



ASSOCIATION POUR LA PRODUCTIVITE AU TOGO

THE PROCESS OF RURA PRODUCTIVITY

A Progress Report of the

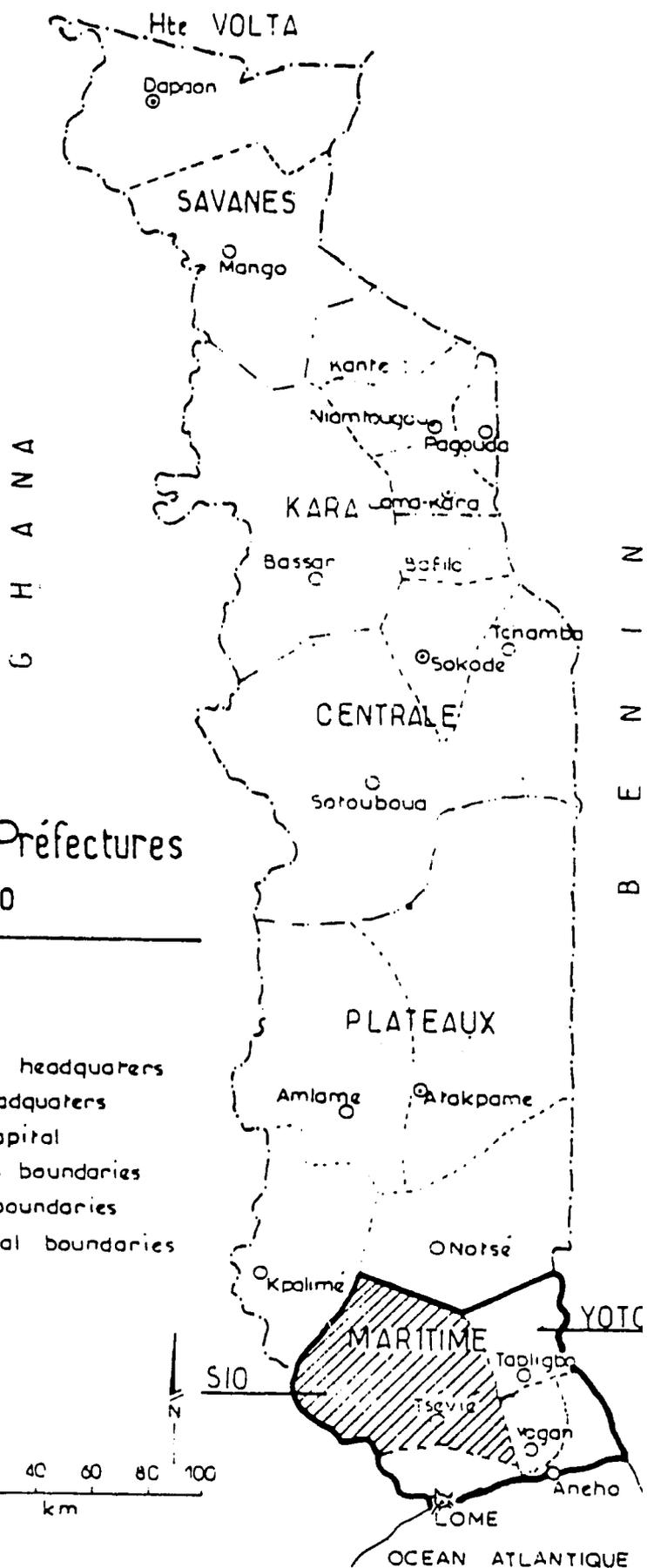
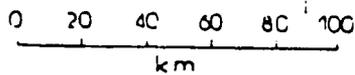
Zio River Economic Development Project

JULY 1985 to JUNE 1986

Presented by: John Schiller
Partnership for Productivity,
Togo
June 1986

Regions and Préfectures of Togo

- prefectures headquarters
- ⊙ regional headquarters
- ★ national capital
- prefectures boundaries
- regional boundaries
- international boundaries



Zio river region

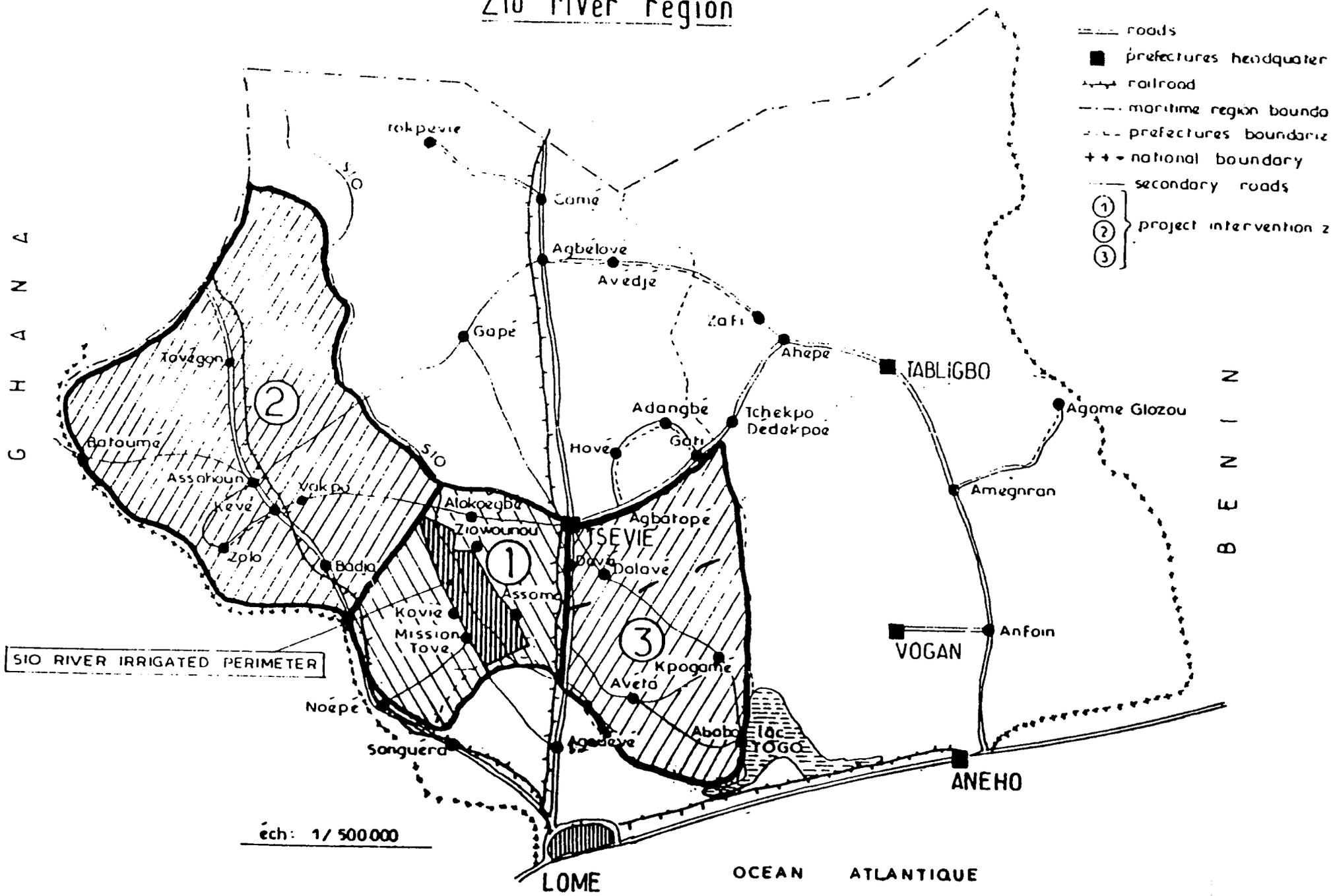


TABLE OF CONTENTS

<u>CONTENTS</u>	<u>PAGE</u>
<u>INTRODUCTION</u>	i
PART I: <u>BUILDING RURAL PRODUCTIVITY IN 1985</u>	1
- P/P/Togo's Underlying Principles.....	1
- Establishing an Effective Program.....	2
- The First Year's Clients and their Projects.....	3
- Impact on Agricultural Productivity and Incomes.....	5
• Maize.....	5
• Cowpeas.....	6
• Irrigated Rice.....	8
• Impact on Incomes.....	9
- Development of Skills and Knowledge.....	11
- Attitudes and Personal Qualities.....	12
- Human and Social Gains.....	14
- Performance of Non-Agricultural Clients.....	15
- Loan Reimbursement.....	18
- Conclusion of 1985.....	20
Part II: <u>INCREASED EFFECTIVENESS AND</u> <u>COST-EFFICIENT EXPANSION</u>	22
<u>Program Themes</u>	
- Working with groups.....	22
- Improving the Extension Methodology.....	25
- Selecting and Training Field Agents.....	25
- Expanding into Zone 2.....	26
- Project Analysis.....	27
- Policy Dialogue.....	28
- Sustainability.....	29
<u>Clients and Projects assisted in 1986</u>	29

INTRODUCTION

Since March 1985 Partnership for Productivity has been working in the southern and western portions of the Zio prefecture, an area we refer to as the Zio River region, to increase the productivity and incomes of small-scale farmers and the proprietors of non-agricultural commercial, artisanal and food processing activities.

