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AID 1025-1 (2-73) (PAGE SHEET)

Attachment A to H.O. 1025.1
 (TL 9:172)

NONCAPITAL PROJECT PAPER (PROP)

PAGE 1 of 2 PAGES

15p.

I. PROJECT IDENTIFICATION

1. PROJECT TITLE
 Employment Generation through Stimulation of Small Industry

APPENDIX ATTACHED
 YES NO

2. PROJECT NO. (H.O. 1025.1)
 931-11-995-9903

3. SUBMISSION
 ORIGINAL COPY
 REV. NO. _____ DATE _____
 CONTR/PASA NO. _____

4. LIFE OF PROJECT
 BEGINS FY 73
 ENDS FY 77

5. RECIPIENT (Specify):
 COUNTRY _____
 REGIONAL _____
 INTERNATIONAL _____

MERGED
 4/9310149

II. FUNDING (USD) AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	B. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMODITIES \$	F. OTHER COSTS \$	G. DATA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATE \$ US (BY COUNTRY)		
		(1) S	(2) MM	(1) S	(2) MM			(1) S	(2) MM	(1) US GRANT LOAN	(2) JOINT	(3) BUDGET
1. FISCAL YEAR ACTUAL FY												
2. OPEN FY 73	100	30	10	20	30	50						
3. BUDGET FY 74	200	60	20	40	60	100						
4. BUDGET FY 75	200	60	20	40	60	100						
5. BUDGET FY 76	200	60	20	40	60	100						
6. BUDGET FY 77	200	50	20	40	60	100						
7. ALL SUBD FY												
8. GRAND TOTAL	900	270	90	180	270	450						

9. OTHER DONOR CONTRIBUTIONS

(A) NAME OF DONOR _____ (B) KIND OF GOOD/SERVICES _____ (C) AMOUNT _____

III. ORIGINATING OFFICE CLEARANCE

1. DRAFTSMAN: Henry A. A. [Signature] TITLE: Deputy Director, TA/OST DATE: 6/5/73

2. CLEARANCE OFFICER: Glenn E. Schweitzer TITLE: Director, TA/OST DATE: 1-20-73

IV. PROJECT AUTHORIZATION

1. CONDITIONS OF APPROVAL

2. CLEARANCES

BUR OFF.	SIGNATURE	DATE	BUR OFF.	SIGNATURE	DATE
TA/PM	David Mathiasen [Signature]				

3. APPROVAL BY OFFICE DIRECTOR: [Signature] DATE: 1/23/77
 Assistant Administrator, TA Bureau

4. APPROVAL AID (H.O. 1025.1) (VIC): [Signature] DATE: _____

PROJECT SUMMARY

This five-year project provides for annual grants to four developing country institutions of \$50,000 each to enable them to develop a more effective capability to provide technical assistance to small industry. At the same time these institutions will demonstrate and document the impact of alternative technical assistance approaches to generating employment through the stimulation of small industry and to encouraging adoption of appropriate technologies that make more effective use of factor endowments in this sector of industry. Also, the institutions will attempt to infuse an employment consciousness within the educational, industrial, and financial sectors of the respective countries by demonstrating in concrete terms how deliberate efforts can generate job opportunities within the context of commercial viability of the enterprises.

One institution will be selected in each geographic region. Among the criteria for selection will be the surrounding economic/business/marketing climate for small industry, seriousness of employment concerns, capabilities and potential of the institution, and linkages with educational, technological, and financial institutions. Efforts will be made to select different types of institutions (e.g. a university, a Ministry of Industry unit, a research institute, a bank) in order to maximize the variety of experiences that are gained.

At least 50 percent of each grant will be tied to purchase of technical assistance and training support to the institution from the U.S. The remainder of the funds can be used for staff development, field operations, and other needs related to the project goals.

NON-CAPITAL PROJECT PROPOSAL (PROP)

A. THE PROJECT GOAL

1. Statement of Goal

This project should contribute to increased employment opportunities in developing countries, and particularly employment outside the principal metropolitan centers. Secondary goals include helping the balance of payments situation, training of the industrial labor force, expansion of local capital markets, and development of industrial infrastructure and supporting technical facilities.

2. Measurement of Goal Achievement

The number of jobs generated will be the principal measurement of goal achievement. Some jobs should be directly traceable to the project but the bulk of the impact will be traceable to project activities only in an indirect way and within a long term perspective.

