

ANNUAL REPORT
for the
INNOVATIVE APPROACHES TO COOPERATIVE
MANAGEMENT, FINANCE AND TRADE PROJECT

USAID Cooperative Agreement
OTR-0192-1-00-8241-00

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I. Introduction

In accordance with Sections F.2.a. and F.2.c of the schedule of the referenced Cooperative Agreement, we provide this Annual Report.

Review of Project Purpose and Objectives

The purpose of the project is to assist developing country cooperatives, credit institutions and the institutions that serve them to share in the benefits associated with the use of computer technology. This includes the traditional efficiencies in record keeping and management decision processes but with additional emphasis on international communication for data acquisition, technical assistance, and trade relations as well as promoting in-country user-groups and bulletin boards. The broader objective of the project is to deliver technical assistance in the areas of management, finance and trade on a smaller scale, to a broader audience, on a continuous basis at a lower per unit cost than the traditional, (i.e. long term, on site) means of delivery allow.

As with any innovative project, there have been some obstacles to overcome. These have not, though, impacted adversely on the objectives for year II of the IAP project. All in all, IAP year II has produced results above and beyond our initial expectations.

Overview

In project Year I, activity began in July 1988 with the initiation of the IAP Advisory Electronic Conference. Four of the five "country feasibility studies" were completed in Costa Rica, Honduras, Indonesia and the Philippines. Current with the work on the feasibility studies, a survey was performed to review relevant electronic information database services available in the United States. Lastly, the first of IAP's computer and telecommunications training courses was held in Costa Rica for 12 cooperative computer and financial administrators.

In Year II, the final country feasibility study for Egypt was conducted and finished. The Advisors Conference, which operated during Project Years I & II was adjourned as of June 1990.

Computer and telecommunications training courses were completed in the remaining four target countries; Honduras, Egypt, the Philippines and Indonesia. In all, over 100 cooperatives from the five countries have participated in the IAP training component.

Electronic mail and conferencing accounts were provided by the IAP project to 17 participating cooperatives in Honduras, Egypt, Costa Rica, Indonesia and the Philippines. In January, these cooperatives joined the IAP Advisory Committee Conference, effectively expanding and changing its role from "advisory" to a globally accessed, cross-cultural, educational and information sharing tool called the "Cooperative Development Conference"

(CDC). In March of 1990, the CDC conference started its first formal distance education course in "Information Management" co-moderated by Connected Education, Inc. A second on-line course was started in July on "Organizational Communication." A parallel CDC conference in Spanish was started in order to facilitate greater participation with the various cooperatives in Latin America. A computer based translation program called, "**Global-Link**", is being used by IAP staff to expedite the translation of conference comments from English to Spanish. The CDC conference will continue into project year III to facilitate other innovative coop-to-coop communication activities.

The IAP "**Cooperative Computer Software Survey**," conducted by the Wisconsin Cooperative Development Council, was completed in June. Fifty-three cooperatives around the United States participated in the survey. The aim of the survey is to identify existing agricultural and cooperative-related software packages which could be beneficial to growth and sustainability of cooperatives in developing countries.

Innovative Approaches' greatest successes in Year II are seen in the initiatives taken overseas by participating cooperatives. In the Philippines, three follow-up projects are being developed. LandBank (Manila) will be using electronic mail to support a Dutch funded project in Iloilo and the National Confederation of Cooperatives (NATCCO) plans to establish an electronic bulletin board service (BBS) to facilitate their inter-organization communications and to provide technical assistance to its members. The third project involves the use of packet-radio switching to facilitate communication among cooperative rural banks (CRBs). In Costa Rica, six cooperatives of FEDECOOP are investigating the formation of a local communication network to facilitate information sharing. In Egypt, there is great interest in continuing the computer training to support continued office automatization within the cooperatives. We are waiting a more propitious moment to conduct a second study. In Indonesia, where the largest number of coops participated in the Innovative Approaches program, the Ministry of Cooperatives has submitted a proposal to ACIDI to provide partial support for a second training program. The Indonesian cooperatives felt that "this kind of training gave direct impact and benefit to the improvement in efficiency and effectiveness of management systems resulting in a greater degree of economic stability." The Indonesian Ministry of Cooperatives has demonstrated their sincerity in this regard by contributing significant resources of their own to this effort. Presently we are working to identify additional funding sources to assist in implementing this training program.

II. Summary of Outputs During the Period

- Use of 17 CARINET telecommunications accounts by cooperatives to participate in Development Conference
- Commencement of Cooperative Development Conference, in both English and Spanish.