To succeed in such a difficult endeavor we believe it is necessary to be committed to a process whereby one moves towards ever-increasing effectiveness based on a rigorous system of observation, self-criticism and total commitment to success. This report is an analysis of the transformation we have undergone since the beginning of the project to understand the dynamic of building rural productivity, and on account of the adjustments we have made to our program in response to the lessons we have learned.

When we began field activities in March 1985, our immediate goal was to create an effective program; to show people that we had an approach that worked and could make a difference in their lives. To do this we felt that we had to establish high standards of performance for our clients and ourselves. Accordingly, we were selective in choosing a small group of 104 individuals to work with, and were rigorous in our insistence that they adhere to our program of technical and managerial improvements.

The results of this approach were spectacular in some cases and very encouraging overall. Yields of maize, cowpeas and irrigated rice increased on an average of two and a half to three times among our 88 agricultural clients, and incomes rose accordingly. Non-agricultural businesspeople showed themselves capable of maintaining working capital at the same time they were repaying a loan, and they built equity in their enterprises. These productivity and financial gains were also matched by increases in skills and knowledge, the development of personal qualities and some social gains. The great majority of our clients took their financial obligations to PTP seriously, as we have so far recorded a loan recovery rate of 86 percent.

As 1986 began we were encouraged by the results of the first year: we had established the project on an operational level, had begun to win the respect of the population and other development practitioners in Togo and had recorded improvements in knowledge, technique and attitudes that had produced marked increases in productivity and incomes among our clients.

But at the same time we realized that this was only the beginning, for the changes in behavior we had observed after nine months were tentative and our scope of service delivery was very small. We knew that we had to increase the quality of our extension methodology in order to effect permanent changes in productivity and had to develop the ability to work with much larger numbers of clients in order to become more cost efficient. These two themes have become our major goals for 1986.

To strengthen our extension methodology, we are placing more emphasis on the clients understanding the why of technical change and in being able to better plan and analyze their economic activities. We have developed a strategy and methodology for training farmers in the storage and marketing of food crops in order to enable them to realize the maximum financial advantage from their increases in productivity. We have modified the training of our field agents to make them more able to effect permanent behavioral change.

To widen the scope of service delivery, we have developed a series of methodologies for working with groups of rural producers. Forty-four percent of our current agricultural clients, as opposed to only 5 percent last year, belong to some kind of group mechanism. We have also enlarged our field staff and have opened up a new zone of operations in the Avé sub-prefecture. The combination of our group methodology and a bigger, better-trained staff has resulted in an evolution in the agent/client ratio from 1/10 in 1985 to 1/22 this year. Also projected for the second half of this year is a major expansion of the project into the Zio River Irrigated Perimeter where we will be working with a group of 29 rice farmers to increase productivity in a 38 hectare section.

Through the first five months of 1986, these changes had resulted in large quantitative increases in the numbers of clients and projects we assist: 195 clients as compared to 104 for all of last year. We also feel that the qualitative changes are having a profound effect on our clients' behavior and are moving them in the direction of permanent productivity increases. Thanks to our monitoring and evaluation and management information systems, these changes are being documented. They will be analyzed and presented in a report at the end of 1986.

PART I

BUILDING RURAL PRODUCTIVITY IN 1985

Unfortunately, the practice of rural development is not a science. It does, of course, contain many scientific and technical elements, especially in the area of agricultural production. Were it just a matter of putting exact principles and techniques into practice, rural development would be easy because most of the technical solutions are evident.

What makes things hard and what transforms rural development from a science to primarily an art is the human factor. The development practitioner is constantly faced with the challenge of getting people who think and do things one way to see the value of and practice them in another, the goal being to help those people adapt to a changing world and realize a greater measure of their human potential.

Because people and cultures are so variable and prone to change, development practitioners must avoid "solutions" to development problems, solutions which may be technically correct but also incomplete and short-sighted and not adapted to the people who are expected to practice them. Instead they must seek to identify and commit themselves to a process. By process we mean a way of proceeding; an attitude that conditions one's approach for getting the point across in an ever-changing environment.

A process approach is inductive rather than deductive. It supposes no eternal truths or infallible models. It is based on experience, on what has worked to peoples' benefit and how things might work even better. It requires high standards of performance, intellectual honesty and a total commitment to the success of the endeavor. But one never totally succeeds with the process approach. The best one can do is to stay on the right path and continue moving towards ever-increasing effectiveness.

PfP/Togo has taken this approach in its attempt to increase rural productivity in the Zio River region. Consequently, this report is not just an account of what our clients and we have accomplished over the past twelve months. It is also an analysis of how things were accomplished, why they did or did not work, and most importantly what we learned and how we have adapted.

PfP/Togo's Underlying Principles

In the previous activity report, "Building Rural Productivity" (August 1985), we presented a detailed description of how we deal on a day-to-day basis with those rural producers and businesspersons that we call our clients, and our reasons for acting as we do. For the benefit of those who did not read that report and in order to put what follows in methodological perspective, we highlight parts of that discussion.

We start with the individual. We have observed that there is an enormous reservoir of knowledge and skill combined with a desire to improve among rural producers and businesspeople. So we begin with what people know and what they want to do. Building on this base we work with them to help them achieve a higher measure of their human potential.

We have also observed that the level of one's human potential is often linked to that of one's economic productivity. When people become more productive, they distance themselves from the marginal and uncertain life of subsistence. New options begin to open, life becomes a bit fuller, people grow more optimistic as they begin to gain more control over their lives. Our focus, consequently, is on assisting people create an economic surplus in the context of the activities they already practice: crop and animal production, artisan manufacturing and repair, small-scale commerce and food processing.

But the school of economic productivity is a rigorous one. Success requires the application of appropriate techniques, the presence of adequate amounts of capital and, above all, good management of resources. These elements are seldom all present in rural small-scale economic activities; often none are present. For this reason, PFP has established these three elements at the center of its productivity training methodology. It uses a staff of highly trained and motivated field agents to provide its clients with intensive field training in agricultural techniques and simple business management. It grants loans to those same clients to enable them to put into practice what they are learning.

Clients and their activities do not develop in a vacuum, however. They are part of a regional economic network, the pieces of which must exist in some sort of equilibrium to one other if things are to work. For example, it makes no sense to emphasize increased maize production if storage techniques are inadequate and the marketing system cannot absorb the surplus. Nor does it do any good to talk about the virtues of fertilizer if there is no institution to make it available or a credit system to allow farmers to buy it. PFP attempts to look at all the elements in the system. It works to develop those which are weak and seeks to exploit the complementarity among different agricultural and non-agricultural activities. Above all, we encourage people to use the system.

As the development of the individual does not occur in a vacuum, neither does it happen overnight. The change from production based on subsistence to the conscious generation of surplus is a profound one. It requires the mastery of new techniques as well as the adoption of new attitudes and new behavior. We therefore start with what is very simple and move progressively towards the more complex. For example, the first step in managing a more productive farm might be mastering improved production techniques for maize, the principle crop. From there one could move to a second and third crop, to storage, marketing and a simple economic analysis of what is happening within the farm. All of this could take several years. We try to proceed in a step-by-step fashion at a rate which allows people to develop at their own pace and maintain control over their activities and lives.

These, in brief form, are our principles. The discussion in the rest of Part I centers around how we put them into practice during the first year of the project, the results these actions produced and our conclusions at year's end.

Establishing an Effective Program

PFP/Togo's hypothesis for the evolution of a development program consists of the following model: effectiveness---->efficiency---->replication. The first task is to show people that the program has, in fact, something of value to offer. Consequently, the necessary effort and resources are applied in order to create something that works. Next comes a period of cost-efficient expansion when program management succeeds in delivering the same high-quality services on a wider scale and at reasonable cost. Finally, when high degrees of effectiveness and efficiency are achieved, the program is replicated elsewhere.

