

EFFECTIVENESS OF AID IN REACHING  
ITS INTENDED BENEFICIARIES, i.e., THE RURAL POOR  
IN AID PROJECT AREAS

Peter Agbor-Tabi  
Ph.D. Candidate, University  
of South Carolina, U. S. A.  
April 1981

## FOREWORD

This report is the product of ten months of research in three provinces of the United Republic of Cameroon. This study could not have been possible without partial funding from my family, friends and the U.S.A.I.D. MISSION in Cameroon (Purchase Order No. 80-AID-157-PRJ). To these individuals and organization, I say thank you. But all the funding in the world would have meant very little to make this study a success without the cooperation of the subjects that were studied. I would like to extend a special thank you to the staff of the North Cameroon Seed Multiplication Project, the Young Farm Family Training Center, the IRZ and HPI personnel in the northwest province, the Cameroon Cooperative Credit Union League staff and finally to those poor villagers in North Cameroon, especially in Kar-Hay region, who patiently sat through the several pages of my questionnaire in the scorching sun of the region and who also accepted to share with me some of the most scarce elements in the region, water and food.

## INTRODUCTION

This study has been an attempt to measure the effectiveness of AID in reaching its intended beneficiaries, i.e., the rural poor in AID project areas. The hypothesis that was tested is that aid does not always reach the intended beneficiaries and that there are institutional constraints that can be identified in the donor and recipient of aid which in this case are the USAID and the GURC - the Government of the United Republic of Cameroon, respectively.

In conducting the research a socio-economic questionnaire was constructed and administered in the project areas of the following four projects:

1. The Center for Training Farm Families (CTFFs);
2. The North Cameroon Seed Multiplication Project;
3. CUNA Assistance to Credit Unions; and
4. Heifer Assistance to Small Farmers

In addition to the questionnaire numerous <sup>interviews</sup> were held with policy makers in the recipient country and the project implementing staff. This author also had access to all project records and to records of the USAID mission in Cameroon on related projects.

The format of this report has generally been in four parts:

- the background history of the project;
- USAID's objectives in assisting the project and end of project life projections;
- author's objectives and research methodology; and
- findings of field research and recommendations.

The results of my analyses show that the four projects used in testing the above hypothesis have not been effective in reaching their target population. The problems identified as a hindrance to the projects from reach-

ing their intended public were common to all four projects examined.

It is hoped that results of this study will be useful in redesigning future phases of these programs.

THE CENTER FOR TRAINING FARM FAMILIES  
(CTFFs)

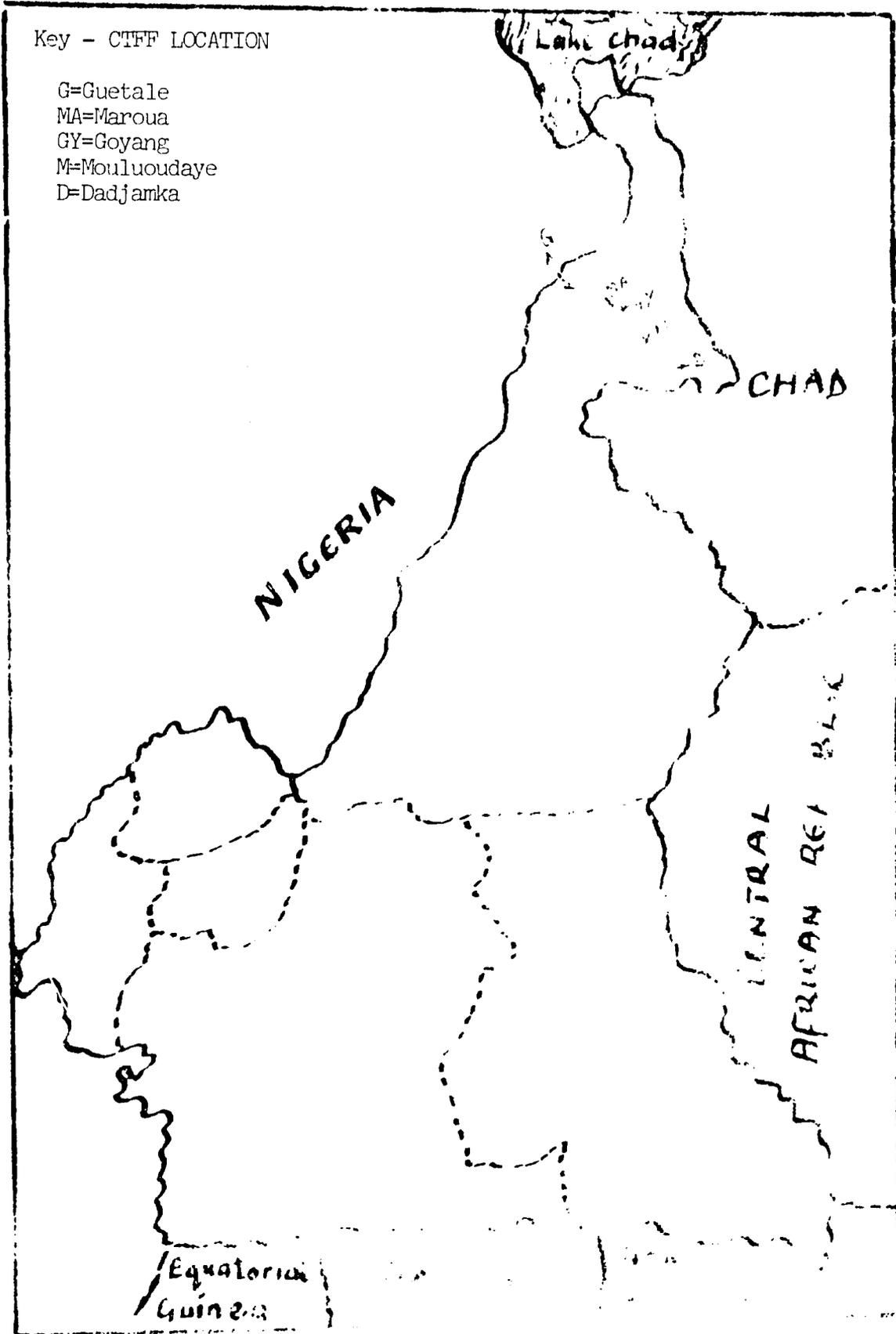
The objective of this study is to test the the hypothesis that Aid does not <sup>a/ways</sup> reach the intended beneficiaries and that there are certain institutional constraints that can be identified in the donor and recipient of aid which in this case are the U.S.AID and the G.U.R.C. (the Government of the United Republic of Cameroon) respectively.

This author will only briefly describe the genesis of the CTFF. See Center for Training Farm Families Project design - 1976, for further detail. This writer will also state USAID's objectives in assisting the CTFFs and also its projection of project impact after 4 years. He will then state his objectives and research methodology. Finally, he will show findings of field research and make recommendations.

BACKGROUND OF CTFF

The second phase of the CTFF which received 47 percent of its total cost from USAID was as a result of the apparent success of the two pilot centers at Goyang in 1969 (Diamare Department) and at Dadjamka in 1974 (Mayo-Danai Department) respectively.

These early centers were built and run by the Geneva Cooperation Federation, a non-governmental Organization headquartered in Geneva, Switzerland. These centers intended to create a cadre of agricultural innovators in Northern Cameroon who will apply modern methods of agricultural production learned during their eleven months of training at the center. For the first four years of the first phase only bachelors were recruited into the centers and at graduation it was realized that one of the main goals, to curb the rural exodus, was not being met. This was because bachelors did not have any status in the villages, lacked land to cultivate and needed money to



pay as dowry for a wife. After graduation former students of the centers ended up selling the agricultural equipment they acquired in the centers at the end of their training and moved to neighbouring urban centers, some going south to Yaounde and Douala. This action only perpetuated one of the problems which the centers were meant to solve.

As a solution to this problem it was decided in 1974 to recruit only young couples between the ages of 20 and 30 years. This decision is definitely a success because the rate of runaway students after graduation is lower than 5 percent. Prior to 1974 it was above 80 percent.

Each center was designed to have an in-take of between 18 and 25 couples. The living structures at the center were meant to be a replica of the students' village environment though with slight improvements.

Given the heterogeneity of North Cameroon both ecologically and culturally the centers were also to reflect these differences. The similarity between the center structures and those of the villages facilitated the trainees' reintegration into the village after the period of training.

Right now there are six CTFFs concentrated in the four most northern departments of the northern province.

Table I

|                                        |   |             |   |                    |   |            |   |               |
|----------------------------------------|---|-------------|---|--------------------|---|------------|---|---------------|
| DEPARTMENT                             | ! | DIAMARE     | ! | LOGONE et<br>CHARI | ! | MAYO-DANAI | ! | MARGUIWANDALA |
| CENTER                                 | ! | Goyang      | ! | Ngouma             | ! | Dadjamka   | ! | Guetale       |
|                                        | ! | Moulvoudaye | ! |                    | ! | Dana       | ! |               |
| THE REGIONAL<br>COORDINATING<br>CENTER | ! | MAROUA      | ! |                    | ! |            | ! |               |

From 1975 to the present date about 340 couples have graduated from all the CTFFs mentioned above. Earlier graduates have not been included in this study because this was prior to the AID assisted program.

### USAID'S OBJECTIVE IN ASSISTING THE CTFFs

The main objective is focused on helping the rural poor near subsistence, and low income rural farm families through training in improved agricultural practices and the use of animal traction to raise their income and food crop production thereby raising their quality of life.

The above goal was to be met through the establishment of a region-wide network of agricultural innovators in the four most northern departments of North Cameroon. These innovators will be taught the use of improved methods of agricultural production through practical instruction at project training centers and will pass these methods on to their neighbors upon return to their villages.

This author would like to underscore the fact that those trained at the centers are not the target population and should be considered as change agents in the project areas. The target population is the poor rural farmer. The centers are supposed to serve a dual purpose: training and extension.

### USAID'S PROJECTIONS OF PROJECT IMPACT AFTER 4 YEARS

The project design projected:

1. A 50 percent increase in productivity for main crops grown by trainees and others within each radial area of the CTFFs;
2. A 40 percent increase in the farmer's net disposable income;
3. A demonstrable increase in the farmer's use of new methods and materials, and
4. Improved nutrition as shown primarily by increased protein consumption.

### AUTHOR'S RESEARCH OBJECTIVES AND METHODOLOGY

When this study was undertaken the purpose was to see what impact the project has on the trainees and the targeted population within the 35 kilometer radial area of the center. To do this a structured questionnaire was constructed and a pre-test carried out in the villages of Kodek and Meskine within the

Maroua periphery. After the test some of the questions were reformulated and administered in four CTFFs. The main factor which determined my choice of center was the number of years it has been in existence and the number of participants trained. With this criterion in mind the Ngouma center was disqualified. The next selection criterion was distance. Dana was eliminated because it is very far away. The four centers I am left with are Goyang, Moulvoudaye, Guetale and Dadjamka. Out of the 340 couples that have received training at these centers a sample of 75 family heads was chosen and interviewed. I felt that a sample of 21 percent of the universe was fairly adequate. Also 75 family heads of non-trainees and neighbors of the ex-students were interviewed. It was difficult to calculate the percentage of the non-trainee sample because there was no data available on the active agricultural population in these radial areas except for the Dadjamka zone.

In selecting my sample the method I adopted was very simple. Take for example the Dadjamka center. The activities of this center are supposed to cover a radial area of 35 km. Within this area there are about 30 villages. Every year the recruitment of students into the center is limited to 3 or 4 villages within the radial area. This means that the batches are spread throughout the area. During my study trip to Dadjamka I wanted 24 ex-students and 24 villagers to interview. I wanted my sample to contain students of the first 5 batches. The sixth batch was not selected because it had just returned to the villages and it was too early to measure the impact it had on the villagers. The five batches in question contained 100 students and were spread over 20 villages from which I had to draw a sample of 24. I thought I should limit my interview to 8 villages selecting three students from each village. The choice of these villages was random. Names of all the 20 villages were written down on separate pieces of paper and lots were drawn selecting the

eight villages I needed. This I thought was the most objective procedure.

In conducting the interviews I was testing for four things:

I. Who gets selected to participate in the CTFF program?

The indicators used to measure this factor were:

- amount of land owned by farmer;
- farmer productivity;
- farmer income; and
- level of education

II. Elements of the CTFF training which were most instrumental to a positive change in farmer's quality of life after graduation. The following areas were probed:

- CTFF curriculum;
- credit facilities; and
- trainees' village reintegration subsidies.

III. Were the projected goals by USAID met after four years of project existence?

- was productivity up by 50 percent in the CTFF radial area?
- was farmer's net disposable income up by 40 percent?
- was there a marked increase in the farmer's (participant and non-participant) use of new methods and materials?

IV. Was there any diffusion of new techniques from center participants to non-participant? This was examined by posing the following questions:

- after graduation did participant consciously demonstrate new techniques acquired at the CTFF to non-participants?
- how many villagers have been taught these new techniques since participant returned to the village?
- how many of those who were taught the methods belonged to the same family as the participant?
- how many non-participants adopted the new methods in their farms? and
- what reason did those who did not adopt the new techniques give for not doing so?

These questions are not at all exhaustive. For more detail see questionnaire attached.

WHO PARTICIPATES IN THE CTFF PROGRAM?

In answering the above question four indicators were used:

-Land ownership; productivity; income and level of education of farmer prior to the introduction of the CTFF program.

As for land ownership data collected on each farmer interviewed showed very little difference in hectarage owned before and after the program by those selected for training at the CTFFs and the non-participants. When the mean was calculated it was found that for participants it was 4.3 ha and 4.6 ha for non-participants. After examining the data very critically this author realized that the land was highly disproportionately distributed between paramount chiefs, princes and other villagers. To correct this discrepancy this writer decided to eliminate farmers with over 10.0 ha of land. With this criterion in mind, two participants and five non-participants were eliminated. A new mean was calculated and it showed that participants and non-participants had 4.0 ha and 3.9 ha respectively. I think that a 2.56 percent difference in quantity of land ownership is too negligible to count as a selection criterion. But if we considered the 2.56 difference as a percentage between who gets selected and who does not we would be right to say that CTFF trainees own more land than the non-participants.

Productivity prior to admission into the centers was also examined as a selection criterion. After analyzing the data collected by this author it was found that the average number of bags produced by a project participant and a non-participant was 35 and 44.5 respectively. This figure led me to conclude that not the most productive farmer was selected.

Another selection factor I investigated was income of farmers prior to the institution of the CTFFs. After examining the base line data I noticed that a center participant had an annual income of 73,000 F.CFA whereas the non-participant had an annual income of 106,600 F.CFA. Again, we can see that it is

not the richest farmer who gets selected into the program.

Finally, I looked at the level of education of farmers to see if it had any influence on the selection process. Out of all participants interviewed, 27.6 percent had some kind of training in western and Koranic schools. But 81 percent of those with some kind of education had been trained in western primary schools whereas only 19 percent had been to Koranic schools. The same kind of analysis was conducted on the non-participants and it was found that 43 percent of the sample had been trained in western and Koranic schools. But 52 percent of those with formal education had been to western primary schools whereas 48 percent had been trained in Koranic schools. In general, level of education does not seem to determine selection into the centers because the distribution is more weighty on the side of non-participants. But an educational factor which very probably influenced the selection process is the kind of education received. In analyzing the data I found a strong positive correlation between the percentage of Koranic trained farmers and membership in the Moslem faith. I came to the conclusion that being a Moslem acts as a hindrance to participation in the centers for Training Farm Families because couples recruited are supposed to follow both the theoretical and practical parts of the training which is given for 11 months. Meanwhile according to Koranic law women are not supposed to work and are not allowed to leave the SARE before sunset, even to visit a friend or a family member. Given these reasons it can be argued that since farming is done during the day it becomes impossible for those women to work with their husbands at the centers and this outright disqualifies the Foulbes (a predominantly Moslem group) as candidates.

From the above analysis we have shown that those recruited into the CTFFs are not necessarily those with the largest quantities of land, nor the best farmers with high production margins, nor those with the highest annual incomes,

nor those with the highest level of education, but the kind of education received influences it to a large degree. Having demonstrated that none of the above variables is a determining factor of recruitment, we are only left with two other variables, morality and motivation, used by the recruiting staff of the CTFFs. I have not examined the morality variable because it is fluid and difficult to measure. Though the follow-up officers claim to have used the morality test as a screening factor we notice from the character sketch kept by the director of the CTFF Quetale on each of the trainees that over 90 percent of the students are very ill-behaved, lack a team spirit and are very cantankerous.

As for the motivation element this author looked at attendance during sensitization meetings in villages prior to the final selection. Eleven meetings are held and attendance is kept. At the final meeting those with the highest attendance are most likely to be selected if other requirements are met (see pp 2-3 of the technical report - not published - presented to the Board of Directors Meeting of the CTFF held in Maroua between December 18-20, 1980). I found attendance as one of the most objective indicators of measuring motivation and a good selection factor. But one of the reasons why some trainees attended these meetings might become clear as we discuss the re-integration subsidies given to the farmers at the end of their training.

In summary one can classify the selection criteria into the CTFFs in the conscious and unconscious categories. The amount of land owned, quantity of crop produced, income and level of education of farmer fall within the unconscious category while religion and motivation seen as attendance fall in the conscious category.

#### POSITIVE ELEMENTS OF THE CTFF TRAINING

The positive elements being considered here were seen as such by almost all the center trainees. These factors were the curriculum, credit facilities and

trainees' village reintegration subsidies.