- Cooperative Software Survey completed.
- Completion of training courses in Egypt, Honduras, Indonesia and the Philippines.
- International on-line course on "information management".
- Creation of a user-group in Costa Rica and the Philippines.
- Introduction of communications networks into ongoing projects in the Philippines and Honduras.
- Completion of the Advisory Committee Conference generating 300 comments.

III. **The Budget**

A. **Budget**

Due to the Year I delays resulting from developing the training programs in-country, project expenditures are out of phase with the proposed budget. Table I, shows how Year II expenditures compare to the originally proposed Year II expenditures.

Table II shows how remaining project funds have been programmed for Year III. Because communications costs and expenditures have been lower than originally projected, this has afforded IAP the opportunity to provide additional funding for "follow-up" technical assistance (see Section IV, G.). Follow-up technical assistance was overlooked in the original project design but is developing as one of the most important areas of the project. This expenditure is reflected in the large "Training" line item of Table II. Items (a) through (d) in the "Training" line item show how we have programmed funds for the follow-up technical assistance activities.

IV. Detailed Description of Expected and Actual Project Outputs

A. Training

Originally it was proposed that NDPL would conduct the computer and telecommunications training for the Innovative Approaches project in the United States. Given certain outstanding circumstance and with the approval of USAID, the computer and telecommunications training courses were developed and held in-country. By January 1990, training courses had been completed in each of the designated countries. Consequently, the cost per participant was lower than expected, the quality of training raised and the number of cooperatives able to participate in the IAP project increased substantially. In all, personnel from over 100 cooperatives participated in these courses (significantly more than the 18 participants originally proposed).

The following curriculum elements were proposed as guidelines for each training program:

- I. Introduction to microcomputers
Microcomputer maintenance
MS-DOS
Norton Utilities and Norton Commander
- II. Introduction to Word Processing
- III. Introduction to spreadsheets
(eg. Lotus 123)
Coop finance applications session
(ex. budgets)
- IV. Introduction to database management
(eg. d-Base III+)
Applications and programming session;
coop finance and management
- V. Introduction to communications, software and systems,
electronic mail, conferencing, accessing communications troubleshooting.

Each country training consultant then tailored the courses around the needs of that particular country.

Training evaluations to-date have been favorable of this program approach. Included with this report are evaluations for Egypt, Indonesia and Costa Rica. Both Indonesian and Egyptian participants were pleased with the training programs and have requested additional training and follow-up.

B. Advisory Committee

The concept and use of an electronic, multi-disciplinary advisory conference for project support has been invaluable in successfully administering and managing the Innovative Approaches project. The Advisory Committees' expert guidance and advice has proven invaluable to the project. We have been able to call on them to assist us in project planning, direct us towards additional information and individuals that we wouldn't have been likely to locate and to give us their comments and suggestions regarding the feasibility study reports.

One Advisor wrote that "the truly innovative aspect of this project ... was the effort to use an entirely new communications structure in the administration of the project (Glenn)." Robert King wrote, "You created a structure that made it possible for experts from a wide range of fields to make substantive contributions to the project in a timely manner."

Following is a list of a few ways in which the Advisory Committee has been able to support the Innovative Approaches project.

- Assistance on the design of the "boilerplate" training agenda, followed up suggestions on individual country course design and effective and creative means of implementation.
- Expedite Pest Control technical assistance. The Animal Wealth Cooperative was able to connect with international livestock centers in Africa for assistance with pest infestation problems through CGNET.
- Provided information on Market News Service (MNS), an export news letter specializing in non-traditional crops. Currently being used in Honduras by FEPROEXAAH
- Assisted in the design and implementation of on-line training courses for participants on "Information Management" and "Electronic Communications."
- Established contact between IAP/HQ staff and European cooperative trade organization OS3.
- Provided assistance to IAP/HQ with design of Cooperative Software Survey.
- Assisted IAP/HQ with identifying currently available Computer Based Training(CBT) software for possible use by cooperatives.
- Information and contacts on packet radio switching for the Philippines.
- Technical advise on non-standard uses of e/mail systems. This was instrumental in establishing the parallel Spanish conference.

This is not to say that there have not been problems. Some of the evaluations we have received from Advisors are particularly insightful and productive in their comments and suggestions (see **accompanying evaluations**). Especially noted was the need for additional face-to-face meetings of the Advisory Committee to help in coordinating diverse efforts of various members and provide feedback to IAP staff.