To arrive at effectiveness and to show the people of the Mission Tavé region that we offered services that responded to their needs and could make a difference in their lives, we concentrated on three main themes during 1985: methodology, the setting up of systems and the establishment of high standards. The methodology for upgrading small producer techniques, credit use and business planning and management was the easiest, since it had largely been developed and tested in the region during the operations research phase of the project in 1983-84. The difficult part involved initiating a brand-new field staff in its implementation.

Various systems were set up to permit us to work in a purposeful, organized way: client selection, credit delivery, agricultural input supply, testing and demonstrating improved production methods, extension, monitoring and evaluation, staff training, financial management and administration. None of these systems was perfect at the end of the year, but all worked and contributed to the quality of our program.

By far the most challenging task, however, was the establishment of high standards, both technical and behavioral, among our clients and ourselves. As we said earlier, the domain of increasing economic productivity is one fraught with risks. A whole series of elements like credit, training and inputs needs to be present, and, most importantly, things need to be done right. Maize that isn't weeded on time doesn't give the expected high yield. Clients who don't repay loans risk bankrupting the credit system. And the field agent who doesn't arrive for his appointment with the farmer for a pesticides application is sacrificing the beans to the insects. Consequently, we made a decision at the beginning of the project that our primary goal was to perform at the highest standard possible and to bring our clients up to those standards of skill, knowledge, attitude and the execution of an economic project that would have permanent effects on their levels of economic productivity. The remainder of Part I is devoted to an evaluation of how successful we were in reaching our goal in 1985 and of the impact of our actions on our clients.

The first year's clients and their projects

The watchword in choosing the first year's group of clients was selectivity. We were looking for a small sample of individuals who showed seriousness of purpose and were willing to give our system a try. We placed the emphasis on individuals rather than groups, since we did not have a well-defined methodology for working with groups at that time, especially with regard to credit. We were not primarily interested in cost-efficient service delivery, having made the decision to spend the necessary time and resources to make things work.

Two hundred and three requests were made for assistance in 1985 of which 104 became projects (a project consists of producing one or more rainfed food crops over one season, an irrigated rice crop, livestock raising or a non-agricultural business). These projects were carried out by 108 individuals. The reason for the large difference between the number of requests and the number assisted was the client selection system. Having heard that PFP had a credit fund, many people believed that we were a financial institution, and were disappointed to learn that they were not able to obtain just a loan. Many objected to the long interview process, the system of "tasks" whereby they had to make some concrete gesture of their good faith and interest in collaborating with PFP before receiving assistance, and accepting the training and follow-up that went along with the financial assistance package. While we did not succeed in eliminating everyone whose motive was simply to obtain money, the great majority of clients proved sincerely interested in learning how to increase their productivity.

We had said at the beginning of the project that we would make a special effort to work with women and "young farmers" (youth who had participated in a special two year agricultural training course). Fourteen percent of the first year's clients were women, two thirds of them undertaking non-agricultural activities. We also worked with sixteen young farmers, five of whom were organized into a producers group. With a couple of exceptions, the experience with these young people was disappointing, the reasons for which will be explained below.

A regional socio-economic baseline study we had performed before beginning field work indicated that the activity that interested most people was agricultural production. This was borne out by the distribution of projects by economic sector as indicated in Table 1 below. Eighty five percent of the projects were in either rainfed or irrigated crop production with the rest in small non-agricultural activities and livestock.

We consciously downplayed the importance of money in increasing productivity and put most of our emphasis on good technique and management. This is illustrated by the small size of the loans. The average loan overall was 77,196 cfa (\$184 at the 1985 exchange rate of \$1.00 = 420 cfa) and only 44,145 cfa (\$105) for rainfed crop production which comprised 60 percent of the projects.

Table 1

Clients/Projects Assisted by
Economic Sector
1985

Sector	# Projects	# Clients		Amount loaned(CFA)	Average loan(CFA)
		M	F		
Crop Production (rainfed)	62	54	4	2,737,010	44,145
Crop Production (irrigated)	26	33	1	3,598,100	138,388
Livestock	1	1	-	450,000	450,000
Commerce- Consumer goods	5	-	5	529,200	105,840
Commerce- Raw materials					
Commerce- Food crops	1	-	1	90,000	90,000
Commerce- Food processing	5	-	5	276,800	55,360
Artisan Production	4	4	-	347,320	86,830
Artisan Repair					
Transport					
Totals	104	92	16	8,028,430	77,196

Impact on Agricultural Productivity and Incomes

1985 proved to be a good beginning in terms of concretely showing regional producers how good organization and technique can result in increased productivity. In many cases the impact of the project on productivity was dramatic. But, at the same time, it was often uneven. The experience of 1985 was more an illustration that peasant agriculture can be productive and financially rewarding than proof of any permanent changes in the way agriculture is practiced. We will need to make a considerable effort to build on the successes of 1985 in order to effect permanent change.

The data we present in the rest of Part I on PFP-assisted producers comes from the project's monitoring and evaluation system that records economic performance, the learning of productive skills and attitudes and social gains both during and following the completion of each individual project. Crop yields for maize and cowpeas were determined by an agent of the Agricultural Statistics Service using sample plots placed in each client's field. Rice production was calculated by actually weighing each client's total production at the Centre Rizicole du Zio at Mission Tové. Comparison data is drawn from a socio-economic survey of 161 households in the Mission Tové area in November 1984 (a year, incidently, when rainfall was slightly better than that in 1985 - hence a good year for comparison). Thirty eight survey questionnaires were randomly selected from that group to make the statistical comparisons found below. We have also used the most recent Agricultural Census (1982-1983) as a check on survey findings in such areas as land area cultivated and crop yields.

We assisted farmers with four crops during the two growing seasons of 1985: maize, cowpeas, peanuts and irrigated rice. Table 2 shows the number of farmers assisted and area cultivated by crop. The discussion on productivity following that table will center on maize, cowpeas and rice, the most significant of the four.

Table 2

<u>Crop</u>	<u>Farmers assisted</u>	<u>Area cultivated</u>
Maize	41	44,9 hectares
Cowpeas	40	18,7
Peanuts	9	2,4
Irrigated rice	34	28,0

Maize

We said earlier that one of PFP's underlying principles in building productivity is to start with what people know and feel comfortable with. In rainfed agriculture in the Maritime Region this translates into working with maize, the staple food. Maize is not the most profitable crop and it is more sensitive than cowpeas and peanuts to periods of drought. But since it is the crop into which people put the most effort, we felt it a good place to start for teaching a more intensive and productive style of agriculture.

The basis of our training is a "technical package", almost identical to that proposed by the DRDR. For one hectare we recommend 25 kilograms of NH-1 improved seed, three packets of Thioral seed treatment, 250 kilograms of fertilizer consisting of 200 kilos of NPK 15-15-15 and 50 kilos of urea. Spacing is 30 centimeters between pockets and 80 centimeters between lines. We recommend thinning to one or two plants per pocket for a total plant population of between 40,000 - 60,000 per hectare.

Farmers who followed this package and who were rigorous in their adherence to the agricultural calendar had spectacular results, especially during the long growing season. As a group, the 29 producers whose yields we were able to measure during that period experienced yield increases of almost two tons over the previous year. (During the interview that each candidate for PFP assistance undergoes, baseline information is gathered on the previous year's production. While we have no way of verifying that information, we have noticed that it usually corresponds with information gathered by various regional socio-economic surveys, including our own). Compared with 34 producers in the region who had not benefited from PFP assistance (and who almost certainly did not apply the technical package) the yields were about one and a half times as great: 2,671 kgs/ha against 1,024 kgs/ha. These results are presented in graphs in Tables 4 and 5 on the next page. Supporting these results is a demonstration test plot supervised by the PFP agronomist in Mission Tové. Using the same NH-1 variety, applying the same techniques and experiencing the same climatic conditions, he obtained 2,805 kgs/ha.

The yields during the second season were not as dramatic. Because this season is shorter and the rains more capricious, there is less room for error on the part of the farmer. Three of the eight farmers whose yields we measured experienced delays in planting and fertilizer application. This, combined with a twenty day dry spell in November when most maize plants were reaching maturity, reduced the average yield to 1,300 kgs/ha, a yield which is still 60 percent higher than the 800 kgs obtained by farmers using traditional methods. By comparison, the PFP agronomist obtained a yield of 1,718 kgs/ha on the demonstration plot at Mission Tové.