Curriculum:

The training is divided into two parts: theory and practice. The theory part of the training is conducted in a structured classroom manner with a lot of interaction between the students exchanging previous experiences on certain agricultural topics. Emphasis is placed on planting of given crops, crop rotation, crop preservation and pest eradication. When interviewing villagers involved in agriculture and especially those who had received training at the centers the majority commented that their annual production has gone up because planting was done on time. Prior to the training planting depended on the whims of the farmer and the result at harvest time was disastrous, the farmers said. Another point which came up very often was the fact that prior to training 25 percent of the harvest was destroyed as a result of inadequate storage facilities. But after training the loss is less than 2 percent except in cases of natural disasters such as flooding and hurricanes.

The practical part of the training revolves around animal traction which can be rightfully considered as the pivot of the program. Students are taught in the field modern techniques of harnessing the traction animals, and their use in plowing and weeding. In my questionnaire I asked if the farmer has found his duties more difficult since he started using the animal traction technique. I also asked how long it took the farmer to plow a hectare of land before and after the animal traction technique. One hundred percent of my sample said the use of animal traction in plowing and weeding has made farming extremely easy and enjoyable. As for the work load since farmers started using animal traction, I noticed after analyzing my data that for project participants there was a 74 percent in man/hr. per hectare and a 72 percent reduction for non-participants.

CREDIT FACILITIES AND VILLAGE REINTEGRATION SUBSIDIES

In this study two kinds of credit have been considered. Credit in kind such as fertilizers given to farmers growing cotton by SODECOTON and the equivalent in cash deductible by creditor when the farmer sells his cotton. This same type of credit is also given by FONADER. The other kind of credit considered here is cash credit. This credit is dispensed by the World Bank, FONADER and the Ministry of Agriculture.

Everyone in my sample (project participant and non-participant) grows cotton and therefore receives fertilizer credit from SODECOTON. For this reason I am leaving out SODECOTON credit in the analysis. Analyzing the data I collected, I found that 73 percent of the project participants either received government assistance dispensed by the Ministry of Agriculture or were qualified to receive it. Whereas 27 percent received government assistance as well as credit from FONADER. Meanwhile only 31.7 percent of the non-participants managed to receive any kind of credit despite the fact that all of them were eligible. On top of the many credit facilities the participants had, the government paid 50 percent for the cost of a pair of oxen, a plow, a yoke, a weeding ridger and a guider wheel used for animal traction.

Also in addition to the know-how acquired at the center, the equipment, reintegration subsidies and credit received at graduation, the participants (except the women) were guided in their agricultural activities for another two years by a follow-up officer placed at each center. All these opportunities and privileges offered to center participants are considered by candidates as the main motivating factors for wanting to go to the centers.

PROJECT GOALS EVALUATED AFTER 4 YEARS

One of the many goals of this study was to see if the objectives set at the design stage of the project were attained. In doing this I looked at

productivity, income and the use of new methods and material by farmers. The annual agricultural income of farmers prior to the introduction of the program was compared to their annual income after the program was instituted. Prior to the program the average annual income of trainees and non-trainees was 73,000 F.CFA and 106,600 F.CFA respectively. After the institution of the project the average annual income of participants and non-participants went up to 135,000 F.CFA and 146,600 F.CFA respectively. The percentage increase of participants and non-participants was calculated and it was noticed that there was an 84.9 percent and 37.5 percent increase respectively in farmers' disposable income. For participants the 40 percent target projected was met and surpassed by 44.9 percentage points but for non-participants the projected increase percentage was below the target.

Another factor which was examined was productivity. Prior to the program those who ended up receiving training at the centers and those who did not produced 35 bags and 50 bags of food and cash crop respectively. After the program was introduced the participants produced 56 bags whereas the non-participants produced 57 bags. If we look at the percentage increase of the two groups we will notice that there was an average increase of 60 percent for participants and a 14 percent increase for non-participants. Here again we see that the projected increase target was reached and surpassed by trainees whereas it was below by 36 percentage points for the non-participants.

As for the use of modern agricultural methods and material most center trainees used the techniques and equipment acquired at the center after graduation. They were also encouraged to do this by the center follow-up officer who provided guidance to ex-trainees for two years after graduation. The non-participants who used modern methods and material were very few and were limited to those who were influenced by participants and other change agents from SODECOTON and the Ministry of Agriculture. A constraining factor

to the use of new techniques by those non-participants who were influenced by change agents is the fact that they could not afford the cost of the new equipment.

Table II

|                           | BEFORE              | AFTER               | % INCREASE |
|---------------------------|---------------------|---------------------|------------|
| INCOME                    | Pt: 73,000 F.CFA    | Pt: 135,000 F.CFA   | 84.9       |
|                           | N-Pt: 106,600 F.CFA | N-Pt: 146,600 F.CFA | 37.5       |
| PRODUCTIVITY<br>(in bags) | Pt: 35              | Pt: 56              | 60.0       |
|                           | N-Pt: 50            | N-Pt: 57            | 14.0       |

\* Pt. = Project participant

N-Pt. = Non-Project participant

Normally one would think that increase in production would correlate with increase in income but we see that it is not the case with data in table II. What is definitely clear in the above data is the fact that the increase in income is not so much as a result of rise in productivity but as a result of a rise in food crop prices within the last five years.

A question which has bothered me since this study was undertaken was why the project designers projected the same percentage increase (50%) for participants and non-participants after 4 years of the project existence. Did they think that non-participants would have the same material inputs as participants had after graduation or did they have a lot of confidence in the myth of the socialistic nature of the African who would give out his equipment for free to his neighbors? If this was the case it has indeed turned out to be a big mistake. Non-participants lack material inputs to work with and even when they have access to the animal traction equipment from the ex-trainees, they would be obliged to pay 10,000 F.CFA for each hectare of land plowed.

SPREAD EFFECT OF THE CTFFs

The main goal of the CTFFs has been to teach the use of improved methods of agricultural production to innovators who would pass these methods on to their neighbors in the villages after graduation. This goal makes it crystal clear that the centers are just a means of reaching the target population which is the village farming population. It is therefore imperative that any scholar examining activities of the CTFFs should look at the diffusion rate of their activities. The first question posed in this direction was to know if center participants had consciously taught the techniques they acquired at the centers to non-participants. Over 98 percent of the graduates claimed to have taught new farming techniques to their neighbors. The data collected was analyzed to find out how many non-participants were taught each year by a former center trainee and it was found out that 1.76 persons were reached. The next question was to find out how many of those reached by center participants each year adopted the new techniques and I noticed that 1.32 persons adopted the new methods. When the adoption rate was calculated it was found out that 75 percent of the number reached by participants adopted the new methods in their farms. Another interesting aspect of the spread was to know if it revolved only within the participants' family. This was calculated and it was found out that only 6.1 percent of all those who adopted these techniques were from the same families as the participants. Finally, I wanted to know if there was a secondary spread effect from those villagers reached by ex-center participants to other villagers but there was none.

With the above results we can hold that there is some spread effect from the activities of the CTFFs but the question is, is it significant enough? Can we claim as it was done by the project designers that after 4 years of the project existence it would reach the totality of the farmers within the radial area of the center? To answer this question we need to

look at the active agricultural population of a given radial area. Take that of Dadjamka which comprises 4,000 persons. The rate of adoption is 1.32 persons per year. Between 1974 and 1978 about 100 trainees graduated from the Dadjamka center. This number of students would need 30.3 years to reach and get all the farmers within the radial zone to adopt the new farming methods. This author is aware of the fact that most adoption or diffusion graphs are bell-shape curves but argues that the spread in this particular project is **different** because of the lack of vital inputs like credit to the non-participants.

We can therefore say that the 4-year period in the design was somewhat overambitious considering that there was no specific means of diffusion indicated in the design document.

#### CONSTRAINTS AND RECOMMENDATIONS

The philosophy behind the creation of the CTFFs which is to raise the quality of life of the poor rural population in an effort to bridge the rich-poor gap and also curb the flow of functional illiterate country people into the cities is one of the most commendable things that could be done in a developing country with four-fifths of its people residing in the countryside and employed in agriculture. From the preceding review it seems that the objectives are being met for participants and not for non-participants. But generally when the objectives for which a laudable project was instituted are not being entirely met, the policy man is faced with four choices:

1. Scrap the project completely; or
2. Continue with the same mistakes hoping that an extra dose of inputs would turn things round (quagmire effect);
3. Gloss over one's mistakes and exaggerate one's successes; or
4. Evaluate the project and make changes.

It is customary, especially in LDCs, for the novice and the untrained mind in problems of development to opt for the first three choices because they are easier. This author strongly believes that the ~~fourth~~ course, though difficult, is the best for effective development. We need to know the factors constraining the effectiveness of a development project in order to correct them.

In conducting this study a number of constraints were detected.

1. Lack of awareness of project role.

The role of the project is to reach the totality of the rural population within the radial areas of the center through the center trainees. But despite the fact that this was mentioned in the project design paper it seems as if no one in the recipient country (i.e., Cameroon) involved in the project from the decision making level to the implementation level is aware of this objective. I arrived at this conclusion as a result of the following:

1. an examination of the activities of the center followup officers throughout my research in North Cameroon;
2. an analysis of annual reports on the activities of the CTFs and the regional coordinating center in Maroua; and
3. as a privileged observer at the 1980 Board of Directors' Meeting held in Maroua.

While in the field examining the activities of the centers I held numerous interviews with the center follow-up officers and also had the opportunity to go with them during their village rounds but all the farmers they visited were former trainees. When asked why they did not give any guidance to non-participant farmers they said that was not part of their duties. They explained to me that their activities included recruitment of new students into the centers and also guiding ex-students for a period of two years after graduation

making sure that they were applying the new techniques acquired at the centers.

If the follow-up officer who should aid the non-participants with expert advice on new agricultural methods does not do this under the pretext that it does not fall within his defined duties, one really begins to wonder if the staff knows what the role of the centers is. Having discovered this shortcoming at the level of the center I was curious to find out if it was just an oversight on the part of the center staff by looking at the level of the project coordinating center.

At the level of the project coordinating center it was sometimes very difficult to get the information I wanted, and to get around this problem I was obliged to depend on the annual reports. It was interesting to note that none of the annual report contained a study on the spread effect of the program. This led me to conclude that not making mention of the diffusion effect was not just an oversight but complete ignorance of the project goal.

I also tried to look at this problem of awareness at the highest level of the project, the Board of Directors level. Here again the report presented by the center coordinator during the Board meeting did not mention, even in passing, the spread effect of the center. None of the Board members except the representative of the prefect of Mayo-Danai noticed this great omission and weakness in the report, and when he asked for clarification, the problem was glossed over as unimportant. This attitude of the Board confirmed my earlier hunch that there was a complete lack of awareness of the major project objective at all levels.

This author believes that diffusion of center objectives through its personnel and trainees should be one of the most emphasized factors of the

program. For this factor to be more effective centers would need more than just one follow-up officer especially as his activities would include guidance of ex-center trainees and non-trainees. It is also imperative to recruit women follow-up officers responsible for the guidance of the rural women, a factor of the program which has up till now received very little emphasis. These officers, male and female, would need to be equipped with means of transportation so as to make their rounds effectively. There should also be a large degree of coordination between these center staff and other extension workers of agencies like SODECOTON, the national civic centers, extension agents of the Ministry of Agriculture and those of the community development, to mention but a few.

## 2. Credit.

It must be remembered that effective diffusion of center activities to non-participants will neither increase their income nor their productivity without the necessary agricultural inputs. The most vital input urgently needed by these farmers is credit. They need this credit for the purchase of a pair of oxen, a plow, a yoke, a weeding ridger and a row marker for animal traction. If this credit is not extended to this group of farmers, they will continue in their present position of dependence on the ex-trainees who own animal traction techniques paying 10,000 F.CFA for each hectare plowed. During my research it was noticed that a non-participant farmer spends at least 20,000 F.CFA each year to hire animal traction from center participants. This dependent position has led non-participants to refer to the participants as "Les colons du village". The argument used by FONADER that these villagers are not credit worthy therefore they should not be given credit is nonsense because if they can spend over 20,000 F.CFA to hire animal traction from center participants it goes against the grain to

argue that they would not be able to reimburse a 10,000 F.CFA note each year for six years. Another way to solve this problem is to encourage the creation of cooperatives supplying credit for the purchase of animal traction equipment for a group of between five and ten farmers.

If the diffusion component of the CTFs is not activated and strengthened, and credit extended to non-participant farmers within the radial zone of the centers then the objectives of the project will take 30 years or more to be achieved. If the project continues without these changes I think what we are going to see developing is the creation of pockets of well-to-do farmers growing in the project zones and exploiting the poorer farmers, whereas when the project began the idea was to help raise the quality of life of the poorer lot.

As a final note it is also believed by this author that the lack of awareness of project goals by the personnel in the recipient country is as a result of the fact that they are not included in the design process of the project document. I would recommend the inclusion of locals (recipient country personnel) at the decision making, designing and implementation levels of each project if these projects are to be effective in the long run.

In addition to the above recommendations I would recommend that future design documents be more specific. Given the level and quality of those involved in the implementation of the project, it might be important to precisely state how the selection of candidates and diffusion should be carried out. Secondly, project goals should remain within realistic limits. I felt that it was too ambitious to claim that all non-participant farmers within the project zone would be reached within four years and their production as well as that of participants will be up by 50 percent.

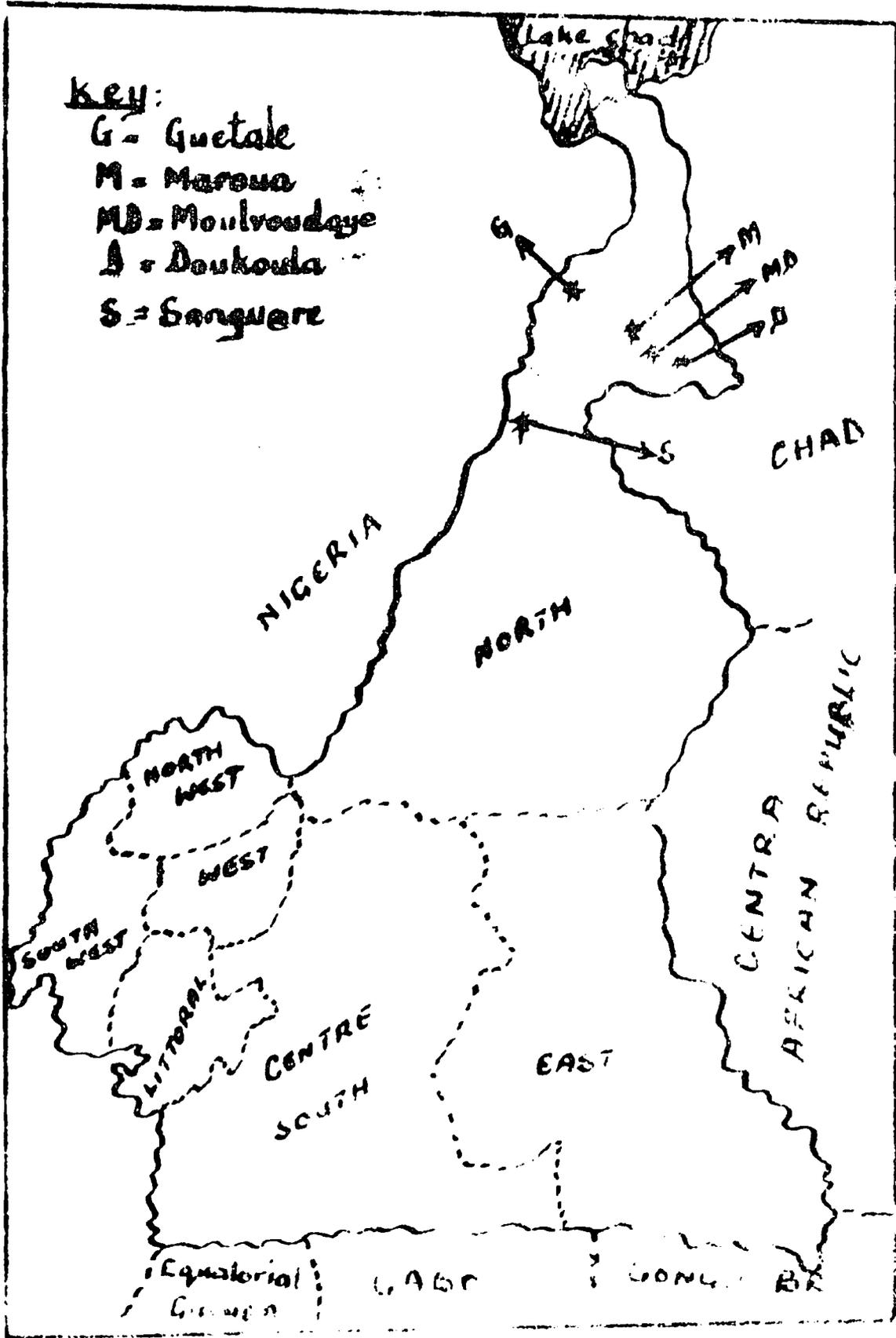
I would also recommend the setting up of a basic statistical data bank at the level of the regional coordinating center and linked up with the Center for Economic and Social Science Research (CES) established in 1974. This bank should be run by a serious individual with some training in statistics and at least four years of college training in the social sciences. The purpose of this bank would be to collect and disseminate socio-economic data especially within project areas. Finally, it is important to state that earlier in this report it was mentioned that strict moslems are disqualified as center candidates. The reason being that CTFF training conditions require that couples work together in the field. The moslem religion prohibits women from working. Given these conditions what can be done? The project is supposed to cover the totality of the four northern departments of North Cameroon. If moslems are not included this will be discarding 30 percent of the population for which the project was meant to help. So, I am recommending that foulbe couples be admitted into the centers; but women would not necessarily join their husbands in the fields. These foulbe or moslem women could be taught modern hygeine methods and child care by the female follow-up officer while their husbands are in the field working.