C. Computer-based Training Modules

Numerous computer-based training packages and authoring systems were identified and included in the Cooperative Software Survey.

IAP is looking into the possibility of linking CBT modules with local, regional and national cooperative staff development and training programs. With the high turnover rates of personnel in the semi-technical positions in cooperatives, such a resource would provide an important level of technical skill continuity to the cooperative.

D. Software Survey

IAP engaged the Wisconsin Cooperative Development Council to conduct the survey of cooperatives use of computer software. The goal of the survey is to identify existing, relevant agricultural and cooperative related software packages used in the US that could be used by or adapted to cooperatives in developing countries.

Fifty-three cooperatives participated in the survey. They varied in size and type from local cooperatives with \$125,000 in annual sales to regional marketing and supply cooperatives with more than \$2 billion in annual sales. Computer systems varied by type and size of cooperative: local cooperatives using mostly PC networks or minicomputers; and regional coops using mainframe systems.

The first point to notice about the information gathered by the survey was the intensive use of information management technologies by the surveyed cooperatives. Fifty-one of the surveyed cooperatives (96%) reported using accounting software. Forty-two percent of the local cooperatives used off-the-shelf software and another 52% used modified software. In contrast, 100% of the regional cooperatives and 71% of the marketing cooperatives used customized software. In all, the study obtained information on nineteen "brand name" accounting packages, of which four were recommended for further study by IAP for possible use by cooperatives both overseas and in the US for their adaptability and ease of use.

Twenty-Three cooperatives reported using operational software, usually related to feed rationing and fertilizer mixing. Of the operational software packages reviewed, nearly half were developed in-house by regional cooperatives for use by their affiliated cooperatives. Descriptions are provided in the Survey's appendices of these programs along with other

public-domain software available on: market charting; fruit & vegetable operations; beef feedlots; crop storage; grain elevator; dial-up ag services; and other agri-business software.

The survey also investigated the use of electronic-mail and facsimile and services by the cooperatives. It was found that 66% of the coops used FAX. Thirty-four percent reported using electronic mail services for accessing market and credit information. Sixty-Eight percent of the cooperatives indicated using computer-based communications to connect with other cooperatives, local or regional.

In conclusion, the survey recommended that in those countries where telephone line transmission is adequate, ACDI should encourage the use of information technologies in supporting cooperative management, trade and finance practices.

The Appendices also include information on over 50 computer-based training (CBT) packages, approximately 25 CBT authoring packages, and other cooperative related software available from the U.S. Agricultural Cooperative Service of the USDA.

Because of cooperation between IAP/ACDI and the USDA Agricultural Cooperative Service in the area of computer software for cooperatives, the decision to develop and/or modify software identified in the survey will be postponed until Project Year III and the outcome of further investigation by IAP/ACDI and ACS.

E. Trade and Finance

In the course of Project Year II activities, several initiatives were taken in the area of developing programs regarding trade issues. In Latin America, investigations were made into the application of the Organization for American State's export/import database "SICE" to the Innovative Approaches project. Information was also delivered to cooperatives and cooperative organizations in Honduras and Costa Rica on the "Market News Service's" trade newsletter.

F. Communications

Recommendations on various communications systems, training guidelines, etc., based on the Innovative Approaches project's experiences over the life of the project will be included in the final reports in Year III.

G. Follow-up Technical Assistance

In the Philippines, three follow-up projects are being developed. The first involves the use of E-mail to support a Dutch funded development project with the LANDBANK of the

Philippines. In this project, E-mail would be used to facilitate project management between LANDBANK headquarters in Manila and the project site in Iloilo City. The second project is the establishment of an electronic bulletin board (BBS) at NATCCO to facilitate their inter-organization communications and technical assistance to their members. The third project involves Philippine "cooperative rural banks (CRBs)," which have undertaken a project to use packet-radio switching to assist in the inter-office and inter-island communications. The Canadian government has donated the hardware and IAP is looking to do the training of bank personnel.

In Costa Rica, six cooperatives of FEDECOOP (coffee federation) are investigating the formation of a local communication network using the integrated FAX/Telex/E-mail services of RACSA (Costa Rican telecommunications company). Again, the intention is to facilitate improved business management through communication and information exchange. Also, along with the Inter-American Institute for Cooperation on Agriculture (IICA), IAP is examining the possible creation of an export information center which would capitalize on the uses of newsprint/FAX/telecommunications to disperse information to producers and agribusinesses.