Cowpeas

Few Zio River farmers have mastered the growing of cowpeas and they remain a minor crop. They are extremely susceptible to insects; left untreated they yield an average of only 300 kilograms per hectare. Properly cultivated and treated with pesticides, however, they can yield a ton or more. Cowpeas do not compete for labor with maize, being planted when most of the work for that crop has finished. There is a ready local market for cowpeas, and when a normal yield of a ton is obtained they are more profitable than maize. For these reasons we decided to promote cowpeas as a complementary crop which farmers could rapidly sell to satisfy their cash needs while waiting for the price of maize to rise.

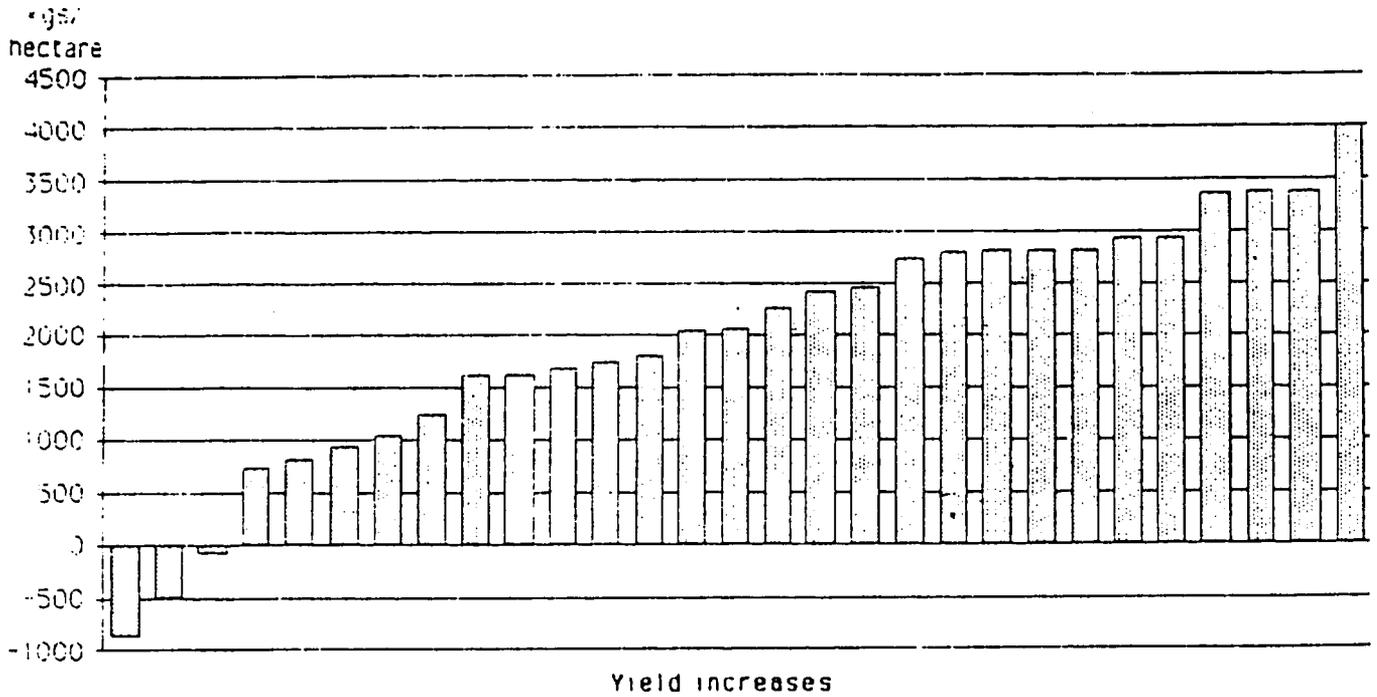
The technical package inputs consist of an improved seed variety, VITA 5, 50 kilos of triple superphosphate, 50 kilos of potassium chloride and three pesticides: Thioral for seed treatment and Decis and Malathion for insect control. In addition to timely weeding, the critical element in the agricultural calendar is the five insecticide treatments which begin between the 20 and 25th days and continue at 10 to 15 day intervals until the harvest.

During the long growing season the PFP agronomist performed several cowpea trials on the demonstration plot in Mission Tové, obtaining very high yields that averaged 2,270 kgs/ha. This demonstration attracted a lot of farmers and encouraged some to request assistance from PFP. The results at their level were not as spectacular although considerably better than what they would have gotten using traditional methods, and as a group not far from the one ton target.

Table 3

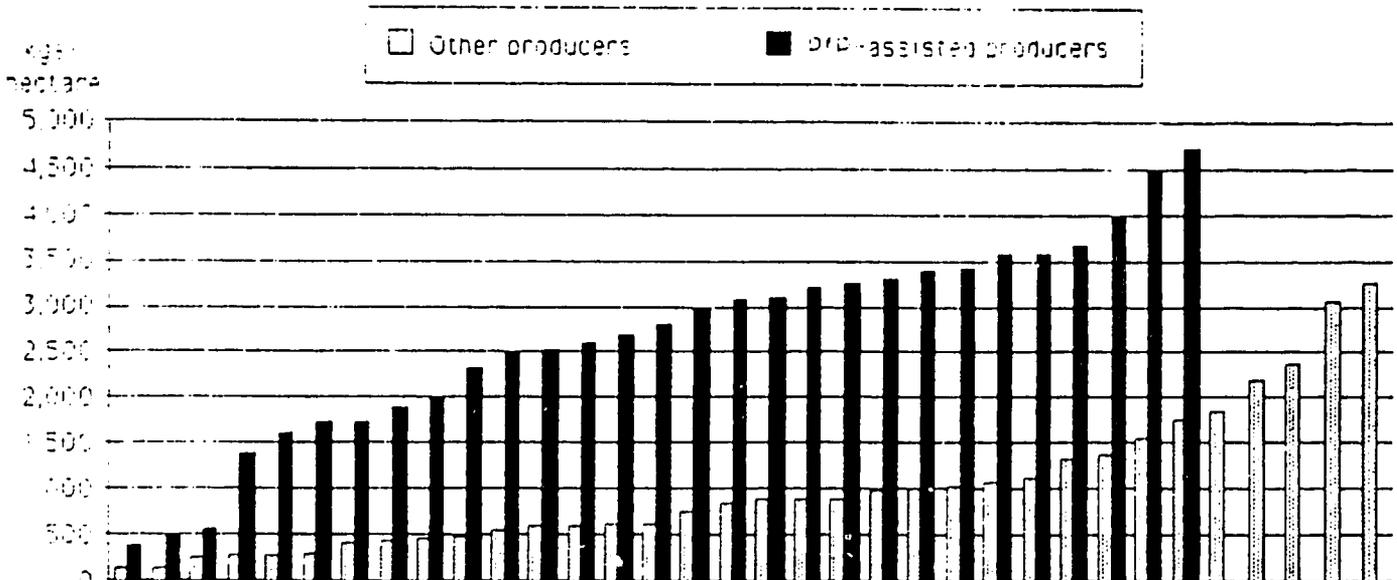
<u>Farmers</u>	<u>Yield (min-max)</u>	<u>Average yield</u>	<u>Traditional yield</u>
8	675kgs-1480kgs	884kgs	300 kgs

1985 INCREASES IN MAIZE PRODUCTION AMONG
PFP-ASSISTED PRODUCERS
(As Compared to the 1984 Long Growing Season)



This graph represents a population of 29 producers
The average yield increase is 1,977 kgs/hectare

COMPARATIVE MAIZE YIELDS AMONG
REGIONAL PRODUCERS
(1985 Long Growing Season)



Information concerning the 34 'other producers' was taken from a randomly selected sample population surveyed annually in APP/Togo's Sio River Region Socio-Economic Baseline Study

Average yield for PFP-assisted producers 2,671 kgs/ha
Average yields for other regional producers 1,024 kgs/ha

Encouraged by these results, farmers requesting assistance appeared in greater numbers during the second season. Like with maize, however, yields dropped to 467 kgs/ha, and for many of the same reasons; poor distribution of rain and faulty technique. In addition an insect appeared which could not be identified by the Plant Protection Service and against which our insecticides proved ineffective. The demonstration field of the PTP agronomist suffered from the same insect attack which lowered the yield to 560 kgs/ha.

Nevertheless, the experience with cowpeas was an interesting one. Cowpeas offer great promise to farmers who are looking for a crop to plant behind maize that will have a substantial impact on their cash incomes. The challenge for us is to convince them of the importance of rigid adherence to good technique in order to obtain higher yields and planting the crop on a larger surface area to make the monetary returns as interesting as possible.

