

IOWA STATE UNIVERSITY
TITLE XII MATCHING FORMULA STRENGTHENING GRANT
SECOND ANNUAL PROGRESS REPORT

H I G H L I G H T S

Twenty-two faculty members at Iowa State University spent fifty-nine person months in Strengthening Grant activities during the period from July 1979 through September 1980. Acquisition of language skills, cross-cultural skills, and an actual working experience in a developing country was their primary objective. Fourteen faculty members were able to spend twenty person months in Costa Rica where their purpose was to obtain a better understanding of the "constraints faced by farmers and their families and by service organizations in the adoption and dissemination of technology and services that might improve the level of living of rural people." Counterpart agencies in Costa Rica were the Ministry of Agriculture, the Ministry of Education, the Interamerican Institute for Agricultural Cooperation (IICA), and the Central American Institute for Tropical Agriculture. Part of the Iowa State University faculty participated in actual in-service training short courses for vocational teachers. The others collected data in a survey of 140 farm families about their knowledge and use of local services (e.g., health, schools, extension). Findings indicate that mass media, except radio, were never or seldom used as sources of information with few exceptions. Analyses of other data are underway.

Information from the multidisciplinary group of faculty who lived and worked in Costa Rica as been shared on campus by special seminars and by incorporation into existing or new courses. One new master's degree program, International Development Studies, has been approved and three other major or minor programs are being planned, indicating that considerable interest in integrated rural development has been generated on campus. Eleven seminars related to this topic were sponsored or cosponsored by the existing Technology and Social Change program on campus and by departments interested in different aspects of rural development and problems facing farm families.

An intensive, one-week training course for Development Advisory Teams has been developed. The first training session was held between winter and spring quarters in March 1981; it attracted 35 faculty and staff members. A second training session is scheduled immediately after spring quarter and 50 people have "enrolled". Management and planning skills for multidisciplinary teamwork as well as policies and procedures for designing and evaluating projects by international agencies such as the Agency for International Development were included in the course.

A second "hands on" experience, this time in a rural area of Honduras, has been planned for eight or nine faculty members for summer 1981. In addition, interaction with Costa Rican counterparts will continue so that training needs and services to enable rural women to participate in development can be identified. Because the Training and Visit Model for transferring technology to farmers has been used in one area of Costa Rica, the opportunity to examine its effectiveness has arisen and will be pursued. The experiences in both Honduras and Costa Rica will increase Iowa State University's capability to offer technical assistance in these areas as well as to teach students on campus and guide them in research related to rural development in less developed countries.

Negotiations are underway to obtain, from IICA, tapes of data collected in rural areas of four or five Central American countries. These data sets will be excellent resources for faculty and students on the Iowa State University campus to study problems of rural development, families, and small farm agriculture in Central America.

IOWA STATE UNIVERSITY
TITLE XII MATCHING FORMULA STRENGTHENING GRANT
SECOND ANNUAL PROGRESS REPORT

I. Introduction

Iowa State University received a Title XII Matching Formula Strengthening Grant in 1979 to increase its capability to offer educational programs, conduct research, and provide technical assistance for the purpose of increasing food availability and improving the level of living of rural families in less developed countries. Faculty members were encouraged by an Iowa State University Policy and Planning Committee to use a multidisciplinary approach to understanding the constraints preventing rural families in Costa Rica from meeting their basic needs, as a first step toward achieving this goal.

II. Review of Major Activities from July 1979 to March 1980

During the first grant period, 15 faculty members in the Strengthening Grant activities studied the Spanish language in classes especially designed for them, participated in cultural orientation seminars, and initiated plans for two "team" activities which would provide "hands on" experience for them and at the same time contribute to existing programs in Costa Rica. Reference materials about agriculture, rural development, and nutrition in Costa Rica were collected from U.S. and Costa Rican sources for use by the participants. Contacts with counterparts were arranged by Iowa State University's field coordinator in Costa Rica; counterparts in the Ministry of Education and the Ministry of Agriculture approved cooperative activities to be carried out during the summer of 1980.

The Policy and Planning Committee developed guidelines for designing and criteria for evaluating faculty proposals for activities in Costa Rica.

Plans for a new master's program in Development Communication were initiated as a result of increased interest in international programs within the Department of Journalism and Mass Communication.

III. Accomplishments from April 1980 to March 1981

A. Language

1. Spring and summer 1980

Fourteen faculty members in the Strengthening Grant continued study of the Spanish language in preparation for living

III. A. 1. (continued)

and studying in Costa Rica during the summer. Of these, ten participated in an intensive Spanish program in Costa Rica for two to five weeks (three hours/day, five days/week).