NORTH CAMEROON SEED MULTIPLICATION PROJECT (NCSMP)

Subject: "Effectiveness of Aid in reaching its intended beneficiaries,  
i.e., the rural poor in AID Project areas"

The objective of this study is to test the hypothesis that Aid does not always reach the intended beneficiaries and that there are certain institutional constraints that can be identified in the donor and recipient of aid which in this case are the USAID and the GURC (the Government of the United Republic of Cameroon) respectively.

In writing this report, a brief background history of the project will be given - see Project Design 1976, and the North Seed Project Evaluation Papers of 1979 and 1980 by Development Alternatives, Inc., and the Mississippi State University Team respectively for more detail. The author will state USAID's objectives in creating the NCSMP and also state its projections of end of project status after 5 years. He will then state his objectives and research methodology. In conclusion, this author will show findings of field research comparing them with project goals and finally make recommendations.



HISTORICAL BACKGROUND AND STRUCTURE OF THE SEED MULTIPLICATION PROJECT

Though the agreement creating the Seed Project was signed on June 15, 1976 by Youssoufa Daouda, the Cameroon Minister of Economic Affairs and Planning, and Herbert J. Spiro, Ambassador of the United States of America in Cameroon, the origins of the Project date much earlier.

These origins can be traced back to the severe drought of 1972-74 which hit the Sahelian regions of Africa affecting most of North Cameroon. This drought brought about total crop failure in the area and inflicted untold hardship on close to 85 percent of the population of the North whose livelihood is based on subsistence agriculture. Because of the famine which resulted from the drought, the seed reserved for planting was used up for food.

It was in a joint effort to correct the imbalance created by this natural disaster that the Cameroon Government and USAID decided to establish a seed program. This project was also established for the following three reasons:

- a) To provide in the short run an improved seed suited for the harsh climatic conditions of the area, and increase food production which would enable the small, poor farmers to increase their income;
- b) It was hoped that as the food production increased, the consumer prices would be reduced;
- c) The long term goal was to lay the foundation for a nation-wide seed policy.

At its creation, the project, though semi-autonomous, was attached to the Mission for the Development of Food Crops (MIDEVIV) with headquarters in Yaounde, far removed from the Project's main office which is in Maroua (Diamare Division). During my interview with numerous senior government

officials in the Northern Province, the general opinion was that the direct supervision of the Project by MIDEVIV was a big mistake. They would have liked to see it linked up directly to some existing structures within the Province and directed from Garoua. A detail organizational chart of the project vividly illustrates that lack of linkage with other agricultural structures in place, an idea very strongly decried by my subjects. See Table I.

According to this chart the project coordinator is answerable to the Director of MIDEVIV. The Director of MIDEVIV appoints the coordinator and the project staff is answerable to the coordinator.

The direction of the arrows in the chart might have been unconscious but in reality it depicts the actual flow of information in the project. Again according to the chart the only area in which we see a direct link with an institution in the area is when it comes to dealing with the farmer. Here the project staff sometimes work through heads of district agricultural posts for extension purposes.

This author has deemed it necessary to provide some detail information on project staff to further illustrate causes of the unfriendly attitude of over 80 percent of government officials I interviewed toward the seed project. See Table II.

TABLE I.

AN ORGANIZATIONAL CHART  
OF THE NORTH CAMEROON SEED  
MULTIPLICATION PROJECT

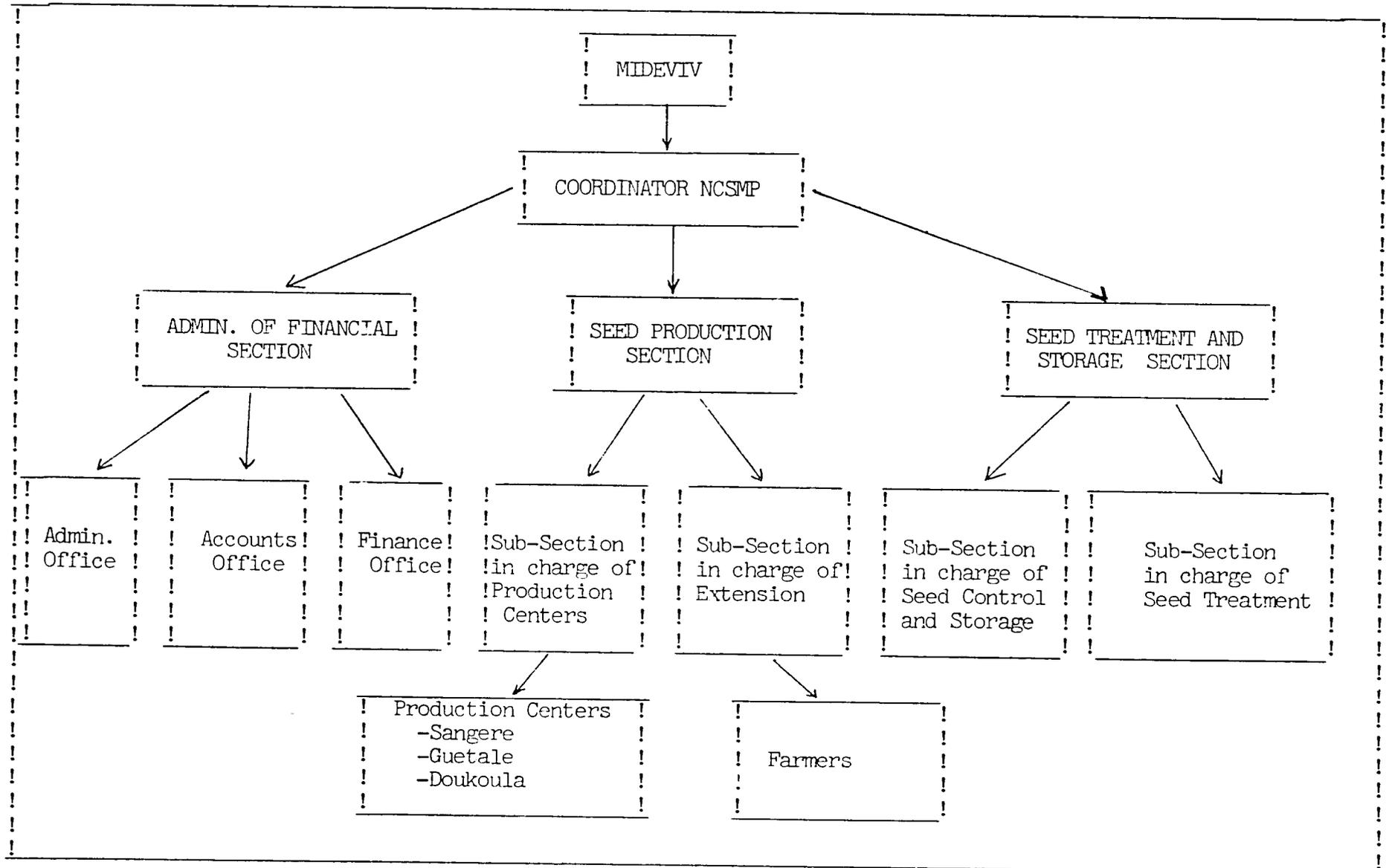


TABLE II

| <u>Name of Staff</u>      | <u>Province of Origin</u> | <u>Position held in the Project</u>            | <u>Classification (Academic and Professional)</u> |
|---------------------------|---------------------------|------------------------------------------------|---------------------------------------------------|
| 1 Mr. Elang Joseph        | Center South Province     | Coordinator                                    | Agricultural Engineer                             |
| 2 Mr. Madukou             | Center South Province     | Head of the Adm. Office                        | G.C.E. Advance Level Equivalent                   |
| 3 Mr. Temani              | Western Province          | Head of the Accounts Office                    | G.C.E. Advance Level Equivalent                   |
| 4 Mr. Gnathan             | Littoral Province         | Head of the Finance Office                     | G.C.E. Ordinary Level Equivalent                  |
| 5 Mr. Moussio Dikoume     | Littoral Province         | Head of the Production Section                 | Agricultural Engineer                             |
| 6 Mr. Njopkou Emmanuel    | Western Province          | Head of the Seed Treatment and Storage Section | Agricultural Engineer                             |
| 7 Mr. Lontchi Christopher | Western Province          | Sub-Head in charge of Production Cent.         | Agricultural Technician                           |
| 8 Mr. Moussa Hamidou      | Northern Province         | Sub-Head in charge of Extension                | Agricultural Technician                           |
| 9 Mr. Dioni Philip        | Western Province          | Sub-Head in charge of Seed Control and Storage | Agricultural Technician                           |
| 10 Mr. Seraphin Njomgue*  | Western Province          | Sub-Head in charge of Seed Treatment           | Agricultural Engineer                             |
| 11 Mr. Mbolda Pierre      | Western Province          | Head of the Sanguer Center                     | Agricultural Engineer                             |
| 12 Mr. Bello Ousmane      | Northern Province         | Head of the Guetele Center                     | Agricultural Technician                           |
| 13 Mr. Oumarou Goudouar   | Northern Province         | Head of Doukoula and Moulvoudaye Center        | Assistant Technician                              |

\*This staff left the seed project in November 1980.

It is also important to mention that the above list of staff has not been exhausted. But in the project hierarchy these are the important officers.

All the officers on this list are fairly competent people and the staff distribution by Province is to a large extent even. I was surprised to hear the constant complaint of my subjects of the under representation of the north on the project staff. When I tried to investigate further, I learnt it was a question of two sections, North and South and not seven provinces, Center-South, Littoral, West, North, Northwest, Southwest and the East which would have put the north in the second position percentage-wise. If only the two sections are considered the ratio will be 1:3.3 in favor of the South. If a ratio of the highest staff in the project hierarchy is calculated it will be 0:6 again in favor of the South (only agricultural engineers have been considered).

Not only is the project dominated by people from the South, it is also directed by MIDEVIV headed by a Southerner and based in the South.

This author has taken great pains to illustrate the fact that great projects have failed before in many parts of the world because the locals did not like outsiders implementing the project. Whether or not it is the case in this project will be discussed below.

#### USAID'S OBJECTIVES IN CREATING THE NORTH CAMEROON SEED PROJECT

The overall goals of the project were:

- 1) to increase small poor farmers' income and reduce the price of food crops to the rural population by increasing the productivity of the land;
- 2) to institutionalize a regional system for production, distribution and instruction in the use of improved peanuts and sorghum in North Cameroon;
- 3) to develop a trained cadre of technical personnel capable of sus-

taining a system of seed multiplication and distribution as well as to form a body of agents providing instruction and information to the farmer on the use of improved varieties of seed.

The point to underscore is that the final objective of the program is to place the improved seeds in the hands of the small resource limited farmer in order to improve his standard of living.

#### USAID'S PROJECTION OF PROJECT IMPACT AFTER 5 YEARS

It was hoped that at the end of the project's life the following goals would be met:

- 1) the institutionalization of a regional network for the multiplication and distribution of seeds;
- 2) the production of high yielding and adapted seeds to meet the needs of 250,000 farmers growing 430,000 ha. of sorghum and 100,000 farmers growing 73,000 ha. of peanuts; and
- 3) the establishment of a trained Cameroonian cadre capable of continuing the operation of the seed multiplication facilities and distribution without foreign technical assistance.

#### AUTHOR'S RESEARCH OBJECTIVES AND METHODOLOGY

In carrying out this study the purpose has been to measure the impact of the project on the target population which is the small, poor farmer in North Cameroon. To do this a questionnaire was constructed and a pre-test conducted in the villages of Kodek and Meskine within the Maroua periphery. Kodek is situated about 5 km. from the Guiring station which serves as a research station for the Institute of Agronomic Research (I.R.A.) and a warehouse to store the project seeds is also located on this station. Meskine is located 12 km. South of Maroua and about 3 km. from the Goyang Young Farm

Family Training Center which technically should serve as an extension arm of the seed project. After the test some of the questions were reformulated and administered in all project areas, Guetele (Koza), Moulvoudaye, Doukoula and Dadjamka, and Sanguere. Hina and Bourha were also included because of the high numbers contract farmers from these areas. My research was limited to within a radial zone of 35 km. of each of these project areas. The subjects used for the Young Farm Family Training Center's report were also used here. See my Quarterly Progress Report I. In addition to the questionnaire this author's research was based on unstructured interviews with Cameroonian officials in Yaounde and the Northern Province involved in decision making and implementation of the project. Some farmers were also interviewed using this method. The author did go through all documents and reports on the project in the NCSMP office in Maroua.

One of the greatest problems I faced conducting this research was determining who a small, poor farm is. I found this problem very crucial because without solving it no one could determine who the target population really is. To solve this problem I had numerous discussions with other researchers and I was very fortunate to meet a team from Mississippi State University, the designers of the original project paper, 1976. The team was visiting Cameroon in August 1980 for an evaluation of the Seed Project. When this question was posed to it, one of its members started off in a very logical fashion saying that Cameroon is a resource-limited country. And in Cameroon the Northern Province is the poorest, therefore whoever receives seeds in the province is a resource-limited farmer. It was an interesting answer but I did not find it very satisfactory. In fact, it only explains why the whole notion of small, poor farmer has been very ill defined in the project.

One of my main concerns throughout the survey was to determine which farmer fell in the following income categories - low, middle and upper.

To arrive at these categories the following variables were used:

- farmer's productivity prior to the introduction of the seed project;
- average cost of farm produce. Here the fact that prices varied from the harvest period to the next planting season was taken into consideration, which explains why only an average of all price variations was considered;
- other sources of farmer's income such as those derived from raising animals were also considered.

Having considered the above variables, data collected showed that my respondents' income varied from 5.000 frs. CFA to 1.000.000 frs. CFA. a year. These figures definitely show that though all of Cameroon is made up of resource -limited farmers, this broad category could be subdivided into smaller groups.

To operationalize the small-poor farmer notion, I divided my sample into three on income basis. The result showed that the low level farmers whom I consider the poorest fell below 41.000 frs. CFA a year. The middle income farmers were between 41.000 and 70.000 frs. CFA a year while the upper level farmers had over 71.000 frs. CFA a year. With these classifications in mind I came to the conclusion that the rightful target population of this project is the farmer who fell under the 41.000 frs. CFA a year income bracket. This decision is in line with the Foreign Assistance Act of 1973 (the New Directions Mandate) which required that AID focus its actions on the poorest of the poor in developing countries.

Other questions of prime interest throughout this study were three-fold:

1. Who receives seed from the project? The indicators used to measure this factor were:

- farmer's income;
- farmer's productivity;
- size of land cultivated by farmer.

2. Community awareness of Project Existence.

Here the author was also interested to know sources of farmer's information concerning the project. (see questionnaire attached to Report)

3. Were the projected goals by USAID met after 5\*years?

- Has a regional network for the multiplication and distribution of seeds been institutionalized in North Cameroon? (How strong is this institution, i.e., can it be sustained without foreign assistance?).
- Has the production of high yielding and adapted seeds met the needs of 250.000 farmers growing 430.000 ha. of sorghum and 100.000 farmers growing 73.000 ha. of peanuts?
- Has a trained Cameroonian cadre capable of continuing the operation of the seed multiplication facilities and distribution without foreign technical assistance been established?
- Has the small-poor farmers' income increased at the end of the project life? Also has the price of food crops gone down as a result of the project?

WHO RECEIVES SEEDS FROM THE PROJECT?

In asking this question the goal was to find out if the seeds went to the low, middle or upper income farmer but bearing in mind that these seeds were targeted initially at the low income farmer. Here my income classifications were used.

---

\*Initially the Seed Project was scheduled to last 5 years but later reduced to 4 years for financial reasons.

I also wanted to know if seeds were only given to modern farmers. i.e., those who had received training at centers such as the CTFFs or the Civic Centers for Participation (Langui). Finally, I was curious to know if seeds were given out on the basis of land size the farmer cultivated.

After analyzing the data it was discovered that over 70 percent of the farmers who received peanut and sorghum seeds fell in the middle and upper income categories (i.e., over 41,000 frs. CFA per annum). I also noticed that seed acquisition did not depend on the amount of training one had in agriculture. For example, most of those trained at the centers only used the seeds while at school and could not manage to get them after graduation. Most of them argued that whenever they applied for seeds they were told that seeds were all sold out. You applied too late, the officials would say. Others argued that seed acquisition depended on one's relationship with either the village head, the head of the agricultural post or the extension agent. These officials were responsible for the placement of seeds with the local farmers.

Finally, in trying to see if size of land was a factor in seed acquisition, I realized that those who received seeds had more land than those who did not. I am not sure that land was measured before the seeds were distributed. But for some reason villagers with large pieces of land nearly always happen to be more influential than those with less land. This could have greatly influenced the distribution.

It would be wrong to say that all those who did not use the seeds could not get them. Some could but complained that they were of poor quality. This group had used the seeds once but apparently they did not do well. I felt their complaint was valid because these seeds go with additional inputs such as fertilizers and insecticides but few of these farmers could pay cash for these inputs.

COMMUNITY AWARENESS OF PROJECT EXISTENCE

According to data collected by this author 98 percent of the sample was aware of project existence. It is necessary to underscore the fact that this statement holds good only for the 35 km. radial zone of the project areas. Data may show different results if one went one or two km. beyond this limit.

Most of the farmers interviewed got their information concerning the project from three main sources:

- Agricultural extension agents;
- Young Farm Family Training Centers; and
- Village heads.

When data were examined more closely it was noticed that awareness of project existence did not mean using project seeds. Fifty percent of my sample were former students of the Young Farm Family Training Centers. For this group the source of information on the project was the centers. But only 74 percent of these center participants were fortunate to use the seeds while at the centers. Twenty-six percent did not because they had graduated two years before the seed program was established. (This point will be further developed under the section: who receives project seeds).

HAS A REGIONAL NETWORK FOR THE MULTIPLICATION AND DISTRIBUTION OF SEED BEEN INSTITUTIONALIZED IN NORTH CAMEROON?

