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Report on
Preliminary Feasibility Study
of
Rural Job Skills Training Project
(Peru)

by

Howard E. Ray
Robert G. Terzuola

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TABLE OF CONTENTS

	<u>Page</u>
I. Summary and Recommendations	1
II. Background	4
III. Development of Project Design	7
A. Project goals, purposes and outcomes	7
B. Target population	9
C. Pilot sites	9
D. Need for training	10
E. Educational technology to be utilized	15
F. Operational systems	18
G. Planning and evaluation	19
IV. Selection of Pilot Sites	20
V. Intersectoral Coordination	23
VI. Training Course Development	25
Appendix A. Resume of procedures followed in carrying out preliminary feasibility study on the proposed rural job skills training project.	
Appendix B. Substantive contacts made by Consultants during preliminary feasibility study of proposed rural job skills training project.	

I. SUMMARY AND RECOMMENDATIONS

A preliminary feasibility study was made of the proposed rural job skills training project in Peru, including a general assessment of the extent to which the capabilities of SENATI, the proposed implementing institution, coincide with the needs of training for the target population. It was concluded from the study that the project has sufficient merit to be considered feasible, although some redefinition and reorientation are recommended. Past and present performance of SENATI would indicate that the organization has sufficient leadership, flexibility and innovativeness to be a logical implementing institution for the proposed project, even though it must move well beyond its present experience and expertise to meet the anticipated needs of training for the target population. In this regard, an additional project sub-objective is recommended, namely, to develop institutional capacity for providing relevant skill training services to rural populations.

A major concern of the team was the risk of disturbing the social, cultural or economic balances in the community through Project actions taken without adequate investigation into their potential impact on the community. Emphasis is placed on the need for SENATI to develop investigation, planning and evaluation capabilities that will enable it to remain sensitive to such factors; and a three step process is proposed for determining training needs in an area. Also, it is recommended that the project be restricted at the outset to no more than two pilot sites in rural areas plus one in an urban population of recent migrants from rural areas.

Two broad categories of training are suggested to meet the needs of the target population adequately: general skills training for self and community improvement; and specific skill training to increase the employment opportunities and/or productivity of the participants. Training activities of the first type will require evaluation in terms of social benefits which accrue, while those in the second category will be subject to evaluation in economic terms.

It is recommended that flexibility be maintained in the use of educational technology for imparting skills training. Some

general guidelines for determining the most appropriate mix of educational technology for a given situation are suggested, with a trained instructor and appropriate programmed instruction materials being a common element throughout. Promoters, mini-mobile units, radio, and correspondence study, and their potential roles in the various types of training proposed under the project, are also considered.

The need is identified for coordination and collaboration between SENATI and other institutions with programs directed toward the same population, and early action toward this end is recommended.

Time did not permit identification of the highest priority skill areas for inclusion in the project. However, preliminary suggestions (based on limited observations in Peru reinforced by experience elsewhere in Latin America) are offered for both specific core skill areas and core skill packages for use in general training courses.

Additional investigation and analysis will be required for development of the PP for this proposed project. It is estimated that three to four person-months of effort by a two or three person team may be required for this task. That team should work in conjunction with a counterpart SENATI team to:

1. Develop criteria for selection of pilot sites and select sites for initial project action.
2. Develop criteria for determining feasibility of establishing a training program in a given area, and for offering a specific course.
3. Determine the core job skill areas and general skill package most needed by the populations of the pilot sites, taking into account social, cultural and economic equilibrium factors.
4. Identify the specific sub-populations for which initial rounds of job skill and general training courses will be designed.

5. **Assess present SENATI capacity for planning and conducting investigations relevant to this project, data analysis and interpretation, and use of same in program formulation or modification; and determine what will be required to develop adequate capacity in these areas, if the need exists.**
6. **Develop and test a systematic procedure for determining training needs of people in a given area.**
7. **Determine the most appropriate mixes of educational technology for different kinds of skill training to be offered, considering effectiveness, cost effectiveness and practicability.**
8. **Determine extent to which existing transportation infrastructure will be a constraint to the use of mini-mobile units.**
9. **Identify institutions and programs with which linkages should be sought to facilitate implementation of this project.**
10. **Determine estimated AID and host country inputs and costs for the project.**

The input of external technical assistance and the time required to move the project to the implementation stage can be reduced to the extent that SENATI is able to mobilize its present resources to initiate work immediately on collection of background information and preliminary investigation on the foregoing.

It is highly likely that technical assistance will also be required during the project implementation stage. These requirements should also be identified by the team which assists in PP preparation.