2. Fall and winter quarters, 1980-81

Eleven faculty participants continued language study on campus. A beginning class was offered for potential future participants in Strengthening Grant activities in Costa Rica or other Latin American countries and for faculty with specific purposes for needing Spanish (e.g., counseling Spanish-speaking foreign students, especially those new on campus; teaching classes during the summer at the University of Merida, Yucatan; participation in the College of Agriculture's exchange with the University of Costa Rica). Sixteen non-Strengthening Grant faculty, i.e., faculty not contributing percent of effort to the Strengthening Grant program, enrolled fall quarter and twelve continued through winter quarter.

3. Spring 1981

Spring quarter participants include 12 in beginning Spanish, 5 in intermediate, and 5 in the advanced class. Of these, 10 are participating in the Strengthening Grant activities in Central America. (See Attachment I for summary of participation in Spanish language classes.)

B. Proposals for in-country activities

Team and individual proposals for activities in Costa Rica were reviewed and approved by the Policy and Planning Committee in April 1980 and by the University Human Subjects Review Committee. A multidisciplinary team of seven faculty members proposed to collect data from families in the district of San Isidro de El General in Costa Rica, in order to "identify constraints faced by farmers and their families and by service organizations in the adoption and dissemination of technology and services that might improve the level of living of rural people." The counterpart agency was the San Isidro district office of the Ministry of Agriculture.

III. B. (continued)

Two in-service workshops were proposed, one on agricultural mechanization and the other on teaching of human development, by three faculty members in Agricultural Education and four faculty members in Home Economics Education, respectively; their objective was to gain experience for understanding the curricular needs of teachers of vocational education in Costa Rica. The counterpart agency was Centro de Investigacion y Perfeccionamiento para la Educacion Tecnica (CIPET), which (within the Ministry of Education) has the responsibility for in-service training of technical school teachers.

C. Group activities in Costa Rica

Dr. Tomás Mulleady served as the field coordinator during the summer; his previous working experience in Costa Rica for the College of Agriculture, Iowa State University, was a valuable and necessary asset to the other members of the faculty, most of whom had not worked in another culture.

During the first two weeks in June 1980, Iowa State University faculty studied Spanish, participated in several orientation seminars provided by the staff of the Interamerican Institute for Agricultural Cooperation (IICA) and began working with their counterparts. One group revised the questionnaire to be used in a survey of farm families, while another collected existing teaching materials and visited technical schools near San Jose. They also visited child-feeding centers in Costa Rica to select potential observation sites for use with technical school teachers who would be enrolled in a two-week course on "Teaching of Human Development" in late August 1980.

The survey team duplicated their revised questionnaire, drew a sample of rural households in Buenos Aires canton, and helped to train technical school students who would administer the questionnaire. Data were obtained from 140 husbands and 140 wives.

Buenos Aires is a generally mountainous area of subsistence farmers producing corn and beans. Information was gathered about (1) their knowledge and use of services providing health care and education, and (2) their sources of information on nutrition and farming practices.

III. C. (continued)

Several questions addressed the role of family members in making decisions about use of their resources.

The survey data have been coded, frequencies obtained, and results have been shared with the host country agency (Ministry of Agriculture), the staff at IICA headquarters in San Jose, and with the Rural Development Officers in the AID Mission. Excellent personal relationships have been established between Iowa State University faculty and their counterparts in Costa Rica. Currently, the statistical unit at IICA and two Iowa State University faculty are discussing the possible transfer of several of their data sets to Iowa State University where they will be available for use by faculty and graduate students. The data sets were obtained by surveys of farm families living in four or five Central American countries. They would increase the on-campus resources for studying and understanding issues related to rural development, families, and small farm agriculture in Central America.

Six Iowa State University faculty participated in two in-service training workshops for teachers in vocational schools in Costa Rica. They had developed, at Iowa State University, course outlines for "Teaching Agricultural Tractors" and for "Teaching of Human Development". Then they had sought information needed to adapt teaching materials to the Costa Rican setting by interaction with Costa Rican students at Iowa State University and by personal observations in Costa Rica.

The two groups of faculty who participated in the in-service training workshops made special efforts to develop visual aids and compile appropriate resource materials in the Spanish language. "Hands on" laboratory experiences, classroom discussions, teacher demonstrations, followed by student practice and field trips, were included in both workshops to demonstrate the variety of teaching methods that could be used by the teacher-students. The Iowa State University faculty participants in these training sessions developed a much greater appreciation of their need to know more technical words and phrases in Spanish in order to explain the subject matter of the courses. Translators had been provided by CIPET for both workshops; for the workshop on agricultural mechanics, the vocabulary of the translators was generally satisfactory because they were familiar with the subject

III. C. (continued)

matter, but the initial translators for the home economics subject matter were not. Fortunately, the Iowa State University faculty knew enough Spanish to recognize the problem and were able to cope with the situation until someone with the appropriate technical Spanish vocabulary could be located. (The Iowa State University faculty were able to locate an appropriate translator themselves because they had met her when they gave several half-day presentations on day-care centers in the U.S.A. to majors in early childhood education at the National University in Heredia, Costa Rica; these sessions with university students had been arranged at the request of faculty members at National University.) At the final workshop period, translators were not used and the Iowa State University faculty were pleased to discover that they could understand 80 percent or more of the presentations in Spanish.

