to maintain contact with the existing industry of the region with intent to establish confidence in the extension office staff and its activities.
5. Continue to upgrade, through training and recruitment, the skill level and performance effectiveness of UP/ISSI staff.
6. Continue to seek out and establish linkages with other national and international agencies and organizations involved in or related to small-scale industry or appropriate technology.
7. Introduce the services of the extension office in the other parts of the region; specifically, Osmoc, Baybay, Maasin, Calbayog, Catbalogan, and Catarman. Small industries in these areas will be visited in order to determine needed areas of assistance.

8. Sponsor participation of one of the extension office staff members in an Industrial Extension Training Course which will be held on the main campus of the University of the Philippines.

Use of Grant Funds by UP/ISSI

For the 1977-1978 Grant Year (January 10, 1977-January 9, 1978), the grantee was funded in the amount of \$45,000 from USAID and \$3,132 from the University of the Philippines. Disbursement was accomplished as shown in Table 1.

Table 1  
DISBURSEMENT OF GRANT AND OTHER PROJECT FUNDS  
UP/ISSI - YEAR II  
(in U. S. dollars)

	<u>From USAID</u>		<u>From Univ. of the</u>
	<u>UP/ISSI</u>	<u>GIT</u>	<u>Philippines</u>
	<u>UP/ISSI</u>	<u>GIT</u>	<u>UP/ISSI</u>
Personal Services	\$ 9,400	\$13,000 <sup>1/</sup>	\$3,132
Travel - Domestic	1,300	-	-
Travel - Foreign	2,900	5,000	-
Materials & Supplies	6,900	4,500	-
Equipment	<u>2,000</u>	<u>-</u>	<u>-</u>
Total	\$22,500	\$22,500	\$3,132

<sup>1/</sup> Includes the authorized GIT overhead and retirement charges.

## UP/ISSI EXTENSION OFFICE ACTIVITIES DURING PROGRAM YEAR II

The activities reported for the UP/ISSI extension office at Tacloban City, Leyte, were performed under the supervision of the Counterpart Project Director, Mr. Paterno Vilorio, Director, UP/ISSI, Quezon City, and the Counterpart Project Coordinator, Mrs. Sonia T. Aquino, Associate Director, UP/ISSI, Quezon City. The Officer-in-Charge at Tacloban City during January-October was Mr. Ignacito V. Alvizo, and from November onwards was Mr. Ed Kakanay. The following sections highlight the activities for the year.

### Program of Industrial Development

In March, the pilot extension office staff prepared, with assistance from Ms. Kay Powell of GIT, an industrial development program for Region VIII. (See Appendix 1.)

During Year II, the pilot extension office conducted a number of studies in order to provide a data base for use in the program of industrial development. These included a survey of small-scale industry on Leyte, a study of incentives for rural small-scale industry, five project feasibility studies, and a directory of manufacturers in Region VIII. The project feasibility studies were on a sash factory, a welding shop, a rattan furniture plant, a wooden furniture plant, and a memorial park/mortuary/casket manufacturing plant.

### Seminar on Entrepreneurship

A seminar on entrepreneurship development was held in Maasin, Southern Leyte, during the first two quarters of 1977. A total of 16 participants were graduated from this seminar. Profiles of the graduates appear in Appendix 2.

One feature of the seminar program was to provide follow-up consultancy to the graduates. As of the last visit in Southern Leyte, one new venture project had been approved by the Development Bank of the Philippines (DBP) for financing. The start of operations awaits the delivery of machinery. Two similar industries with aggregate employment of 20 were established right after the end of the seminar. One expansion project with 14 workers was awaiting approval by the DBP. A new venture which will utilize indigenous resources will be proposed.

The same seminar was scheduled to be held in Catbalogan and Ormoc City. However, there were only six registrants for the proposed program in Catbalogan, and the proposed cooperating agency in Ormoc City was busy with semestral break activities. Therefore, these two seminars were cancelled.

#### Working Agreement with Divine Word University

A formal working agreement was signed with the Divine Word University (DWU), located in Tacloban, Leyte, in which the extension office and the University agreed to share resources in the promotion of entrepreneurship in the region. The most tangible result of this agreement was the fabrication by a member of the extension office staff in the DWU machine shop of a wood lathe for use by a furniture plant.

#### Contact with Existing Industry

The pilot extension office continued working during 1977 with 11 firms that had requested technical assistance during 1976. Seven of these firms are located in Tacloban City; two are located in Jaro; and one each in Palo and Pinamopon. All are on the island of Leyte.

Eleven additional technical assistance cases were opened during 1977. Only one of these companies is located in Tacloban City; seven are in rural areas of Leyte; and three are on the island of Samar.

Details of the work done for these firms appear in Appendix 3, "Summary of Technical Assistance Cases."

A survey of the firms receiving technical assistance shows a gain of 47 new jobs in Region VIII, an increase of 31% over the period when technical assistance was being given. (See Table 2.)

#### Training of Extension Office Staff

Ms. Lourdes Abrugar, Senior Research Assistant with the pilot extension office, received a fellowship from Technonet Asia to attend a two-month Industrial Extension Training Course at UP/ISSI.

Mr. Teodoro Gotico, Research Assistant with the pilot extension office, also participated in the two-month Industrial Extension Training Course.

Table 2  
EMPLOYMENT GENERATION WITHIN ASSISTED FIRMS, YEAR II

Case No.	Employment		Variance
	Start	Present	
1	0	0	0
2	4	4	0
3	2	2	0
4	20	20	0
5	3	3	0
6	*	*	*
7	*	*	*
8	*	3	3
9	5	5	0
10	18	22	4
11	11	8	-3
12	2	3	1
13	*	*	*
14	2	2	0
15	29	29	0
16	**	**	**
17	5	7	2
18	5	6	1
19	25	60	35
20	3	3	0
21	3	7	4
22	<u>14</u>	<u>14</u>	<u>0</u>
	151	198	47

\* Proposed project, business not yet established.

\*\* This firm, excluded from employment count, has had to curtail employment by 78 (from 106 to 28), due to a government ban on cutting its major raw materials. The pilot extension office has taken action on this matter, which now awaits government response. (See Case 16, Appendix 3.)

Source: Pilot Extension Office, UP/ISSI, Survey Data, Fourth Quarter 1977.



He also received two and one-half weeks of training in industrial extension at the Georgia Institute of Technology. The outline for this course appears as Appendix 4.

#### Linkages with Other Agencies and Organizations

Recognizing the need to coordinate its activities with those of other government agencies in the region, the extension office developed working relationships with other agencies in the execution of the following projects:

Introduction of Entrepreneurial Development in Business Courses at the College Level. During the first quarter of Year II, plans for a seminar on the concept and practice of entrepreneurial development were discussed in a meeting with the Project Coordinating Council (PCC), an organization composed of nine private and government agencies, religious and civic organizations and ten colleges and universities.

The extension office staff prepared the project proposal, coordinated a five-day workshop/seminar, conducted a program follow-up, and provided two staff members from the UP/ISSI-Diliman office who presented lectures on entrepreneurship during the workshop/seminar.

During Year II this program graduated 23 faculty members from the colleges and universities located in the growth centers of Region VIII. These faculty members will introduce the concept and practice of entrepreneurship among students at the college level. The seminar resulted in a syllabus of courses geared toward entrepreneurship development for first- and second-year students of business administration.

Leyte Sab-a Basin Handicraft Project. This project was conceived during the last quarter of 1976 and approved during the second quarter of 1977. It was intended to provide supplemental income to 30 farmer-settlers in Barangay San Paglaum. Skill training in basket making was undertaken by a resident skills trainer, assisted by a skills trainer from the National Cottage Industries Development Authority (NACIDA).

Although there were 30 trainees at the outset, the number of trainees in the skills training program dwindled to 11 on the day before its temporary suspension. The suspension occurred at a time when the trainee farmers were busy with the harvest and the fiesta and were being transferred to the resettlement site. It had been noted that the remaining 11 (or 21%) had progressed

well in basket weaving. The rest of the trainees were either disinterested or had other commitments. The project has not yet been revived pending the transfer of the skills trainer to the resettlement site.

The Leyte Sab-a Basin Development Authority (LSBDA) provided funding of up to ₱16,000 for working capital for a period of two years. A portion of this amount will be liquidated by the production workers after every monthly or quarterly sale of their baskets. If successful, similar training programs would be directed to neighboring towns and barrios in the Sab-a Basin.

NACIDA's commitment involves skills training and market assistance. Products not sold by NACIDA would be marketed by the LSBDA. UP/ISSI and the Leyte Development Staff (LDS) provided the project proposal, supervision management, and evaluation.