II. BACKGROUND

A shortage of trained manpower and the lack of training facilities that can reach low income population groups with relevant training services are among the critical problems faced by Peru in carrying out its development programs and creating better opportunities for those groups. These problems are especially serious in rural areas where major unemployment and under-employment exist, and where training opportunities are minimal. At present, job training programs for unskilled, semi-skilled and middle level workers are generally restricted to urban areas and on-the-job training services. (Excerpted from AID Project Identification Document on Rural Job Skills Training).

USAID/Peru and SENATI (Servicio Nacional de Adiestramiento en Trabajo Industrial), an institution with demonstrated expertise in developing appropriate skill training for industries in urban areas, have together explored various alternatives for alleviating the problems described above. SENATI has already moved beyond its initial concept of concentrating training programs within permanent facilities located in large industrial centers. Although these facilities continue to form the core component of its total program, SENATI has successfully introduced the use of mobile units to extend its services into smaller urban areas where the need for job skill training is also serious. As a further step in the same direction, a new training program being instituted by SENATI, with assistance from the Netherlands, will be oriented specifically to the needs of small enterprises. However, both the mobile unit and planned small enterprise programs are limited mainly to urban and sub-urban areas.

As a logical next step in its development, SENATI has expressed interest in extending its coverage into less accessible areas, and in developing its training capabilities for more disadvantaged populations. Although the organization has received, and continues to receive, substantive assistance from a number of donor agencies in the development of its programs, all such assistance appears to have been directed to urban job skills training. USAID has received a request from SENATI for assistance in developing this new thrust toward rural areas.

The USAID/Peru Mission has responded favorably to the above request, and has proposed a three-year assistance project to

help expand SENATI's outreach capability in order to directly benefit members of the rural target population. The proposed project is described in the PID for Project 527-0165 entitled Rural Job Skills Training.

The present report has been prepared in fulfillment of terms of Contract No. AID/AFR-C-1131 (IQC), Work Order No. 33, for Technical Support (Education). The objective was to conduct a preliminary feasibility study of a job skills training program (described briefly above) proposed by USAID/Peru. The scope of work included under the objective was:

- 1) Determine the potential areas of training in the experimental pilot sites. Based on locally available information and employment opportunities, project future training needs of the region and the needs of the target population. Special attention should be given to the possibility for agricultural training programs.
- 2) Determine what level of basic education skills may be required as requisites for skills training programs.
- 3) Determine the minimum population concentration necessary for the establishment of skills training programs.
- 4) Generalize to what extent SENATI's capabilities and the training areas coincide with the needs of training for the target population.
- 5) Determine if the existing transportation infrastructure permits the use of mini-mobile units.
- 6) Determine the possibilities for use of radio, correspondence courses and programmed instruction as elements of the training programs.

Upon arrival in Lima, the Consultants met with Mr. Barry N. Heyman, Human Resources Development Officer, who further clarified the assignment. Mr. Heyman emphasized the preliminary nature of the feasibility study, and indicated that the present assessment should seek to: identify the relevant questions on

which a more detailed study would focus; determine what information will be required, how it may be developed, and a suggested time frame; and arrive at a recommendation concerning the overall feasibility of the Project.

The Consultants sought to take into consideration both the scope of work as written and the HRDO's added insights in carrying out the present assignment. A brief resume of the procedures followed is presented in Appendix A, and a list of substantive contacts is included as Appendix B.

III. DEVELOPMENT OF PROJECT DESIGN

A preliminary conclusion from the present study is that the proposed project has sufficient merit to be considered feasible in relation to its stated purposes. As indicated in the sections which follow, however, it is the judgment of the Consultants that its feasibility and, consequently, benefits to be expected can be improved through some redefinition and re-orientation of the project. Such factors should be studied in greater depth during the preparation of the PP.

The proposed project will require that SENATI move well beyond the limits of its experience to date in terms of operational systems as well as in adapting its high level training programs to the real needs of the target population. The organization has both capability and experience in many of the required skill areas, although at a significantly higher level than is anticipated to be appropriate for the target population of this project. Furthermore, SENATI has shown flexibility and innovativeness in moving into new fields such as the mobile unit program. Based on past and present performance, it would appear that SENATI has the leadership and flexibility to determine skill needs of the target population and to provide training which responds to those needs. This preliminary conclusion should be re-examined during the preparation of the PP.

A. Project Goals, Purposes and Outcomes

Within the general goal, as stated in the PID, the following is suggested as a specific goal for this project: to provide appropriate skills training opportunities in response to the needs of disadvantaged Peruvians. The project purpose appears adequate as stated except that it should be broadened to include both job and general skills training. It would then read: to provide low cost job and general skills training opportunities for the poor in two rural areas of Peru.