D. Individual activities in Costa Rica and in nearby countries

1. Of special interest to an Extension Sociologist on the Iowa State University team was the fact that the Extension Service in the western area of Costa Rica has adopted the Training and Visit Model developed by Daniel Benor, World Bank. He observed the model in action for a short time during the month he spent in Costa Rica in July-August 1980. In the fall, 1980, under other funding, he had an opportunity to study the transfer of technology from international agricultural research centers in national and local institutions in six or seven South American countries. Therefore, he immediately drew on some of his experiences in the Strengthening Grant program. He has presented observations from the Strengthening Grant (plus observations in other Latin countries under the other auspices) in several seminars with students enrolled in the Technology and Social Change program, with sociology faculty and graduate students, and with graduate students in the course on Applied Sociology.
2. The nutritionist on the Iowa State University team spent four days at Santiago de Puriscal observing and participating in activities of a longitudinal study of nutrition, health, and medical problems of pregnant women, lactating women, and preschool

III. D. 2. (continued)

children (the study is under the supervision of Dr. Leonardo Mata of the University of Costa Rica). She also visited the School of Nutrition at the University of Costa Rica and discussed possible content of courses in a new curriculum leading to a degree in Nutrition. The curriculum has been developed because all of the 35 nutritionists in Costa Rica were trained in other countries and only 18 of them are Costa Ricans. Discussions included a possible exchange agreement between the Department of Food and Nutrition at Iowa State University and the School of Nutrition in Costa Rica. Plans are now underway for a faculty member in the School of Nutrition to study for a graduate degree at Iowa State University. Other Costa Rican faculty may be sent to Iowa State University for shorter periods to learn about specific course contents and methods of teaching courses.

Firsthand experience in the rural areas of Costa Rica gave the nutritionist actual exposure to consequences of inadequate nutritional intakes, e.g., angular stomatitis, usually associated with low intakes of riboflavin. She had read about nutritional deficiencies in developing countries but this year she has been able to include actual field observations in her classes. In addition, she has created interest in an international nutrition major (or minor) for undergraduate students at Iowa State University.

On her return trip to Iowa from Costa Rica, she stopped for several days at the regional nutrition laboratory, INCAP, in Guatemala City. She discussed the nutritional problems existing in several Central American countries with the INCAP staff as well as the research underway to develop ways to improve nutritional deficiencies.

3. Three home economists on Iowa State University's team visited ICAITI, a regional center for industrial technology, in Guatemala City. An Iowa State alumna in the laboratory discussed the overall research program. Of special interest was the study of various kinds of open fire lorenas which were being tested for their efficiency as heat sources in family food preparation.

III. D. 3. (continued)

Because Iowa State University has a current AID/Guatemala contract in "Integrated Area Studies", these three faculty members also met with that project's personnel and visited rural areas in which data were being collected about availability and uses of various community services (health centers, feeding centers, schools, etc.). Interaction with their colleagues in Guatemala gave them some basis for making comparisons with their field observations in rural Costa Rica.

The Iowa State University faculty members who stopped for short visits in Guatemala also briefed the Rural Development Officers in AID/Guatemala about their interests and activities and in turn received information about existing and potential AID projects in Guatemala.

4. An Iowa State University agronomist in the Strengthening Grant spent part of his time at the regional center for tropical agriculture (CATIE) at Turrialba, Costa Rica, in discussions of plant root physiology (mixed crops) with researchers working with small farming systems. This research program and others at CATIE offer good potential for cooperation in research for Iowa State University graduate students who are interested in studying tropical crops. He visited five different cantons, some prosperous, others not, and observed a much larger variety of associated cropping patterns than he had expected. On one area, beans had been sown among weeds which were then cut to provide a mulch over the seeds to reduce labor needs for planting because coffee beans were ready to be picked. Serious soil erosion existed in several farming areas and no attention was being given to use of legume crops to improve the soil.
5. Two faculty (one in communications, the other in sociology) were able to schedule several days at CIMMYT on their way to Costa Rica. A former Iowa State University faculty member who was working as an editor for information being published from the wheat program was their host. He and they were interested in the ways in which findings at international centers were being made available to potential users.

