

Honduras Small Farmer Organization
Strengthening Project
Contract Number 522-0252-C-00-7160-00
Assess Cooperatives Computerization
Needs Consultancy
Dale Key, Consultant
Agricultural Cooperative Development Int'l.
September 1987

PD-AAW-725
Mauricio
52987
Lee

MEMORANDUM

Return for
DK

DATE: September 8, 1987
TO: Lee, Mauricio, Bob
FROM: Dale Key *Dale Key*
RE: Honduras Activities

This memo is to update my activities with the Honduras/WOCCU accounting and information system.

My trip to Honduras in July was to help conduct a seminar with representatives from the credit unions and ag co-ops concerning the contents of the RfP to be submitted to vendors later this year. The first day was devoted to going over the various modules and the second day was broken up into small groups to obtain input as to module content. Everything went well, although there was limited participation from the UNIOCCOOP cooperatives. A good deal of work was done on the chart of accounts which was to be reviewed by the Arthur Young representatives in Honduras.

My next trip in early August was to the Arthur Young office in Providence, R.I. to further refine the RfP with Peter Livingston of WOCCU and Richard Enos of Arthur Young. The result of all this is attached in the following document. It was compiled by Peter Livingston and printed on his laser printer. I am also attaching copies of some other things I have recently done. PLEASE BE CAREFUL WITH THIS DOCUMENT, IT IS THE ONLY ONE I HAVE.

The project seems to be on hold at the moment. The major problem, from what I understand, is that the timing was bad. The project was conceived before the FDF team was in place and then was dumped in their lap shortly after they got started. I believe there is reluctance to carry on with it without considerably more FDF involvement. The computerized accounting and information system was not their idea and they want to mold it to fit whatever their concept is.

I have run into problems with the UNIOCCOOP people. They basically see this system as being dominated by the credit unions and will not participate as much as they should in the RfP process. They are in effect creating a self fulfilling prophecy by staying aloof. Bill Alvarado has shared their concern and I have informed Peter Livingston about it. As a result, Peter asked me to write up something on an UNIOCCOOP favorite theme: cost accounting. I also wrote at Peter's request a tome on why co-ops should or should not computerize based on my experience.

I called Bill to get the specifics on what they are looking for with regard to cost accounting. Bill also told me there will be an audit of the UNIOCCOOP co-ops in late September and felt it would be a good idea to hold off further activity until then.

It seems that this project is stalled for the time being. FDF wants more control and therefore Peter and I will probably wait until they

✓ decide what to do next. We were going to have a seminar this month to finalize the RfP, but I now think nothing will happen until late October or perhaps November. Also, I suspect that the RfP will not be submitted to vendors when it is finally done, it may just gather dust.

My work with UNIOCCOOP looks somewhat nebulous also. I was supposed to lend technical assistance on a regular basis to help in installing my Dataflex accounting system. Past experience has me believe that it may stall again and possibly be abandoned without my presence. It should be up and running in both the exporter co-ops. Chances for success are much better there. I doubt whether the Morazan co-op will ever use the system.

USER INTERFACE

MENU DRIVEN

1. System initialization (boot up) which either goes directly into the program or into file management software.
2. No more than 10 items per menu.
3. Single letter/number commands.
4. User information/prompts to explain commands.
5. Use of multiple choice branching programs with single letter/number commands to choose different options from one choice on menu. Example: choice of several different display and/or sort options for audit trail reports.
6. Output options -- choice of output to printer, screen or disk file.
7. Power user option -- exit from menu system for those who want unrestricted access to system. This is usually an option for a system administrator.

ON LINE HELP

1. Context sensitive -- help key shows information pertaining to what's on the screen.
2. Examples -- use of as many as possible for clearer explanation.
3. User defined -- ability within software to create help screens for specific applications.

SPANISH LANGUAGE

1. Menus
2. User defined help screens
3. Error messages
4. Prompts and questions within programs
5. Data entry screens
6. Reports
7. Documentation

DOCUMENTATION

1. Short explanations with bold representation of screens and keystrokes used in programs.

2. Step by step instruction through typical procedures such as entering transactions, posting and end of month closing.
3. General description of system design with as much graphical representation as possible: i.e. charts representing file relationships, information flow in various procedures, etc.
4. Printed menus with highlighted options.
5. Report examples such as trial balance, audit trail, profit and loss. Annexes should include examples of all reports.
6. File definitions depicting field relationships.