Project outcomes (quantifications must be added) should be expected to include:

- 1) local people trained in basic skills to satisfy their own needs in improving their immediate environment;
- 2) local people trained in specific skills to enable them to take advantage of better job opportunities, particularly in their own geographic area;
- 3) unskilled or semi-skilled workers with higher levels of competence in specific job areas that increase their productivity and/or quality of output;
- 4) local people qualified in the various skills and abilities required for achieving success in small business enterprises.

While designing programs or courses directed toward achieving the suggested outcomes within a given geographical area, great care should be taken to avoid disturbing the social, cultural or economic balances in that area. The following observations (which require further checking) made during the Consultants' visit to the Department of Cusco are offered to illustrate this point:

- 1) Impressions gained from visits to a number of "peloterías" (furriers) in Sicuani was that the quality of fur goods produced is reasonably good, and that the supply of skilled workers is kept in balance with demand through informal apprentice-type training, both local and regional. At present, production seems to be geared closely to the availability of animal hides, the raw product. New training programs to either upgrade the productivity of present workers or increase the number of workers available could conceivably oversaturate the labor market and/or increase the demand for raw material to the extent that hide prices would rise to the point where the enterprise was no longer profitable.
- 2) The unsatisfied demand for blacksmiths, tinsmiths and carpenters, as assessed by the quantity of each product offered for sale at the Sicuani market, may be rather limited. Training of even modest numbers of new craftsmen and artisans might result in exceeding the

market demand for such products and, eventually, in increased migration to the cities.

- 3) The level of poverty in many towns and villages between Siuani and Cusco appeared to be severe. Improving the basic skills of these people might be of little value due to the lack of resources needed to permit them to utilize such skills in improving their surroundings. Therefore, a general type of training could conceivably lead to even greater frustration on the part of the recipients rather than in positive action to improve their own environment.

The above examples are not intended to imply that job and general skills training would automatically have deleterious effects. Rather, they are presented to illustrate the necessity for considering potential negative, as well as positive, impact in developing local training programs.

B. Target Population

The definition of "target population" as described in the PID appears reasonably adequate at this stage of the project's development -- males and females aged 15 through 39 who are employed in either unskilled or semi-skilled occupations in small rural industries, in associative enterprises or in family enterprises (including farming), and those presently employed or under-employed. That broad definition will require refinement as the project is developed, and sub-division into specific audiences for the different types of training to be offered.

C. Pilot Sites

The proposed project, as stated earlier, represents a departure from the type of in-depth skills training currently offered by SENATI to workers in urban areas. It will require the development of new operational systems as well as areas of expertise. Therefore, it is highly appropriate to speak in terms of pilot sites. As this project is expected to be the first step in an expanding program, however, it may be desirable to

avoid the use of the word "experimental" in connection with the pilot sites.

It is suggested that pilot sites selected for this project be utilized by SENATI to gain experience in:

- Identifying types of skills needed by the target population taking into consideration present skill levels common to the area, employment opportunities, potential impact of skills training on social and economic equilibria, and implications with respect to migration;
- developing coordinating mechanisms and collaborative arrangements with other programs and institutions to facilitate determination of skill needs, identification of potential trainees, and organization of relevant courses;
- utilizing present SENATI expertise and experience as the base from which to develop new courses and programs geared to meeting identified needs;
- developing operational systems appropriate for this new and extended outreach program.

Development of institutional capability in the above areas should be included as one of the specific objectives of the project.

D. Need for Training

Two broad categories of potential need for training were considered in the study:

- training designed for social benefits, i. e., skills and abilities needed for improving the home and community environment;
- training designed for economic benefits through increasing worker productivity or improving his employment potential.

Implied in these categories are distinct, although overlapping, target populations and quite different kinds of training with respect

to content and methodology.

1. Training for self-improvement (social benefits)

Training courses falling into the first category described above would not be expected to result directly in any change of occupation or increased income among the participants. On the contrary, the objective would be to increase the general level of skills needed to perform the multitude of tasks required of a person to maintain and improve his immediate environment.

The content of such courses would encompass a variety of skills presented at levels consistent with: a) existing capabilities of the participants; and b) skill levels required to satisfy the needs of the individual, the family and the community. It should be emphasized that such courses would seek to teach basic skills rather than to produce qualified industrial workers.

Courses of this nature could be designed for large numbers of participants, and possibly make effective use of various media to reduce costs per person trained. The courses would be offered in the language of the participants, and, at least for initial phases, would have few or no prerequisites. That is, literacy would probably not be a requirement for enrollment, nor would previous skill training or experience. Finally, there would be only minimal requirements as to resources available to the participants -- tools, materials, buildings, etc.