3. Basic Assumptions of Goal Achievement

Goal achievement will depend not only on the direct and indirect impact of the project inputs but also on the business climate for small industry. It is assumed that in the participating countries both the Governmental economic policies and the local business conditions will be conducive to growth of small industry.

B. THE PROJECT PURPOSE

1. Statement of the Purpose

- (a) Strengthen capabilities of four developing country institutions to provide technical assistance to employment generating small industry.
- (b) Demonstrate and document the impact of alternative technical assistance approaches to small industry.
- (c) Infuse an employment consciousness into educational, industrial and financial sectors in four countries.

2. Conditions Expected at End of Project

- (a) Sound technical assistance projects being implemented by the selected institutions.
- (b) Ready receptivity in financial and business circles to support small industry efforts that are well conceived.

- (c) Widespread emphases on encouraging "appropriate" technologies.

3. Assumptions

- (a) The thrust of the program can be dovetailed with small industry efforts of the Governments.
- (b) The selected institutions can attract and retain high quality people.

C. PROJECT OUTPUTS

1. Outputs

- (a) Increased job opportunities in four countries.
- (b) Increased viability of indigenously owned enterprises.
- (c) Improved capability of four developing country institutions to serve small industry.
- (d) Tested methodologies for strengthening developing country institutions involved in support of small industry with particular attention to the necessity for adjusting approaches as economic development proceeds.
- (e) Evaluation reports on successes and failures in assisting small industry.

2. Output Indicators

- (a) Demand for services of the selected institutions by industry.
- (b) Profit and loss statements of assisted entrepreneurs.
- (c) Number of jobs created -- directly and indirectly.

D. INPUTS

1. U. S.

Annual grants of \$50,000 to each of four developing country institutions which provide for