Irrigated rice

The Zio River region has a unique economic opportunity in the form of the Zio River irrigated perimeter, a tract of approximately 350 hectares that affords farmers in the villages of Mission Tové, Kovié and Assomé the possibility of augmenting their cash incomes by cultivating irrigated rice. Unlike rainfed crops which can be cultivated successfully on an individual basis, irrigated rice requires a coordinated effort among groups of farmers who depend on the same water source and drainage system and who must share such common resources as rototillers for land preparation, drying and storage facilities and winnowers and decorticators for processing. With the exception of periods when the irrigated perimeter benefited from Taiwanese and Chinese technical assistance, this coordination has not existed, and as a result perimeter farmers have not been able to realize their great productive potential.

Given the organizational and managerial nature of the problem, our perimeter strategy in 1985 was to work with a sample group of rice farmers to see what could be accomplished agronomically, while at the same time developing a longer term plan for working with groups of farmers. We will present the outline of the plan in Part II of this report, concentrating here on the results of the two agricultural campaigns of 1985.

The technical package for rice is the same proposed by the Centre Rizicole du Zio (CRZ), the government service responsible for the management of the perimeter infrastructure. Correct application of the package should yield an average of three tons of paddy rice. There are several varieties of improved seed (IR28, MRC, ADNY11, BR) that can produce 4 to 5 tons of paddy rice under ideal conditions. Fertilizer includes 300 kilos of NPK 15-15-15 and 150 kilos of urea. Two treatments with the insecticide Sumithion are also recommended. Critical operations in the rice calendar include preparing the nursery, transplanting, controlling the level of water in the paddy, protecting the ripening grain against birds and a timely harvest. Irrigated rice is by far the most labor intensive of the crops we work with.

The farmers we chose to assist fell into two groups: those with more experience who had worked with the Chinese in the past and who had produced good results, and those for whom rice was a newer crop. The first group predominated during the long season and made impressive yields. Because of those results we increased the number of farmers during the second season, admitting those with less experience. The two seasons concluded as follows.

Table 6

<u>Season</u>	<u>Farmers assisted</u>	<u>Area cultivated</u>	<u>Yield</u>
1	13	9.9 has.	3.4 tons
2	21	18.1	1.9

While a higher level of experience was certainly an important factor in the successful first season, there were reasons besides experience that explain the relatively poor performance of the second (by comparison, a hectare of irrigated rice on which improved techniques are not used can be expected to yield 1.5 tons). One was the degenerated quality of much of the seed that was used. We observed especially that the variety IR28 has been used for several years without genetic renewal. Another was the scarcity of rototillers which caused delays both in starting the season and in transplanting. A third was poor water management as manifested in the form of uneven surfaces in many of the paddies and clogged drainage canals. Finally, there was a two week interruption in the supply of irrigation water due to a break in one of the principle canals.

As with maize and cowpeas, the 12 irrigated rice projects out of 26 that succeeded in producing 2.5 tons or better, showed both the productive potential and the economic profitability of improved agricultural techniques. Living through the problems of the perimeter for an entire year with these farmers gave us a better idea of how to proceed in 1986.

Impact on Incomes

What was the impact of these productivity increases on farm incomes? To answer this question we calculated the net return on an average rainfed farm for maize, cowpeas and peanuts for both farmers using traditional methods and PFP clients. The details are presented in Tables 7 and 8 below. Figures on surface area cultivated and yields for traditional farms were taken from the 1982 - 1983 Agricultural Census. Interestingly, both these figures as well as the calculation of net return coincide with information obtained by PFP in 1985 during a socio-economic survey of the Avé region near Mission Tové. Prices to the producer were conservatively calculated based on regional price surveys conducted during the year.

The results show a net return of 122,565 cfa coming from improved techniques against 44,120 cfa on traditional farms. Included in these amounts is agricultural produce kept by the family for its own consumption.

The difference is striking. But what is even more interesting about these figures is the potential for still better performance. Farmers could make a much greater effort, for example, to increase cultivated surface area, especially for the more profitable crops like cowpeas and peanuts. Yields of both these crops could also be increased through better application of the technical packages. Other profitable crops like okra, red peppers and other traditional vegetables could provide additional income. Much could also be done to obtain better prices by adopting improved storage techniques.

Improved technique, however, will not be enough to realize this potential. Farmers will also need to become more adept at analyzing the economics of their operations in order to be able to make the informed decisions that will bring them still greater productivity and incomes. This analytical ability backed up by solid technique will make a great difference in their economic lives.

Table 7

Net Return for an Average Farm (Improved Techniques)
1985

Crops	Maize	Cowpeas	Peanuts	Okra	Pepper
Cultivated area (ha)	1.1	0.5	0.3		
Average yield	2,600	600	900		
Production (kg)	2,860	300	270		
Price to the producer (FCFA)	45	120	120		
Gross Income (FCFA)	128,700	36,000	32,400		
Cash Expenses (FCFA)					
Seed	4,125	1,875			
Fertilizer	13,750	1,250	750		
Pesticides	400	10,150	4,170		
Salaried labor	17,790	9,735	6,040		
Total Expenses (FCFA)	36,065	23,010	15,460		
Net Return (FCFA)	92,635	12,990	16,940	TOTAL=	122,565 =====

Table 8

Net Return for an Average Farm (Traditional Techniques)
1985

Crops	Maize	Cowpeas	Peanuts	Okra	Pepper
Cultivated area (ha)	1.4	0.05	0.04		
Average yield	800	300	650		
Production (kg)	1,120	15	26		
Price to the producer (FCFA)	45	120	120		
Gross Income (FCFA)	50,400	1,800	3,120		
Cash Expenses (FCFA)					
Seed					
Fertilizer					
Pesticides					
Salaried labor	11,200				
Total Cash Expenses (FCFA)					
Net Return (FCFA)	39,200	1,800	3,120	Total=	44,120 =====