In addition to increasing the general potential for home and community improvement, persons with innate ability in a particular manual skill could be identified through such courses. These persons could then become candidates for the specific type of skill training discussed below. Likewise, common interests and needs in the communities represented in the general courses could provide the stimulus for more sharply focused follow-up courses. In the broader context of development, improvements over time in personal and community living conditions should contribute to stability in the community and decreased desire to migrate to the overcrowded urban areas -- provided employment opportunities in the area can also be developed.

2. Training for increased income potential (economic benefit)

Each training event conducted under this category would be restricted to teaching or reinforcing a single skill (e. g., carpentry, masonry, maintenance and repair of tools and machinery, etc.) to those already employed or with an identifiable possibility for employment. Both the prerequisites for enrollment and the expected level of achievement would be conditioned by the local situation.

In general terms, both prerequisites and achievement goals would be significantly lower than is the case with present SENATI training programs. Where basic education skills are essential, prerequisites for enrollment should include only those necessary to start training. Additional basic education, where required, should be incorporated into the course itself.

Almost by definition, a specific skill training course will have a smaller potential clientele than a multi-skill course designed for the general population. Furthermore, the specific skill course will be more intensive and require more sophisticated training aids. Most critical of all, the needs for such intensive training will be highly site-specific. Therefore, specific skill training courses would be expected to: 1) have fewer participants per course; 2) require a higher degree of instructor/student contact; and 3) be less amenable than the general courses to the use of mass media such as radio.

As in the case of the general courses, specific skills courses should have important indirect results as well as increasing the income potential of the graduates. If carefully matched to the demand for both workers and products, the resulting pool of appropriately trained manpower should contribute significantly to both increased productivity and higher quality output of existing enterprises in the rural areas. In addition, availability of such a pool should lead to the creation of new small enterprises and expansion of existing ones. This should, in turn, generate new employment, thus offering the people viable alternatives to migration. Outstanding trainees at the intermediate level of skills training anticipated under this project would become candidates for ongoing SENATI training programs to meet the more limited need for highly skilled workers in the pilot site region.

The two broad categories of training have been discussed above in terms of differences in objective, focus and target population. In practice, however, no clearcut division is possible. General courses will almost inevitably place greatest emphasis on one or a few skills, and many specific skills training courses will necessarily include elements of related skills. An example of a course that does not fall neatly into either category (based on observations of need made during visits to small enterprises in Cusco) would be a course on spatial planning and job organization for owners of small industrial enterprises.

3. Determination of training needs

Both present and potential demand in the region for semi-skilled and skilled manpower should be determined as the first step in development of a relevant skills training program for rural or newly-urban people. The levels of training required to satisfy the various demands of the market may well be equally as important to a realistic assessment of training needs as are the numbers of workers required.

Assessment of the present status of the target population in the region with respect to manpower available to meet present and projected demand (both quantity and skill levels) should be the second step in determining specific training needs to be incorporated into the program.

The third step will be to determine the degree to which already existing training mechanisms (apprenticeships, etc.) can be expected to meet the demand adequately. It may be found, for example, that the present system for training workers for the "peletería" in Sicuaní is essentially adequate to meet current and projected demand both in numbers and level of competence. It is conceivable, however, that this industry could benefit from sending a few workers to other areas for training as a means for upgrading the level of the Sicuaní fur industry over time.

To determine the nature and extent of training needs of the self-improvement type, the desired and present skill levels of the target population must be balanced against the possibility for

utilization of improved skills within the resource and other constraints of the individual and his community. For example, surface drainage around houses appeared to be a serious problem in many villages between Cusco and Sicuani. Construction of simple drainage systems would therefore appear to be a skill needed by people in that area. If, however, the land is flat and the water table is at the surface, such drainage systems might be useless in terms of solving that particular problem.

Failure to consider demand and feasibility in their various dimensions when planning a job skills training program will almost inevitably result in disequilibria, such as those cited in Section III A, that can have serious consequences for the overall development of the region. Conversely, if both general and specific skills training programs are sensitive to the need for maintaining proper social and economic balances on a local level, it is the judgment of the Consultants that such programs would contribute positively and significantly to orderly development of the region. In the process of that development, competent workers would either remain in their own communities or tend to move within the region to take advantage of new employment opportunities rather than migrate to the already overcrowded large urban industrial centers.

This rather lengthy discussion on determination of training needs is prompted by the Consultants' concern (based on one short field trip to one department, Cusco) that present balances could be seriously disrupted with only minor incorrect action in the area of skills training. The sample was entirely too small to permit generalization. Therefore, this report can only identify some of the crucial factors which must be studied in greater depth and in other geographic areas as the project develops. Tentative conclusions concerning training needs in the Cusco-Sicuani areas are presented in Section VI.