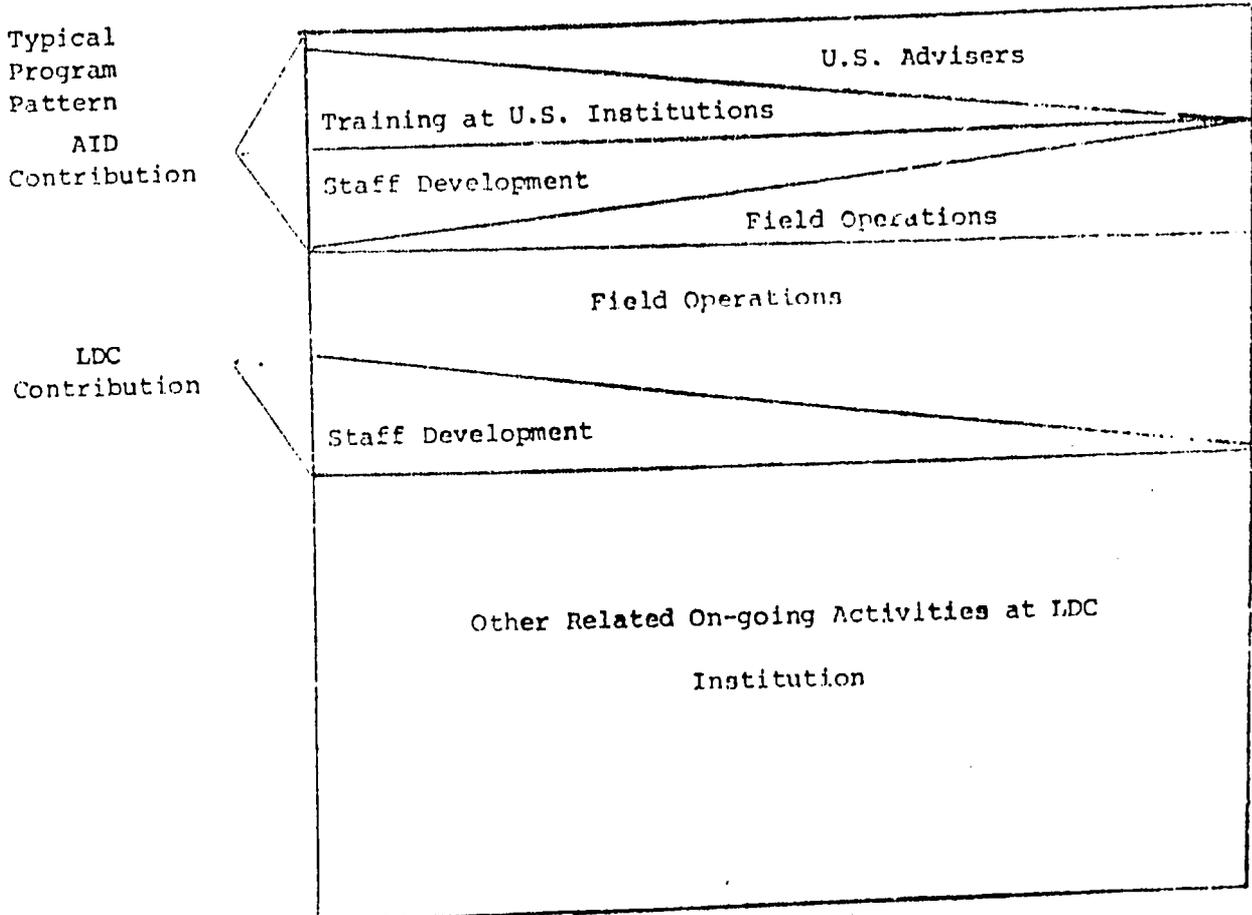
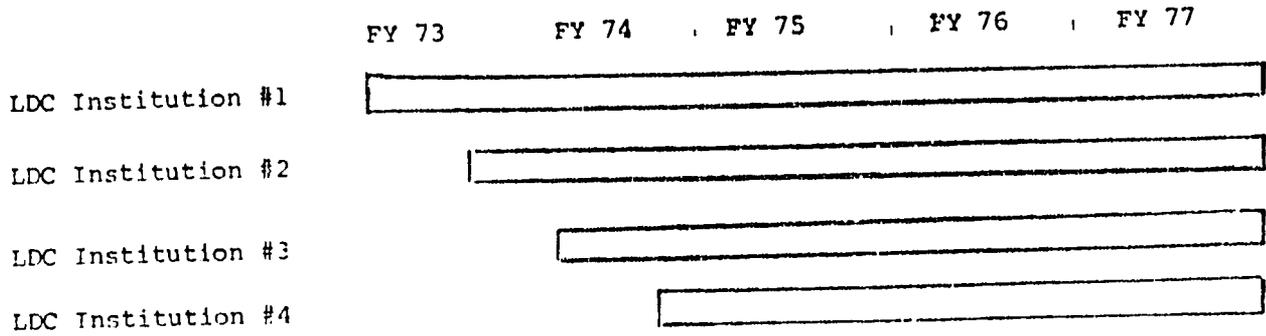
- (a) Technical assistance and training from U.S. institutions (at least \$25,000 per grant).

(b) Developing country staff development and field operations.

2. Cooperating Institutions

Staff contributions (minimum of 5 man years per grant).

3. Implementation Schedule



E. RATIONALE

(1) Problems of Unemployment - The World Bank estimates that unemployment -- including allowances for underemployment -- approximates 20 to 25 percent in most developing countries, and the problem is bound to become worse in the absence of significant changes in past patterns. Closely related to the employment problems are the inequities in income distribution in the LDCs. We have learned that LDC economic growth alone will not solve these problems since fiscal systems cannot be relied upon to redistribute the benefits of growth in a socially equitable way. The only effective solution is through generation of productive jobs.

(2) A.I.D. Policies on Unemployment - For several years A.I.D. has been making renewed efforts to increase the impact of its programs on employment and income distribution. Most recently, on April 12, 1972, the Administrator's Policy Council reaffirmed the importance of this effort and detailed policy guidance is currently being developed.

(3) Alternative A.I.D. Approaches to Employment - There are a number of specific steps which have been or are currently being encouraged by A.I.D. to address the employment problem. Some of these approaches are:

- Encouraging economic policies which gives impetus to industrial and agriculture strategies and programs that utilize manpower endowments more effectively (e.g. interest rates, amortization and tax policies, foreign currency controls, wage rates).
- Encouraging governmental contracting policies -- particularly related to construction -- which are deliberately designed to utilize manpower endowments more effectively.
- Investigating and supporting technological advances that increase the arability of land (e.g. opening new areas, double and triple cropping, wiser and more extensive planting of previously farmed areas).
- Assisting in the financing and carrying out of governmentally subsidized "public works" programs deliberately designed to address employment and development needs (e.g. feeder roads, reforestation, irrigation schemes).
- Supporting technological research and adaptation that can open opportunities for new or more effective use of natural resource endowments, and particularly increasing the value added locally to such resources.
- Providing technical and financial assistance to strengthen indigenous capabilities to provide carefully packaged technical, managerial, and financial support for small and medium-scale industry, and particularly small enterprises outside the principal metropolitan centers.