III. E. New courses or new material in courses on campus indicates increased interest in rural development in developing countries due to Strengthening Grant program

1. New courses

a. Architecture of Human Settlements in Developing Countries

- . offered Spring Quarter 1980 and Spring Quarter 1981 as an experimental course in the College of Design (undergraduate and graduate students). About 30 students enrolled in 1980.

b. Integrated Rural Development

- . taught Spring Quarter 1980 in the Technology and Social Change curriculum (graduate students). 40 enrolled.

c. Appropriate Technology for Third World Agriculture

- . taught Spring Quarter 1980 and Winter Quarter 1981 in the Technology and Social Change curriculum. 17 students enrolled in 1980, 20 in 1981.

d. Transfer of Technology in Latin American Countries

- . proposed for 1981-82 in the Technology and Social Change curriculum

2. New material (over 1/3) in existing courses

a. Cultural Change and Applied Anthropology

- . offered Fall Quarter 1980; 28 students

b. Planning in Developing Nations

- . offered in College of Design; revised and enriched by experience of faculty in ISU/Guatemala AID project which is a Title XII project although not part of the Strengthening Grant

3. New material (less than 1/3) in existing courses

a. Home Economics Education (H Ec Ed) 406, Methods of Teaching Home Economics. (addition of a global perspective in identifying societal conditions and their implications for curriculum development)

b. H Ec Ed 507, Curriculum Development in Teaching Vocational Education. (needs of families and individuals examined from world perspective)

c. Food & Nutrition (FN) 101, Seminar for freshmen. (introduction to nutritional problems in developing countries)

d. FN 107, Nutrition and Man's Food. (examples of foods available and nutritional problems in Central America)

e. FN 404, Seminar for seniors in Food & Nutrition. (segment on nutrition in Latin American countries)

III. E. 3. (continued)

- f. FN 510, Malnutrition in Developing Countries
 - g. Family Environment (FE) 375, Management in the Family
 - h. FE 523, Management within Family Environment
 - i. FE 572X, Families and Stress, to be offered Fall Semester 1981
 - j. Sociology (Soc) 540, Theories of Social Change
 - k. Soc 331, Sociology of Poverty
 - l. Journalism/Mass Communication 501, Theories of Mass Communication
4. Invited lecturers (not an integral part of the Strengthening Grant, but an indication of increasing interest in rural problems in developing countries)

At least eleven speakers from off campus gave invited lectures related to rural development, nutrition, and agriculture in regular classes and in open seminars. Three were from developing countries (Dr. Sen, Economist, India, an IFPRI Board member; Dr. Abilla, Sociology, University of Nairobi; Marcos Bogan, National University, Costa Rica). The other eight all had had experience in developing countries or at international research centers, although they are currently employed at U.S. universities.

F. Research, advising, and on-campus sharing of information

- 1. Four manuscripts are being prepared by Strengthening Grant participants, based on data and observations from in-country activities or studies stimulated by in-country experiences. The manuscripts will document the need for additional information in order to understand fully the constraints facing rural families and the potentials for overcoming them.
- 2. One or more departmental or college seminars have been given by all Strengthening Grant participants.
- 3. Empathy while advising students from developing countries has increased; greater efforts are being made to develop graduate research problems appropriate for home country. (Funds to support much research, however, are not available in sufficient amounts to meet needs.)

III. F. 4. Faculty members with experience in Latin American countries have been identified and invited to participate in a special seminar series in spring 1981 with the current Strengthening Grant participants. These efforts will help in developing a faculty network that will be augmented with periodic flyers to share news and ideas with each other.

G. New degree programs (directly related to Iowa State University's Strengthening Grant activities)

1. Approved

- . International Development Studies as an option in the General Graduate Studies program (the first applications for admission were received in March 1981).

2. Proposed

- a. Master's degree in Development Communication (to be offered through the Department of Journalism and Mass Communication)
- b. Undergraduate curriculum in International Nutrition (in Department of Food & Nutrition)
- c. Minor program in International Studies in Home Economics Education (for graduate students, offered by the Department of Home Economics Education)

H. Development Advisory Team (DAT) Training Sessions for Iowa State University faculty and staff

During summer 1980, a faculty anthropologist with considerable experience in Africa and also with several years' experience with AID operations overseas, proposed to develop a week-long training session to give faculty members from different disciplines an understanding of international development agency (USAID) policies (particularly their relationship to design of projects and programs). The training sessions would provide learning experiences in working effectively as a member of a multicultural, cross-disciplinary team. Initially, the World Food Institute of Iowa State University supported the project. In November 1980, the Policy and Planning Committee for the Iowa State University Title XII Strengthening Grant approved the development and implementation of the proposed faculty training sessions as a project under the Strengthening Grant.