With the existing structures and equipment in seed farms like Guetele (Koza) and Sanguere (Garoua) including the smaller farms in Doukoula and Moulvoudaye, one can definitely answer in the affirmative that a seed multiplication network exists in North Cameroon. Also the high degree awareness of project existence in the region only goes to confirm the above statement. However, the immediate concern should be improving the quality of seeds

coming out of these farms. To do this there should be a steady renewal of foundation seeds by IRA-Nord, the institution charged with the responsibility to do this service. Right now the NCSMP-IRA link is one of the weakest and badly needs to be strengthened. It might be important to point out that good pure hybrid seeds can hardly be arrived at without the presence of breeders and this is lacking in IRA-Nord. It is even more surprising that IRA-Nord has no research component on leguminous plants and yet it is supposed to supply the NCSMP with foundation seeds such as peanuts. This author really wonders where the seed this agency supplies comes from. These are the types of concerns to have. This is because the project technically is directed toward the poorest of the poor farmers who fear to take risks with their seasonal crops because this may mean life or death. So the project wants to make sure that the seed given out is of very good quality and make the end user develop confidence in it.

The distribution component of the project has very serious problems. It is very poorly endowed with vital inputs such as personnel and transportation which makes timely placement of seeds to the end users difficult, if not impossible. Only two extension workers, an agronomic engineer and an agricultural technician (see table 1), work directly for the project. It is said that these individuals are supposed to work in very close collaboration with heads of agricultural posts, extension agents attached to the Ministry of Agriculture, Directors of the Young Farm Family Training Centers, D.N.E.B. (Division Nord-Est Benoue), C.N.S.C.P.D. Langui (Centre National de Services Civiques de Participation au Developement) and SODECOTON.

In theory this idea is wonderful but in practice it is not practical for the following reasons:

- The number of extension agents in the area is too small compared to the population they are supposed to work with, e.g., 4 extension

workers in the entire Bourha Sub-Division. I have not considered the SODECOTON extension workers in making this statement because their follow-up experience is only based on cotton and not food crops. It could therefore be said that they are ill equipped for food crop follow-up. This might be different if in future training is arranged for food crops.

-These extension agents lack even bicycles to cover the huge distances separating them from the farmers. Some people will point to extension workers with the Young Farmers Training Centers and say they have Moto-cycles. But each center only has one extension agent and his follow-up services seem to be limited only to ex-center trainees who are not very many compared to the rest of the population.

-The training centers in general have played an important role in the distribution of seeds. During my interviews especially around the Goyang training center, most of my respondents both trainees and non-trainees said that they have never used improved seeds.

But Seed Project officials argue that seeds were collected by the Director of the Center for farmers. If farmers did not use seeds and project seeds were delivered to the center, we might begin to wonder where the seeds went to. This is just one of the many examples of the way project seeds are handled in the region.

The above information vividly illustrates problems faced in the distribution of seeds at the level of extension agents and farmers. The other link that deserves mention is the transfer of seeds from the Project warehouses, Guetele and Guring, to the heads of agricultural posts and the training center directors. Here too the timely placement of seeds in these depots

is very difficult because of lack of transportation. But despite these problems we saw a steady growth of seed placement centers from one in the Hina area with contract farmers in 1977/78 to 12 in 1978/79 to 19 in 1979/80 and to a low of 14 in 1980/81. It must be emphasized that these figures have nothing to do with the seed tonnage distributed.

HAS THE PRODUCTION OF HIGH YIELDING AND ADAPTED SEEDS MET THE NEED OF 250.000 FARMERS GROWING 430.000 ha. OF SORGHUM AND 100.000 FARMERS GROWING 73.000 ha. OF PEANUTS?

To answer this question I am limiting my calculations to 1979/80 and 1980/81 planting seasons. This is because these are the years with the highest number of seed placement centers. Secondly, these years were immediately after the end of project life. In the 1979/80 planting season 2.540 farmers planted 635 ha. of peanuts and 282 farmers planted 141 ha. of sorghum.

In the 1980/81 planting season 1.695 farmers planted 423.8 ha. of peanuts and 450 farmers planted 225 ha. of sorghum.

If these figures are compared to the end of project projections after 4 years we see that less than 10 percent of project goals have been met in this area without even trying to know whether or not the target population was reached.

HAS A TRAINED CAMEROONIAN CADRE CAPABLE OF CONTINUING THE OPERATION OF THE SEED MULTIPLICATION FACILITIES AND DISTRIBUTION WITHOUT FOREIGN TECHNICAL ASSISTANCE BEEN ESTABLISHED?

In examining the training component of the Seed Project I am not considering the clerical staff. I am also leaving out the very low level staff such as the field laborers. The staff being considered in this study is from the level of assistant agricultural technician upwards. This is not to say that the staff not examined here is not important and does not need training. Training for this group of workers was not envisaged in the original project

paper.

Fourteen Cameroonians fall within the category of staff being analyzed here. All fourteen have received some training pertaining to agriculture in general and seed technology in particular since they joined the seed project. Some were trained in Cameroon, some in the Senegal and others in the United States of America (USA). Four out of six\* agronomic engineers with the project received further training in the USA under the auspices of USAID after graduating from the "Ecole Nationale Supérieure d'Agronomie" (ENSA) which is the Advanced School of Agriculture in Cameroon. Two agricultural technicians and one engineer were trained in Senegal. The other seven members of staff received training in Cameroon during conferences and seminars held in Maroua and Garoua during which experts on seed technology and grain conditioning and storage were brought in from the USA. The above information is a good positive indicator that training has been done.

The question is whether the training has established a capability within the project whereby seed multiplication and distribution activities can be carried out without foreign assistance.

I strongly believe that the project right now lacks such capabilities for the following reasons:

-The number of staff at the agricultural and assistant agricultural technician level which is directly involved with the daily activities of the seed farms is very inadequate and needs to be increased. This group needs to be given adequate training to enable it to perform its job well. I will argue that the two to three weeks training they have

---

\*There were six agronomic engineers with the seed project until November 1980 when Mr. Seraphin Njomgue left the project.

received so far is not sufficient and does not provide them with the necessary capabilities to continue with the Seed Project independent of outside aid.

-The four engineers put together were trained for 42 months in the United States. Out of this time period 17 months were spent on language training which makes it 40.4 percent of the total time. Only 59.6 percent of the time was allocated for seed technology, extension and community development. Language is important, I agree, but I also think that more time should have been allocated for technical training which was the main purpose of the training. Another thing that could be done to cut down on the time used for language training especially in the case of Cameroon, is to organize training in Cameroon aiming at proficiency at the level of TOEFL before leaving for the USA. This way expenses would be reduced greatly and more time could be given to technical training in the U. S.

-Another aspect of the training which needs to be strengthened if the right capability is to be provided to the Cameroonian staff is to determine well in advance what areas of agriculture the project needs to emphasize. The types of courses should be defined and contact made with U. S. institutions offering these courses so that on arrival both the school and student know what they want. During my interviews with the project staff trained in the United States one of the complaints was that their program was not defined which made it difficult for the professors to know what to expect or offer them;

-I would add that the project staff cannot at the moment sustain the seed project without external assistance because of the weaknesses in

staff training:

- a) no staff has received training in organizational management which makes this arm of the project fairly weak;
- b) only two project staff have received training in extension which again makes the distribution arm of the project extremely weak. Some people have questioned the rationale in seed multiplication if it does not get to the end user - the farmer;
- c) the lack of a breeder in the project overseeing the activities of IRA - Nord which is the source of foundation seeds for the project.

HAS THE SMALL-POOR FARMER'S INCOME INCREASED AT THE END OF THE PROJECT LIFE?  
ALSO, HAS THE PRICE OF FOOD CROPS GONE DOWN AS A RESULT OF THE PROJECT?

About 30 percent of those who fell within the target group, i.e., the poorest farmers, according to the income categorization used in this analysis received seeds from the project. Seventy percent did not. But over 85 percent of the target population, those who received seeds and those who did not, experienced an increase in their income during the project period. For this reason we cannot attribute increase in income entirely to the new improved seeds because even those who did not use them experienced the same growth. Market prices during this time seem to be the best explanant.

With this answer as the cause of increase in farmer annual income we can conclude that food prices have not gone down. They have instead gone up. This statement holds good even if the inflation factor is taken into consideration.

#### CONSTRAINTS AND RECOMMENDATIONS

The main goal in the creation of a pilot seed project in North Cameroon was to increase the small-poor farmer's income and reduce the price of food crops to the rural population. The preceding review of project activities had

demonstrated that this initial project goal has not been met. The questions I shall attempt to answer in the rest of this paper are:

-Why was this goal not met?

-What is needed for it to be met?

Throughout this study I have tried to show some of the elements that made it difficult to meet the goal. In this final part of the analysis I want to concentrate on the three factors I consider most constraining. These factors are:

-Design oversight

-Inter-Organization Linkages

-Agricultural inputs

#### DESIGN OVERSIGHT

One of the inbuilt weaknesses of the project stems from the very ambitious goals set for the project. This author has often wondered about the factors that are taken into consideration in arriving at end of project life projections. I recommend very strongly that these figures be made as manageable as possible.

One of the greatest constraining factors in the entire project has been the absence of clear indications of who the actual beneficiaries of the program should be. If this element is overlooked at the design stage it will seem logical to me that those involved in the implementation of these projects would only guess who the target population is.

I recommend that a thorough income analysis be done before undertaking any project. This way the beneficiaries would be determined before hand and this would help greatly in the placement of aid in the right hands. This was not done which explains why over 70% of it has been misdirected.

INTER-ORGANIZATIONAL LINKAGES

The seed project definitely lacks structures capable of supplying extension services to farmers receiving seeds in the northern region. It needs to be linked up with other organizations with such capabilities such as the Ministry of Agriculture and the Centers for Training Young Farm Families. I consider links with these agencies very appropriate because they are involved both in cash and food crops. I am very skeptical about the link with SODECOTON for the following reasons:

-The basic philosophy of this agency is the promotion of cash crops, cotton to be more specific; and

-we can hardly consider SODECOTON today an entirely Cameroonian enterprise given the percentage of shares in it owned by foreign bodies.

The basic philosophy of this agency would appear to me conflictual with that of the seed project which is the development of food crops. Also, it could be rightfully argued that the farmer only has a limited number of hours to work each day. For this reason any number of hours used up on a peanut farm would mean less hours for cotton and this will not be taken well by one whose goal is to promote cotton.

While in the north I had extensive discussions with SODECOTON extension agents and they were very convinced that it was more economical for farmers in those areas where cotton did well to grow only cotton and use their earnings to buy food. This antagonistic feeling is very widespread all over North Cameroon and even senior government officials like the Governor of the Province have also come to admit openly that SODECOTON "hates" peanuts. This statement was made at Guetele on the Project farm when Mr. Bennett, USAID administrator, visited Cameroon in 1980. To further substantiate this

struggle between SODECOTON and the seed project see copies of correspondences from both agencies on this subject\*. These letters show that SODECOTON has tried to establish an independent capability of seed multiplication whereas the NCSMP was set up on the understanding that SODECOTON would be one of its main customers. I think this was a deliberate attempt to discredit the seed project and later on cripple it.

If this conflict of philosophies exists between the two bodies I think it would go against the grain to give the monopoly of food crop extension services to SODECOTON.

Some people have argued that this has been done because SODECOTON has an already developed extension structure in place. It is difficult to see how this conclusion was arrived at. It is true that SODECOTON'S extension services are very developed, especially in North Cameroon. But it might also be important to point out that these services are only involved with cotton. To have a food crop capability there will need to be training for it. Also even if training was dispensed, for a good job to be done SODECOTON would need to increase its extension agent capacity. I doubt strongly that this agency is prepared to make these adjustments.

For these reasons I am recommending the development of an independent extension component, well endowed with the necessary inputs like transportation, and attached to the seed project.

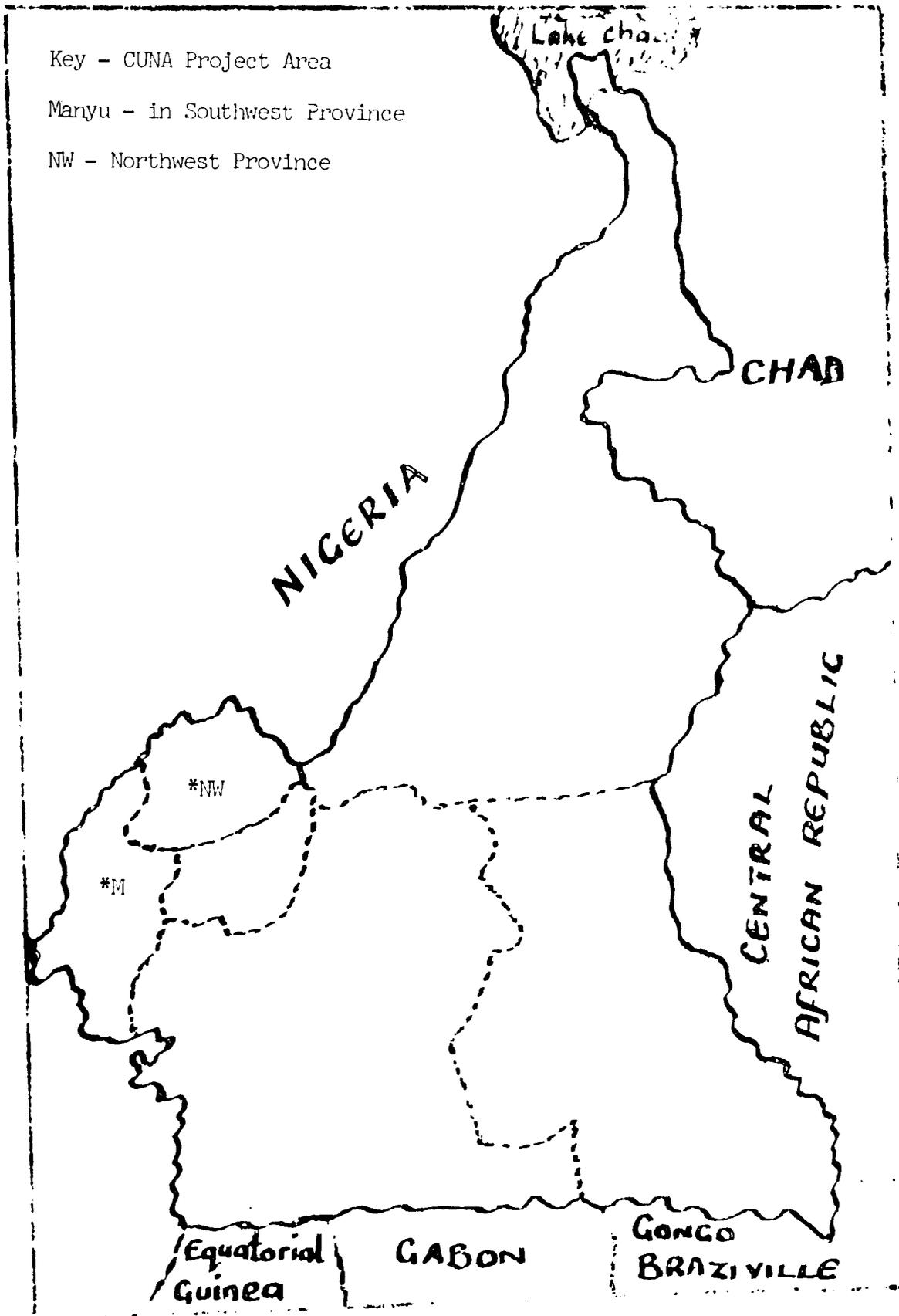
Finally, I do believe that improved seeds in themselves do not mean much without additional inputs like fertilizers and insecticides. But we know that our target population can hardly afford these inputs initially. To give

---

\*Letter No. 6552/AD/FG of Oct. 9, 1980 from A Dufor (Director General SODECOTON)  
Letter No. 6457/DD/GH/BH of Oct. 7, 1980 from H. Gruson  
Letter No. 218/L/P.5/60 of Nov. 14, 1980 from Coordinator NCSMP - Maroua  
Letter No. 201/L/80/P.5 of Nov. 1, 1980 from Coordinator NCSMP - Maroua

more meaning to these seeds we want to create a heavily subsidized credit system which will enable these farmers to acquire the inputs needed.

Proper arrangements could be made to retrieve these monies after the farmer sells his crop. If this is not done, I fear that the whole notion of a seed program aimed at the poorest farmer will remain a myth.



CUNA ASSISTANCE TO SMALL FARMERS

"Effectiveness of Aid in reaching its intended beneficiaries  
i.e., the rural poor in Aid Project Areas"

Hypothesis: Aid does not always reach the intended beneficiaries and that there are institutional constraints that can be identified in the donor and recipient of aid which in this case are the U.S.A.I.D. and the G.U.R.C. (the government of the United Republic of Cameroon) respectively.

## BACKGROUND HISTORY OF PROJECT

The majority of CamCCul's (Cameroon Cooperative Credit Union League) affiliated members are based in the rural areas. Most of these members are mainly involved in agriculture which employs over 80 percent of the entire Cameroon population. CamCCul was aware of the enormous profits made by local crop buyers (popularly known as Buyam-Sellams) who are the main source of seasonal loans to the rural farmers in general and the small, limited-resource farmers in particular. It was also aware of the fact that farmers are charged exorbitant prices for agricultural inputs when they are forced to buy them on credit from storekeepers. CamCCul felt that by providing a source of directed credit to its members, the financial advantages enjoyed by these Buyam-Sellams and storekeepers would be offsetted and instead accrue to the credit union members themselves. It was therefore in an effort to be of greater service to these farming populations that CamCCul began thinking of introducing the Directed Agricultural Production Credit (D.A.P.C.) which later on became known as the SFPC (Small Farmer Production Credit) scheme. This scheme will be referred to in this study as SFPC.