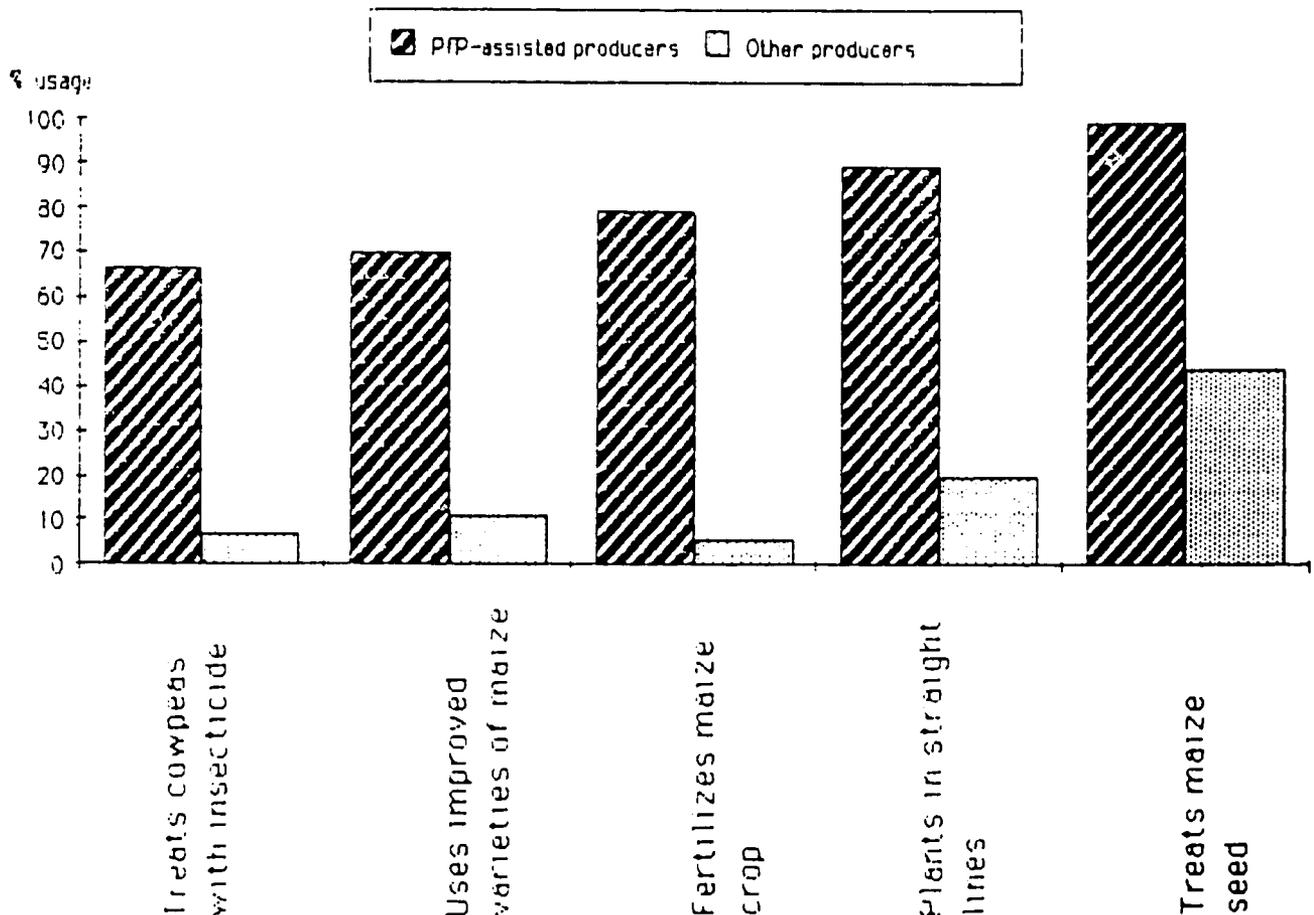
Development of Skills and Knowledge

The increases in productivity and incomes that we described above were not an accident. They were directly related to the fact that a certain number of people undertook productive activities in different and better ways by learning new techniques.

In Table 9 below we show the extent to which improved agricultural practices were adopted by PFP assisted producers. Of the twelve techniques listed, the first ten were practiced by a majority of the 29 producers surveyed. These ten practices involve techniques contained in the technical packages that our field agents intensively promoted. The two least practiced techniques, planning and recordkeeping, were not themes that we stressed very strongly. They are more abstract in nature and less related to producing rapid and dramatic results. However, as we said in the previous section, good technique must be accompanied by analytical ability in order for productivity gains to be sustained over time. As our clients master agricultural techniques, we will consequently be stressing more analytical skills, especially the capacity to calculate the profitability of different agricultural operations.

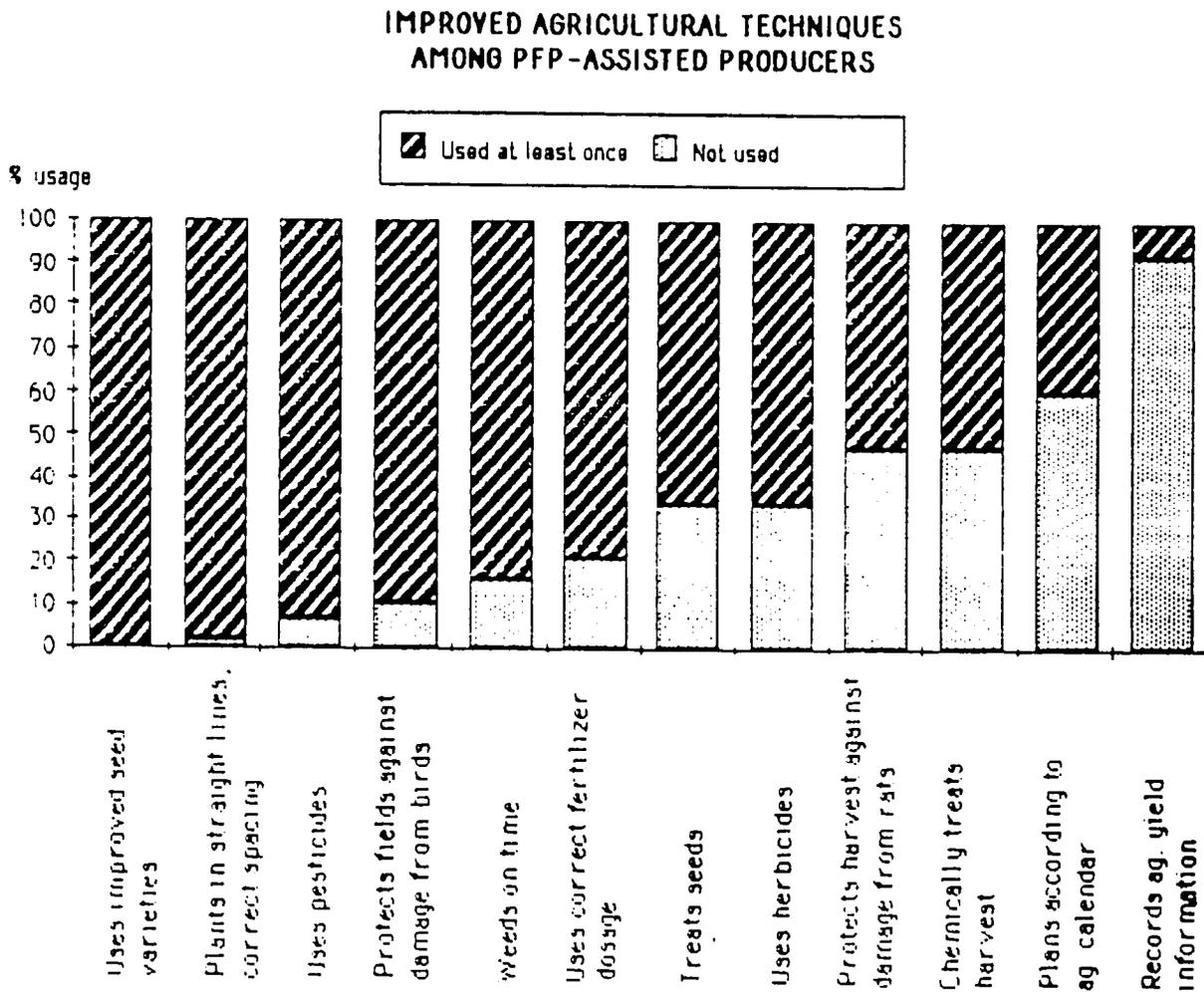
What this table unfortunately does not show is how well these techniques were practiced and to what degree they really became part of the farmer's way of doing things. Our impression is that farmers will require a lot of institutional support for these new skills to become permanent.

Table 9 ADOPTION OF IMPROVED AGRICULTURAL PRACTICES AMONG REGIONAL PRODUCERS



In showing a great disparity between our clients and other regional producers in the adoption of improved agricultural practices, Table 10 below, combined with the other data we have presented, makes a strong case for a cause-effect relationship between improved skills and increased productivity. Of course, the evidence is still tentative as this data is only based on the first year of work. But already it shows a trend, and it is this trend which we will focus on and try to prove or disprove in the future to discover precisely what blend of environmental and behavioral traits really make for increased production and productivity.

Table 10



Attitudes and Personal Qualities

In addition to analyzing the relationship between productivity and skills, we are also interested in observing clients' attitudes and personal qualities that might have a bearing on their economic productivity.