Information Network. A meeting was held with the Commission of Small and Medium Industries (CSMI) member agencies in the region to propose the organization of an information network. The project was approved in principle; however, due to problems of funding for the information network, it was scrapped. Nevertheless, the UP/ISSI pilot extension office (PEO) completed a bibliography of technical materials and journals available in its library. This project was to have been called LINK and was intended to bridge the gap in industrial information.

Fermentative Food Processing and Food Preservation. The Department of Social Services and Development (DSSD), in cooperation with the National Science Development Board (NSDB), proposed the conduct of a training program on fermentative food processing and food preservation for the clientele of the former agency. After training, the DSSD would finance those graduates who wished to engage in some kind of venture related to the skills acquired in the training program. This financing would be drawn from the self-employment assistance fund of the DSSD. The NSDB would undertake the technical training phase of the seminar, and the UP/ISSI-PEO would conduct the management and entrepreneurship training phase. In addition to its involvement in the actual training, the PEO would select a suitable site for the training program, follow up the graduates of the program, train the DSSD staff who would supervise the program, and determine the market feasibility of proposed commercial projects.

As of the beginning of the fourth quarter of 1977, a program proposal had been drawn up as a guideline for the market study. A preliminary screening of possible projects showed the following:

- o Meat processing would not be feasible, due to the lack of raw materials.
- o Food preserves that would have the most likelihood of success are balimbing and kamias (tropical fruits), guava jelly, jams, etc.
- o Crispy bolinao (dilis or small fish) would be feasible.
- o Vinegar made from coconut water definitely would be a marketable product.

The project started on September 9, 1977. Approved funds for the studies to be undertaken by the UP/ISSI-PEO totalled ₱15,000.

Restructured Manpower Training Program. Funded by the National Manpower and Youth Council (NMYC) in the amount of ₱45,000, this project benefited the members of the Tacloban Ironworks and Engineering Industries Association (TIEIA) and their workers. This association was organized by the UP/ISSI-PEO during the first quarter of 1977. The membership of the association is composed of owners/managers of machine shops, welding shops, automotive shops, electrical shops, and agricultural-implement shops. Monthly meetings were held in which an UP/ISSI staff member served as adviser. Membership totals 48, with 20-25 members actively involved in the program.

The skills training program dealt with two aspects: automotive and machine shop. The automotive training segment was divided into automotive electrical and industrial electrical; autobody building, tinsmithing, and painting; and auto mechanics. The machine shop training was divided into arc welding, crankshaft grinding, reborning, and lathe operation.

In all, 28 persons were trained in automotive electricity and industrial electricity, 25 in autobody building and tinsmithing, four in automotive painting, and 48 in mechanic skills training. In the machine shop skills training, six were enrolled in machine process arc welding, six in crankshaft grinding, five in reborning, and 14 on lathe machine operations. The total number of trainees in both programs was 136. Their instructors were all TIEIA members.

The workers/trainees' average age level was 21, and all were males. There were 44 high school graduates in the whole group, 32% of the total. The rest were high school dropouts or elementary school graduates.

The involvement of the UP/ISSI-PEO in this project consisted of course content and syllabus design and advisory and consultancy service to the officers and members of the association.

The project started in July 1977 and was completed in December.

#### Survey of Small-Scale Industries in Leyte and Preinvestment Study for Leyte.

This is a joint project of the UP College Tacloban and the UP/ISSI-PEO. Begun in the third quarter of 1977, the study is expected to be completed in February 1978. As of the beginning of the fourth quarter, a total of 43 entrepreneurs from the various industry sectors had been interviewed. Results of the study will be submitted to a financial institution, and will include a small-scale industry survey, a resource utilization survey, a list of priority industries, a list of potential industries, an incentive policy for rural small-scale industries, and several preinvestment studies.

#### Broadening of Area in Which Extension Services Are Provided

Despite the long distances and lengthy trips involved in serving all areas of the islands of Leyte and Samar, the pilot extension office was able to significantly broaden its coverage of Region VIII. This is particularly well illustrated in Table 3, which shows the geographic distribution of inquiries serviced during 1977.

#### Appropriate Technology

Advocating appropriate technology for the rural areas, the pilot extension office selects an impact project every year. Last year, a mechanical feed mixer was designed and fabricated to increase the feed mixing efficiency of a swine raiser in Jaro, Leyte. This design was disseminated to the other swine raisers in the region for possible adaptation; however, not a single firm took advantage of the offer.

This year, the following projects on adaptive technology were undertaken for two manufacturing industries in the region:

Soft-Drink Box Factory. A wooden cart was designed to transport materials around the manufacturing area. (See Figures 2 and 3.) This cart was designed to carry raw materials and waste materials to and from the workplace of the machine operators. Each unit will cost approximately ₱646.47 (\$67.00). The

Table 3

## GEOGRAPHICAL DISTRIBUTION OF INQUIRIES SERVED, 1977

<u>Nature of Inquiry</u>	<u>Northern Leyte</u>	<u>Southern Leyte</u>	<u>Western Samar</u>	<u>Northern Samar</u>	<u>Eastern Samar</u>	<u>Subprov. Biliran</u>	<u>Total</u>
Concept of Small-Scale Industry	83	72	70	-	-	-	225
Marketing/ Dealership	68	1	2	1	-	-	72
Production/ Technical	10	5	4	1	1	-	21
Financial Mgt., Sources of Financing & Project Study	19	3	12	-	-	1	35
Inquiries about UP/ISSI-PEO Services	3	-	1	2	1	-	7
Statistical Data on Leyte	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1</u>
Total	184	81	89	4	2	1	361