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Cost Accounting Requirements/UNTOCOOP

I called Billy Alvarado-Greenwood on 8/26 regarding the cost accounting needs of the ag co-ops and he related his experience with a co-op computerization in the States. He stated that ideally you need someone who can combine computer and accounting skills with a thorough knowledge of agriculture. The information needs of an ag co-op calls for specialized programming.

The cost of the physical process of production through post harvest is must be kept track of including "mini cost centers" such as the cooling and packing plants at Fruta del Sol. The operating costs involved are:

- 1) Inputs
- 2) Production
- 3) Administration
- 4) Transportation
- 5) Sales

These costs are then distributed by crop, giving the following matrix:

	-- Crop --				
	CORN	BEANS	RICE	COFFEE	MELONS
Operation:	INPUTS				
	PRODUCT.				
	ADMIN.				
	TRANS.				
	SALES				

This whole cost center issue brings up the question of whether we should separate out the ag co-ops in the next seminar so that they can deal with this as well as their other special needs, i.e. inventory, payroll, process control, etc. By doing this we will allay somewhat their sense of being left out and at the same time demonstrate that we have their best interest in mind.

Bill stated that FDF was in the process of formalizing an audit of the ag co-ops and felt that it would be a good idea to incorporate the information that comes out of the audit into the RfP. I couldn't disagree as this is a good opportunity to really involve the FDF in this computerization process. The necessity of the audit information is to me a mute point as the more important issue is FDF involvement.

The audit probably won't happen until the end of September. This means that the next seminar will have to wait until October or November. I see the whole project being delayed at least 2 or 3 months. From my point of view any delay is an acceptable price to pay if we can finally get some sort of cooperation and positive involvement from the FDF.

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WHY COMPUTERIZE?

The issue of computerization has become commonplace in the last few years due to the dramatic reduction in cost. While the price of hardware and software has gone down the capabilities of each has improved substantially. This presents to the potential user an almost irresistible desire to take advantage of this technology. This phenomenon is not restricted to the industrialized nations but to all countries, rich and poor. As a result, I have seen the interest and use in computers in the development field go from almost nothing four years ago to a universal clamor for machines and software.

Background:

Bolivia, 1980: My first encounter with computers in development occurred in 1980 while working as an administrative advisor in Bolivia with rural multiservice cooperatives. As micros were then appearing on the market it was felt that they were more cost effective than outmoded accounting machines.

Not knowing where else to go, AID turned to IBM and said they wanted to buy small computers. To my knowledge no bidding process was ever done, no other vendors were consulted. IBM at the time had just come out with a micro called the model 5100 which AID purchased for \$15,000 each. IBM also provided the accounting software and training to co-op personnel as well as selected project staff.

Although I was not included in the computer project, it captured my interest to the point where I put in my own time to try to learn more about it. At first it seemed a straightforward thing, you install the machines, train personnel, enter data, and then wonderful results follow. It didn't work like that.

First, the software was full of bugs and wouldn't function properly. Co-op staff couldn't cope with the software problems as well as the extra work needed to set up the system. The training did not have adequate follow up in the field. One co-op had environmental problems prohibiting the installation of the equipment.

The project personnel lacked any computer background so we were at the mercy of the IBM people. We had to believe their recommendations and they were not all that interested in devoting much time to the project once their original contractual obligations were over. It became obvious that they were not going to solve the software problem, so we decided to hire a local computer firm to debug the code. Again we were at their mercy. The debugging process dragged on and on with no end in sight.

The equipment itself was soon abandoned by IBM when they came out with the IBM PC in 1981. The 5100 was a short-lived attempt by IBM to enter the micro market, it was poorly designed with no software base. When I left this project in 1981 a lot of time, effort and money had been spent with no tangible results.

Costa Rica, 84-85: My next encounter with computerization in the field was assisting in writing an RfP for the Bank of Cooperatives in Costa Rica. I worked with a Costa Rican systems analyst with many years experience

in banking systems. His experience was invaluable in writing up the hardware and software specifications for an minicomputer system.

During the RFP writing process, we identified 5 potential vendors, but it became obvious that one vendor offered far superior equipment at a better price than the others. My counterpart had also identified some excellent programmers and analysts to create the software (there was nothing commercially available for the Bank).

The Bank chose the superior equipment and hired the programmer and the analyst best qualified to do the job. I visited the Bank while the system was partially finished and found the programming to be going along well, but the Bank management somewhat dissatisfied with the slow pace. I felt that in order for the job to be done right it was better to wait than to push things. Overall I felt this to be a successful computer implementation.