This project is directed to developing a strengthened capability in the last area, recognizing there is clearly interaction among all the approaches.

(4) What is Small Industry? - For our purposes, "small industry" can be characterized by (a) little or no specialization in management, essentially management by one man, perhaps with a few assistants, (b) close personal contact of the manager (often a manager-proprietor) with all those involved in the business, (c) lack of access to capital through the organized securities market, (d) no dominant position in a major product market, and (e) close integration with the local community by reason of local ownership, management, raw material sources, or markets. Statistically, "small industry" can be defined as including manufacturing units having fewer than 100 employees.

(5) The General Situation in Developing Countries - In most developing countries, small-scale industries account for a very large proportion of the total number of manufacturing enterprises and for an appreciable proportion of total employment and total value added in industry. In countries at the earliest stages of industrial development, however, especially in Africa, the industrial structure consists essentially of a few large-scale and medium-sized industries owned either by foreign or expatriate interests and/or by the Government on the one hand, and a large number of artisan and handicraft undertakings and cottage industries on the other. Where a few small manufacturing concerns do exist, they are often owned and managed by foreigners. Except for some types of industry in the relatively more industrialized developing countries, small-scale industries are generally weak, ill-managed, poorly equipped and produce goods of uneven quality. Everywhere, many small entrepreneurs are unaware of their needs or unable to identify them and are reluctant to request or even to accept assistance for reasons ranging from ignorance and prejudice to fear that information might be channelled to the tax authorities or to competitors.

In some countries, the promotion of small-scale industry is an important objective of policy, and government responsibility for the development of this sector is fully recognized. In other countries, however, there is some confusion regarding the respective role of artisans, handicrafts, small-scale and large-scale industry in over-all industrialization plans. Many countries have adopted some measures of promotion, and several countries have set up one or more agencies to carry out these measures. However, even in India, which has set up the largest small industry development organization in the world, services can be provided to only a small fraction of a large and constantly growing number of small industrial enterprises. Most of the agencies suffer from inadequate financial resources and from difficulties in recruiting and keeping qualified staff. They are subject to various restrictions, usually because they are government departments bound to civil service budgeting, administration and personnel management, and those restrictions hamper initiative and action.

In general, developing countries recognize that, since small industries need guidance and assistance in establishment, management and operation, measures to assist them should be integrated into over-all development programs. With some exceptions, such as Argentina, Ceylon, India, Israel, Pakistan and Thailand, most countries have taken only piecemeal action; most of them, however, hope in due course to develop the necessary services and facilities. Lack of expert knowledge -- national and foreign -- appears to explain this gap as much as the lack of financial resources.

In most countries, responsibility for small industry development is borne by the Ministry of Industry, but special small industry service institutes, industrial extension centers or equivalent agencies providing technical and managerial assistance as a major function are in operation or in the process of establishment in only a limited number of countries -- Argentina, Chile, Ecuador, India, Indonesia, Israel, Pakistan, Korea, Thailand, Turkey and Uganda. In other countries, technical and managerial assistance is provided by technological or industrial research institutes (Colombia) and by industrial studies and development centers (Tanzania).

Only in a few countries has industrial extension been closely linked to financial assistance. Special credit schemes with liberal conditions for small-scale industries are exceedingly rare and only in India is hire-purchase of machinery found. Small industries rarely receive special tax and tariff concessions; in a few cases, such concessions discriminate against them. Special measures of export promotion of the products of small industry are in effect only in a few countries, e.g. India and Korea. The organization of co-operative associations of small producers appears to face the same obstacles. The promotion of subcontracting is seldom undertaken systematically; subcontractors' exchanges usually do not exist.

(5) Specific Problems of Small Industry - The following extract from the Small Industry Bulletin for Asia and the Far East highlights some of the more specific problems of small industry.