Figure 2  
WAGON-TYPE CART DESIGNED BY UP/ISSI-PEO  
SIDE VIEW

SCALE: 1:10

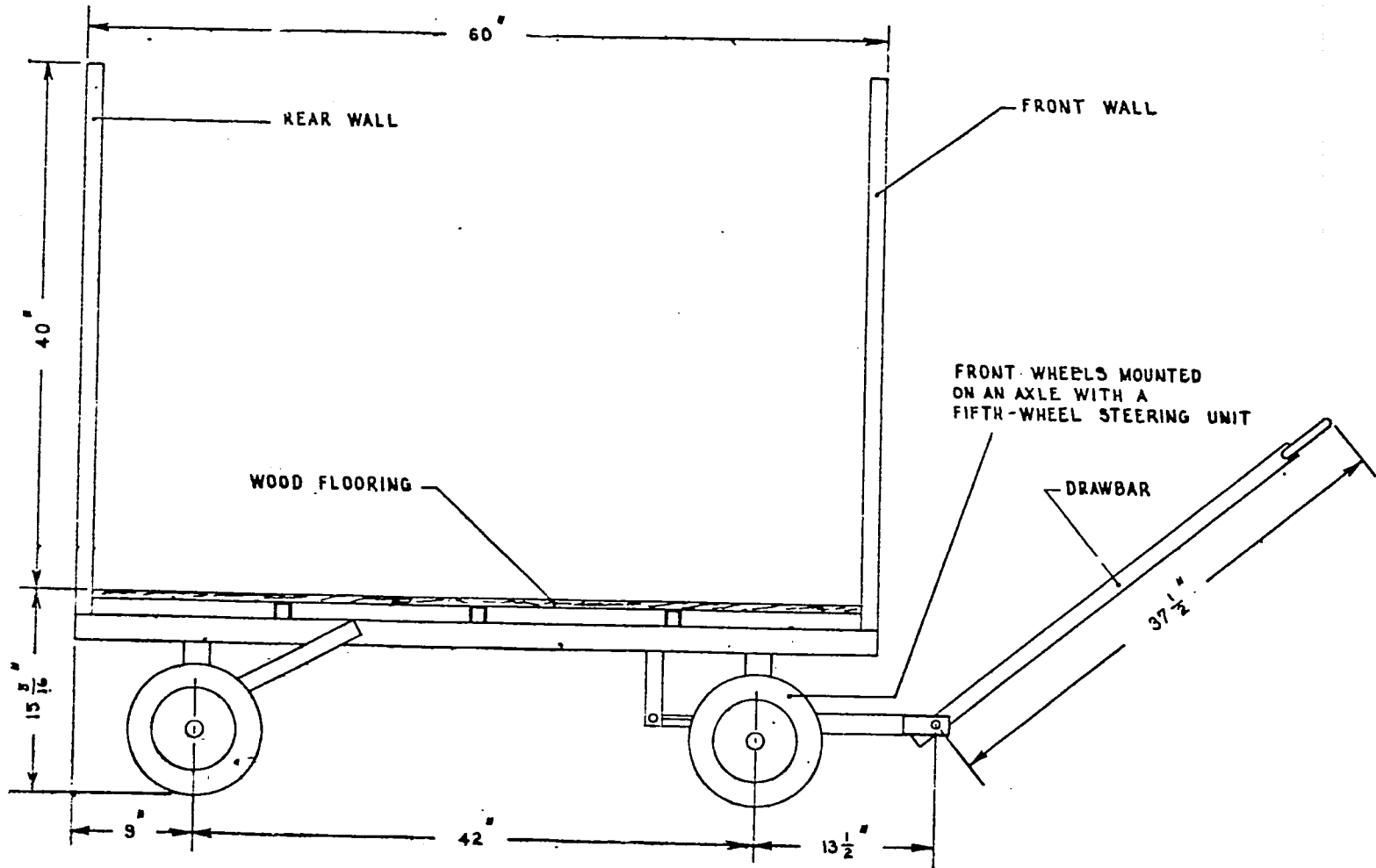
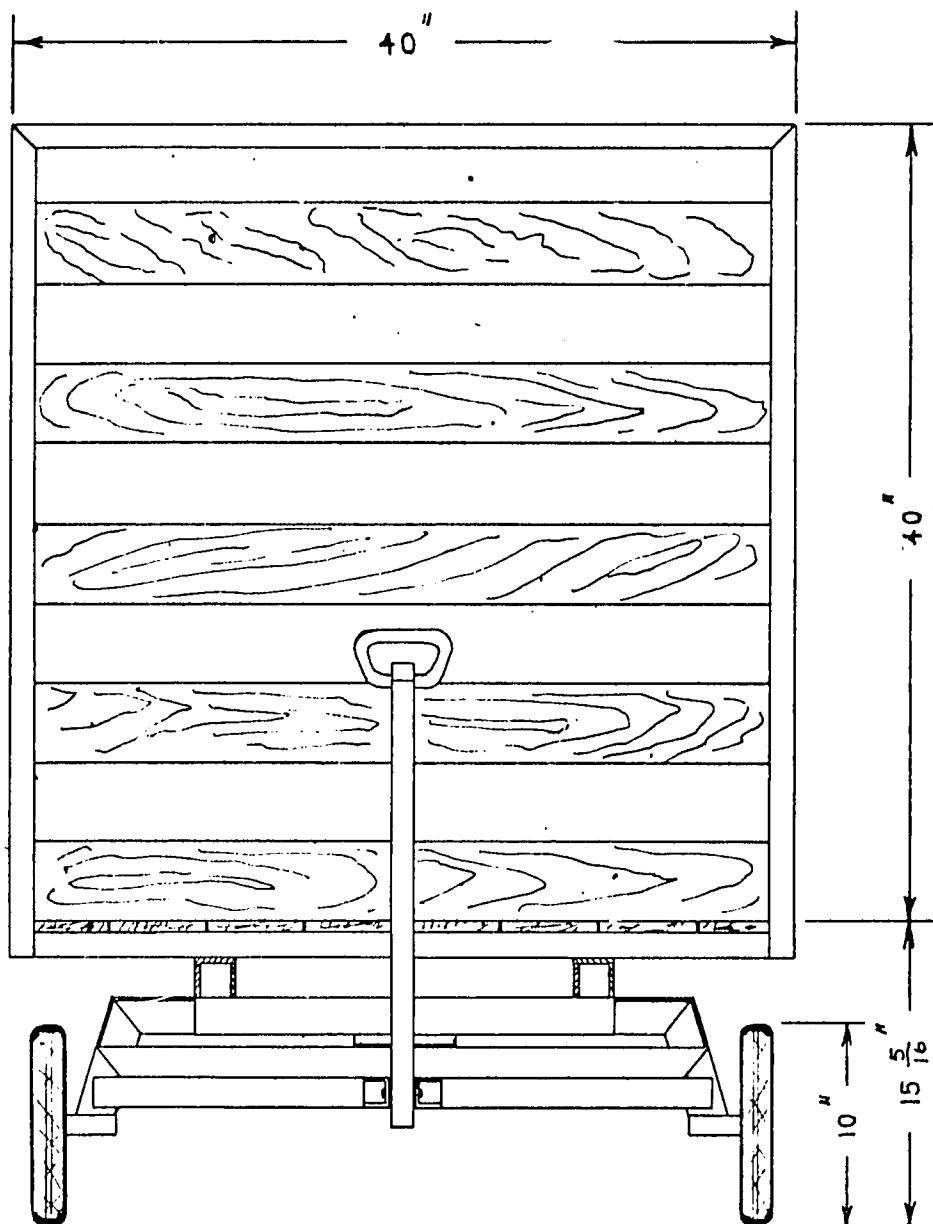


Figure 3  
WAGON-TYPE CART DESIGNED BY UP/ISSI-PEO  
FRONT VIEW

SCALE : 1 : 10



use of these carts is expected to decrease the unproductive time by about 50% in the band-saw operation, where materials clog the work area and prevent smooth operations. Although the design has been completed and the pathways for the carts have been cemented, the construction of the carts is held in abeyance pending release by the bank of funds intended for capital expenditures.

Furniture Shop. A 3-foot, 8-inch wood lathe, powered by a 1 1/2 HP motor, was designed and fabricated during the year. (See Figure 4.) The frame, spindle, tool rest, and tail stock are all made of steel bars and shafting steel. The spindle speed can be changed through a pair of step pulleys attached to the spindle and motor. The lathe uses a V-belt and has an adjustable tool rest. The machine costs approximately \$100 exclusive of the electric motor.

The decision to design and fabricate this machine was made as a result of the following considerations:

1. The shop owner could not afford to buy a commercial wood lathe.
2. It takes much time and money to order wood turnings from Cebu City, which is on a neighboring island.
3. Delivery of wood turnings is often delayed, causing delays in the delivery of finished goods.
4. There are several furniture shops in the region which could benefit from this low-cost design.

Through the advice and guidance of Dr. David Fyffe of Georgia Tech, preliminary investigations have been made to adapt an improved band-saw design for application in the furniture shops and soft-drink box factories in the region. The main feature of this band saw, which is about 80% wood, is that it stands on two posts instead of the usual four. This design reduces the downtime for changing blades, since only two adjustments are made instead of four. (The flywheel which is connected to the posts has to be adjusted every time a fresh blade is installed.) The design for this band saw will be finalized and a prototype will be fabricated early next year. Two manufacturing shops have already indicated an interest in utilizing this design.