Thirty-five faculty and staff representing twenty-one different departments or administrative units at Iowa State University participated

III. H. (continued)

in the first DAT training session for five days, March 2-6, 1981. Biographical data indicated that they had had experience in 55 non-European countries and could communicate in 25 different languages. There were also a few inexperienced faculty in the group. Four persons from the USAID staff in Washington, D.C. assisted in presentation of materials in the workshop. A one-page syllabus with a brief description of the training session objectives and format is attached. (Attachment II)

Through verbal and written comments, workshop participants unanimously agreed that the first training session was excellent. Individuals who did not know each other became acquainted; team spirit was created among six-member groups in the workshop; knowledge about the AID process (CDSS, PASA, PID, PP, Logframe, etc.) was gained; handouts were well-chosen, although the volume overwhelmed some people; a rural road construction exercise provided an excellent team experience; and, participants expressed a desire to continue to interact with each other on campus through some means.

Four participants in the first DAT session are currently involved in other activities of the Strengthening Grant program; at the second training session (scheduled between spring quarter and first summer session 1981), seven additional faculty participants in the Strengthening Grant program will be among the fifty faculty and staff who will be involved.

During summer 1981, the training materials will be compiled as a manual for use with groups of students as well as for additional groups of faculty members.

- I. Participation in off-campus conferences by faculty in the Strengthening Grant program
- . Texas A&M University (Sept. 1980) 1
"Preparing the University Community for International Development"
 - . WID/Washington, D.C. (October 1980) 2
"Women in Development Workshop"
 - . Tuskegee Institute (March 1981) 1
"Women and Development"
 - . Regional Title XII Conferences (Jan. & Feb. 1981) 2

III. I. (continued)

- . ISU-IICA Seminar & Workshop (March 1981) 2
"The Role of Women in the Rural Development Process" and "Potential Uses of Existing Data Sets for Analysis of Small Farmer Technologies" were the titles of presentations given by Strengthening Grant participants at the seminar and workshop.

J. Other activities

One Strengthening Grant participant spent five days in St. Lucia (February 1981) conferring with Barbara Knudsen and other personnel conducting research on the "Economic Role of Women in Small-Scale Agriculture in the Eastern Caribbean", a project supported by the Midwest Universities Consortium for International Activities (MUCIA). The possibility for observing the project in action in St. Lucia had been discussed at the WID/Washington conference in October 1980 and arrangements for the visit were completed in early January 1981.

IV. On-campus Evaluation

The Policy and Planning Committee at Iowa State University asked five administrators of units without current participants in the Strengthening Grant but with international experience and evaluation expertise to review the Iowa State University program. Their report addressed the following issues:

- A. Effectiveness of the present organizational structure
- B. Impact of the program thus far conducted on faculty participants and on Iowa State University competence in international matters
- C. Possible improvements in the program
- D. Effectiveness of language training and in-country experience

The evaluators commended the program in general, noting the variation in impact of the program on faculty members was more related to individual differences and needs than to the structure of the program. In particular, emphasis on acquiring language skills and on the interdisciplinary approach focusing on the farm family were cited as strengths. They recommended that changes in the organizational structure on campus be considered and that steps be taken to inform a broader group of potential participants about the opportunities for international development work. (N.B. The Development Advisory Team (DAT) training sessions

IV. D. (continued)

for faculty are supported by the Title XII Strengthening Grant and do address this latter recommendation.)

The evaluators also raised several questions to be considered by a program advisory committee; these will be discussed by the current Policy and Planning Committee during the last half of the second Strengthening Grant period.

V. Estimated Expenditures, 1 October 1980 - 30 September 1981
(See also Attachment III for summaries of time spent in Strengthening Grant activities and expenditures for Periods I and II.)

Iowa State University matching	-	\$110,000
AID grant	-	<u>100,000</u>
TOTAL		\$210,000

VI. Future Plans

A. 1 March 1981 - 30 September 1981 (year II)

1. Conduct Development Advisory Team (DAT) Training Session II (26-31 May).
2. Prepare training manual for DAT, based on experience and evaluation of two training sessions.
3. Continue special language classes (3 levels) in Spring Quarter 1981; interested other faculty have been offered the opportunity to begin studying the Spanish language in fall 1981 (about 15 expressions of interest were received in March 1981).
4. Schedule seminars on integrated rural development with emphasis on Latin American countries (Spring Quarter 1981, on campus, open to all faculty with an interest in Latin America); seminars will encourage greater interaction of faculty with considerable experience in Latin American countries with current Strengthening Grant participants.
5. Negotiate with IICA for copies of data (on tapes) from surveys conducted in rural areas of Guatemala, Honduras, Nicaragua, and Panama (for use on Iowa State University campus by faculty and graduate students). Training sessions for Iowa State University staff in SAS programming and in data management will be provided by the Computation Center at Iowa State University, perhaps jointly with IICA staff members who are familiar with the data sets.