"(i) Organizational weaknesses: The present pattern of small industry is highly individualistic; there is a marked tendency to undertake all operations under one roof. Lack of mutual assistance and organization has led to uneconomical operations. Many small industries must organize themselves into effective and strong co-operatives or other types of associations -- for certain small industries, government assistance can be more conveniently and effectively extended to co-operatives and associations rather than to individuals. 'Common production programmes' are lacking between large and small industries. If organized, small industries could economically perform a number of operations of large industries and become sub-contractors. Certain functions and operations, where economically feasible, should only be performed by small industries.

- (ii) Raw materials, spares and machinery: Shortage of imported raw material is one of the greatest handicaps. Even indigenous raw materials of good quality at reasonable prices are often not available to small industries. In the absence of a planned development programme, a number of less essential industries have come into existence. Many of these, owing to shortage of raw materials, are running at a low rate of production; at the same time they may deprive other essential consumer and producer goods industries of raw materials. Many machines are standing idle due to non-availability of spares.
- (iii) Technical know-how: In the absence of adequate technical guidance, small industries are working uneconomically and in a vacuum. Many old practices that have long outlived their efficiency are still in use. Inadequate knowledge of modern industrial techniques and management methods is a great handicap. There are insufficient facilities for offering 'on the spot' advice, for providing small industries with knowledge of modern techniques or for demonstrating the use of modern technical processes. Facilities are limited for conducting research useful to small industries in the better use of raw materials, improvement in designs, etc. Small industries lack managerial know-how. In addition to the shortage of skilled workers, there is a still greater shortage of trained foremen and shop managers.
- (iv) Credit facilities: Credit available to small industries is extremely limited. In view of the precarious situation of many of them, commercial banks have been very reluctant to advance even working capital. Securities offered by small industries are inadequate. There is no organised system of hire-purchase of machinery. Small loans on personal guarantee and sureties are usually not available. For the proper development of small industries, a wide net-work of credit facilities is essential to meet both short and long term credit needs.
- (v) Marketing: Small industries are at a great disadvantage in marketing their products. They lack holding power. Facilities such as transport and warehousing are not easily available to them. They also lack knowledge of current market conditions. They are often at the mercy of unscrupulous middlemen. Facilities for procurement of materials and equipment are also lacking. There is little knowledge of sales promotion and advertising methods. Marketing weaknesses increase prices both to the consumers and to the small industrialists.

- (vi) Standardization: Low quality of products and lack of uniformity seriously retard the sale of small industry products. There is no machinery for obtaining and disseminating to small industry current information on designs, qualities and standards. This is a serious handicap particularly in foreign markets.
- (vii) Government purchases: The absence of an organized system of government purchases of small industry products denies an important source of encouragement to small industries. There are no channels through which they can explore the possibilities of sales to government agencies and no means of ensuring production according to government specifications. Small industries are not organized to meet large scale orders.
- (viii) Lack of common facilities: There are few processing and finishing facilities for use on a joint basis. Due to this, many production processes that could be done more efficiently on a common basis are being carried on by each industrial unit.
- (ix) Export difficulties: Small industries which are in the export business or have the potential to export face the problems outlined above but in a more acute form because they have to meet world competition. Among the special problems of these industries are: insufficient knowledge of overseas market requirements and potential; deterioration in the design; inadequate production volume to meet initial and repeat foreign orders within specified delivery times; unevenness in quality and technical standards of goods; relatively high costs of production; and numerous problems in connection with the collection and marketing of goods. Good design, quality and price are probably the most important elements in overseas sales, and these are often lacking at present. There are many difficulties in organizing a large number of individual small industries to provide sufficient quantity for export. There is almost complete lack of foreign commercial experience. Raw materials used for export products are often of low quality. Means must be found to lower production costs. These and other problems must be overcome before any greatly increased exports can be expected by small industries."

(7) Assistance at the Preinvestment Stage - The following types of pre-investment activities are sorely needed in developing countries:

- Surveys to determine the industrial potential of a given area, which may be the country as a whole, a region, a

province, a district or a town. The area survey provides the basis for a planned program of industrial development pinpointing short-term and long-term industrial possibilities and necessary measures of promotion and assistance.