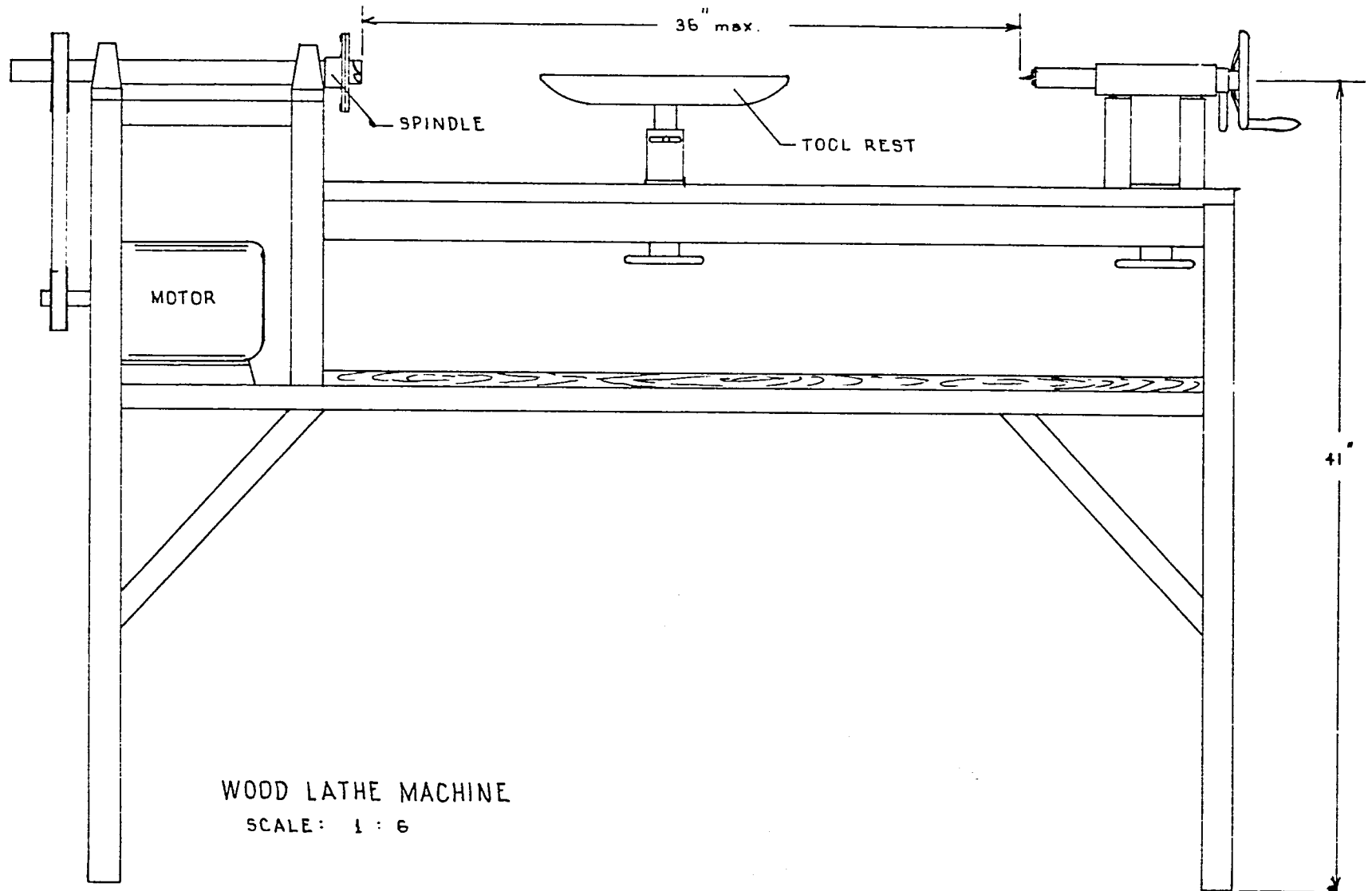
#### Other Activities

Several other activities were carried out during 1977. These included audiovisual documentation, work toward organization of a second industrial



Figure 4

WOOD LATHE DESIGNED BY UP/ISSI-PEO



WOOD LATHE MACHINE  
SCALE: 1 : 6

association, and completion of a survey of rural industry.

Two documentation projects were conducted, with black and white and colored photos and videotapes being produced of various projects. Mr. Mark W. Robinson, a U. S. Peace Corps volunteer, assisted Mr. Baldoria of the UP/ISSI staff with the first filming. The second was conducted by Mr. Baldoria and Ms. Edwina Ware of Georgia Tech.

In addition to helping organize the Tacloban Ironworks and Engineering Industries Association, as previously noted, the pilot extension office began an attempt to organize the furniture and woodcraft plants in Region VIII into a similar association. It brought Mr. Alberto L. Morales, National President of the Philippine Chamber of Furniture Industries, down to Tacloban to meet with interested entrepreneurs. Work on this project will continue into 1978.

Aware of the dearth of data on small industries in the region, the pilot extension office initiated field visits to gather employment and other basic data. Problems of small-scale industries in the rural areas also were identified and assessed. Problems that surfaced are itemized in Appendix 5.

It was determined as a result of these visits that small-scale industries in the region are mostly cottage industry. As defined by the Commission on Small and Medium-Scale Industries (CSMI), cottage industries are home industries employing fewer than five workers, having a capitalization of less than ₱100,000, and in which the owner was actively engaged in production. Small-scale industries, on the other hand, are manufacturing or service industries with five to 100 workers and ₱100,000 to ₱1 million capitalization. Out of the 273 entrepreneurs contacted, 201 gave information on their employment level. Distribution of employment data by province is shown in Appendix 6.

GEORGIA INSTITUTE OF TECHNOLOGY  
ACTIVITIES DURING PROGRAM YEAR II

The activities of the Georgia Institute of Technology for the program year were initiated by Ms. Kay Powell on March 2, 1977, when she visited the Philippines to provide on-site assistance in the project. This visit was later followed by those of Mr. Ross Hammond, Dr. David E. Fyffe, Mr. Donald E. Lodge, and Ms. Edwina Ware.

The GIT program of work had been set up by Mr. Donald E. Lodge, in consultation with the Counterpart Project Director, Mr. Paterno V. Vilorio, in November 1977. Different OIP staff members were tentatively assigned to carry out individual tasks, and the Project Plan for Year II was prepared, as shown in Figure 5. Each staff member was funded by this project or by other AID-sponsored programs. A brief summary of the individual activities follows in chronological order.

March 2-April 1, 1977 (Ms. Kay Powell)

This member of the GIT staff had the responsibility of assisting the pilot extension office in the establishment of an economic development program for Region VIII. She also aided the staff in the establishment of a record-keeping system for technical assistance cases and a daily activities log. Ms. Powell lectured on how to present a venture proposal to a bank for a loan on March 20 during the course of the Entrepreneur Development Program which was held at Maasin, Leyte.

June 28, 1977 (Mr. Ross W. Hammond)

Mr. Hammond provided administrative guidance and counseling to the Counterpart Project Director and his staff.

August 5-29, 1977 (Dr. David E. Fyffe)

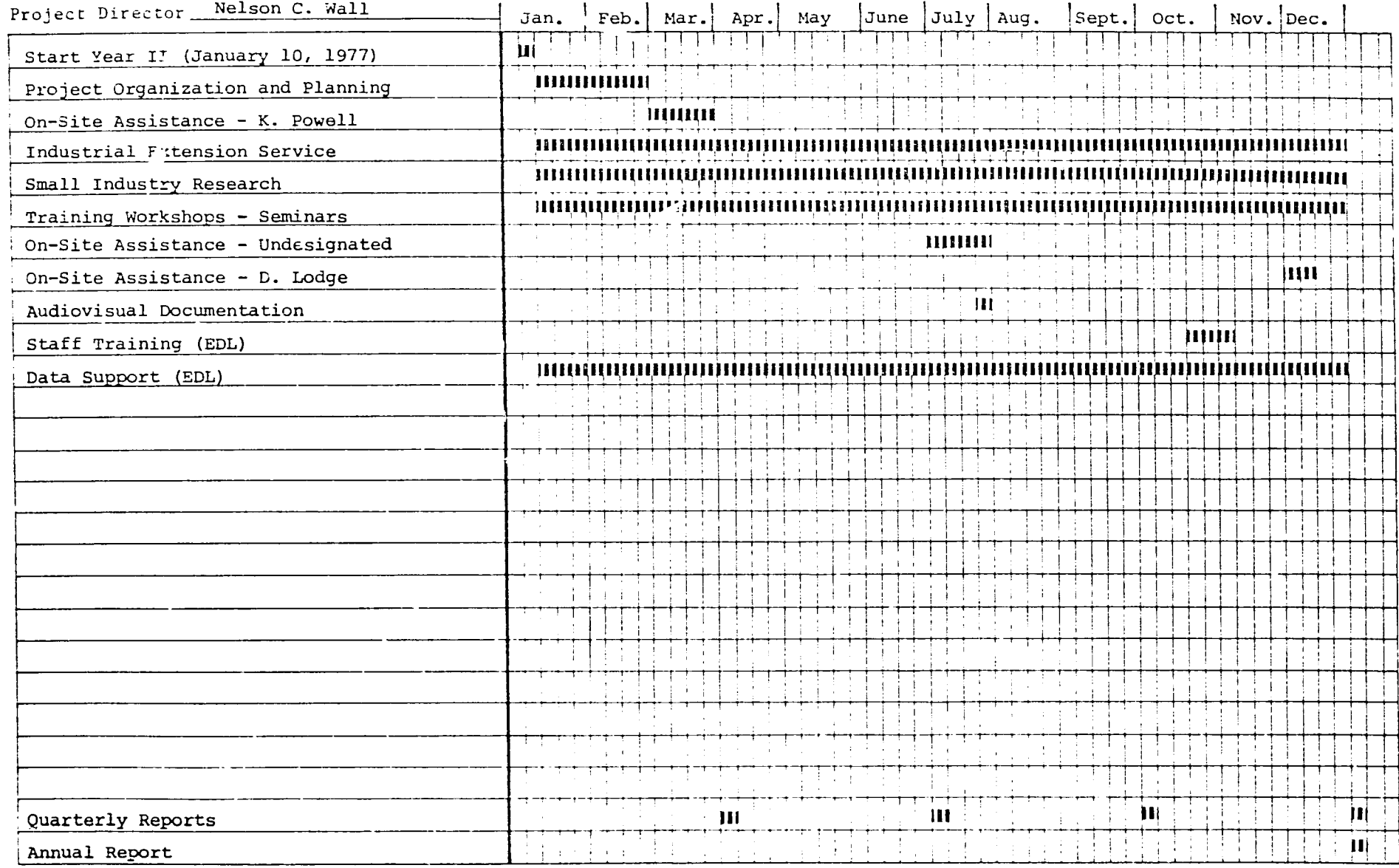
The primary purpose of Dr. Fyffe's visit was to provide consultation and training to the pilot extension office staff. During his stay, he presented two seminars on extension services in the United States and a seminar on operations research, held discussions with various UP/ISSI administrators, assisted in making a cost analysis of the use of a gasoline-powered generator and several electric motors versus a gasoline engine and common line shaft in a

Project No. B-463, Year II

# PROJECT PLAN

Project Title SIG-UP/ISSI

Project Director Nelson C. Wall



<b>LEGEND</b>
---------------

furniture plant, and worked on the design for an idler pulley arrangement for a common line shaft for another wood products plant and on the design for a simplified band saw.