4. Minimum population concentration

Criteria suitable for determining the feasibility of establishing a job or general skills training program in a given area are not easily determined. Population density is one indicator, but is not adequate if used alone. Among the other factors to be

considered are population distribution, accessibility of the area, and extent of interest in the proposed programs,

The most realistic approach to determining such feasibility may be to establish the minimum number of participants required to justify a given pattern of training, probably keyed to an acceptable cost per trainee. Availability of human and other resources, competing demands for their use and possibilities for extending coverage through use of promoters, mass media, etc., are other factors to be taken into consideration. Alternative means for providing skills training should also be evaluated. For example, where the number of potential trainees is too small to justify taking the training to them, it should be possible (in at least some cases) to take the trainees to regional centers for their preparation.

Criteria for determining the feasibility of offering training in a given situation should be developed during the planning or early implementation stages of the project.

E. Educational Technology to be Utilized

The educational technology utilized in the project should be dictated by: 1) the nature of the content of a given course or series of courses; 2) the number of participants expected in the courses, and their characteristics; 3) availability of facilities and resources; and 4) the relative cost effectiveness of alternative mixes of appropriate educational technologies. For example, the use of radio might be highly cost effective as one component of a mix for reaching 1000 enrollees in a general skills training course, but completely inappropriate for use in a specific skills training course for 30 people.

A basic requirement for all courses anticipated under the project will be face to face contact between instructor and trainee. An element common to all general and specific skills training courses will therefore be a trained instructor. The difference will be in the amount of instructor/trainee contact necessary. Although skills training courses could theoretically be conducted without the use of prepared materials and equipment, in practical terms the instructor should be provided with a set of programmed

instruction materials and training aids. The degree to which other media may be used to supplement, support or reinforce his direct contact with the trainees will depend upon the complexity of course content and desired intensity of training.

The number of trainees reached by one trained instructor could be increased through the use of lower cost promotors to supplement the instructor's contact with his trainees. For example, an instructor might spend two days per week with each of three groups of trainees. On the days in which he is working elsewhere, the promotor could utilize programmed instruction materials and relevant training aids in working with the group to practice and further develop concepts and skills introduced by the instructor. The ultimate extension of his efforts through promotors would be for the instructor to devote full time to training, supervising and reinforcing promotors who would in turn provide the face to face contact with the trainees.

The key to successful use of promotors to either supplement or replace instructor/trainee contact is an effective program of promotor training and reinforcement. Even so, it must be recognized that the use of promotors as suggested above will mean some sacrifice in the quality and depth of skills training that can be provided. That loss, which may be of little consequence in imparting general skills training, will become increasingly serious as the complexity and depth of course content increase. In areas where significant numbers of people do not speak or are not fluent in Spanish, however, the use of bi-lingual promotors who can receive training in Spanish and impart it to others in their native language may be the only viable alternative for reaching those populations.

The introduction and use of mini-mobile units would appear to offer two major advantages for the total skills training program: the possibility to conduct higher level training for which limited amounts of special equipment are required; and greater mobility for instructors. Used in combination with promotors, the mini-mobile unit concept would appear to offer the possibility for further increasing the number of people who could be offered substantive skills training (both general and specific) per instructor available.

It was not possible to ascertain, within the time available for this study, the extent to which the existing transportation infrastructure would permit the use of mini-mobile units. In the area between Cusco and Sicuani, however, population distribution in relation to existing roads appeared to be well-suited to the use of mini-mobile units. In other areas which are not accessible by road, there would be the possibility of bringing promoters to the mini-mobile unit periodically for training and feedback. They would then return to the more remote areas to conduct the skills training courses. A careful study should be made of road systems in the pilot areas in relation to population distribution to determine the extent to which lack of passable roads may prove to be a constraint to the effective use of mini-mobile units. The preliminary conclusion, in the meantime, is that the existing transportation infrastructure should permit effective use of at least a limited number of such units mounted on four-wheel drive vehicles.

Other media may be appropriate for use in support of certain skills training courses, and as a means to increase the effective clientele of a mini-mobile unit.