- Industry feasibility studies to determine the techno-economic possibilities of establishing and expanding a particular industry or of manufacturing a specific product or group of products. These studies present recommendations on number and size of enterprises to be encouraged and their location; production, marketing and financing possibilities; investment requirements; anticipated cost of production and profitability; and policies and measures for the establishment or expansion of industries.

- Market surveys to provide information on the outlets for given products not only to improve distribution and to expand sales but also to assess the feasibility of candidate industries. The market survey also provides information on the potential size of the market, the long-run effect of substitute products and the elasticity of demand.

- Model schemes or industry fact sheets for industries offering good prospects of development. These are short pamphlets containing basic information for establishing and operating an industrial unit and manufacturing a product: size of plant, type of equipment, production processes, prospective markets, requirements of fixed and working capital, estimates of income, expenditure and profitability.

(8) Types of Assistance - Among the various modes of assistance which must be adjusted to the country-specific situation are:

- technical counselling, including advice and guidance on the selection and utilization of materials, machinery and auxiliary equipment, on plant layout, production processes, production planning and control, maintenance, inventory control, cost reduction and general housekeeping.

- facilitation of financing, including assessment of credit needs, preparation of project proposals, steps to establish loan eligibility, and development of repayment schemes.

- establishment of common service facilities, such as a toolroom, a testing and quality-control laboratory,

heat-treatment, electroplating and finishing workshops, forging and die-casting units, foundry, specialized workshops for certain industries, leasing of machinery and equipment, and maintenance and repair workshops.

- improvement of design, quality and standards, including simpler sampling, testing procedures, and calibration standards.
- management assistance, including diagnosis of the state of the finances, budgeting and cost control, organizational structure, personnel policies, industrial relations and management training.
- marketing assistance, including advertising methods, marketing channel development, market surveys, and in disseminating marketing information.
- industrial research directed to use of local agricultural, mineral and forest products and of waste materials or by-products; investigation of problems of processing, of machinery and equipment and of developing appropriate technologies; and collection and dissemination of industrial, technical and scientific information of interest to small-scale industries.
- promotion of subcontracting with attention to the following factors: needs of large plants in certain fields of manufacturing, e.g. the metal industry, for highly specialized small industries; an effective machinery for bringing together supply and demand; technical and managerial assistance facilities; legislation to protect small establishments; and, in certain cases, a favorable tax system -- taxation on value added being especially appropriate, since it avoids cumulative tax payments.

(9) Previous A.I.D. Involvement in Small Industry Activities - Over the years A.I.D. has been involved in a wide variety of programs relating to small industry. The most extensive, systematic efforts have been in support of productivity centers and of industrially oriented intermediate credit institutions which in some instances have served small industry. Also, A.I.D. has undertaken a wide range of individual small industry projects -- both on a contract basis and through direct hire personnel. The report series Spring Review of Intermediate Credit Institutions (1969) and supporting documentation analyzes in considerable detail A.I.D. efforts in this field. Virgil Poling, a long-time A.I.D. small industry specialist, has analyzed and summarized more than 100 reports in the A.I.D. Reference Center on small industry; in addition he has summarized his experiences in working with the Korean silk industry, noting in conclusion that at this time rather modest A.I.D. inputs in this field could be very effective in catalyzing dormant LDC resources and in demonstrating payoff from alternative approaches.

Project Rita, a \$2.8 million A.I.D. rural industry program carried out in Northeast Brazil from 1965-1969, involved six U.S. universities working with counterpart universities in Brazil. Unfortunately, none of the U.S. universities had solid records of success or even significant experience in the field prior to venturing to Brazil. In addition they relied heavily on inexperienced and usually unqualified graduate students to serve as the expert advisers. The evaluation of the project concludes that despite the lack of qualifications of the U.S. participants, the project had a stimulating effect on small and medium industry development.

During the 1960s Arthur D. Little, Inc., served as an A.I.D. intermediary in the small industry field in Nigeria. Despite disruption of the project due to the war, a number of useful lessons were learned. Specifically, the necessity to link the technical and financial aspects with an overall marketing framework is clearly an essential key to success.

(10) Activities of Other Assistance Agencies - During a twelve-year period the Ford Foundation invested \$20 million in small industry in India. Smaller programs have been carried out in Pakistan and Malaysia. While it is difficult to trace the impact of these pioneering efforts, the current growth of small industry in India is estimated at 20,000 manufacturing units annually. Much of this experience is summarized in publications of the International Industrial Development Center of Stanford Research Institute. A particularly helpful overview is included in Stepanek's Small Industry Advisory Services - 1960, which has been brought up to date in recent correspondence with Stepanek.