Talks between CamCCul and CUNA (Credit Union National Association) concerning this pilot project began in 1974. In March 1974 a feasibility study was conducted by CUNA in Cameroon. The findings were positive and demonstrated that there was a large small farmer population that could readily benefit from such a project. A project identification paper was submitted to USAID in May 1974. The project was approved in June and a USAID grant (AFR-G-1079) was signed. CUNA assigned an SFPC technician, John Butts, to work with CamCCul in January 1975 and a Cameroonian counterpart, Miss Mary Immaculate Ndenge, was only appointed in June 1978, a year before the end of project life.

The geographical location of the pilot project was all of the northwest province and Manyu division in the southwest province. These two provinces have

the most developed credit union network in the entire United Republic of Cameroon. Within the first year of the project existence three credit unions, Banten, Ntundip and Mbangom joined the SFPC scheme. Between 1976 and 1979 the following 16 credit unions were added to the scheme:

|                |                |
|----------------|----------------|
| -Anjin         | -Mfuni         |
| -Anyajua       | -Nchang        |
| -Ashing        | -Ngondzen      |
| -Awing         | -Njaah         |
| -Babanki Tungo | -Nkar          |
| -Kimbo         | -Santa Central |
| -Mbam Nkum     | -Shisong       |
| -Meluf         | -Wombong       |

Talking of the pilot project's background, it is important to briefly mention the criteria that were used in selecting credit unions for the SFPC scheme. According to a letter sent out to credit unions on the SFPC by A. B. Ndofor, League Manager, on March 14, 1975, the following criteria had to be met before a credit union became involved in the SFPC scheme:

1. Membership of credit union is made up of 50% or more (full time) farmers.
2. 20% or more of the membership have shown some interest in receiving SFPC loans.
3. Credit union has a good record of loan repayment.
4. Credit union is willing to accept guidance of League personnel and allow them to inspect credit union records, and farms of members.
5. Willingness of credit union board and membership to study and understand SFPC program.
6. Willingness of members receiving loan to capitalize (10%) of loan on repayment.
7. Credit unions must have funds that are not being fully utilized.
8. Credit unions must be in good standing with the league.

The same letter stated that participating credit unions in the SFPC program will receive the following:

1. Interest-free loan from the league for salary of a fulltime manager;
2. Technical aid from the league and Ministry of Agriculture;
3. Interest-free loan for purchase of office equipment;
4. Loans from league to support SFPC loans;
5. Training for credit union manager (secretary and/or bookkeeper), credit union officers and members; and
6. Members will receive technical aid in obtaining supplies, planting, care, harvest and marketing of agricultural produce, so that they will receive maximum benefit from their crop.

## USAID's ASSISTANCE OBJECTIVES

In assisting the SFPC program, USAID had four main intentions:

1. Increase the net income and capital resources of participating small farmers as well as increase the productivity in the rural areas.
2. Bring about a significant increase in the level of technical assistance from the Ministry of Agriculture personnel to the small farmers participating in the project.
3. Develop member-owned rural credit unions to have the ability to:
  - a. provide agricultural production credit;
  - b. assist in marketing the crops;
  - c. obtain agricultural supplies for members;
  - d. disseminate information related to agricultural and animal husbandry innovations.
4. Enable CamCCul to achieve financial and technical viability by the end of the project (1979).

The point to underscore here is that the main focus of the project was to establish model credit unions that concentrated on the productive needs of the small farmers

## AUTHOR'S RESEARCH METHODOLOGY AND GOALS

Five out of nineteen credit unions were studied which gave a sample of 26.3% of the entire credit union universe involved in the SFPC scheme. These credit unions were Banten, Mfuni, Nehang, Nkar and Ntundip. Banten and Ntundip were selected because CamCCul officers thought that they were among the least successful and also because they are located in the forest zone in the southwest province. The choice of Nkar was also because it ranged among the least successful and because of its proximity to Banten. It was thought appropriate to include the three less successful credit unions to compare them with the very successful ones and also to see what made them unsuccessful.

An unstructured questionnaire method was used to interview League authorities in Bamenda, the divisional fieldworkers in Manyu and Meme in the southwest province; Momo, Mezam, Bui and Donga-Mantung in the northwest province. Field trips were made to the different credit unions on their business day which gave the author a chance to meet and interview the majority of the members which included over 80% of the Board members. Short trips were also made to credit union demonstration plots' sites. Finally, the author had access to files on the project in CamCCul's head office in Bamenda and at the USAID mission in Yaounde.

In conducting this study the author had five goals in mind:

- I. to determine the nature of assistance provided by the SFPC program.
- II. to measure the number and type of small limited-resource farmers served by the program and to see its impact on recipients.
  - To analyze this the following indicators were used:
    - a. role played by member in the credit union;
    - b. kinds of training received by member since the scheme was introduced;
    - c. member savings with the credit union.
- III. To find out if the introduction of this scheme served as a better substitute for the "Buyam-Sellam" and in effect cut them off the supply end; or was it competitive enough; and

IV. to find out if CamCCul achieved financial and technical viability and also if the participating credit unions were technically and financially more viable by the end of the project life.

Here, variables such as:

-savings

-delinquency rates

will be examined, using a time-series analysis.

## RESEARCH FINDINGS AND RECOMMENDATIONS

I. Nature of Assistance Provided by the SFPC Program

There were three main areas of focus.

1. SFPC loans

The loan service began as early as December 1975. By 1979 when the SFPC technician, John Butts, left for the U. S., only two credit unions, Banten and Ntundip, took advantage of this loan scheme. The interesting aspect of this loan scheme which made it different from other credit union loans was that a member could borrow as much as five times his savings with the credit union.

2. Information Dissemination and SFPC Formal Training

The quarterly publication of a newsletter begun in July 1978 served two very useful purposes:

- Kept participating SFPC credit unions informed of the activities of other unions which helped to create an atmosphere of healthy competition among them.
- each issue selected and discussed one aspect of agriculture which credit union members found useful.

Training sessions and seminars were organized at RTC Kumba and Mfonta, the cooperative college in Bamenda and at the different divisional headquarters in the southwest and the northwest provinces. The last seminar which took place in Mamfe between February 25-28, 1981 is being included in this category though it was not specifically for the SFPC program. The fact that SFPC credit union members attended justifies this decision. During these sessions courses were organized around the following subjects:

- General Agricultural Training for Farmers
- Agricultural Training for SFPC Secretaries
- Risk Management
- Bookkeeping

- Credit Union Management/Administration
- Credit Union Loan Policy
- Loan Granting and Procedure
- Cooperative Law/Credit Union By-Laws
- Central Measures

Those who attended these seminars were presidents, board members, secretaries and bookkeepers of credit unions. A few training sessions were organized at Mfonta, RTC Kumba and IRZ (Institute of Animal Research) Mankon during which credit union members were encouraged to attend and learn how to raise small animals like exotic goats, pigs, poultry and rabbits.

### 3. The Agricultural Supply Service

This service entailed the supply of those farm inputs which were not readily available locally and which the existing cooperative unions did not have in their stores. The items supplied included hybrid maize seeds (Ekona white for areas below 800 m. and above sea level, and the strains that did well 800 m. above sea level and disease resistant), onion seeds, vegetable seeds, veterinary drugs for animals and insecticides to fight weevils which are the most common plant pests in the region.

The union members interviewed felt that the agricultural supply service offered them was a lot of help because it provided services that they would not otherwise have acquired. What they seemed to miss the most is the Actelic 2 which they used against weevils. With that reaction one is inclined to conclude that it was very useful to them and helped cut down the amount of crop damaged during storage.

Demonstration plots for maize were set up in six credit unions to teach members modern agricultural techniques which involved when to plant it, how deep in the soil the seed should be buried, how far apart it should be spaced, when it should be weeded and how and when fertilizer should be applied.

The yield per ha. on these demonstration farms was two and a half times more

than it would be using traditional methods.

When asked how well the crop did on members' farms after the demonstration, this author was told it did poorly except for one or two members who had applied fertilizers. The others could not afford it though they understand perfectly well that fertilizers would make a difference to the yield on an exhausted piece of land. They would use fertilizer if some credit arrangements could be made to supply them with it reimbursable after the crop was harvested and sold. Those involved in the development of new plant technologies admit that the hybrid strains would not do as well as the local strains without the correct doses of inputs such as fertilizers and the appropriate planting techniques.

Another thing which was quite surprising while visiting the demonstration plots was the fact that only maize was being experimented with. These farmers grow a variety of crops and it would be appropriate to set up other demonstration plots to teach them techniques of growing rice, onions and vegetables. Without doing this we might see them using the same techniques used in growing maize to grow the other seeds just mentioned.

## II. The Number and Type of Small Limited-Resource Farmers Served by the Program

To define the type of farmer, this author has focused on the 1973 Foreign Assistance Act, the New Directions Mandate, which required that American foreign development assistance flow first and foremost to the poorest of the poor. See Kent Hughes' "U. S. Policy Toward Developing Countries" in The U. S. Role in a Changing World Political Economy: Major Issues for the 96th Congress, June 25, 1979, pp. 74-75. The poorest of the poor as used in this study refers to the lowest income earners in those countries receiving U. S. aid.

The two credit unions involved in the loan scheme were Banten and Ntundip. Banten had two SFPC loan allotments given out to its members between 1975 and 1979. The number of loans given out during this time period was 54. But only 24 individuals out of an average membership of 231 during the five year period of the project life benefited from this loan scheme. If the per centage of those served with loans is calculated it comes out to 10.3% which is very low. For Ntundip 20 individuals out of an average membership of 253 received the 39 loans granted between 1975 and 1979. Again if the per centage of loan recipients is calculated against the entire membership, it comes out to 7.9%, even less than that for Banten.

From the above information it is clear that some members took two or more loans. When the passbooks of credit union members were examined very critically it was found that the savings of those repeater borrowers increased dramatically just before they took a loan.

This point is illustrated on Table I which shows the savings and loans of three repeater borrowers from the Banten Credit Union.

TABLE I

| <u>No. of Times Loan<br/>was Granted</u> | <u>Pass-Book<br/>Account No.</u> | <u>Savings in<br/>Fr. CFA</u> | <u>Loans in Fr. CFA<br/>(US \$1=250F cfa<br/>1975 rate)</u> |
|------------------------------------------|----------------------------------|-------------------------------|-------------------------------------------------------------|
| 1                                        | 71                               | 5,340                         | 15,000                                                      |
| 2                                        | 71                               | 12,960                        | 30,000                                                      |
| 3                                        | 71                               | 29,890                        | 100,000                                                     |
| 1                                        | 118                              | 14,323                        | 40,000                                                      |
| 2                                        | 118                              | 19,728                        | 35,000                                                      |
| 3                                        | 118                              | 39,083                        | 66,000                                                      |
| 1                                        | 147                              | 27,938                        | 78,000                                                      |
| 2                                        | 147                              | 52,033                        | 86,000                                                      |
| 3                                        | 147                              | 97,894                        | 250,000                                                     |

The above data show a considerable increase in savings the second and third times loans were made and it significantly correlates with the amount of loans granted except for pass-book 118's second loan. The point to emphasize here is that large deposits were made just before the repeater borrowers applied for a loan. Since this behavior was frequent in the unions, it leads one to conclude that repeater borrowers tended to save just so that they could increase the amount of their loans and not to help the union to become more self-sufficient, money-wise and therefore be more useful to its other members. This could be said to be contrary to credit union norms which say that "together we can grow" and not "together I can grow".

Another aspect of this analysis was to know the number and percentage of total loans that went to the different sub-categories of the SFPC scheme (see Table II)

| <u>SUB-CATEGORIES</u>                | <u>NO. OF LOANS</u> | <u>% OF TOTAL LOANS</u> |
|--------------------------------------|---------------------|-------------------------|
| (Purpose of Loan)                    |                     |                         |
| 1. Cash crop farming (coffee)        | 39                  | 41.94                   |
| 2. Livestock (cattle and goats)      | 32                  | 34.40                   |
| 3. Food Crop Farming (beans & maize) | 9                   | 9.68                    |
| 4. Coffee Trade                      | 4                   | 4.30                    |
| 5. School Fees                       | 3                   | 3.23                    |
| 6. Fish Farming                      | 2                   | 2.15                    |
| 7. Building Construction             | 2                   | 2.15                    |
| 8. Other Kinds of Trade              | <u>2</u>            | <u>2.15</u>             |
| Total                                | 93*                 | 100.00                  |

\*The number of loans here does not correspond with the number alluded to above but this is not an oversight. The numbering of loans in this case has taken into consideration the fact that one loan granted to an individual could serve one or more purposes. The calculations here are based on loan purposes and not on the number of loans per se.

That the above data should show a larger per centage of the loans going to productive sectors like coffee and livestock is not surprising, especially as the credit scheme was earmarked for agricultural loans. The question to ask is whether all these loans were used for the purposes for which they were intended. The answer to this question is no. Passbook no. 147 from the Banten Credit Union took a loan of 250,000 f. CFA, claiming that it was intended for agriculture, but credit union members told author that he has absconded to Nigeria where he is now established as a trader.

The author was also told by credit union members that using loans to raise livestock was very profitable until the goat disease outbreak of 1978. Since then farmers are very reluctant and would only raise goats in a large

scale if they were assured of veterinary assistance in a similar outbreak in the future.

In this data coffee trade loans rank fourth, but in effect, most of the loans are diverted into this sector. Credit union loans are used by members who can receive them to replace the "buyam-sellams". Buyam-sellams usually come from the urban areas to buy produce in the rural areas. But by instituting a credit system within the credit union to serve farmers, CamCCul had intended to cut off the BUYAM-SELLAMS. But while the dependence on the urban BUYAM-SELLAMS was being eliminated, a new dependence on the rural BUYAM-SELLAMS was being created unconsciously.

With the above information two things have become clear: the number of loans given out and in what category they fell. What has not yet been dealt with is the kind of credit union members who received these loans. In analyzing this factor the following three variables were used:

1. role played by member in the credit union;
2. kinds of training received by member since the pilot project was introduced; and
3. member savings with the credit union.

In Banten and Ntundip twelve out of forty-four -- **27** percent of the borrowers were credit union board members. This number is very significant if one considers the fact that there are twenty board members for the two unions, and out of this number sixty percent in the group had loans. Again, fifty-eight percent out of the twelve board members granted credit received two or three loans from the credit union. If these figures are compared to the percentage of non-board members receiving loans and those who do not, the significance will become even greater. Only 32 out of 464 non-board members -- 6.9 percent -- received loans. But only 25 percent out of the 32 non-board members received more than one loan.

There is a high percentage of board members receiving SFPC loans because of the kind of training received since the introduction of the project (factor 2). This is because most SFPC conferences and seminars organized have only been geared toward the training of credit union office holders and not planned for the entire credit union membership. Given the above information, it would appear that the knowledge acquired from conferences and seminars is not passed on to the rest of the credit union members and it is only used to foster the interest of seminar and conference attendants. When savings were examined to see if they influenced the granting of credit to credit union members, it was found that those with bigger savings tended to acquire loans easily. All the repeater borrowers fell within this category.

In conclusion one could say that being a board member, having a large savings with the credit union and having a good knowledge of the union's activities and rules influenced significantly the acquisition of a loan. These three variables together are being referred to by this author as High Status Variable. This appellation is considered appropriate because in the Cameroon rural set-up an individual who embodies these three elements is considered highly and treated with reverence. In fact, high status in a rural set-up gives bearer advantages he/she would otherwise not have if he were of a low status. Most of those who received credit union loans fall within this category. If we examine our hypothesis again, in terms of the loan beneficiaries we can definitely say that the scheme is not reaching its targeted population. On the contrary it seems to be reaching only those who could have done without it.

The above information has only been concerned with SFPC loans. No mention has been made of the Agricultural Supply Service. All five of the credit unions examined in this study were involved in this program. With the Agricultural Supply Service there was greater participation by credit

union members especially with the experimentation of the hybrid maize seed. A kg. of these seeds only cost 50 f. CFA (U. S. \$0.20) so farmers could afford them. But as soon as they realized the seeds were no good without additional inputs like fertilizers, most farmers reverted to their local varieties. Those farmers who could purchase fertilizers and insecticides like the book-keeper of the Nkar, Nchang, Mfuni and the president of Ntundip credit unions have continued using these hybrid seeds, and they argue that the yield is at least two and a half as much as the local variety. It has been very difficult to measure the impact of the Agricultural Supply Service on the credit union members because it was only instituted in the 1977 planting season and abandoned immediately after. One crop season was too short to observe the impact. But going by what most respondents said it was a good and useful program but it did not last for long.

### III. Did the SFPC scheme serve as a better substitute for the BUYAM-SELLAMS?

One of the reasons for instituting the SFPC scheme was to provide the resource-limited credit union farmer with an alternative source of credit other than the exploitative BUYAM-SELLAMS and storekeepers in the urban areas. But unfortunately very few members took advantage of the loan scheme. For five years of the project existence only forty-four individuals out of a total of 1091 got loans. Just about all of these loans went to the wealthier and more influential members of the credit unions who virtually replaced the urban BUYAM-SELLAMS. This group of individuals behaved exactly as the urban BUYAM-SELLAMS did; that is, they bought produce of poorer credit union members at very low rates when they were in need of money instead of directing them to the credit union where they could get loans with lower interest rates. On other occasions the more intelligent and trained credit union members had the other members to be co-makers for their loans which made it difficult for them to apply for and get a loan before the loan they co-signed for was settled.

IV. Did CamCCul and the participating credit unions achieve financial and technical viability by the end of the project life?

CamCCul in general and credit unions in particular obtain their income from loan interests. Without collecting this interest on outstanding loans it is impossible for a credit union to meet its expenses and still pay dividends to members. Though there has been a general weakness in the collection of interests, there has been considerable improvement in this area since the introduction of the SFPC scheme.