VI. A. 5. (continued)

Mechanisms and procedures to coordinate data analysis at Iowa State University and IICA will be established by an agreement between the two institutions.

6. Develop plans for a pilot evaluation of the Training and Visit (T & V) Model for transfer of agricultural technology; the T & V Model is being used in Guanacaste, Costa Rica. It may also be possible for two Iowa State University faculty participants in the Strengthening Grant to evaluate the model using a small sample of farmers and extension agents. The findings would be especially helpful to Iowa State University faculty who are interested in transferring technology in developing countries.
7. Cooperate in June 1981, at Iowa State University, with Jan Hurwitch, head of the Youth and Women in Development section of IICA, to develop plans for a workshop in Costa Rica. The workshop would consist of 20 campesino women and 5 vocational home economics teachers who participated in the in-service training workshop in summer 1980 and would address their needs as well as sources of information and assistance for the rural families they represent.
8. Training needs of health and other professionals who provide assistance for rural families will be examined by Iowa State University faculty and counterparts in IICA in the data from the survey in Buenos Aires and by discussion with selected Costa Rican campesino women in a workshop. (See 7. above.) Specific components for a pilot training package will be identified and will focus on improving the quality of relationships within families, the skills for assessing family resources, and preparing youth to assume adult roles in society. Funds to test and evaluate the training packages will be sought jointly. Two or more Iowa State University Strengthening Grant participants will attend the workshop which will be sponsored by IICA and which will be held in early July 1981.
9. Participate in a rural development project in Honduras to obtain "hands on" experience by mini-survey and case studies for the purpose of learning how rural peasant families meet their basic needs. Seven Iowa State University faculty members plan to live in the Santa Barbara Department for four to eight weeks in order to increase their facility with local idiomatic Spanish, gather data by

VI. A. 9. (continued)

participant observation and by formal surveys, and develop skills needed to conduct studies in an interdisciplinary context under conditions in a developing area where the culture and language are different from those of the Strengthening Grant participants. The area chosen is considerably poorer in resources than that of Buenos Aires (Costa Rica) where Iowa State University faculty conducted a small survey in 1980.

The cooperating agency is the Honduran office of the Organization of American States. It has agreed that the learning objectives of Iowa State University faculty coincide with OAS's interest in knowing more about the nature of and potential for community participation in an area where baseline data for a proposed development project have been collected. Iowa State University's team includes a sociologist, an anthropologist, two home economists interested in management of family resources, and an agricultural engineer, who wants to observe the technologies used by small farm families and identify possible alternatives for increasing food production. In addition, two nutritionists are interested in observing the iron status of preschool children and the possibilities of unrecognized food toxicology problems arising from improper processing, storage, or contamination. The RDO in the AID/Honduras Mission has been briefed on Iowa State University's proposed activities in Honduras, and has indicated that approval for the proposed Title XII Strengthening Grant activities will be given when the clearance requests are received.

10. Initiate contacts with potential African countries for cooperation in future Strengthening Grant program.

B. 1 October 1981 - 30 September 1982 (year III)

1. Continue special Spanish language classes (two or three levels) for Iowa State University faculty.
2. Incorporate DAT training sessions into graduate programs such as International Development Studies.
3. Encourage analyses of data in data sets from Central American countries

VI. B. 3. (continued)

by faculty and students who have not had access to data from rural areas of developing countries.

4. Submit several manuscripts on rural families in developing countries, now in preparation, for publication, in order to share knowledge gained by faculty participants in Iowa State University's Strengthening Grant.
5. Encourage increased on-campus interaction among Strengthening Grant participants and faculty who will have returned to campus in September 1981 from the AID/Guatemala project on "Integrated Area Studies"; several large data sets from the project will be housed at Iowa State University and can be made available to faculty and students interested in preparing regional planning exercises for class use, or using the data to develop policy alternatives.
6. Initiate limited efforts to acquire background knowledge and experience in an English-speaking African country.
7. Integrate faculty improvement leaves (FIL) into Strengthening Grant program if appropriate.

C. 1 October 1982 - 30 September 1983 (year IV)

1. Provide "hands on" experience in an African country for faculty team in activities related to assessment of family needs in rural areas.
2. Examine training program for those who provide assistance to rural families in several developing countries.
3. Compare institutional resources for improving rural life in several countries.
4. Consider planning a seminar or conference in year V to compare management of resources by rural families in different cultures.
5. Establish network for Africanists on campus.

D. 1 October 1983 - 30 September 1984 (year V)

1. Provide "hands on" experiences in a second African country for faculty members, if feasible.
2. Compare management of resources by rural families in different cultures.
3. Review on-campus mechanisms for effectiveness of communication among international programs.