In Egypt, there is great interest in continuing the computer training. For various political reasons, the cooperative community's use of electronic telecommunications is limited. Therefore, Innovative Approaches has been concentrating on computer training and follow-up support for the cooperatives. It is intended that IAP/Egypt will be able to produce a report/proposal for the Government of Egypt, proposing a development plan for institutional strengthening through technical assistance in the areas of information management.

In Indonesia where the largest number of coops participated in the Innovative Approaches program, the Ministry of Cooperatives has submitted a proposal to ACIDI for a second computer training program. The second training program would be for another 60 cooperatives. ACIDI is proposing an expanded program along the lines of the Egyptian concept, for institutional strengthening through technical assistance in information management.

IAP is working with the USDA Agricultural Cooperative Service to a) extend the scope of the software survey, and b) identify common areas for pooling resources to create a national cooperative computer information clearinghouse. The center would possibly be responsible for such things as reviewing software for application to cooperative practices, gathering public domain software and its distribution, information clearinghouse.

IV Description of all financial contributions to the project

IAP training was enhanced by in-kind contributions from the local participating cooperatives, other development projects and government ministries. In-kind contributions came in the form of cash, donated software, trainers and participants time, and training facilities. In

Indonesia, the Department of Cooperatives donated US \$11,500 to expand the training in their country. In the Philippines, the participating cooperatives donated their time and software valued at \$18,884. In Egypt, participants time, required software and training facilities valued at \$52,507.00 was donated. In Honduras, IAP worked with another AID project, Small Farmer Organization Strengthening Project (SFOSP). SFOSP personnel's time is being donated to IAP to better coordinate these two project's goals. The Honduras in-kind contributions has not yet been assigned a value.

During the course of Project Year-One, \$145,445 was contributed to the project by ACIDI, Central Bank for Cooperatives (CoBank), NCFB and other contributing sources. In Project Year-Two, \$183,341 was contributed from the same.

In the original proposal, \$216,630 was to have been contributed from non-AID sources. Although, the originally projected contributions from U.S. cooperatives have not fully rationalized, we feel this has been offset by the unanticipated in-kind contributions from the participating cooperatives.

The ACIDI Development Fund's contribution will be expended by the end-of-project date, June 1991, as reported in the Year I Annual Report.

V. Follow-up Proposals

Plans have not changed in carrying out the follow-on projects identified in the original proposal or endeavors to seek funding from Foundations or other institutions to finance these projects.

IAP has found, though, that many of the suggested follow-on projects mentioned in the original IAP proposal already exist and need not to be recreated. For example; there are a multitude of agricultural related computer based training software programs available, such as: CoopSim, a managers' decision support system for cooperatives. Also, many agricultural universities provide agribusiness "public domain" software free. (See Cooperative Software Survey)

As for creating "generic" cooperative software, IAP sees two approaches to be pursued in Year III. The first is for IAP (along with USDA/ACS) to seek additional funding for further research into cooperative uses of computer technologies and possibly develop generic software which could be recommended and modified in-house in appropriate circumstances.

The second direction lies with the concept of the Computer Information Resource Centers. These institutions, being local groups with experience in local procedures and practices, could be trained to develop their own software. This approach has the added benefit of creating a local technical support group familiar with the various generic software products developed by the CIRC and the local cooperative sectors needs.

IAP, along with Digital Electronic Corporation (DEC) and California State University is holding an electronic conference called AFRICANET. The purpose of AFRICANET is to provide the means for geographically dispersed organizations to collaborate in writing proposals to submit to DEC. The concept is to establish an economically sustainable telecommunications infrastructure in southern Africa providing distance education and technology transfer capabilities. The countries currently being evaluated are: Zimbabwe; Zambia; Kenya and Uganda. DEC is funding the AFRICANET conference.

VI. Administrative and Organizational Matters

Staff:

William Carter, Project Manager (March 1, 1989 - present)
Jeffery Levine, Project Coordinator (May 1, 1989 - present)

Consultants: Training

Costa Rica

Oscer Mesen Jimenez, IAP/Costa Rica Coordinator
Jorge Cespedes, Training Coordinator
Gerardo Mirabelli, Telecommunications Training

Honduras

Mary Awad, IAP/Honduras Coordinator
Maria Martorell-Deese, Training Coordinator

Egypt

Sherif Ebeid, IAP/Egypt Coordinator

Philippines

Antonio Arcellana, ACDI Regional Representative
Toti Chua, IAP/Philippines Coordinator