This can be seen from the dividends declared between 1972 and 1978 by Ntundip and Banten.

Table III

| <u>Credit Union</u> | <u>Indicator</u>  | <u>1972</u> | <u>1973</u> | <u>1974</u> | <u>1975</u> | <u>1976</u> | <u>1977</u> | <u>1978</u> |
|---------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Ntundip             | total income      | 41,395      | not avail.  | 94,144      | 223,926     | 250,950     | 314,041     | 426,555     |
|                     | total expenses    | 18,005      | n.a.        | 54,465      | 91,295      | 146,741     | 179,595     | 223,660     |
|                     | dividend declared | 0           | n.a.        | 0           | 0           | 58,525      | 78,000      | 100,000     |
| Banten              | total income      | 85,880      | 85,120      | 111,185     | 144,267     | 193,004     | 317,776     | 321,691     |
|                     | total expenses    | 38,300      | 17,790      | 42,015      | 43,465      | 111,780     | 162,509     | 234,810     |
|                     | dividend declared | 0           | 0           | 0           | 14,370      | 59,370      | 60,000      | 0           |

The increasing growth in dividend from 1976 shows an increase in the volume of business, loanwise, conducted by the two credit unions. It also shows that particular emphasis has been placed on the collection of interest on loans which was not the case prior to the establishment of the SFPC scheme. This certainly came about because one of the conditions placed on credit unions participating in the SFPC scheme which was to reduce their rate of delinquency and also cut down on unnecessary expenses for entertainment.

Again, prior to the SFPC scheme participating credit unions' financial records hardly showed any profits. By 1978, three of them, Njaah, Ntundip and Ngondzen, made profits of 7.75 percent, 9.3 percent and 7.4 percent respectively.

The league gets its funds from the following sources: credit union entrance fees, credit union dues, interest on investments, grants and subsidies from governments and elsewhere, donations, loans and deposits approved by the Board, shares, income derived from services and any other source approved by the general meeting in accordance with the law. (See Michael Tah Banseka, 101 Questions and Answers on Credit Unions, Nooremac Press, 1980, p. 47).

Very few SFPC credit unions have been able to pay fully their annual deposit which is 25 percent of their total savings to the league. But only 5 out of 19 credit unions have not paid their league dues.

Generally an increase in credit union savings and a decrease in the delinquency rate on loans would mean more financial viability for both the credit union and CamCCul.

Table IV will show membership, savings and delinquency rates from 1975 to 1980, of the five credit unions examined in this study.

TABLE IV

| CREDIT UNION | MEMBERSHIP    |     |     |     |     |     | DELINQUENCY % |       |       |       |       |      | SAVINGS (in Fr. CFA) |         |         |         |         |         |
|--------------|---------------|-----|-----|-----|-----|-----|---------------|-------|-------|-------|-------|------|----------------------|---------|---------|---------|---------|---------|
|              | 1975          | '76 | '77 | '78 | '79 | '80 | '75           | '76   | '77   | '78   | '79   | '80  | 1975                 | 1976    | 1977    | 1978    | 1979    | 1980    |
| Banten       | 184           | 214 | 226 | 206 | 228 | 204 | 5.6           | 28.7  | 9.3   | 24.0  | 7.5   | 12.0 | 1735625              | 2492187 | 3530493 | 3581046 | 4292517 | 4053922 |
|              |               |     |     |     |     |     |               | +23.1 | -19.4 | +14.7 | -16.5 | +4.5 |                      |         |         |         |         |         |
| Mfuni        | NA            | NA  | NA  | 138 | 154 | 160 |               |       |       | 28.9  | 42.6  | 35.0 |                      |         |         | 1500000 | 2242660 | NA      |
|              |               |     |     |     |     |     |               |       |       |       | +13.7 | -7.6 |                      |         |         |         |         |         |
| Nehang       | not available |     |     |     | 220 | 218 |               |       |       |       |       | 100  |                      |         |         | 2300000 | 2400000 | NA      |
| Nkar         | NA            | NA  | 212 | 201 | 209 | 216 |               |       | 47.3  | 35.8  | 22.4  | 20.0 | NA                   | NA      | NA      | 3026158 | 3236604 | NA      |
|              |               |     |     |     |     |     |               |       |       | -11.5 | -13.4 | -2.4 |                      |         |         |         |         |         |
| Ntundip      | 194           | 228 | 283 | 282 | 280 | 277 | 9             | 7     | 10    | 18.8  | 7.7   | 10.7 | 1713715              | 2153321 | 3137202 | 3619701 | 4304702 | 4792765 |
|              |               |     |     |     |     |     |               | -2    | +3    | +8.8  | -11.1 | +3.0 |                      |         |         |         |         |         |

According to the above data showing percentages of delinquency on outstanding loans, it can be argued that the introduction of the SFPC program has not in any way helped to bring down the delinquency rate of the participating credit unions. This also means that it has not helped the credit unions to be any more financially viable than they were prior to the project. The one area which financially helped CamCCul is the increase in savings which increased the volume of money deposited with the league. However, this increase in the volume of money deposited with the league does not make CamCCul sufficiently viable as to do without external aid. Right now if the U. S. Peace Corps and the Netherlands volunteers were withdrawn as field-workers and replaced by Cameroonians placed on CamCCul payroll it is highly probable that CamCCul will not be able to pay them. This is certainly an indicator of non-financial viability the SFPC scheme had hoped to establish.

By introducing the SFPC program the donor had hoped that CamCCul would become technically viable by the end of the project. This issue would be investigated at two different levels: the level of the credit unions and the level of CamCCul.

This goal of technical viability was to be achieved through training seminars and the follow-up activities of the SFPC resident technician and his Cameroonian counterpart. During the five year duration of the project, credit union secretaries/bookkeepers and board members received training on how to run credit union business in general and SFPC programs in particular. These training sessions were very effective because prior to them, the records and ledgers could not be balanced properly by the secretaries, but after the training the job was well done. In fact, fieldworkers only needed very few minutes to run through the books during their routine field visits.

As for CamCCul there are definitely some problems. The first one stems from the fact that it took it 3½ years to appoint an SFPC counterpart to understudy the resident technician. After she was appointed CamCCul could only keep her for another 1½ years. She left CamCCul three months after the resident technician left in September. With his and her departures, CamCCul faced a severe handicap. What this has done to the SFPC program is that it has killed the program. Since 1979 no SFPC loan has been granted and the Agricultural Supply Service has also come to a standstill. The complaint at CamCCul level is that the small farmer production credit loans cannot be processed because there is no technician capable of evaluating farmers' demands and giving followup support. This complaint and also the death of the program is evidence of the technical incapability of CamCCul.

In conclusion one can say that out of the five credit unions examined with a membership of 1091 (these figures are based on the 1979 credit union statistics), only 44 individuals benefited from the SFPC loan scheme. This gives us a 4.03 percent of loan distribution in a period of five years. On a yearly basis it

would be 0.806 percent which is statistically not significant. Continuing with the Agricultural Supply Service might have been able to help increase productivity in the rural areas, but it was discontinued too soon after it started. For this reason the program was not much help in this area either.

The program had hoped to strengthen the link between the Ministries of Agriculture and Animal Husbandry extension agents and the farmers participating in the SFPC scheme but unfortunately this was not done. The participating farmers felt helpless with no aid coming from the Ministry of Animal Husbandry in 1978 during the goat disease outbreak.

Also, the establishment of the SFPC program did not help CamCCul to become financially and technically viable. If anything, it has instead weakened CamCCul in the sense that it has proven to its affiliated unions that it is incapable of delivering the services it promised in 1975, and in the future credit unions might not be open to new pilot trials knowing that they will only be abandoned at the end of the project life.

Finally, it is important to mention the fact that though the SFPC program failed, it does not make it a bad project (bad here means not useful in the rural development structures of Cameroon). This author will even venture to say that it is one of the best ideas propounded since Cameroon started searching for an appropriate device to reach and aid the rural population and the agricultural industry. If this is the case, why then did such a laudable endeavor fail? The project failed because of weaknesses in the recipient and donor institutions.

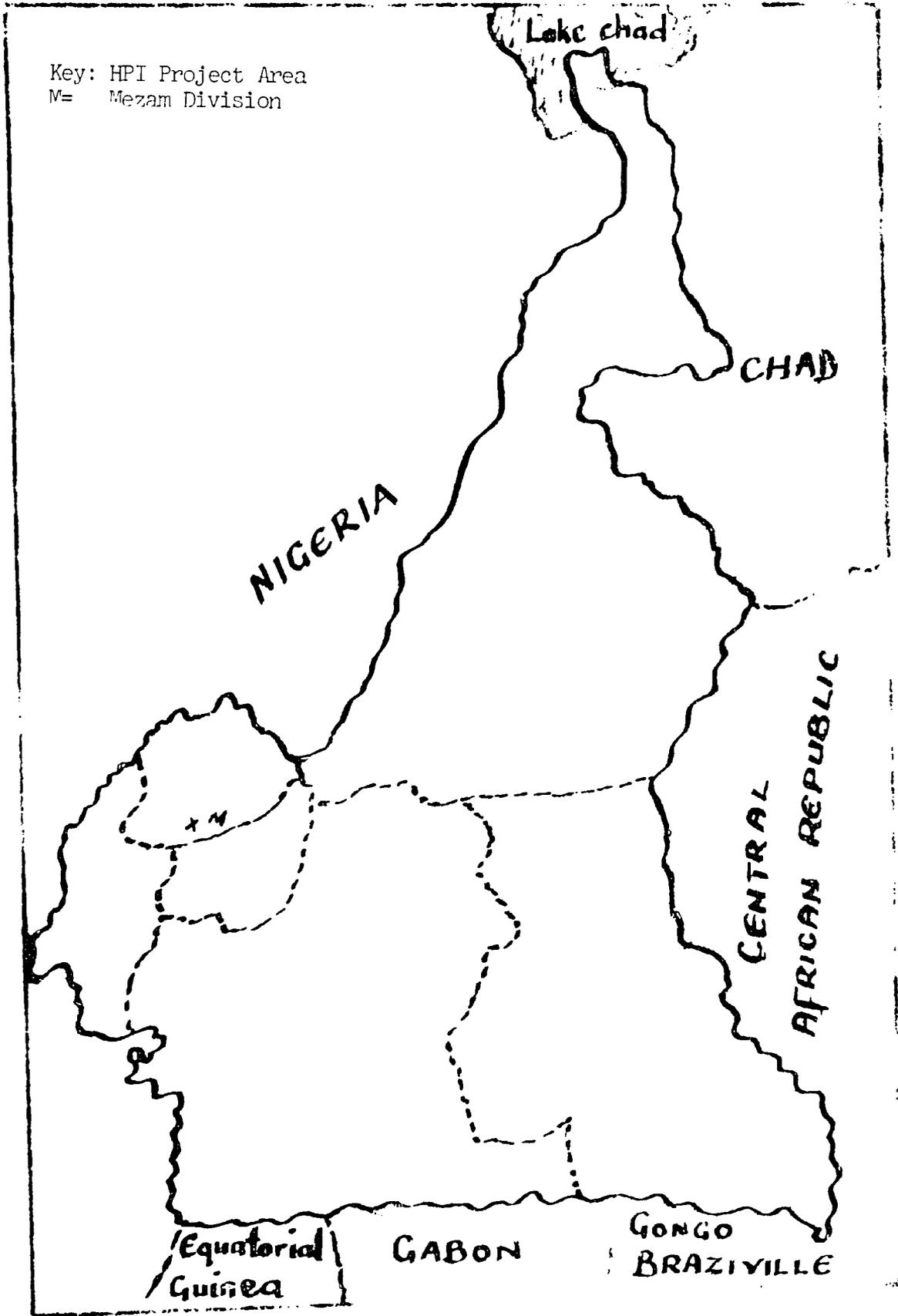
Though it was CamCCul's initial idea to institutionalize a directed agricultural production credit system in order to be of more service to its affiliated members, it was not ready to absorb the SFPC program in 1975 when it was introduced. A factor which influenced this observation is the fact that it took CamCCul 3½ years after the project had been in existence to come up with a

project counterpart and to let her go eighteen months after even before they had thought of her replacement. It might be added that one of the many reasons which prompted her departure was the fact that there was no reliable four-wheel drive transportation to enable her to do her job effectively. The only means of transportation was provided by the donor agency five years earlier, and given the nature of the roads CamCCul should have thought of its replacement. Also, CamCCul had not made any concrete arrangements with either the Ministry of Agriculture or the Ministry of Animal Husbandry to be certain of extension agents' assistance to the participating farmers in the event the project was eventually launched which was another sign of weakness and unpreparedness.

Finally, CUNA might have been involved for decades with the development and organization of credit unions all over the world but to have conducted a feasibility study which gave birth to this project in less than two months in three different countries puts question marks on the thoroughness with which the study was conducted. This feasibility study failed to collect baseline data on the productivity of a sample of the participating farmers which makes it difficult for project officers to adequately measure the impact of the project. Also, the study took for granted the fact that credit union officials trained in how union business is done would pass it on to the non-trained members and this would increase the number of loan recipients in an SFPC program. If the study team had taken up a little more time to understudy the activities of Cameroon credit unions, it might have been less optimistic in the number of possible SFPC recipients. Or, for the project to reach the large majority that was being projected, the team would have recommended a formal education program to include all credit union members and not just secretaries/bookkeepers and board members.

HEIFER ASSISTANCE TO SMALL FARMERS

Hypothesis: Aid does not always reach the intended beneficiaries and that there are institutional constraints that can be identified in the donor and recipient of aid which in this case are the U.S.A.I.D. and the G.U.R.C. (the Government of the United Republic of Cameroon) respectively.



## BACKGROUND HISTORY OF HPI IN CAMEROON

The initial contact between HPI (Heifer Project International) and Cameroon was made in 1968 by Drs. Oyebock and Tebong (now with the Cameroon Development Corporation and the General Delegation for Scientific and Technical Research respectively). At the time of this contact the Bambui Agricultural Farm was already in existence. One of the purposes of the farm was to produce milk and beef and also raise pigs and chickens.

In 1969 the farm began experimenting with the White Fulani cattle to determine its dairy capacity. The Red Fulani, another local breed of cattle which was already lactating, was included in the experiment in 1973. The results of these experiments showed that these two breeds produced three to four litres of milk a day in lactation lengths not exceeding 200 days under improved management conditions (see Annual Dairy Cattle Report - Bambui Station). These results lead the researchers to conclude that the animals were not economical dairy animals.

Contacts were again made with HPI - Little Rock with the hope of using the high milk producing American Holstein Friesians and Jerseys to upgrade the milk production capacity of the local breed. It is important at this point to underline the basic philosophical differences between Bambui, Mankon and Wakwa (Cameroon Animal Farms) and HPI. These farms at least on paper, are interested in researching on the adaptability of the exotic animals in their new environment and also in the milk production of the offspring which came as a result of crossing the exotic and local breeds. Meanwhile, HPI's goal is the immediate placement of the exotic animals with the resource limited farmers within the recipient country. The purpose according to HPI

is to provide livestock and other related services to needy persons to enable them to feed themselves; to enable recipients to share the increase of their gifts and to provide an opportunity for others to share in the gift and also to involve recipients in project planning and decision making. None of the above goals is included in the decree creating ONAREST or DGRST which is the agency controlling the farms. The effects of these differences on project goals will be discussed later.

These contacts between HPI and Cameroon researchers ended up in the visit of Dr. Metzger, then Director of HPI Programs, to the Bambui Station in February 1973 to see the conditions of pasture, climate and other existing structures. From this visit a consignment of 22 dairy animals from the USA arrived in Cameroon on August 5, 1974. There were 11 Holstein Friesians and 11 Jerseys in the consignment. These animals were all pregnant except one, a Jersey bull. Another consignment of exotic animals from the USA arrived in Cameroon in 1976. This consignment consisted of 13 Jerseys, 27 Holstein Friesians, dairy goats, pigs, chickens and rabbits. Sixteen Holstein Friesians were sent to Wakwa in Ngaoundere. The pigs, goats, rabbits and chickens went Mankon, another animal research station.

It can therefore be said that the apparent success of HPI involvement in Cameroon since 1974 culminated in USAID OPG approval to HPI in 1980 to assist the small limited resource farmers in Cameroon. It would be interesting to see the commonalities of objectives shared by USAID and HPI.

#### USAID'S OBJECTIVES IN ASSISTING THE PROJECT

AID had three main goals in mind in assisting this project.

1. To provide a system through which small-limited resource farmers can benefit from the development of improved breeds of livestock and poultry that are adapted to the Cameroon environment;

2. To increase the availability at a reasonable cost of dairy products,

eggs and meat; and

3. To establish a trained Cameroonian Cadre to manage the project at the end of five years.

The intended beneficiaries of the program is the small-limited resource farmer whose main income is derived from farming. The above goals were basically the same as HPI's.

#### USAID'S END OF PROJECT PROJECTIONS

It was hoped that at the end of five years the following would be established:

1. a nascent dairy cattle, small livestock and a poultry in Cameroon which will involve a distribution system to provide improved livestock and poultry to small-limited resource farmers and cooperative groups. During the life of the project it is anticipated that the following numbers of livestock and poultry will be available for distribution.

Table 1

| <u>LIVESTOCK</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> | <u>1984</u> | <u>TOTAL</u> |
|------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| POULTRY          | 15,000      | 30,000      | 60,000      | 100,000     | 150,000     | 355,000      |
| RABBITS          | 300         | 500         | 700         | 900         | 1,000       | 3,400        |
| PIGS             | 100         | 300         | 600         | 600         | 600         | 2,200        |
| CATTLE           | 20          | 40          | 80          | 100         | 120         | 360          |
| GOATS            | 0           | 20          | 40          | 80          | 100         | 210          |
| SHEEP            | 0           | 0           | 20          | 40          | 50          | 110          |

2. a functional livestock and poultry research unit with an ongoing program of research in breeding, nutrition, disease and pest control;

3. an increased number of small farmers raising improved breeds of livestock and poultry for subsistence needs and for sale;

4. a greater availability of meat, eggs and dairy products to the people at a reasonable cost; and

5. a small farmer accessibility to formulated rations (locally produced), breeding services and marketing systems.