In the multilateral arena, UNIDO has assumed leadership in this area, largely because of Stepanek's presence in UNIDO. ILO and the UN Economic Commissions also have smaller efforts in progress. UNIDO currently has Special Fund projects in Cameroon, Senegal, Togo, Uganda, Zambia, Brazil, Chile, Iran, Greece, and Turkey. The experiences of UNIDO, other international agencies, and several donor countries in the field are summarized in the UNIDO reports Technical Services for Small-Scale Industries, 1970 and Small-Scale Industry in Latin America, 1969. OECD has also dabbled in this field, with its most significant publication being Promotion of Small and Medium-Sized Firms, 1969. The World Bank is also increasing its interest and a particularly relevant report is The Development of African Private Enterprise, 1971.

(11) Why Should A.I.D. be Involved in Small Industry? - There are a variety of reasons why A.I.D. should have at least a modest, high quality capability in the practical aspects of small industry even though in recent years A.I.D. programs in the area have almost vanished:

Small industry is and will remain a significant and integral part of development in most LDCs. Practical, on-going experience in this sector is essential if A.I.D. as an institution is to understand overall development process.

- Small industry is directly related to priority A.I.D. concerns over employment and income distribution. It provides a handle to attempt to attack these problems.
- Small industry is closely linked to A.I.D. concerns over agriculture and rural development. Indeed, it is an essential dimension if such concerns are to be met.
- The U.S. has directly relevant high quality experience which can be directed to LDC problems at reasonable cost. The LDCs who are aware of this capability are interested in tapping it (e.g. Paraguay, Indonesia, Venezuela, Colombia).
- The multilateral agencies will probably continue to increase efforts in this area. In the absence of a credible body of expertise A.I.D. will not be able to interact effectively with these institutions nor affect their programs in a significant way. At present U.S. experts are often not invited to relevant meetings since the U.S. is considered to have abandoned the area.

F. IMPLEMENTATION

Upon project approval, steps will be taken to select the four institutions, preferably in different geographical areas, for participation in the program. There are a large number of candidate institutions, including:

South America	Paraguay	National University Center for Development and Productivity
	Colombia	University of the Valley
	Bolivia	Bolivian Development Corp. National University
	NE, SE Brazil	Federal University, Pernambuco Federal University, Santa Catarina
Caribbean	Trinidad	University of the West Indies
	Honduras	Industry & Technology Institute of Productivity
Asia	Thailand	Asian Institute of Technology
	Indonesia	Pandung Institute of Technology
Africa	Nigeria	University of Ife
	Kenya	Nairobi University
	Ethiopia	Haile Selassie I University

A mix of different types of institutions will be considered. For example, it may be possible to select

- a Ministry of Industry and Commerce (or equivalent),
- a national university with scientific and engineering elements,
- a national productivity center (or equivalent), and
- a multinational university.

This would provide a diversity of institutions and organizations with which to demonstrate existing existing methodologies and field test and field test new or innovative approaches. It would provide an evaluation of alternative organizational vehicles for achieving industrialization of the small-scale type, and permit consideration in other countries of the best available organization for the purpose. It is recognized that the developing countries operate in differing social, economic, cultural, and governmental environments. The approach that works well in one country may fail miserably in another. In working with these linkages, prime requirements are flexibility in approach and adaptability to different environmental situations.

The criteria for selection of institutions will include the suitability of the national macro-economic framework and of local business conditions, existence of practicing or potential entrepreneurs, seriousness of employment concerns, matching of potential products with potential markets, and linkages of the institute with educational, financial, and technological institutions of the country. Also, the usual project criteria of host Government commitment, quality of the institution's staff, and potential multiplier effect will be considered.

As a first step, selected USAIDs will be asked to comment on an initial list of candidate institutions and suggest other institutions. An AID/Georgia Tech team will then visit a limited number of these institutions, and in consultation with the concerned USAIDs and with UNIDO make the final selection.

Programs will begin at two institutions in FY 73 and the two other selectees in FY 74. The principal responsibility for program development, program management, and program evaluation will be placed on the institutions themselves with Georgia Tech and A.I.D. contributing to these efforts.