Radio could be an appropriate medium, for example, for use in promotion of skills training courses, in motivating people to seek such courses, and in presenting educational content to supplement and reinforce the training received in organized classes. The latter functions would be restricted largely, although not entirely, to general skills courses with large and widespread participation. The following examples may serve to illustrate:

- A specific skills training course on administration and management of small enterprises is in progress. A series of "soap opera" type radio programs are broadcast during the course of this training to dramatize the need for good management and the consequences of poor management.
- A general skills training course is organized for which widespread participation is sought. To maximize the number of participants who can be served, the instructor

visits several communities each week with his mini-mobile unit and makes fullest possible use of promoters. A regularly scheduled series of radio programs geared to and synchronized with course content are produced and broadcast over local radio stations to provide continuity, and to supplement the content imparted by the instructor and the promoters.

Correspondence courses offer another possible means of imparting skills training. The level of literacy in an area will determine the feasibility of using this medium. (According to the 1972 census, approximately two-thirds of the rural population between the ages of 15 and 39 years in the department of Cusco are illiterate.) If literacy levels are adequate to permit their use, correspondence courses could become another effective supporting medium to the total job and general skills training program.

In summary, the core element in all skills training courses should be contact between instructor and trainee either directly or through a well-trained promotor. The use of promoters and/or mini-mobile units offer possibilities for increasing the effective clientele of an instructor. Coverage may be further increased and, in some cases, the value of the training enhanced through appropriate use of media such as radio in supporting roles. The most appropriate mixes of educational technologies to employ can only be determined on a course by course basis.

F. Operational Systems

Entry of SENATI into this new type of activity will require that new systems be developed to identify needs, recruit trainees, conduct courses of a type and at levels with which SENATI has had little experience, obtain reliable feedback from the field, and evaluate effectiveness of courses conducted. Such systems will have to be integrated into the total SENATI structure and program.

The past performance of SENATI, as described in Section III, would indicate that it may have the flexibility and innovativeness to accomplish the above. This should be investigated with

SENATI in more depth during the course of PP preparation, however.

G. Planning and Evaluation

This report has placed strong emphasis on the need for careful study and analysis before embarking on a program of job and general skills training. That need will continue as long as the program functions. Therefore, SENATI will require a strong investigation, planning and evaluation capability.

The SENATI structure already includes a relatively well-staffed planning and evaluation component. It maintains a Department of Planning which consists of three divisions: 1) Projects (three professional staff); 2) Planning and Evaluation (11 people); and 3) Studies, Investigations and Statistics (8 people, including anthropologists, sociologists and research specialists). A preliminary assessment, based on contacts with SENATI personnel, indicates that the present studies and investigations division has the capacity to direct and supervise field studies into needs and critical implementation factors for skills training in rural areas. They do not have trained field personnel to actually conduct such studies, however.

Thus, it appears that SENATI, with moderate strengthening of existing divisions, may be able to develop its investigative and planning capacity to meet the requirements of the proposed project. During the PP preparation phase, present and potential capacity of SENATI's planning department should be assessed in terms of:

- capacity to plan relevant investigations and collect valid data;**
- capacity to analyze and interpret data generated through such investigations;**
- capacity to use the above as the basis for program formulation or modification.**

IV. SELECTION OF PILOT SITES

It is anticipated that the project will be implemented in two selected rural areas (see Section III A), and in up to two populations which might be described as recently migrated urban or "pueblos jóvenes." Due to the complexity of the project and lack of previous experience by SENATI in the types and levels of skills training proposed, it is suggested that the project be restricted initially to no more than two rural pilot sites plus one "pueblo joven."

For purposes of this project, rural areas will include both completely rural populations, and towns and villages with non-urban characteristics. A pilot site will include the total population within given geographic or political boundaries. For example, the entire population of Sicuani District in Cusco (distributed as illustrated in Table 1) would be classed as rural within the context of the project, and might constitute one pilot site.

The "pueblo joven" may be defined as a concentration of people recently migrated from rural areas who have progressed a step beyond "new arrival" status, but whose employment opportunities are limited by lack of employable skills. Although the project's principal focus will be on rural areas, experience gained in working with a population in transition should contribute toward better understanding of differences and commonalities between rural and urban populations with respect to their needs for skills training.

By definition in the project proposal, the pilot sites will be selected in the sierra region of Peru. The recent USAID/Peru study which identified the relative position of all Peruvian provinces on the basis of a 10-factor index of socio-economic characteristics can be used for preliminary determination of the rural areas in which programs will be established. Final selection should be made on the basis of verification in the field of information available from this and other studies.