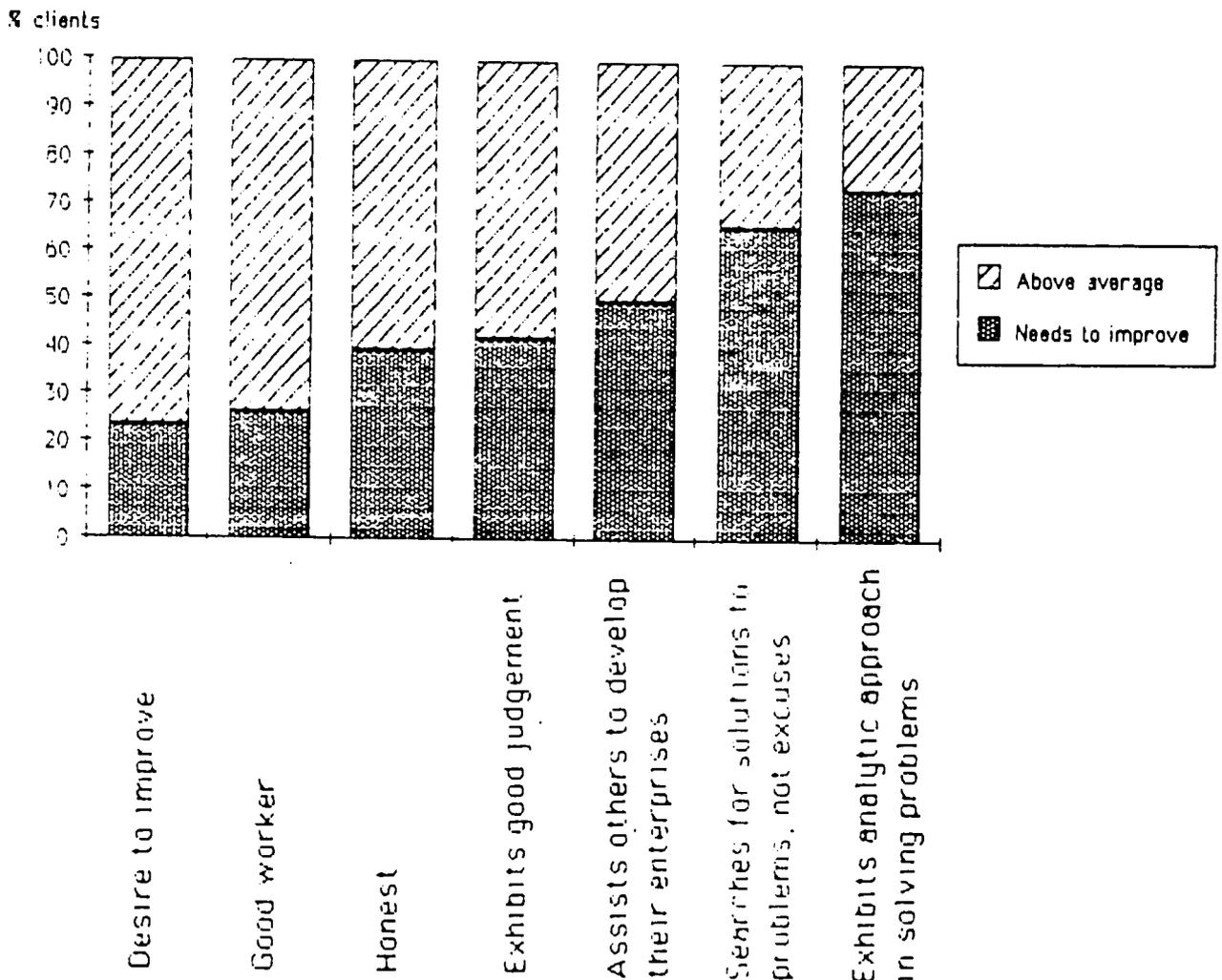
Table 11 is a rating of clients' entrepreneurial qualities made by our field agents. It reveals that the majority of our clients are hard working, desire to improve and have been open and forthcoming with PFP. Less prevalent are qualities related to a systematic, analytic way of solving problems and changing behavior.

This distribution of qualities seems logical. For in the process of behavioral change, there first comes an initial motivation and willingness to work at change. Then come qualities necessary for change: the important ability to be honest with others and with oneself; good judgement to select and keep doing what are healthy practices; and a willingness to share positive change with others and also be supported in further accomplishment of it. The hardest to accomplish is the development of critical consciousness about oneself; that is the skill that most leads to self discovery and breakthroughs in performance. To get to that critical self-consciousness, one has to believe that he or she is the source of whatever is going to happen, and therefore the locus of responsibility. It is interesting that our field agents felt that only about 35 percent of the clients we worked with had this locus of responsibility placed within themselves. And only 30 percent of the clients had an analytic approach to problem-solving.

Placed next to the data on agricultural productivity, this chart suggests that the PFP field agents are as much (or perhaps even more) responsible for change at this point than their producer clients. It points out the need for our training system to place more emphasis on analytical ability and making our clients realize that they are primarily responsible for their own development. Over the life of the project we will be analyzing data on management skills and personal qualities to see if this transformation takes place.

Table 11

DEVELOPMENT IN ENTREPRENEUR QUALITIES
AMONG PFP-ASSISTED PRODUCERS



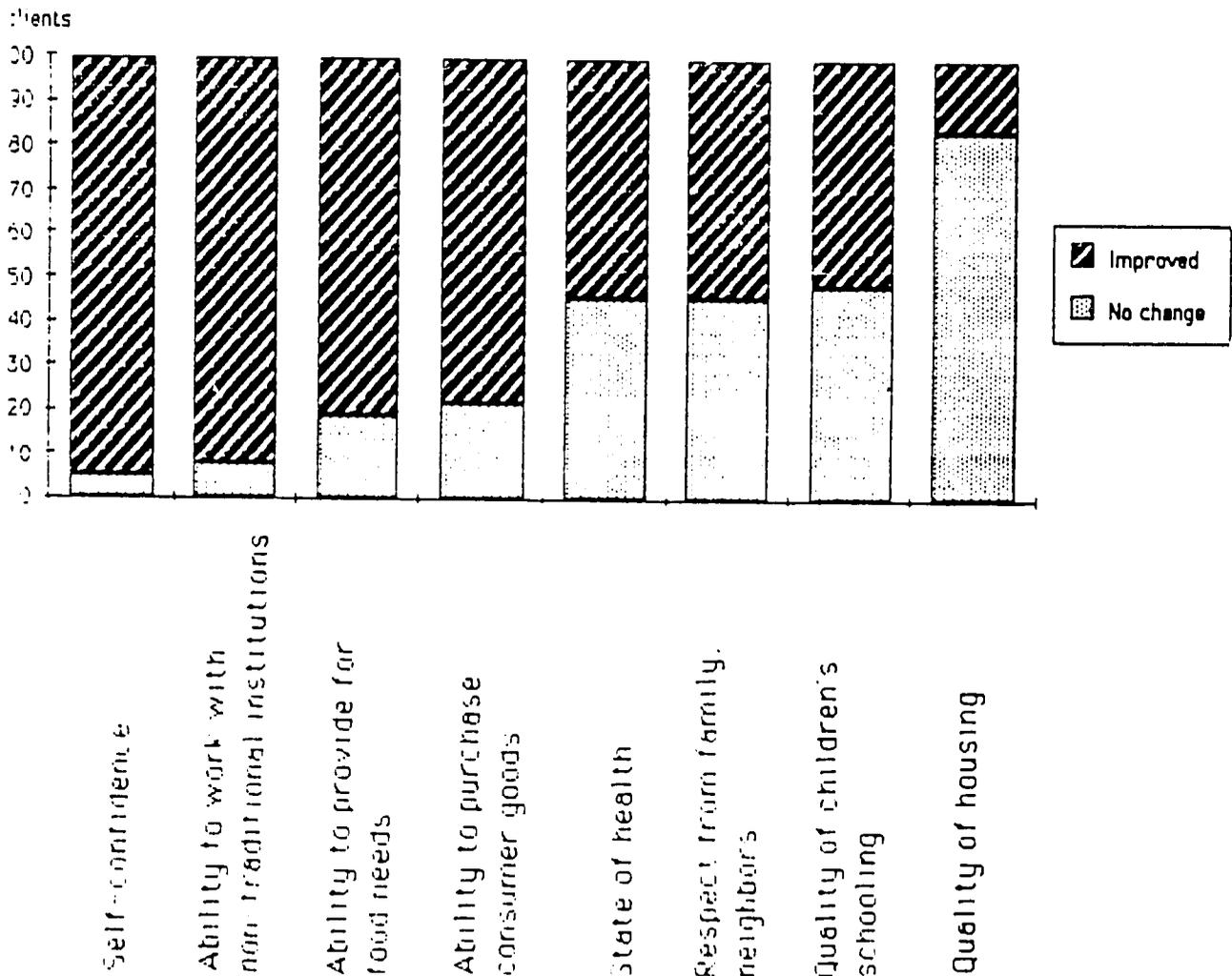
Human and Social Gains

Earlier we made reference to certain quality-of-life changes that we have observed among clients who succeed in small economic activities. Material conditions tend to improve as incomes rise. People gain in self-confidence as they realize that their improved condition is largely a result of their own efforts. Life in general becomes fuller.

Following completion of their projects, clients are asked to compare their present situation with that of the previous year. Table 12 reveals the responses after the first agricultural season.

While one season is much too short to be able to claim any permanent social gains, this table nevertheless reveals trends that we will be tracking throughout the project. Nearly everyone thought they made psychological gains both in terms of their own self-confidence and in being able to deal on a business-like basis with a non-traditional institution like PFP. And many believed they won increased respect from family members and friends. A striking 80 percent felt they made gains in food security and the purchase of consumer goods. Improvements in the state of health and the quality of education probably are a reflection of the fact that people had more money to spend on those things than real quality increases. Little change in the quality of housing is logical, since no one could be expected to improve much after just one good season.

Table 12 1985 SOCIAL GAINS AMONG PFP ASSISTED CLIENTS
(Clients' Assessments in Comparison
With One Year Ago)



Performance of Non-Agricultural Clients

Our involvement with non-agricultural clients has so far been minor. The importance of agriculture to the regional economy, our desire to develop an effective extension methodology and the great amount of time it takes with agricultural clients to make sure that things are being done right have influenced us in the direction of small farmers and their agricultural activities.