September 6-10, 1977 (Mr. Paterno V. Viloría)

Mr. Viloría represented UP/ISSI at the Conference on Issues Related to Small Industries Appropriate Technologies, which was held in Guatemala City under another AID contract. Ten LDCs were represented at this meeting, including participants from four institutions working with OIP/GIT under the Small Industry Grant program and six other OIP counterpart institutions.

September 11-14, 1977 (Mr. Paterno V. Viloría)

Mr. Viloría visited OIP in Atlanta, Georgia, where he met with OIP staff and other high officials of GIT. He discussed the small-scale industry program at UP/ISSI, future cooperative efforts between the two institutions, and possible funded contract work for UP/ISSI and GIT in the Philippines.

November 2-13, 1977 (Mr. Donald E. Lodge)

This was the last on-site contact by GIT for Program Year II. Mr. Lodge was in the Philippines to supervise the audiovisual documentation of this program and to work with Mr. Alvizo, officer in charge of the pilot extension office, on data for the annual report. He also conferred with Mr. Paterno Viloría, Counterpart Project Director, and Mrs. Sonia Aquino, Counterpart Project Coordinator, regarding the Year III program.

November 5-13, 1977 (Ms. Edwina Ware)

Ms. Ware traveled to the Philippines to assist UP/ISSI staff in the preparation of Year II audiovisual documentation of the Small Industry Grant program.

November 7-25, 1977 (Counterpart Training)

Mr. Teodulo C. Gotico, Research Assistant, pilot extension office, UP/ISSI, received two and one-half weeks of training in industrial extension at the OIP offices in Atlanta and at the GIT industrial extension office in Augusta, Georgia.

The training program, designed by the OIP staff, incorporated various training modes, including classroom activities, on-the-job situations, guidance and counseling, industrial tours, and general small industry exposure within the state of Georgia. The training program also provided information regarding current solar energy research at Georgia Tech. (See Appendix 4.)

## RESULTS AND CONCLUSIONS

The second year of this small-scale industry development program has had many positive results, a number of which were briefly listed in the Introduction of this annual report. In this section, the major accomplishments will be highlighted:

1. Twenty-two firms received technical assistance during the year. Eleven of these firms were carried over from Year I; the remaining 11 were new cases opened during 1977. As a result of this assistance, 47 new jobs became available.
2. A new skills training program in automotive and machine shop theory and practice graduated 136 persons during Year II. This training program was the result of the formation of the Tacloban Ironworks and Engineering Industries Association, a trade group which the pilot extension office was instrumental in organizing earlier in the year. The extension office also assisted in planning the course content and designing the syllabus for this highly successful training program.
3. Work was begun toward the organization of a similar association for woodworking firms.
4. A seminar for potential entrepreneurs was held, with 16 persons graduating. The extension office will stay in touch with these graduates in order to provide assistance as they establish their businesses.
5. The pilot extension office embarked on a program of industrial development during 1977. Project feasibility studies were conducted and a manufacturing directory was compiled.
6. Formal arrangements were completed with the Divine Word University allowing the pilot extension office staff to use DWU's machine shop for the fabrication of machinery.
7. Several projects involving appropriate technology were designed and have been or will be fabricated and tested. A wood lathe was designed, built, and put into use in a wooden furniture plant during Year II. A materials handling cart was designed for use in a wooden products plant. A number of these carts will be built and put into use upon receipt of a loan which is now in process. An improved band-saw design was completed in 1977 and will be fabricated and tested early in 1978.

8. The audiovisual documentation for Year II was completed.

9. A survey was conducted of 273 small-scale businesses located in Region VIII to determine the problems which these firms face. These data will aid the extension office in designing future programs of work.

10. The staff of the pilot extension office received further training during Year II. Two staff members attended a two-month industrial extension course at the University of the Philippines and one staff member received two and one-half weeks of training given in Georgia by GIT.

11. The pilot extension office cooperated with nine private and government agencies and ten colleges and universities in the conduct of a seminar on teaching entrepreneurship at the college level. The program saw 23 faculty members complete the seminar. All 23 will be teaching courses in entrepreneurship on Region VIII college and university campuses.

12. Work was begun on the design of a training program concerning fermentative food processing and food preservation. Viable projects will be identified (the pilot extension office began work on this during 1977). In addition, individuals will be trained, and assistance will be provided to enable them to establish businesses involved in food processing or food preservation.

During the year, not only have these items been accomplished, but also additional small-scale industries in the target area have been provided with assistance which previously was available to them only from the Manila metropolitan area.



APPENDICES

Appendix 1  
ECONOMIC DEVELOPMENT PROGRAM FOR  
EASTERN VISAYAS (REGION VIII), PHILIPPINES

- I. Raw Materials Inventory
  1. Natural materials (amount, quality, availability)
  2. By-products and waste products of existing industry
  3. Fuels
  
- II. Existing Industry as:
  1. User
  2. Supplier
  3. Support

(During this survey get information on employment, wages, taxes, capital investment, etc., to prepare a manufacturing directory for the Eastern Visayas Region.)
  
- III. Labor Force
  1. Numbers, sex, age
  2. Skills/trainability
  3. Mobility, current attitudes and work patterns
  
- IV. Training Available and Needed
  
- V. Market

Demand locally and regionally for products and services. Then look to the national and international market demands
  
- VI. Determine type industry and services the region can support based on the analysis of the above research data
  
- VII. Research and list national government incentives for industry
  
- VIII. Determine local incentives which can be offered new and expanding industry
  1. Make recommendations to local authorities
  2. Prepare a program for implementation of these incentives
  3. Work closely with and coordinate through the national regulatory agencies

## IX. Promotion

- i. Create awareness of need for jobs among community leaders
  - a. Politicians
  - b. Business people (banks, lawyers, influential merchants, civic organizations, academic community, etc.)
  - c. Utility companies
  - d. Other government agencies
  - e. Other industries
  - f. Infrastructure (transportation, communication, etc.)
  - g. Government and private agencies in Manila (especially the Board of Investments)
2. Selling Points
  - a. New and expanded industry means:
    1. More jobs
    2. More income for residents
    3. Increased tax base for government and ability to improve city services through capital investment, ongoing taxes, increased income tax from the residents, and sales tax increase
    4. Increased buying power for the basics (food, clothing, shelter) and for other goods and services
  - b. Provides jobs to stem outmigration of trained workers and make the community more stable
3. Get local incentives approved (local meaning regional, provincial, and city)

## X. Sites/Districts for Industry

1. Identify the best sites based on
  - a. Topography
  - b. Road network
  - c. Available utilities
  - d. Proximity to labor supply
  - e. Cost of land
  - f. Proper location based on planning and zoning

Appendix 2  
 PROFILE OF PARTICIPANTS IN  
 ENTREPRENEURSHIP SEMINAR

<u>Name/Educational Attainment</u>	<u>Position</u>	<u>Company/Office Address</u>	<u>Residence Address</u>	<u>Project</u>
1. ABERASTURI, Domingo F. BSME, CIT	Bulk Plant Supervisor	Mobil Bulk Plant Malitbog, So. Leyte	Malitbog, So. Leyte	Warehousing
2. ALCANTARA, Elena T. College undergrad.	Member	Samahang Nayon Macrohon, So. Leyte	Rizal Street Macrohon, So. Leyte	Hollow Blocks (proposed)
3. GLORIA, Angel B.	--	--	Ichon, Macrohon So. Leyte	Cottage Industry: Handicraft
4. JUNIO, Rodolfo M. BS, Southwestern University	Sangguniang Bayan Secretary	Malitbog, So. Leyte	San Vicente St., Malitbog, So. Leyte	Warehousing
5. LEONOR, Manuel C. College undergrad.	Barangay Councilman	Abgao, Maasin So. Leyte	San Vicente Abgao, Maasin	Coco-Charcoal (proposed)
6. OLO, Lolita C. NGH School of Nursing (Manila)	Farm Manager	Sogod, So. Leyte	Sogod, So. Leyte	Coco By-product (proposed)
7. ORTIZ, Narcisa P. 4th yr. high school	Manager	Ortiz Fibercrafts, Bo. Bantig, San Rafael, Maasin So. Leyte	San Mafael Maasin, So. Leyte	Fibercraft
8. SALA, Ismael C. College undergrad. USC	--	--	Malitbog, So. Leyte	Hollow Blocks (proposed)
9. SIA, Felipe R. College undergrad. CIT	Asst. Manager	Golden Gate Bakery P. Burgos, So. Leyte	Real St., Padre Burgos, So. Leyte	Fish Culture (proposed)
10. SIA, Juana R.	Owner/Manager	Golden Gate Bakery P. Burgos, So. Leyte	Real St., Padre Burgos, So. Leyte	Salt Making (proposed)
11. SIAO, Romeo B.M. BSChE (4th yr.)	Municipal Project Officer	Municipal Development Staff, Municipality of Padre Burgos So. Leyte	Lungsodaan Street Padre Burgos So. Leyte	Piggery
12. SIEGA, Teodora T. A.A., Tomas Oppus Community College	Underwriter	The Insular Life Assurance Co., Ltd.	No. 6 San Antonio St., Sogod, So. Leyte	Ice Plant/Cold Storage (proposed)
13. YNIGUEZ, Gabriel O. BSFS (Int'l. Relations) UP Political Theory (units), UP	President	Sabas Arastre Service Maasin, So. Leyte	Pugaling, Maasin, So. Leyte	Warehousing
14. SALA, Anatalio V.	--	--	Padre Burgos So. Leyte	Salt Making & Fishpond (prop.)
15. GAVIOLA, Angelita	Owner/Manager	Gaviola's Fibercraft	San Rafael So. Leyte	Fibercraft
16. AMIT, Antonio L.	Supervisor	G.II Amit Furniture	73 R.K. Kang Leon St., Maasin So. Leyte	Furniture (expansion proposed)