The Departments of Cusco and Cajamarca have been suggested as potential pilot sites. The Consultants were unable to visit Cajamarca due to time limitations. Review of census data and discussions with USAID and Peruvian officials, however, would

Table 1. Population of communities in Sicuani District,
Department of Cusco

<u>Centros Poblados</u>	<u>Categoría de los Centros Poblados</u>	<u>Población Total Censada</u>
<u>Dist. Sicuani</u>		35,650
Sicuani	Ciudad	12,783
Accota	Anexo	487
Achocchayani	Caserío	50
Bano Pata	Caserío	43
Beluyo	Comunidad	149
Capillani I	Comunidad	302
Ccanccahua	Comunidad	598
Chanchapata	Comunidad	328
Chchijonatse	Comunidad	68
Chihuaco	Comunidad	937
Chihuaco	Parcialidad	492
Chumo	Comunidad	1,406
Churubamba	Comunidad	155
Condorsenka	Hacienda	118
Condorsenka	Estancia	65
Condorsenka	Comunidad	75
Fenchintani	Comunidad	94
Hercca	Comunidad	1,004
Hercca	Parcialidad	605
Huankotuyoc	Caserío	151
Huankuiri	Caserío	63
Jurcana	Caserío	175
Kacchota	Caserío	110
Katahui	Caserío	57
Lari	Comunidad	497
Lirincaya	Comunidad	298
Lopez Vlalviro	Comunidad	93
Machacoyo	Comunidad	114
Marcani	Comunidad	124
Mioma	Comunidad	86

Source: 1972 census.

appear to indicate that some portion of that department may well be suitable for the project. As noted earlier, Sicuani District of Cusco would also appear to merit consideration as a pilot site. In addition to the above, several other potential sites should be identified and studied before the final selection is made.

V. INTERSECTORAL COORDINATION

For perhaps the first time in its experience, SENATI will, in this project, be required to identify its potential clients and their needs for training, and to develop a demand for its services. Those clients will be unorganized and dispersed, and often unable to articulate the kinds of skills training from which they could benefit. Furthermore, the relevance and potential benefits to be derived from a given class of training will often be determined by factors beyond the control of either SENATI or its clientele.

To function successfully in the situation described above, SENATI will need to develop effective coordination and collaboration with other institutions whose programs are directed toward the same target population. The objective should be to seek mutual reinforcement of programs that will benefit both the client and the programs. Time did not permit a detailed survey of relevant institutions during the current study. However, two institutions with which it would appear that SENATI could collaborate to the benefit of all were identified, and are cited below as examples.

The Industrial Bank of Peru, with assistance received through an AID loan, is actively engaged in making loans to small businesses in the sierra departments. In the department of Cusco alone, some 500 such loans have already been made. The owners and employees of those small enterprises, the majority of which are actually small industries, would appear to be potential clients for the skills training services to be offered by SENATI under this project. If that should prove to be the case, SENATI would benefit from the assistance of the bank in identifying groups of trainees. The bank, in turn, would benefit from the improved financial position of its borrowers resulting from increased productivity or efficiency, and the trainees and businesses represented would rightly be the primary beneficiaries.

As a result of agrarian reform, former haciendas have been converted into agricultural production cooperatives (CAPS). According to information provided to the Consultants, the CAPS range in

membership from ten to seventy or more families. A government agency, CENCIRA, has the responsibility for providing management training to these CAPS. Manual skills are also required within the membership of the cooperatives to maintain and repair equipment and installations, build needed structures, add to the amenities of life in the community, etc. Skills training --general or job, depending upon need-- provided by SENATI could complement the managerial training of CENCIRA in developing stronger cooperatives. Interested members of a CAP might well form the nucleus around which a series of courses could be organized by SENATI.

The above examples are illustrative only. However, the principle involved will be of vital importance to the success of the project. Every possible effort should be made to identify appropriate institutions, and to develop effective linkages with them.

VI. TRAINING COURSE DEVELOPMENT

The temptation for SENATI to try to develop expertise in all types of skills training for which there might possibly be a request should be resisted. Rather, areas of greatest potential need and demand should be identified and used as the basis for developing expertise, training aids, programmed instruction materials, etc., on a limited number of skills and/or skill packages.

The present study did not lend itself to identification of skill areas for which the greatest demand may be expected in the rural and "pueblo joven" pilot sites of this project. Based on very limited observation in Peru and experience elsewhere, however, some tentative suggestions are offered below which may serve as a useful point of departure for more extensive investigation and planning as the project develops.

Of the seven core areas tentatively identified in the PID, three would appear to be somewhat questionable -- cottage industries, plumbing and food processing. Cottage industries is placed into that category because, as the name implies, it includes a group of "home industries" each of which would have its own particular skill requirements. Plumbing and food processing are considered questionable as they would appear to be too specialized for general skills training, and other job skills may have higher priority in the region in which the project will operate. The other core areas suggested in the PID --woodwork and carpentry, maintenance and repair of agricultural equipment and agro-industrial machinery, rural construction, and basic electricity-- are considered relevant and appropriate.