VI. D. 4. Develop training models, or modules, for those who extend information and services to farm families in less developed countries.

E. 1 October 1984 - 30 September 1985 (year VI)

1. Prepare a summary report of the Strengthening Grant program at Iowa State University over the first five years with particular emphasis on changes that have occurred on campus re: courses and course content and research programs, especially for students from developing countries.
2. Initiate limited efforts to acquire background knowledge and experience in an Asian or Far Eastern country.

F. 1 October 1985 - 30 September 1986 (year VII)

1. Provide "hands on" experience in an Asian country for multidisciplinary team of faculty members interested in family needs in rural areas.
2. Increase emphasis on "strengthening" activities on campus in order to broaden the opportunities for faculty members to become involved and to implement greater interaction with those faculty with experience in developing countries.

VII. Project Budget for Seventh Year

AID	\$100,000	(10% of anticipated AID expenditures through contracts at ISU)
ISU	<u>135,000</u>	
	\$235,000	

Attachment I

SUMMARY OF PARTICIPATION
IN
SPANISH LANGUAGE CLASSES

	<u>Strengthening Grant Participants</u>	<u>Faculty Not Contributing Matching Time</u>	<u>Spouses</u>	<u>Total</u>	<u>Number of Sections</u>
Spring 1980	14	4	5	23	2
Summer 1980 (in Costa Rica)	10	-	-	10	3
Fall 1980	11	16	5	32	3
Winter 1981	10	12	3	25	3
Spring 1981 (tentative)	10	9	3	22	3

D A T T R A I N I N G S E S S I O N I
M A R C H 2 - 7

Attachment II

	MONDAY MARCH 2	TUESDAY MARCH 3	WEDNESDAY MARCH 4	THURSDAY MARCH 5	FRIDAY MARCH 6	SATURDAY MARCH 7
8:30 - 10:00 a.m.	INTRODUCTION; the DAT Concept	PROBLEM IDENT.; ALTERNATIVES DEVEL.; PRIORITY-SETTING; DECISION-MAKING; FORCE-FIELD ANALYSIS	SOCIAL SOUNDNESS/ ECONOMIC/TECHNI- CAL ANALYSES	WOMEN IN DE- VELOPMENT ANALYSES	R U R A L R O A D C O N S T R U C T I O N E X E R C I S E	R U R A L R O A D C O N - S T R U C - T I O N E X E R C I S E P R O C E S S - I N G
10:00 - 10:30	C O F F E E B R E A K					
10:30 - noon	USAID & NEW DIRECTIONS LEGISLATION	PROJECT DESIGN - the PID and PP Stages	PROGRAMMING TECHNIQUES: MBO, GANTT, PERT	ENVIRONMENT & DEVELOPMENT; ORGANIZATIONAL COMMUNICATIONS		
noon - 1:30	L U N C H B R E A K					
1:30 - 3:00 p.m.	CROSS-CULTURAL & CROSS-DISCIPLINARY COMMUNICATIONS in the CHANGE PROCESS	THE LOGICAL FRAMEWORK	COST-BENEFIT & COST-EFFECTIVE- NESS ANALYSES	R U R A L R O A D C O N S T R U C - T I O N		
3:00 - 3:30	C O F F E E B R E A K					
3:30 - 5:00 p.m.	The CDSS and POLICY-PROGRAM- PROJECT RELATIONSHIPS	SITUATIONAL MANAGEMENT; MOTIVATION & PRODUCTIVITY	PROJECT EVALUATIONS	B U D G E T P R E P A R A - T I O N		

The objectives of the training program are the following:

- (1) To develop the capacity for ISU faculty and staff working as multidisciplinary development advisory teams to conduct international development project design and evaluation assignments in an efficient and effective manner.
- (2) To understand international development agency (particularly USAID) policies and their relationships to program and project design.
- (3) To develop the capacity to produce complex project design and evaluation documents according to USAID requirements and formats.
- (4) To develop the capacity to work efficiently and effectively in a multicultural, cross-disciplinary team effort by utilizing techniques which foster communication, cooperation, and coordination of efforts.

The training will be experiential in format. That is, once a managerial or planning technique has been presented, teams will work, sometimes competitively, on actual assignments which immediately put the technique into use. All of the managerial and planning materials which will be presented will be equally useful in university teaching and administration as they will be in international development assignments. It is imperative that participation be complete as all of the managerial and planning material presented in the first four days will be utilized in a complex training exercise which will take nearly two days and will require a thorough understanding of all previous materials presented. The exercise matches the complexity of most design and evaluation assignments and is based on actual development efforts.