Appendix 3

SUMMARY OF TECHNICAL ASSISTANCE CASES, 1977

Continuing Cases Begun Prior to 1977

<u>Case No.</u>	<u>Municipality</u>	<u>Product</u>
1	Tacloban City	Soy sauce
2	Jaro, Leyte	Swine
3	Palo, Leyte	Poultry feed and veterinary products
4	Pinamopoan, Leyte	Coconut shell charcoal
5	Tacloban City	Draperies and venetian blinds
6	Tacloban City	Rattan furniture
7	Jaro, Letye	Copra oil
8	Tacloban City	Garments
9	Tacloban City	Fabricated steel products
10	Tacloban City	Soft-drink boxes
11	Tacloban City	Rattan furniture

New Cases During 1977

<u>Case No.</u>	<u>Municipality</u>	<u>Product</u>
12	Catarman, Northern Samar	Concrete block and tile
13	Sogod, Southern Leyte	Swine
14	Sogod, Southern Leyte	Ice and cold storage warehouse
15	San Rafael, Southern Leyte	Fibercraft bags, purses, and belts
16	Albuera, Leyte	Woodcraft products
17	Guinsorongan, Samar	Shellcraft products
18	Maasin, Southern Leyte	Furniture
19	Catbalogan, Samar	Wooden boxes
20	Bato, Leyte	Jeep bodies and side cars
21	Tacloban City, Leyte	Garments
22	Padre Burgos, Southern Leyte	Bakery

SUMMARY OF TECHNICAL ASSISTANCE CASES

CASE NO. 1

MAIN PRODUCT: SOY SAUCE

Municipality: Tacloban City

Brief Description of Problem

The company sought financing for the purchase of equipment needed to improve the efficiency and cleanliness of its operation.

Applied Solution

The owner found that, due to his lack of the required collateral, he was unable to get a loan to finance the purchase of the equipment which had been designed by the extension office staff. He dropped his expansion plans, and this project was discontinued.

CASE NO. 2

MAIN PRODUCT: SWINE

Municipality: Jaro, Leyte

Brief Description of Problem

The company needed money to expand its operation.

Applied Solution

The pilot extension office arranged for the company to work with the Medium and Small Industry Coordinated Action Program Team, which provides access to funds needed for expansion.

CASE NO. 3

MAIN PRODUCT: POULTRY FEED AND  
VETERINARY PRODUCTS

Municipality: Palo, Leyte

Brief Description of Problem

In mid-1977, the owner switched his business from raising poultry to supplying poultry feeds and veterinary products to other poultry growers. The owner had no bookkeeping experience and had difficulty in accounting for his operation. He also was seeking a new source for baby chicks.

CASE NO. 3 (Continued)

Applied Solution

The pilot extension officer assisted the owner in setting up bookkeeping and accounting procedures and provided continuing accounting assistance to him during the year. The result of this assistance is that the owner now has better knowledge of his financial situation. He was also given information on a new source for baby chicks.

CASE NO. 4

MAIN PRODUCT: COCONUT SHELL CHARCOAL

Municipality: Pinamopoan, Leyte

Brief Description of Problem

This firm was unable to sell its charcoal at a price high enough to sustain its manufacturing operations.

Applied Solution

The pilot extension office team assisted the manufacturer to determine the cost of producing charcoal, and then assisted the manufacturer to deliver samples to charcoal buyers located in other cities. The samples of charcoal were of such low quality that the manufacturer decided to stop producing charcoal and go into the garment business. The extension office advised him about the garment business and located a garment project available for lease. At year's end he was considering this project.

CASE NO. 5

MAIN PRODUCT: DRAPERIES AND VENETIAN  
BLINDS

Municipality: Tacloban City

Brief Description of Problem

The firm was concerned with methods of preservation and treatment of its raw materials.

CASE NO. 5 (Continued)

Applied Solution

The pilot extension office team provided further instructions on the care and treatment of rattan and bamboo materials to prevent spoilage of raw materials and to improve the quality of the finished product.

CASE NO. 6

MAIN PRODUCT: RATTAN FURNITURE

Municipality: Tacloban City

Brief Description of Problem

This party was interested in the export market for rattan furniture.

Applied Solution

The pilot extension office team provided further instructions on the care and treatment of rattan and bamboo materials to prevent spoilage of raw materials and to improve the quality of the finished product.

CASE NO. 7

MAIN PRODUCT: COPRA OIL

Municipality: Jaro, Leyte

Brief Description of Problem

This man sought money with which to build a 25-ton-per-day oil mill to process the coconuts produced on his family farm. Using an economic study previously prepared by the extension office, he had been unable to obtain a loan on a personal basis.

Applied Solution

Using the project proposal previously prepared, a staff member of the pilot extension office accompanied this individual to a meeting with an intermediary bank and loan broker in Manila. At this meeting he was assisted in the presentation of the proposal and his resources. He subsequently received a commitment for a loan with a foreign financing company, through its local broker, although he must still get a Philippine bank to act as an intermediary in handling the funds.



CASE NO. 8

MAIN PRODUCT: GARMENTS FOR LADIES,  
GIRLS AND BOYS

Municipality: Tacloban City

Brief Description of Problem

This company faced foreclosure because of nonpayment of overdue loans. The firm had not achieved its sales projections.

Applied Solution

The pilot extension office staff studied this case and learned that the company had applied borrowed operating funds to pay for capital costs of building and equipment. The company also applied too high a markup on direct costs, resulting in noncompetitive prices. The pilot extension office assisted the owner in avoiding foreclosure by negotiating with the banks. This provided the owner time to raise additional working capital, which was accomplished.

CASE NO. 9

MAIN PRODUCT: FABRICATED STEEL PRODUCTS--  
GRILLES, WINDOWS, GATES,  
FENCES, TRUSSES

Municipality: Tacloban City

Brief Description of Problem

This company was unable to fabricate all the products it could sell because the shop was deficient in basic metalworking tools and equipment. To get a bank loan to purchase this equipment, the company was required to submit a project proposal to the bank.

Applied Solution

The pilot extension office staff, with assistance from the UP/ISSI staff in Manila, prepared the project proposal, which was submitted to the bank for its consideration. The bank determined that the shop has problems regarding the lease on the site. The result is that the loan has been temporarily delayed until the cloud on the leasing contract has been removed.

CASE NO. 10

MAIN PRODUCT: WOODEN SOFT-DRINK BOX  
COMPONENTS

Municipality: Tacloban City

Brief Description of Problem

This plant was unable to meet its production requirements, in part due to work flow and materials-handling problems and excessive downtime of band saws and swing saws.

Applied Solution

A pilot extension office study identified the specific causes of the problems. On the basis of this study, the owners were advised to assign an assistant to the trim saw operator to handle incoming materials, waste and processed materials, and to provide sharpened band-saw blades for immediate replacement of dulled blades. It was also suggested that two unskilled workers be used to sharpen the saw blades. The pilot extension office staff designed transport carts to carry raw materials to and waste materials from the workplace of the machine operators. The extension office, assisted by GIT, also designed a belt shifting mechanism to enable any one of the four band saws to be stopped independently when repairs were needed on a single saw.

The pilot extension office staff prepared a proposal for a loan with which to pay for the needed improvements and assisted the company in submitting it to a bank. While the loan was under consideration, the company accepted the recommendation concerning the sharpening of saw blades, creating two new jobs. This is expected to increase each band-saw operator's output by 30%.