#### AUTHOR'S RESEARCH OBJECTIVES AND METHODOLOGY

The structured and unstructured questionnaire method was used in this study to interview project participants. Over 85 percent of the project participants were interviewed and their farms were also visited. All technicians and officials involved with the project were interviewed. All IRZ (Institute of Animal Research) and HPI Cameroon related records were consulted.

The study was conducted on a radial zone of about 25 km. ~~within~~ Central Mezam division. The greatest concentration of project recipients is along the Bamenda-Bambili road (Nkwen, to be more specific). Finally, a week was spent on the milk truck collecting data on who bought milk, his/her profession and their location.

The OPG for this project was only signed in 1980 which makes this phase of HPI assistance only one year old. It has often been argued that it is difficult to determine a project's impact after one or two years of its existence. One needs between three and four years to begin perceiving the impact. The author is aware of the time factor in impact studies so he decided to go as far back as 1974 when HPI first got into Cameroon. The time period being examined is from 1974 to 1980. The intention is to examine HPI's experience during this time to determine what impact it had on the intended beneficiaries and with these results make a projection of its future performance during this project life. The objectives of this study are as follows:

1. to determine who the target population is;
2. to see who has so far benefited from the program. The measuring

indicators were:

- a. milk production and its distribution
- b. animal distribution
- c. source of income of beneficiaries;

3. To determine investment cost of infrastructure and cost to raise dairy cattle, pigs and goats and to see if the cost of dairy products; eggs and meat has gone down since HPI became involved in Cameroon; and

4. To see if AID's projected goals will be met at the end of the project life.

#### FINDINGS OF FIELD RESEARCH AND RECOMMENDATIONS

##### DETERMINATION OF PROJECT TARGET POPULATION

The most crucial problem in the entire study was to define the target population for which the project was intended. The parameters used to delineate this group are those used by USAID in the Foreign Assistance Act of 1973. This act stipulated that U. S. assistance be directed to the poorest income earners in those Third World countries receiving U. S. aid. This is in agreement with HPI's definition which says that its assistance is directed only to those in need (i.e., those who cannot go to the rural bank to borrow money to start the project, and those who do not have steady income from a job that provides for them [see Exchange No. 27]). Also the present HPI chief of party, Dr. Williams, and Charles Burwell, the HPI program director, say that the project is aimed at those poor-limited resource farmers whose major income is from farming. During this study there was a dearth of data in all HPI records showing the incomes of project participants and their sources of origin. This made it difficult for the project implementation officers to say whether or not the benefits of the program were going to the appropriate recipients. A detailed socioeconomic study of the project

participants is needed if this aid is not to be misdirected.

#### WHO HAS SO FAR RECEIVED HPI ASSISTANCE?

Distribution of animals to small-limited resource farmers takes place after the completion of a training program organized at the Bambui Farm for cattle or at the Mankon Station for pigs, goats, rabbits and poultry. Between 1974 and 1980 two courses on dairy cattle have been organized.

The first course was in 1978 under Leo Chaloux, an HPI resident technician and the second one was in 1980 under Thomas Needham, the HPI resident dairy advisor. During the two training sessions 15 farmers received training. Not all of these trained farmers have received animals because some of them have not yet finished preparing their land for the animals and also because of the fact that some of the animals are not ready for distribution. Despite the fact that training was conducted in 1978, the first cattle distribution only took place in 1980 during which time 28 dairy cattle were distributed. The 28 dairy cattle went to 14 different recipients. Five out of the 14 were fulltime farmers. Five were government employees and four were religious bodies. The cattle distribution data definitely show that the majority of project recipients have not been those for whom the program was intended. Also the government workers and missionary bodies could easily obtain credit from other sources which would have in effect disqualified them as recipients of this project.

Table 2.

| <u>NAME</u>                                  | <u>MAIN OCCUPATION</u> | <u>BREED</u>                | <u>NO./CLASS</u>       |
|----------------------------------------------|------------------------|-----------------------------|------------------------|
| Tah Evaristus                                | Employee with IRZ      | Jersey<br>Holstein Friesian | 1 cow<br>1 cow         |
| Hamman Bi Ruga                               | Employee with IRZ      | Jersey<br>Holstein Friesian | 1 bull<br>2 bulls      |
| Stephen Atie                                 | Farming                | Jersey<br>Jersey cross      | 1 bull<br>1 cow        |
| Jospeh Muma                                  | Farming                | Jersey                      | 1 cow                  |
| Clement Akoh                                 | Farming                | Jersey<br>Jersey cross      | 1 cow<br>1 bull, 1 cow |
| Joseph Tamutana                              | Farming                | Jersey                      | 1 cow                  |
| Thaddeus Mungang                             | Farming                | Jersey<br>Jersey cross      | 1 cow<br>1 cow         |
| Joseph Nkwenti                               | HPI employee           | Jersey<br>Holstein Friesian | 1 cow<br>1 cow, 1 bull |
| Dr. Foncha                                   | Politician             | Holstein Friesian           | 1 bull                 |
| Mr. Malafa                                   | C.D.C.                 | Jersey                      | 2 cows                 |
| Sisterhood of Emmanuel-Pafut                 | Missionary group       | Jersey<br>Jersey cross      | 1 cow<br>1 cow         |
| Presbyterian Rural Education Training Center |                        | Holstein Friesian           | 2 cows                 |
| Monastery of Mbengwi                         | Missionary group       | Holstein Friesian           | 2 bulls                |
| Catholic Mission fontem                      | Missionary group       | Jersey                      | 1 bull<br>2 cows       |

Another area of the dairy program whose beneficiaries were examined is the milk sector. Some of the dairy animals that have not been distributed are left on the Bambui Farm and milked twice every day. Since the program is meant for the lower income bracket within the project area one would expect that they would be those to benefit from the milk extracted from these animals.

This author followed the milk truck for a period of five days covering an average distance of 34 km. a day collecting occupational data and quantity of milk bought by each buyer. Out of all the milk buyers during those five days none of them was a fulltime farmer. Over 90 percent of the buyers were teachers within the OCast Community and government civil servants resident in Bamenda. The biggest customers being members of Club 58 Bamenda exclusively limited to the wealthy elite within the province. Ten percent of the milk was bought by businessmen in town some running small restaurants. Again this is another indicator that the project is not benefiting the small poor farmer. Even if the farmer had wanted to buy the milk which is doubtful because of its price, it would have been difficult because the earliest time the milk truck leaves the Bambui Farm is 9:00 a.m. while the farmers leave for their farms before 6:30 a.m.

Training had been organized for pigs, goats, rabbits and poultry. Fifty-six exotic pigs, five exotic goats and 53 rabbits were distributed in 1980. Again, most of these small animals went to recipients whose main source of income is not agriculture. It was very difficult to determine the number of chickens distributed because no live chickens have as yet been distributed. This is because of a fault in the incubating process. Eggs for incubating are being sold for 35 F.CFA (U.S. 14¢) while those for consumption are sold for 30 F.CFA (U.S. 12¢) each. But here we are faced with two problems. No records are kept of the number of incubating eggs sold. Secondly, even if the records were kept it would still have been extremely difficult to keep track of the number of chicks hatched because of the lack of follow-up extension services. Also it is highly probable that buyers of such eggs would have decided to use them for consumption since they are cheaper than the going market price for eggs.

The above information has shown that most of the beneficiaries of the program do not come from the poorest income bracket and their main source of income is not from agriculture as stated in the project design document. Having found out that the project's benefits are misdirected, it was important to investigate the cause of this misdirection. Could this have been because of the initial capital investment needed to start a farm?

INVESTMENT ESTIMATES AND COST TO RAISE A DAIRY CATTLE

This author believes that one of the very first things to do in setting up a project like this one is to calculate the cost of capital investment to be incurred by recipients. This was unfortunately not done by HPI. Such an oversight made it difficult for the donor to know whether or not the intended beneficiaries could afford such amounts of money.

In this study the farms of five project recipients who are fulltime farmers were visited and an average investment cost of animal, stable and paddock was made. The cost of feed per animal a year was also included in this list.

| <u>ITEM</u>                                                                                               | <u>COST</u>         |
|-----------------------------------------------------------------------------------------------------------|---------------------|
| -Permanent roofing sheets for stable                                                                      | 45,000 F.CFA        |
| -Bamboos and wooden poles                                                                                 | 24,000 F.CFA        |
| -Cement (for milking area)                                                                                | 21,000 F.CFA        |
| -Sprays for ticks, soap, salt                                                                             | 1,800 F.CFA         |
| -Fencing of paddock                                                                                       | 50,000 F.CFA        |
| -Cost of animal                                                                                           | 70,000 F.CFA        |
| -Labor                                                                                                    | 25,000 F.CFA        |
| -Cost of concentrate in a year per animal<br>assuming that animal is fed 5 kg. a day<br>at 40 F.CFA a kg. | <u>60,120 F.CFA</u> |
| (U.S. \$1 = 250 F.CFA)      TOTAL*                                                                        | 297,920 F.CFA       |

\*pasture improvement hasn't been added.

To calculate the return on the investment to the farmer we needed to know how much milk was produced by a cow per a lactation period. On the Bambui farm with a better dairy management staff (at least in comparison with the local farmer) the daily average milk production of a dairy cow is 11.1 litres. (Figures are taken from the Dairy Cattle Research Report of 1980 by J. C. Maxi-Muagu). Animals with a local farmer who has haphazard feeding habits will produce about 8 litres of milk per day. Again let us assume that the mean lactation period is 300.6 days.

In one year the farmer would have produced  $8 \text{ litres} \times 300.6 = 2404.8 \text{ litres}$ . Assuming that the family of the farmer consumes half of the milk produced, as the farmer claims, he will be left with 1202.4 litres to sell. If one litre costs 120 F.CFA, 1202.4 litres will cost  $120 \times 1202.4 = 144,288 \text{ F.CFA}$ . If the farmer makes 144,288 F.CFA a year from the sale of milk, assuming again that he finds buyers for all his milk and none of it goes bad, he would still not have recovered 158,212 F.CFA. But this amount of money could easily be recovered in the third year of dairy farming including 131,400 F.CFA which he would have again spent on animal feed for year two and three.

According to these calculations a farmer going into dairy farming would only start making a profit after three years of investment. The next question to ask is who is the kind of farmer in Cameroon who can afford to tie up money in a project for three years before expecting a profit? This kind of farmer is definitely not the limited resource farmer for whom the project was intended. In fact, very few Cameroonian small farmers can afford 297,920 F.CFA (US \$1191.68) a year to invest in a dairy project.

It should be remembered that the per capita income of Cameroon according to U. S. State Department Special Report No. 61 of 1979 was 82,000 F.CFA (U. S. \$320.00). But it is also known that the gap between the rich and the poor in developing countries is very wide and Cameroon is no exception to this. Most studies on income distribution, especially in LCDs have shown that the greater majority of the people in such countries have an income far below the national per capita income which is the case for Cameroon. If most adults in Cameroon make less than 82,000 F.CFA a year then it would be right to conclude that anyone who can afford to invest over 200,000 F.CFA a year does not fall in the resource limited group. Therefore, we can classify the five full time farmers participating in this project among the wealthy category of Cameroonians. With this conclusion we can argue that no one within the project target group has so far benefited from the project.

Another question which was of interest in this study was to see if the involvement of HPI in Cameroon had reduced the cost of dairy products, eggs and meat, at least in the project areas. As mentioned above, though HPI has been in Cameroon since 1974, the first time animals were distributed to local farmers was in 1980. It is perhaps too early to make a definite statement on the project's impact on market prices. But so far the results seem very encouraging in that a litre of milk, a kg. of meat or pork and an egg cost 60, 350 and 30 F.CFA respectively which is far below the market price in areas far removed from the project area. It is not yet very clear whether these prices are low because the project is heavily subsidized by G. U. R. C. and the donor agency. It might be necessary to wait until a year or two after the project life to measure this impact.

#### IV. WILL AID'S PROJECTED GOALS BE MET AT THE END OF THE PROJECT LIFE?

By 1984 a nascent dairy cattle, small livestock and poultry would have been established in Cameroon, but that the animals from this establishment would be distributed to the small-limited resource farmers will remain a myth if steps are not taken right now to redirect the flow of the animals being distributed. It must be pointed out that the target population of this project is incapable of raising enough money individually to raise dairy animals. If the donor agency and the G.U.R.C. are really bent on aiding this sector of the population they have to make credit available to this group. One of the ways to do this would be to directly link up the CUNA project to the Heifer project. Also it is absolutely necessary for the donor agency to clearly delineate its resource limited farmer. This author will suggest that the cutoff point be as low as 50,000 F.CFA below which a farmer could be referred to as resource limited. This cut off point would be lower or higher given the region in Cameroon the project is being established.

It is very doubtful that the presence of an HPI program in Cameroon will strengthen the research unit on livestock and poultry as envisaged by AID. Philosophically HPI is not interested in conducting research, its number one goal is the placement of the animals with project participants. As mentioned earlier in this paper the linkage of HPI and IRC, two agencies with different goals, does not help either one of them develop fully because of the nascent organizational struggle that develops among them. If HPI had its way some of these farms would be turned into production centers and this is one of the greatest fears of the researchers. A research station should not contain as many animals as they are presently on the farms. This large number of animals on the farms divert scarce research money into animal feed, and this does not help research at all. If our projection of project impact on research are

based on HPI's post performance it would be right to conclude that the research component will not be any stronger than it is now, which is weak. This conclusion might be a little hasty because earlier in the HPI involvement in Cameroon, there was no advanced degree training in the training component. But this phase of the program has taken this aspect of training into consideration and this might make a difference.

Also, that a greater number of Cameroonian farmers will raise livestock and poultry and that there will be a greater availability of meat, eggs and dairy products at the end of the program is very true but what is not true is that the animals will be raised by small-limited resource farmers and that the prices will be low. In the short run the prices will be lower than the going market prices because of the subsidy from G.U.R.C. and U.S.A.I.D. In the long run when this subsidy thins off the prices will just be as high as the going market prices.

Finally, this author feels that at the end of the program the small-limited resource farmer will not have any better accessibility to formulated rations (locally produced), breeding services and marketing systems if the present condition remain constant.

The pessimism as to the ability of the program to reach the small-limited resource farmer is as a result of the mistakes that were made during the initial distribution exercise in 1980. The distribution committee is comprised of representatives from IRZ, HPI, and the Ministry of Agriculture. The parties from the IRZ and the Ministry of Agriculture have never read the project design paper so they do not understand what the project goals really are. All they know is that the project's intention is to set up a dairy program in Cameroon. They are unaware of the fact that the project is aimed at a particular population. The HPI representative is aware of the targeted

population though not defined but it would appear as though he is more interested in working with an elite group in the short run, hoping that the project will reach the target population in the long run. The idea here is to first of all get those with the most political influence to accept the program. But the problem with such a procedure is how much should a program give in to political pressure and for how long? The political factor and its impact on projects has been one of the weakest arms of most project designs which makes it difficult to answer this question. But for this project to succeed this author would suggest that buy-offs be kept out of the project. The way this problem could be dealt with is to clearly define the target population and give it as much publicity as possible stating it in every application form for animal distribution.

In conclusion one can say that HPI's performance in the first phase and the first year of the second phase (i.e., the phase which starts with a USAID O.P.G.) has not been successful in reaching the target population.

This study has shown that this program is beyond the reach of the small-limited resource farmer because he is incapable of amassing on his own the capital necessary to start a dairy program. If this program could be linked up with CUNA which will soon begin its second phase in Cameroon, the necessary capital to start this project could be provided. Arrangements could also be made for FONADER to provide loans to those small-limited resource farmers wanting to go into dairy farming.

Another point to emphasize in this conclusion is the fact that the present HPI-IRZ link is unrealistic because of differences in the organizational goals they pursue. One is interested in research and the other is interested in the immediate placement of animals with the small farmers. In

fact, it could even be said that the presence of HPI within the IRZ system is a hindrance to its effectiveness. Research does not need 355,000 poultry, 3,400 rabbits, 2,200 pigs, 360 cattle, 210 goats and 110 sheep within the next three years. These many animals will only turn a research station into a production center. All a research station will need is about 10 of each animal species to conduct experiments on.

Secondly, IRZ does not provide extension services in the project area, and if it did the work load for the few existing researchers would be very heavy and this would probably cause inefficiency. For these reasons this author believes that the rightful linkage for HPI is the Ministry of Animal Husbandry (MINEL). These two agencies share about the same philosophical goals. Also MINEL has an extension component which could provide follow-up services to project participants.