Attachment III

A. SUMMARY OF TIME SPENT IN STRENGTHENING GRANT ACTIVITIES

<u>Activities</u>	<u>Period I</u> (actual) <u>July '79-Sept. '80</u> <u>person months</u>	<u>Period II</u> (estimate) <u>Oct. '80-Sept. '81</u> <u>person months</u>
	Language Instruction and Cultural Orientation	7.62*
Management and Support	4.68 (faculty) 6.50 (grad. ass't.) 4.20 (clerical)	4.20 (faculty) 1.75 (grad. ass't.) 7.20 (clerical)
Faculty Participation	17.65 in Costa Rica (13) - 27.24 on campus (17)	5.25 in Costa Rica (5) 11.25 in Honduras (8) 18.46 on campus (16)
Field Coordination	2.50 in Costa Rica - 1.65 on campus	- 2.20 in Honduras 4.00 on campus
Development Advisory Team (DAT) Training Program	-	1.70 on campus

*includes 2.00 person months as hourly pay

B. TOTALS OF TIME BY APPOINTMENT BASE

<u>Period I</u> (actual) <u>person months</u>	<u>Period II</u> (estimate) <u>person months</u>
59.34 (A- and B-base faculty)	54.71 (A- and B-base faculty)
6.50 (C-base, grad. ass't.)	1.75 (C-base, grad. ass't.)
4.20 (E-base, clerical)	7.20 (E-base, clerical)
2.00 (hourly pay for language)	

C. SUMMARY OF EXPENDITURES

	<u>Period I</u> (actual) <u>dollars</u>	<u>Period II</u> (estimate) <u>dollars</u>
Salaries and Fringe Benefits	\$175,702.55	\$160,000
Current Expenses	<u>48,163.46</u>	<u>50,000</u>
	\$223,866.01	\$210,000

Attachment III
(continued)

D. SUMMARY OF TOTAL BUDGET BY ACTIVITIES IN PERIOD II

<u>Faculty Participation</u>	<u>Total</u>	<u>Summer 1981</u>		<u>Academic Year '80-'81</u>	
		<u>A I D</u> (includes Travel & Per Diem)	<u>I S U</u>	<u>I S U</u>	<u>A I D</u>
College of:					
Agriculture	\$37,842.70	\$11,508.70*	ca. \$ 1,800	\$17,156	\$ 7,378
Engineering	4,175.30 ⁺	4,175.30*	-	+	-
Home Economics	52,259.58	30,270.58*	ca. 5,900	14,089	2,000
Sciences & Humanities	39,350.98	19,509.98*	-	17,455	2,386
<u>Current Expenses</u>	<u>13,155.00</u>	<u>4,155.00</u>	<u>-</u>	<u>2,000</u>	<u>7,000</u>
Subtotal	\$146,783.56	\$69,619.56	\$ 7,700	\$50,700	\$18,764
<u>On-campus Programs</u>					
Language & Cul- tural Orientation	13,200.00	-	-	13,200	-
Management/Support	28,000.00	-	-	27,020	980
DAT Training	8,100.00	1,850.00	-	6,250	-
Home Ec. Seminar	3,400.00	1,700.00	1,700	-	-
Pending Proposals	<u>10,716.00</u>	<u>7,086.00</u>	<u>3,630</u>	<u>-</u>	<u>-</u>
Total	\$210,199.56	\$80,255.56	\$13,030	\$97,170	\$19,744

*Includes estimated salary, fringe benefits, travel, and per diem during proposed activities in Honduras or Costa Rica.

Attachment III
(continued)

E. AREAS OF EXPERTISE IN ISU'S STRENGTHENING GRANT PROGRAM
IN FIRST TWO PERIODS

<u>Department</u>	<u>Period I Number</u>	<u>Period II Number</u>
1. Journalism/Mass Communication	1	1
2. Agricultural Education	3	1
3. Economics	2	0
4. Agronomy	3	2
5. Agricultural Engineering	1	1
6. Sociology	2	2
7. Food and Nutrition	2	2
8. Family Environment	2	3
9. Home Economics Education	2	2
10. Anthropology	-	2
11. Chemical Engineering (use of wastes)	-	1
12. Computer Science (programmer for management of data sets)	-	1
13. Foreign Languages & Literatures	2	2
14. Office of International Educa- tional Services	1	1
15. World Food Institute (management)	3	3

F. DEPARTMENTS IN WHICH ONE OR MORE FACULTY
HAVE EXPRESSED INTEREST IN
PARTICIPATING IN THE STRENGTHENING GRANT

1. Regional Planning
2. Architecture (housing and settlements)
3. Botany
4. Animal Ecology (aquaculture)
5. Plant Pathology, Seed & Weed Science
6. Animal Science
7. Statistics
8. Political Science
9. Textiles & Clothing
10. Adult Education