CASE NO. 11

MAIN PRODUCT: RATTAN FURNITURE

Municipality: Tacloban City

Brief Description of Problem

The City of Tacloban planned to build a barangay road through the middle of the existing plant. The company did not have enough money to move to a new site, nor did they have a site in mind. An additional problem was that insects were infesting their stock of rattan poles.

CASE NO. 11 (Continued)

Applied Solution

The pilot extension office team located a new site in an industrial estate and provided technical and market studies concerning the plant expansion. The pilot extension office also experimented with several bleaching processes to protect rattan from insects and provided the manufacturer with technical information on the preservation of rattan.

CASE NO. 12

MAIN PRODUCT: CONCRETE BLOCK AND TILE

Municipality: Catarman, Northern Samar

Brief Description of Problem

The owner needed money to expand his operation into the manufacture of red bricks and had asked the pilot extension office to prepare a project feasibility study for him.

Applied Solution

The UP/ISSI team directed the owner to the Medium and Small Industry Coordinated Action Program team which is responsible for performing feasibility studies.

CASE NO. 13

MAIN PRODUCT: SWINE

Municipality: Sogod, Southern Leyte

Brief Description of Problem

The owner of 100 hectares of land needed advice as to whether to go into swine production or to establish a rice mill.

Applied Solution

The pilot extension office staff gathered engineering and cost information on rice mills and advised the owner of the most economical rice mill, based on the prices and specifications quoted. The staff also provided information concerning the swine growing business. The staff will continue to assist the owner, who has decided to go into swine production.

CASE NO. 14

MAIN PRODUCT: ICE AND COLD STORAGE  
WAREHOUSE

Municipality: Sogod, Southern Leyte

Brief Description of Problem

This individual wanted to establish an ice production plant with a cold storage facility. She needed assistance in acquiring loans from a bank.

Applied Solution

The pilot extension office endorsed the project and assisted the company in getting a loan from the bank. The staff assisted her in setting up a bookkeeping system. The machinery was delivered in October, and when fully operating, it will provide new jobs for eight people.

CASE NO. 15

MAIN PRODUCT: FIBERCRAFT BAGS, PURSES,  
AND BELTS

Municipality: San Rafael, Southern Leyte

Brief Description of Problem

This company lacked market outlets and was having collection problems. It also needed a way to utilize rattan handle rejects and advice on how to bleach rattan.

Applied Solution

The pilot extension office staff brought in an export producer and handicraft buyer, with whom the company was able to negotiate a permanent marketing arrangement. This should expand sales and improve the collection problem.

The staff also suggested that the rejected rattan handles be salvaged by covering them with woven fiber. The staff sought and acquired information on rattan bleaching processes, but none proved satisfactory for this specific problem. Work will continue on this problem.

CASE NO. 16

MAIN PRODUCT: WOODCRAFT--TRAYS,  
DINNERWARE, AND DECORATIVE  
ITEMS

Municipality: Albuera, Leyte

Brief Description of Problem

A recently imposed national government regulation banned the use of lumber from certain species of trees, seriously affecting the output and employment level of this company. This ban affected the entire woodcraft industry because this particular species of wood is necessary to industry.

Applied Solution

The pilot extension office staff organized a meeting with representatives of the National Cottage Industries Development Authority-Eastern Visayas Regional Institute, the Bureau of Forest Development, and the National Economic Development Authority. The staff prepared a position paper on raw material requirements of furniture manufacturers in Region VIII. The intent of the paper was to demonstrate the plight of the woodcraft industry caused by the timber ban and to seek relief from the authorities for the users of the banned timber. The paper was presented to the Regional Development Council, which endorsed the paper and forwarded the request to the Bureau of Forest Development.

CASE NO. 17

MAIN PRODUCT: SHELLCRAFT ITEMS:  
HANDCRAFTED WALL MIRRORS

Municipality: Guinsorongan, Samar

Brief Description of Problem

Since production was on a custom order basis which limited its market, this business operated on an erratic scale. The owner wanted to mass-produce small items and possibly to expand his operations to go into bamboo or rattan preservation and into the canning of abalone and crab meat.

Applied Solution

The pilot extension office team assisted the company in contacting buyers in Manila, export traders in Manila and Cebu City, and a Belgian marketing

CASE NO. 17 (Continued)

Applied Solution (Continued)

firm. Mirror samples were sent to Brussels. These actions resulted in an order from a big buyer in Manila and the display of products at the Philippine Trade Houses abroad.

The staff gave the owner technical information about bamboo and rattan preservation. It suggested that the owner could receive assistance concerning the canning of crab meat and abalone from the Medium and Small Industry Coordinated Action Program team in Samar.

CASE NO. 18

MAIN PRODUCT: FURNITURE

Municipality: Maasin, Southern Leyte

Brief Description of Problem

The owner needed capital to expand his operation, which had outgrown its present facilities. Productivity was at a low level because nearly all operations were performed manually and the plant had a very poor layout. The owner stated a need to mechanize his plant. He planned to do this by using an internal combustion engine connected to various machines by a drive shaft and belts, but lacked the ability to design this mechanism.

Applied Solution

The pilot extension office staff briefed the owner on the lending requirements of the Development Bank of the Philippines and advised him on loan application procedures. They also suggested the acquisition of a 3/4-inch band saw. The staff provided suggestions for an improved plant layout, which the owner has adopted. The cost of providing power to the proposed machines by the use of a gasoline-powered generator and electric motors at each work station was compared with the cost of using a gasoline-powered engine and a single drive shaft to power all the machines.

The owner followed the instructions of the extension team and has begun to complete the loan application forms. He also agreed to adopt the recommendations for installing a band saw. Work continues by the staff on the design of the drive mechanism.

CASE NO. 19

MAIN PRODUCT: WOODEN BOXES

Municipality: Catbalogan, Samar

Brief Description of Problem

This company was being charged nonindustrial rates for electricity, which increased the cost of operations.

Applied Solution

A letter was written to the chairman of the board of the power authority to request that the industrial rate be extended to small-scale industry. The authority responded by writing that it would consider this matter as soon as its new generators were installed, late in 1977.

CASE NO. 20

MAIN PRODUCT: JEEP BODIES AND SIDE CARS

Municipality: Bato, Leyte

Brief Description of Problem

The company was so successful that it was unable to cope with job orders. The owner wanted to expand his business, but lacked working capital for the purchase of additional machinery, buildings, equipment, and inventories.

Applied Solution

The staff provided information on the financing program of the Development Bank of the Philippines and advised the owner regarding the requirements of the DBP. However, the owner was unable to provide 50% collateral. The project was closed in late 1977.

CASE NO. 21

MAIN PRODUCT: LADIES' AND MEN'S GARMENTS

Municipality: Tacloban City

Brief Description of Problem

This newly formed company was assisted in its organization by the pilot extension office staff, with help from the UP/ISSI staff. A feasibility study was prepared, and help was provided the company in securing a loan from the

CASE NO. 21 (Continued)

Brief Description of Problem (Continued)

bank. However, the firm was unable to generate enough sales to maintain full manufacturing operations and therefore had to produce garments on an order basis.

Applied Solution

The staff advised the company to increase its sales by advertising on the radio and in the local newspaper. They also suggested that the name of the shop should appear on its shopping bags, and samples of paper shopping bags from Japan were shown to the owner.

CASE NO. 22

MAIN PRODUCT: BAKERY

Municipality: Padre Burgos, Southern Leyte

Brief Description of Problem

This well-established bakery needed additional money for improvements, repairs, and operating capital.

Applied Solution

The staff introduced the owner to the branch manager of the Surigao City Branch of the Development Bank of the Philippines. They will follow up the firm's loan application with the bank. The bank was processing the loan at year's end. The pilot extension office will further assist as necessary in the marketing aspects of this business.