Tonga, 1986: I went to Tonga to install a purchase order/inventory system I had programmed in Washington. The purpose was to automate a manual system for the Tonga Cooperative Federation's warehouse/wholesale business. The manual system was deemed inadequate.

The system I developed was well conceived, but somewhat complicated. I went to Tonga not knowing what to expect with regard to the readiness of the TCF for computers. It became obvious that although the need was great to automate, the personnel were not ready to handle computers. I spent most of my time teaching word processing to the secretaries, developing spreadsheets for accountants, and refining the purchase order system.

I determined that the Tongas needed more training and therefore located an American on the island who was hired to teach computer literacy for 3 months to TCF staff. My feedback months later was that the classes were poorly attended. The purchase order system was never implemented. Apparently the word processing function is doing well.

Honduras, 1984-1987: The Honduran rural cooperatives, assisted by ACCI's project, asked that I investigate computerizing their accounting systems. It seemed vital that local sources be used in order to provide adequate maintenance and support.

Although the market was very limited, I located a potential vendor who could provide adequate hardware and software. My recommendations were abandoned. In 1985 I was called back to again investigate computerizing the accounting systems. This time I was persuaded to do the programming and installation myself. I had the feeling that if I didn't do it, no one would.

Many days of work went into modifying ACCI's accounting system to adapt it to the co-ops. I then had to train project staff so they could do the field implementation. The advantages and disadvantages of this approach are:

Advantages

1. Software was already written and installed at ACCI/Washington. Only modification needed: translation into Spanish, add loan capability.
 2. Control over final product: ability to customize for specific needs.
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Disadvantages

1. No high level technical assistance available in Honduras. I had to provide the T.A. from a distance when not in country.
2. Must rely on locally trained personnel with no computer background to do installation, implementation, and training of co-op personnel.

It was difficult to decide exactly how to implement the use of the software. I was in favor of centralizing the input in ACCI's office in Tegucigalpa while project staff wanted field implementation. I felt that there would be more control over the data and handling of software with a centralized system. Field implementation won out due to the vagaries of receiving the accounting data from the field to the office.

Once training was done, a computer was installed in the "20 de marzo" co-op, which was to be the pilot implementation. In many ways this co-op was the most problematica due to its isolation, lack of prepared personnel and managerial problems. I felt that the exporting co-ops were better candidates, but project staff felt that the chosen co-op could best be helped by computerization. The exporting co-ops were implemented months later.

As of this date, no implementation can be called a success. The "20 de marzo" co-op fell behind in their manual system when running parallel manual and automated and decided to abandon the automated system. Several small technical problems needed my assistance from Washington. One exporting co-op mistakenly erased all there data after a month of smooth operation. It seems that any obstacle would delay progress for weeks and months.

Conclusions

1. Time frame: any computer project takes a good deal of time. Hardware and software must be chosen and staff must be trained. The amount of time depends on the application, wordprocessing usually takes the shortest and database the longest.
2. Personnel: Everyone seems to react differently to computers. Some learn quickly and can teach themselves sophisticated uses of software. Others shy away and only learn rudimentary tasks.
3. Usage Policy: An organization should be security conscious with regard to equipment and software, but every effort should be made to make the machines available to staff who can take advantage of them. A secure machine that sits idle 80% of the time because of difficulty of access is wasted equipment.
4. Technical Support: It is crucial that adequate technical support be readily available. If a problem arises, it has to be fixed quickly or the subsequent down time makes the computer become more a liability than an asset.
5. No Panacea: If a manual operation is poorly run, a computer won't fix it.

Recommendations

The cost of computers has gone down so dramatically that they are attractive alternatives to small organizations such as developing country cooperatives. Cost benefit analysis and careful study of existing manual systems oftentimes cannot conclusively discount the purchase of a computer, but it must be realized that a computer is not a machine that can be implemented as easily as a vehicle or a calculator.

The question "why computerize?" is answered by the potential user by saying the present manual system is cumbersome and time-consuming. He wants to do it quicker and better. Can he do it quicker and better? The answer is a qualified yes, but he must be made to realize that it won't be easy. He must decide to invest a lot of time and effort into making the plunge worth it. If he still wants to go ahead, then I can't tell him not to.

Based on my experience with several projects I would say that the one big deficiency has been priority. Computerization has been approached as a sideline event. Send a consultant for a week or two, make some decisions, a little progress, and hope that the rest will fall into place. Computerization needs full time staff and support from project leaders. It must be placed high on the priority list, it needs a great deal of attention and care. This is true in the developed as well as the developing world. I have never seen a poorly supported computer project be truly successful.