Three additional types of skills training that may merit consideration as core areas, based on observations and discussions in Cusco, are: metalworking; spatial planning, job organization and safety for small industries; and administration and management of small enterprises. The last mentioned, which was strongly suggested as a critical need by the Industrial Bank, could easily build upon a current SENATI project of similar nature being developed with assistance from the Netherlands (see Section II).

The general skills training described in Section III D 1 will require development of a core package of skills which will probably contain elements of the majority of the core job skills suggested earlier. That core package should have sufficiently broad applicability to permit its use throughout most, if not all, of Pera. For a specific course, however, it would be adapted and supplemented as necessary to meet the needs in the local situation.

Other areas of skills training which might be worthy of consideration either as individual skill core areas or as components of the core package of skills would include: management of natural resources (developing home water supply, surface drainage system, clearing of fields, etc.); protection against temperature extremes and other elements of the climate; and home skills (making soap, candles, etc.). Training in agricultural production skills is not considered appropriate for this project, although members of the farm family might well benefit from basic skills training which may become available to them.

Flexibility should be maintained in course prerequisites and in the levels at which skills are taught. These should be adjusted insofar as possible in accordance with local needs rather than being pre-determined and fixed.

As stated earlier in this report, every possible effort should be exerted to avoid destroying local social, cultural and economic equilibria when planning and developing either general or job skills training courses in a given community.

APPENDIX A

Resume of procedures followed in carrying out preliminary feasibility study on the proposed rural job skills training project.

March 27 - April 7, 1978

Consultant team: Howard E. Ray
 Robert G. Terzuola

The study was carried out in three general phases, roughly defined as: 1) background research; 2) field investigation; and 3) verification and report preparation.

The March 26-29 period was spent in reviewing reports relevant to the project, gathering background information, establishing contact and communication with SENATI, and discussions with USAID/Peru officers knowledgeable about other Peruvian institutions involved in related programs.

Crucial to this phase of the study were frequent sessions with the Human Resources Development Officer during which the scope of work was clarified, and the team was provided detailed background and helpful insights concerning the local situation. Also, a meeting with the director and assistant director of the SENATI projects unit on March 27, and a session with the director general of SENATI and his key staff on the following day established the communications and working relationships that were vital to the success of the study.

The second phase of the study, field investigation, was carried out in the Department of Cusco during the period from March 30 through April 2, by a team consisting of the Consultants and the assistant director of the SENATI projects unit. The investigation focused on small industries, artisan products and production, and technical skill levels to be found in rural and semi-rural areas of that region.

Substantive contact was established with Banco Industrial offices in Cusco who arranged for the team to visit ten small industries in Cusco city who have received financing through the small enterprise development loan.

Arrangements for the team to visit the town of Sicuani and for a native anthropologist to accompany them were made by the AID-funded bilingual education team based in Cusco. On that trip, seven furriers (the predominant small industry) and two markets were visited in Sicuani.

The final phase of the study, verification and report preparation, was accomplished following the team's return to Lima on April 3. Follow-up contacts were made with USAID/Peru officials, SENATI and representatives of other donor agencies, and the study report was written and discussed with both USAID/Peru and SENATI.

APPENDIX B

**Substantive contacts made by Consultants
during preliminary feasibility study of
proposed rural job skills training project.**

USAID/Peru

Barry N. Heyman - Human Resources Development Officer
Lee Twentyman - Agricultural Economist/Loan Officer
(Small Enterprise Development Fund-Banco
Industrial)
Milton Lau - Rural Development Officer
Edward Howard - Loan Officer
(INTINTEC)
John O'Donnell - Chief, Sectoral Planning Office
Janice Weber - Program Analyst
(CENCIRA)
Robert Kramer - Assistant Program Officer
(CENCIRA)

SENATI

Ing. Ciro Gonzales Zavala - Director General
Ing. Javier Aguayo Ugáz - National Sub-Director
Artemio Villalobos Dávila - Director, Projects Division
Juan Pimentel - Assistant Director, Projects Division

Banco Industrial del Peru - Cusco

Juan Gutierrez Mendoza - Chief Administrator
Ing. Luis Vilca Villacorta - Promotor, Small Enterprise Fund

Other Contacts

Geoffrey Cowley - British Embassy, Lima
John Cox - Chief of Party, British Mission to SENATI, Lima
Aart-Jan Verdegaal - Third Secretary, Embassy of the Netherlands,
Lima
Luis Negrón - USAID Bilingual Education Project, Lima
Juan Tueros - Anthropologist, USAID Bilingual Education Project,
Cusco
Vernon Jantzi - Cornell University, Bilingual Education Technician,
Cusco