Appendix 4  
INDUSTRIAL EXTENSION TRAINING PROGRAM FOR  
MR. GOTICO, UP/ISSI  
NOVEMBER 7-25, 1977

<u>Date</u>	<u>Time</u>	<u>Lecturer</u>	<u>Subject</u>	<u>Place</u>
11/7	9:00 am - 10:00 am	Hammond, R.	Welcome, OIP	Atlanta
	10:00 am - 11:00 am	Johnston, R.	Program of work - Plant visit requests of participants	Atlanta
	1:00 pm - 2:00 pm	Johnston, R.	Tour OIP and Basic Data	Atlanta
	2:00 pm - 4:00 pm	Johnston, R.	Tour Georgia Tech campus	Atlanta
11/8	9:00 am - 10:00 am	Lewis, J.	Needs of the Small and Medium Business	Atlanta
	10:00 am - 11:00 am	Johnston, R.	Guidelines for Industrial Extension Personnel	Atlanta
	1:00 pm - 2:00 pm	Hammond, R.	An Approach to Furnishing Industrial Extension Service to SS Industry	Atlanta
	2:00 pm - 3:00 pm	Kaatz, J.	Sources of Credit for SS Industry in the LDC	Atlanta
11/9	9:00 am - 10:00 am	Davis, L.H.	Industrial Extension at FESSC	Atlanta
	10:00 am - 11:00 am	Potts, P.	Water Pump Manufacturing in Central America by Small-Scale Industry	Atlanta
	2:00 pm - 4:00 pm	Moh, K.	Solar Stills and Solar Energy at Georgia Tech - Tour of Facilities	Atlanta
11/10	9:00 am - 10:00 am	Johnston, R.	Role of Information in Industrial Extension	Atlanta
	10:00 am - 11:00 am	Auciello, K.	Use of DIALOG in Industrial Extension Market Research	Atlanta
	1:00 pm - 3:00 pm	Auciello, K.	Laboratory - Using DIALOG	Atlanta
11/11	8:00 am - 4:00 pm	Johnston, R.	Drive to University of Georgia - Meet Dr. Lancaster at 11:00 am	Athens
		Lancaster, J.	Program Building in Extension Service	Athens
11/14	9:00 am - 12:00 noon	Junk, R.	Drive to Augusta Branch Office	Augusta
	12:00 noon - 5:00 pm		Observe technical assistance work - Augusta Foundry	Augusta
11/15	All day		Observe technical assistance work	Augusta
11/16	All day		Observe technical assistance work	Augusta
11/17	All day		Observe technical assistance work	Augusta
11/18	9:00 am - 12:00 noon		Observe technical assistance work	Augusta
	12:00 noon - 5:00 pm		Return to Atlanta	Atlanta
11/21	All day	Moh, K.	Visits to industry	Atlanta
11/22	All day	Moh, K.	Visits to industry	Atlanta
11/23	All day	Moh, K.	Visits to industry	Atlanta
11/24	HOLIDAY-THANKSGIVING			
11/25	Individual research - to be determined			

Appendix 5  
 PROBLEMS OF RURAL SMALL-SCALE INDUSTRIES  
 BY INDUSTRY GROUP, REGION VIII

<u>Problem</u>	<u>No. Reporting</u>
<u>A. Abaca Processing</u>	
1. Slow transmittal of funds from buyers in Manila and/or Cebu to Southern Leyte	1
2. Recruitment of employee within Southern Leyte	1
<u>B. Bakery</u>	
1. Lack of capital to improve building, acquire new machinery and purchase additional delivery truck	1
2. Financial management know-how is poor	1
<u>C. Bamboocraft/Rattancraft</u>	
1. Lack of innovative designs	1
2. Marketing problem	1
3. Lack of capital for expansion	1
4. Lack of knowledge on bleaching of rattan	1
5. Bamboo and rattan are attacked by molds and bores	1
<u>D. Buricraft (chairs and others)</u>	
1. Lacks capital but isn't interested in borrowing from bank	1
2. Marketing problems	1
<u>E. Ceramics, Hollow Block, Concrete Products</u>	
1. Poor quality control	1
2. Standards are not known	1
3. Does not know whether clay deposits in his area are of commercial quantities	1
4. NACIDA does not give assistance	1
5. Most workers are not from the place	1
6. There is no production when it is raining	1
7. Rising prices of clay	1

	<u>Problem</u>	<u>No. Reporting</u>
8.	Does not have sufficient market to absorb present production	1
9.	Market potential is not known	1
10.	Lacks capital for machinery	1
11.	Lacks raw material (marble)	1
E.	<u>Charcoal Making</u>	
1.	Lack of capital	2
2.	Use of funds	1
3.	Marketing problems	1
4.	Quality control	1
F.	<u>Duck and Goose Raising</u>	
1.	Lack of capital	1
G.	<u>Furniture and Fixtures, Woodcraft, Wood Processing</u>	
1.	Lack of capital	17
2.	Lack of raw materials; supply of lumber is scarce and timber ban imposed by the BFD restricts timber cutting	16
3.	Lack of skilled workers to manufacture rattan/wood furniture	3
4.	Does not have project study	3
5.	Needs design for band saw	2
6.	Surface/wood finishing is poor	2
7.	Needs designs for rattan/wood furniture	2
8.	Needs additional machinery to improve productivity	2
9.	Lacks collateral, even if financing is available	1
10.	Antiquated manufacturing technology	1
11.	No electricity during daytime	1
12.	Poor plant layout	1
13.	Poor carving	1
14.	Checking accounts	1
15.	High building rental	1
16.	No provision for management succession	1
17.	Marketing problems	1

<u>Problem</u>	<u>No. Reporting</u>
18. Workers' absenteeism	1
19. Payment of workers' salaries	1
20. Low production output	1
21. Poor materials handling	1
22. Poor waste disposal system	1
23. Increased price of coconut husk for upholstery	1
24. Far source of lumber	1
25. Lacks capital but isn't interested in securing a loan	1
26. Government red tape in getting timber cutting permits	1
27. A government agency is trying to hinder progress of business	1
28. Government bank has not informed him of status of his loan	1
29. Market study had not been prepared by said bank	1
H. <u>Food Processing</u>	
1. Lack of capital	1
2. High price of sugar	1
3. Stiff competition	1
4. Lack of market	1
I. <u>Garments, Dressmaking, Tailoring</u>	
1. Lack of skilled manpower	2
2. Lack of capital	1
3. Lack of raw materials and supplies	1
4. Lack of bookkeeping knowledge	1
J. <u>Ice Plant</u>	
1. Market not fully served	1
2. Delay in installation of machinery	1
3. Stiff competition	1
K. <u>Knitting, Weaving</u>	
1. Lack of capital	1
2. Project study preparation	1

	<u>Problem</u>	<u>No. Reporting</u>
L.	<u>Machine Shops, Welding Shops, Automotive, Agri-Implements, Electrical Shops</u>	
	1. Lack of capital	22
	2. Workers' absenteeism	5
	3. Low supply of electric current	2
	4. Low productivity due to lack of machineries and equipment	2
	5. High price of raw materials used	2
	6. Improper safekeeping of tools	1
	7. No service vehicle	1
	8. Unhealthy competition	1
	9. Project study preparation	1
	10. Lacks capital for expansion but is not interested in bank loan	1
	11. Lacks tools	1
	12. Lack of site for expansion	1
	13. Few customers	1
M.	<u>Needlecraft</u>	
	1. Lack of capital	1
N.	<u>Handicraft (Bags)</u>	
	1. Lack of market	1
O.	<u>Fibercraft</u>	
	1. Marketing problems	1
	2. No knowledge of rattan bleaching	1
P.	<u>Hog/Swine Raising</u>	
	1. Inadequate supply of feed	1
	2. Inadequate supply of hogs	1
	3. Lack of capital	1

<u>Problem</u>	<u>No. Reporting</u>
Q. <u>Fishpond, Sugpo Culture, Hito Farming</u>	
1. No commercial quantity of sugpo fry	1
2. Lack of capital	1
R. <u>Poultry Raising</u>	
1. Shortage of poultry feed	1
2. Environmental problems (coercion, threat from an outsider)	1
S. <u>Rope Making</u>	
1. Lack of capital	2
T. <u>Shellcraft</u>	
1. Lack of market	1
2. Lack of financing	1
U. <u>Shoe Industry</u>	
1. Lack of capital	1
V. <u>Transportation</u>	
1. Financial viability is not known	1
W. <u>Tinsmithing/Blacksmithing</u>	
1. Lack of capital	2
2. Lack of market	1
3. Lack of raw materials	1
4. Lack of skilled manpower	1

Appendix 6  
 EMPLOYMENT LEVEL OF INDUSTRIES CONTACTED  
 BY PROVINCE, 1977

<u>Province</u>	<u>Less than 5</u>		<u>5-100</u>		<u>Total</u>	
	<u>No. of Firms</u>	<u>% of Total</u>	<u>No. of Firms</u>	<u>% of Total</u>	<u>No. of Firms</u>	<u>% of Total</u>
Northern Leyte	87	43.3	37	18.5	124	61.8
Southern Leyte	3	1.5	7	3.5	10	5.0
Western Samar	26	12.9	9	4.5	35	17.4
Northern Samar	8	4.0	3	1.5	11	5.5
Eastern Samar	17	8.5	2	0.9	19	9.4
Subprovince of Biliran	<u>2</u>	<u>0.9</u>	<u>-</u>	<u>-</u>	<u>2</u>	<u>0.9</u>
Total	143	71.1	58	28.9	201	100.0