Interviewer \_\_\_\_\_ Interview # \_\_\_\_\_

Interviewee \_\_\_\_\_ Date of Interviews: \_\_\_\_\_

A SOCIO-ECONOMIC QUESTIONNAIRE FOR PARTICIPANTS AND NON-PARTICIPANT FARMERS IN SELECTED A.I.D. PROGRAMS IN NORTH CAMEROON.

| NO: | SOURCE | QUESTION                                                 | RESPONSE |
|-----|--------|----------------------------------------------------------|----------|
| 1.  |        | Farmer's name.....                                       |          |
| 2.  |        | Farmer's age.....                                        |          |
| 3.  |        | Farmer's sex.....                                        |          |
| 4.  |        | Farmer's Village.....                                    |          |
| 5.  |        | Language of communication at home.....                   |          |
| 6.  |        | Size of immediate family.....                            |          |
| 7.  |        | What are the household duties of the respondent.....     |          |
| 8.  |        | What is the marital status of interviewee?               |          |
|     |        | a) Married.....                                          |          |
|     |        | b) Polygamy.....                                         |          |
|     |        | c) Monogamy.....                                         |          |
|     |        | d) Single.....                                           |          |
|     |        | e) Divorced.....                                         |          |
|     |        | f) Separated.....                                        |          |
|     |        | g) Widower.....                                          |          |
|     |        | h) Other (identify).....                                 |          |
| 9.  |        | Who is head of the household (immediate family).....     |          |
| 10. |        | Which community organizations is the farmer a member of: |          |
|     |        | a).....                                                  |          |
|     |        | b).....                                                  |          |
|     |        | c).....                                                  |          |

| NO. | SOURCE | QUESTION                                                                               | RESPONSE |
|-----|--------|----------------------------------------------------------------------------------------|----------|
|     |        | d).....                                                                                |          |
| 11. |        | Does the farmer hold a position in the community organization to which he/she belongs? |          |
|     |        | a).....                                                                                |          |
|     |        | b).....                                                                                |          |
|     |        | c).....                                                                                |          |
|     |        | d).....                                                                                |          |
| 12. |        | Is the farmer aware of the North Cameroon Seed Multiplication Project? .....           |          |
| 13. |        | What was farmer's source of information?                                               |          |
|     |        | a) radio.....                                                                          |          |
|     |        | b) extension.....                                                                      |          |
|     |        | c) Village Chief.....                                                                  |          |
|     |        | d) Quarter head.....                                                                   |          |
|     |        | e) Family member living in town.....                                                   |          |
|     |        | f) Other (identify).....                                                               |          |
| 14. |        | Has farmer used seeds from this project?                                               |          |
|     |        | a) Peanut.....                                                                         |          |
|     |        | b) Sorghum.....                                                                        |          |
| 15. |        | Is family aware of the Center for Training Farm Families? .....                        |          |
| 16. |        | What was the farmer's source of information?                                           |          |
|     |        | a) radio.....                                                                          |          |
|     |        | b) extension agent.....                                                                |          |
|     |        | c) Village chief.....                                                                  |          |
|     |        | d) Quarter head.....                                                                   |          |
|     |        | e) Family member living in town.....                                                   |          |
|     |        | f) Other (identify).....                                                               |          |
| 17. |        | Has family ever participated in the Training Program?<br>.....                         |          |
| 18. |        | Is farmer aware of the Directed Agricultural Production Credit?.....                   |          |
| 19. |        | What was farmer's source of information?                                               |          |
|     |        | a) Radio.....                                                                          |          |
|     |        | b) Extension agent.....                                                                |          |
|     |        | c) Village Chief.....                                                                  |          |
|     |        | d) Quarter head.....                                                                   |          |
|     |        | e) Family member living in town.....                                                   |          |
|     |        | f) Other (identify).....                                                               |          |

INTERVIEW #.....

| NO. | SOURCE | QUESTION                                                                                                                                                                                                                                                                      | RESPONSE |
|-----|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 20. |        | Has farmer had credit from this source?<br>a) Yes.....<br>b) No.....                                                                                                                                                                                                          |          |
| 21. |        | Is farmer aware of the small Farmer Livestock and Poultry Development?.....                                                                                                                                                                                                   |          |
| 22. |        | What was farmer's source of information?<br>a) Radio.....<br>b) Extension agent.....<br>c) Village chief.....<br>d) Quarter head.....<br>e) Family member living in town.....<br>f) Other (identify).....                                                                     |          |
| 23. |        | What is respondent's level of education?<br>a) No formal education (Western or Islamic).....<br>b) Primary School.....<br>c) Post-Primary Education.....<br>d) Islamic Schools (describe).....<br>e) Years of schooling (Western or Islamic).....<br>f) Other (describe)..... |          |
| 24. |        | What is the size of land under cultivation by the farmer? (in hectares)<br>a) 0 - 0.6 .....<br>b) 0.7 - 1.2 .....<br>c) 1.3 - 2.4 .....<br>d) 2.5 - 4.8 .....<br>e) 4.9 - 9.6 .....<br>f) 9.7 - over .....                                                                    |          |
| 25. |        | How much land does the farmer own? (in hectares)<br>a) 0 - 0.6 .....<br>b) 0.7 - 1.2 .....<br>c) 1.3 - 2.4 .....<br>d) 2.5 - 4.8 .....<br>e) 4.9 - 9.6 .....<br>f) 9.7 - over .....                                                                                           |          |
| 26. |        | Is farmer a tenant of the following quantity of land?<br>a) 0 - 0.6 .....<br>b) 0.7 - 1.2 .....<br>c) 1.3 - 2.4 .....<br>d) 2.5 - 4.8 .....<br>e) 4.9 - 9.6 .....<br>f) 9.7 - over .....                                                                                      |          |

81

| NO. | SOURCE | QUESTION                                                                                                                                                                                                                                                                                                                           | RESPONSE |
|-----|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 27. |        | Has farmer access to the following technology?<br>a) Tractor .....<br>b) Fertilizers .....<br>c) Pesticides .....<br>d) Herbicides .....<br>e) Animal traction .....<br>f) Other (describe) .....                                                                                                                                  |          |
| 28. |        | What quantity of pesticides does the farmer use on his land per planting season? (in litres).....                                                                                                                                                                                                                                  |          |
| 29. |        | What quantity of herbicides does the farmer use on his land per planting season? (in litres).....                                                                                                                                                                                                                                  |          |
| 30. |        | What quantity of fertilizer does the farmer use on his land per planting season? (in bags).....                                                                                                                                                                                                                                    |          |
| 31. |        | How many loans has farmer received within the last five years?.....                                                                                                                                                                                                                                                                |          |
| 32. |        | When was loan awarded to the farmer?.....                                                                                                                                                                                                                                                                                          |          |
| 33. |        | Which of the following were farmer's sources of loan?<br>a) FONADER .....<br>b) Private banks (identify).....<br>Farmer's Cooperatives.....<br>d) Njangi (Meeting).....<br>e) Other (identify) .....                                                                                                                               |          |
| 34. |        | Why did farmer go to this source of loan? (explain)<br>....<br>.....                                                                                                                                                                                                                                                               |          |
| 35. |        | What was the loan used for?<br>a) Children's school fees.....<br>b) Hire farm labor.....<br>c) Funeral celebration .....<br>d) Buy farm equipment.....<br>e) Purchase fertilizers, hybrid seed, pesticides and herbicides.....<br>f) marriage.....<br>g) build a house.....<br>h) repair a house .....<br>i) Other (identify)..... |          |
| 36. |        | How much of the loan was spent on each of the above items?<br>a) .....<br>b) .....<br>c) .....<br>d) .....<br>e) .....<br>f) .....                                                                                                                                                                                                 |          |

NO. SOURCE QUESTION RESPONSE

g) .....  
 h) .....  
 i) .....

37. What crop (s) does farmer cultivate?  
 a) Millet (Djigari).....  
 b) Sorghum (musquari) .....  
 c) groundnut .....  
 d) cotton .....  
 e) Other (identify).....

38. What quantity of land (in hectares) is allocated for crop cultivated?  
 a) Millet ( Djigari).....  
 b) Sorghum (Musquari).....  
 c) groundnuts.....  
 d) Cotton .....  
 e. Other (identify).....

39. What was productivity in kg. or bags prior to program?  
 a) Millet (Djigari).....  
 b) Sorghum (musquari) .....  
 c) groundnuts.....  
 d) cotton .....  
 e) Other (identify).....

40. What percent of the following was damaged due to inadequate storage facility?  
 a) Millet 1) 0 2) 1 - 25 3) 26 - 50 4) 51 - 74 5) 76 & over.  
 b) Sorghum 1) 2) 3) 4) 5)  
 c) groundnuts 1) 2) 3) 4) 5)  
 d) Cotton 1) 2) 3) 4) 5)  
 e) Other(id) 1) 2) 3) 4) 5)

41. What percent of the following was consumes by household or immediate family and relatives living in the same house prior to the program?  
 a) Millet 1) 0 2) 1 -25 3) 26 - 50 4) 51 - 75 5) 76 & over  
 b) Sorghum 1) 2) 3) 4) 5)  
 c) groungnut 1) 2) 3) 4) 5)  
 d) cotton 1) 2) 3) 4) 5)  
 e) other(id)1) 2) 3) 4) 5)

42. What kind of storage mechanism did farmer use after the program was introduced? (Describe).....  
 .....

43. What was productivity in kg. or bags after the program was introduced?  
 a) Millet (Djigari).....  
 b) Sorghum (Musquari).....

| NO. | SOURCE | QUESTION                                                                                                                                             | RESPONSE |
|-----|--------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
|     |        | c) groundnuts.....                                                                                                                                   |          |
|     |        | d) Cotton .....                                                                                                                                      |          |
|     |        | e) Other (identify).....                                                                                                                             |          |
| 44. |        | What percent of the following was damaged due to inadequate storage facilities after the program was introduced?                                     |          |
|     |        | a) Millet 1) 0 2) 1 - 25 3) 26 - 50 4) 51 - 75 5) 76 & over                                                                                          |          |
|     |        | b) Sorghum 1) 2) 3) 4) 5)                                                                                                                            |          |
|     |        | c) groundnut 1) 2) 3) 4) 5)                                                                                                                          |          |
|     |        | d) cotton 1) 2) 3) 4) 5)                                                                                                                             |          |
|     |        | e) Other (id) 1) 2) 3) 4) 5)                                                                                                                         |          |
| 45. |        | What percent of the following was consumed by the household ( immediate family and relatives living in the same house) after program was introduced? |          |
|     |        | a) Millet 1) 0 2) 1 -25 3) 26-50 4) 51-75 5) 76 & over.                                                                                              |          |
|     |        | b) Sorghum 1) 2) 3) 4) 5)                                                                                                                            |          |
|     |        | c) Groundnut 1) 2) 3) 4) 5)                                                                                                                          |          |
|     |        | d) Cotton 1) 2) 3) 4) 5)                                                                                                                             |          |
|     |        | e) Other (id) 1) 2) 3) 4) 5)                                                                                                                         |          |
| 46. |        | Has family size (immediate family and relatives living in the same house) changed since the program was introduced?.....                             |          |
| 47. |        | How many members of the household got married and moved out of the family compound?.....                                                             |          |
| 48. |        | If answer to the above question is yes, by how many?..                                                                                               |          |
| 49. |        | How many members of the household have died within the last five years?.....                                                                         |          |
| 50. |        | How many children were born in the household within the last five years? .....                                                                       |          |
| 51. |        | How many members of the household left home to seek for jobs? .....                                                                                  |          |
| 52. |        | How many members of the family left home for other reasons?.....                                                                                     |          |
| 53. |        | To whom was the pre-program harvested crop sold?                                                                                                     |          |
|     |        | a) Millet.....                                                                                                                                       |          |
|     |        | b) Sorghum .....                                                                                                                                     |          |
|     |        | c) Groundnuts .....                                                                                                                                  |          |
|     |        | d) Cotton .....                                                                                                                                      |          |
|     |        | e) Other (identify).....                                                                                                                             |          |
| 54. |        | What was the cost of crop per kg. or bag before the program?                                                                                         |          |
|     |        | a) Millet .....                                                                                                                                      |          |
|     |        | b) Sorghum .....                                                                                                                                     |          |

| NO. | SOURCE | QUESTION                                                                                                   | RESPONSE |
|-----|--------|------------------------------------------------------------------------------------------------------------|----------|
|     |        | c) Groundnut .....                                                                                         |          |
|     |        | d) Cotton .....                                                                                            |          |
|     |        | e) Other (identify).....                                                                                   |          |
| 55. |        | What was the total gross agricultural income before the program? .....                                     |          |
| 56. |        | What was the cost of labor used by farmer after the program? .....                                         |          |
| 57. |        | What was the cost of labor used by farmer prior to the program? .....                                      |          |
| 58. |        | Has farm size changed since program was introduced?....                                                    |          |
| 59. |        | If the above answer is yes, give size in hectares plus or minus.....                                       |          |
| 60. |        | What was the total annual gross agricultural income after program was introduced?.....                     |          |
| 61. |        | Did farmer need help (in plowing, weeding, harvesting, etc.)?.....                                         |          |
| 62. |        | Did farmer get as much help as he needed?.....                                                             |          |
| 63. |        | If the above answer is No, why did he not get it?.....                                                     |          |
| 64. |        | But if the answer to Quest. 62 is Yes, how did he/she get it? (describe).....                              |          |
| 65. |        | To whom was the harvest crop sold after the program was introduced?                                        |          |
|     |        | a) Millet.....                                                                                             |          |
|     |        | b) Sorghum.....                                                                                            |          |
|     |        | c) Groundnut .....                                                                                         |          |
|     |        | d) Cotton .....                                                                                            |          |
|     |        | e) Other (identify) .....                                                                                  |          |
| 66. |        | What was the cost of crop per kg or bag after the program was introduced?                                  |          |
|     |        | a) Millet .....                                                                                            |          |
|     |        | b) Sorghum .....                                                                                           |          |
|     |        | c) Groundnut .....                                                                                         |          |
|     |        | d) Cotton .....                                                                                            |          |
|     |        | e) Other (identify) .....                                                                                  |          |
| 67. |        | Has non-participant changed his/her farming methods since the introduction of the program? (Describe)..... |          |

| NO. | SOURCE | QUESTION                                                                                                                                                                 | RESPONSE |
|-----|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 68. |        | What was the cause of this change of method?<br>a) Accident .....<br>b) Climate seasons.....<br>c) Program participant influence .....<br>d) Other (describe).....       |          |
| 69. |        | Did participant consciously demonstrate modern techniques to non-participants?.....<br><br>How many non-participants did participant demonstrate new techniques to?..... |          |
| 70. |        | How many of these non-participants are from the same family as participants?.....                                                                                        |          |
| 71. |        | How many non-participants adopted the new techniques in the farms? .....                                                                                                 |          |
| 72. |        | How many of those who adopted the new techniques are from the same family as participant?.....                                                                           |          |
| 73. |        | What reason(s) was/were given for not using the new method.....<br>.....                                                                                                 |          |
| 74. |        | What kind of tax did respondent pay five years ago (i.e) income tax, jangali, basic etc.)?.....                                                                          |          |
| 75. |        | What kind of tax is participant paying today?.....                                                                                                                       |          |
| 76. |        | What percent of annual revenue is paid as tax by participant?<br>a) 2%.....<br>b) 5%.....<br>c) 10% .....<br>d) Other (identify).....                                    |          |
| 77. |        | What does participant think is the main cause of increase in agricultural productivity?.....<br>.....                                                                    |          |
| 78. |        | What is the religious affiliation of respondent?<br>a) Moslem .....<br>b) Protestant .....<br>c) Roman Catholic .....<br>d) Animist .....<br>e) Other (identify).....    |          |
| 79. |        | Does farmer raise livestock?.....                                                                                                                                        |          |
| 80. |        | What is the number of livesstock raised?<br>a) Cattle.....                                                                                                               |          |

| NO. | SOURCE | QUESTION                                                                                                                                                                         | RESPONSE |
|-----|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
|     |        | b) Sheep .....                                                                                                                                                                   |          |
|     |        | c) Goats .....                                                                                                                                                                   |          |
|     |        | d) Horses .....                                                                                                                                                                  |          |
| 81. |        | Has farmer had cause to seek the services of a veterinarian? (Describe causes and number of time .....                                                                           |          |
| 82. |        | Does farmer use animal in :<br>a) Plowing b) weeding c) harvesting d) Other(Id.)                                                                                                 |          |
| 83. |        | Is interviewee :<br>a) Herder.....<br>b) Owner .....                                                                                                                             |          |
|     |        | c) Herder/owner .....                                                                                                                                                            |          |
|     |        | d) Other (identify) .....                                                                                                                                                        |          |
| 84. |        | Does farmer raise livestock solely for personal consumption? .....                                                                                                               |          |
| 85. |        | Does farmer raise livestock solely for commercial purposes? .....                                                                                                                |          |
| 86. |        | Does farmer raise livestock for consumption and commercial purposes?                                                                                                             |          |
| 87. |        | What is the annual percentage of revenue generated from the sale of livestock?<br>a) 0%.....d) 21-30%.....<br>b) 1-10% .....e) 31-40%.....<br>c) 11-20%.....f) 41% and over..... |          |
| 88. |        | Has farmer ever participated in animal traction demonstration? (briefly describe).....                                                                                           |          |
| 89. |        | Who was the demonstrating agent of the above technique?<br>a) Project agent .....                                                                                                |          |
|     |        | b) Extension agent .....                                                                                                                                                         |          |
|     |        | c) Project participant .....                                                                                                                                                     |          |
|     |        | d) Other (identify) .....                                                                                                                                                        |          |
| 90. |        | How far are the closest watering points for livestock?<br>a) 1-3km.....b) 4-6km .....                                                                                            |          |
|     |        | c) 7-10 km .....d) 10km and above .....                                                                                                                                          |          |
| 91. |        | If farmer uses the animal traction technique, has he/she noticed a reduction in work load since the introduction of this method? .....                                           |          |

| NO. | SOURCE | QUESTION                                                                                                                                                         | RESPONSE |
|-----|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 92. |        | How long did it take farmer to plow 0,5 Ha. before the introduction of animal traction?.....                                                                     |          |
| 93. |        | How long does it take farmer to plow 0,5 Ha with the animal traction technique? .....                                                                            |          |
| 94. |        | What is the percent of decrease (man/hrs.)?<br>a) 25% .....<br>b) 50% .....<br>c) 75% .....<br>d) 75% and over .....                                             |          |
| 95. |        | Does livestock farmer keep animal for:<br>a) Milk and meat .....<br>b) Status symbol .....<br>c) Dowry .....<br>d) Fertilizers .....<br>e) Other (identify)..... |          |