Nevertheless, non-agricultural activities are important to the development of the regional economy. Food processing, small-scale trade, transport and artisan activities are all complementary to agriculture. They provide goods and services that farmers need and they absorb parts of their production and incomes. They also serve as an important source of income for many families, and are the primary economic activities of many women.

Our approach to the development of non-agricultural activities is a lot simpler than for agriculture. We have noticed that the most important factor in the success of a rural small business is the maintenance of working capital. Unfortunately, many small business people do not understand this principle, considering all assets in the activity as the owner's personal property that can be withdrawn as needed.

Our assistance, consequently, centers on teaching people to maintain a revolving fund: how to recognize and calculate the value of its component elements; how to separate working capital and profits; and how to maintain or increase the fund while paying back a loan.

Our primary tool is the balance sheet. Field agents do periodic balance sheets when they make visits to the place of business, usually once a month. In this way they accustom the client to analyzing the financial performance of different parts of the business, and allow him or her to identify problems before they get out of hand. These balance sheets also provide us with reliable information for our two non-agricultural performance indicators, working capital management and increases in owner equity. In Tables 13 and 14 on the next two pages we present the performance results of 17 non-agricultural projects over a fifteen month period. To complete these tables we took the amounts of working capital and owner equity recorded on the first balance sheet done after the granting of the loan and compared it with the same information on the most recent balance sheet.

In terms of maintaining working capital, the seventeen projects as a group showed a slight increase of 3 percent. Nine of the seventeen increased their funds from a low of 2 percent to a high of 87 percent. The other eight showed decreases ranging from less than one percent to 50 percent. It is interesting to note that six of the eight projects to show a decrease involved manufacturing or processing. By contrast, seven of the nine to show an increase were commercial activities. This is probably in part a reflection of the fact that demand for commercial goods is more constant than for manufactured ones. Another interesting result of this analysis is that all the activities showing an increase were managed by women. On the other hand, all four of the male-managed businesses experienced decreases in working capital.

The growth in owner equity was positive in all but two cases, ranging from a low of 5 to a high of over 700 percent. These substantial increases are due to the fact that many of the non-agricultural clients have few personal assets invested in their activities at the outset, but are able to rapidly build equity by maintaining their working capital while paying off their loan. It is a graphic illustration of how to become wealthier while paying one's debts.

Table 13

NON-AGRICULTURAL PROJECTSEvolution of Working CapitalMarch 1985 - May 1986

Loan No.	Activity	Period (months)	Working Capital		Change	%Change
			Beginning (FCFA)	Ending (FCFA)		
MT 8	Weaving	12,0	258,325	203,130	-55,195	- 21
9	Commerce (general)	12,0	136,747	116,250	-20,497	- 15
9-2	Commerce (general)	1,5	324,940	330,620	5,680	2
43	Carpentry	12,0	120,420	64,785	-55,635	- 46
44	Fufu Bar/Commerce	11,5	78,500	146,800	68,300	87
45	Blacksmithing	11,3	107,675	75,025	-32,650	- 30
46	Bakery	10,5	48,600	73,705	25,105	52
47	Commerce/Used clothing	11,3	244,000	277,100	33,100	14
49	Commerce/Cowpeas	10	107,000	106,575	- 425	- 1
52	Commerce/Sugar/Soap	6	51,150	74,900	23,750	47
53	Carpentry	6,2	105,300	96,880	- 8,420	- 8
54	Kernel oil	7,1	80,000	59,390	-20,610	- 26
75	Commerce	2,3	249,470	324,185	74,715	30
79	Commerce/Jewelry	5,0	87,010	130,468	43,458	50
80	Kernel Oil	6,4	41,625	22,950	-18,675	- 45
81	Kernel Oil	6,4	35,725	38,510	2,785	8
82	Commerce/Miscellaneous	4,1	96,495	102,015	5,520	6
Totals		8,2	2,172,982	2,243,288	70,306	3

Table 14

NON-AGRICULTURAL PROJECTS

March 1985 - May 1986

Evolution of Owner's Equity

Loan No.	Activity	Period (months)	Owner's Equity		Change	% Change
			Beginning (FCFA)	Ending (FCFA)		
MT 8	Weaving	12.0	248,130	244,130	4,000	- 2
9	Commerce (general)	12.0	54,847	119,650	64,803	118
9-2	Commerce (general)	1.5	130,540	155,345	24,805	19
43	Carpentry	12.0	199,855	245,580	45,725	23
44	Fufu Bar/Commerce	11.5	38,650	207,510	168,860	437
45	Blacksmithing	11.3	208,325	294,405	86,080	41
46	Bakery	10.5	30,665	89,110	58,445	191
47	Commerce/Used clothing	11.3	129,000	291,400	162,400	126
49	Commerce/Cowpeas	10.8	32,000	94,845	62,845	196
52	Commerce/Sugar/Soap	6.7	6,250	50,345	44,095	705
53	Carpentry	8.2	94,200	59,870	- 34,330	- 36
54	Kernel Oil	7.1	60,750	65,570	4,820	8
75	Commerce (general)	2.3	72,307	167,335	95,028	131
79	Commerce/Jewelry	5.0	32,020	107,348	75,328	235
80	Kernel Oil	6.4	22,800	24,625	1,825	8
81	Kernel Oil	6.4	35,125	36,900	1,775	5
82	Commerce/Miscellaneous	4.1	17,045	49,965	32,920	193
Totals		8.2	1,412,509	2,303,933	891,424	63

Loan Reimbursements

Increasing one's productivity with borrowed money is a good thing; in fact, very few farmers are able to advance significantly in their agriculture without access to some form of credit. But in order for a rural credit system to function, advances in technique, productivity and incomes need to be accompanied by sincere intentions and timely action when it comes time to repay the loan. Our experience in extending credit to and recovering it from rural producers has, on the whole, been positive. But it has not been easy.

When we came to the Zio River region, it is probably safe to say that most people viewed us as a financial institution: a place where they could come to get money that somehow would be invested in farming and other projects of an economic nature. They did not understand at first that we are basically a training institution, and they certainly did not comprehend how we used credit as a training tool. They also did not understand that we were serious about high standards of performance, both in terms of executing an economic project and repaying the loan. Some had had experience with other attempts to extend credit to rural producers in which high standards were not enforced. For them the first experience with PFP was a test to see how serious we really were.

The result of these different perceptions is that we have had to spend an enormous amount of time with our clients explaining the role of credit in our system and making the point that we are serious about recovering our money. Most have responded favorably. But the achievement of high performance levels of loan reimbursement remains one of our biggest challenges.

In Table 15 on the next page we present the repayment situation as of May 31, 1986 for the 103 loans we made on which repayment has begun. These loans total 8,390,430 cfa of which 4,075,855 cfa is still outstanding. 1,205,675 cfa, or 14 percent of the loans made, are considered late. In the context of agricultural projects, "late" loans are those which are still outstanding after the reimbursement limit which has been fixed for a particular season. For example, all long season rainfed loans had to be repaid by November 30, 1985. Those of the short season by March 31, 1986. "Late" non-agricultural loans are those for which the regular monthly payments called for in the loan contract are not being made on time.

In addition to the general attitude towards credit mentioned above, there are a number of individual factors that influence reimbursement performance in each of the economic sectors. In rainfed agriculture, where nearly all of the delinquencies are located, we experienced three distinct problems. One involved the difficulty that many farmers have in selling large quantities of their crops at a particular time due to lack of availability of farm to market transport and an efficient marketing system. Because of this they tend to progressively sell off their crop in small quantities, a fact which makes reimbursement difficult, since the small quantities of money tend to be spent on personal needs rather than put aside for a loan reimbursement. To remedy this situation we agreed to accept reimbursements in kind, an offer which many farmers accepted.

A second problem was the poor second season in which many of our clients, despite overall acceptable yields, experienced a loss. They simply were unable to produce enough to pay back their loans, although 24 of the 27 clients who received loans have repaid at least a portion. Recognizing this good faith, we have refinanced projects for some during the current agricultural campaign to enable them to pay off last year's debts.

Table 15

**LOAN REIMBURSEMENT
SITUATION**

Date: 31 May, 1986

Economic Sector	Loans made		Loans repaid		Loans written off		Loans Outstanding		Late Reimbursements					
	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
Crop production (rainfed)	58	2,237,010	19	1,636,780			39	1,100,230			22	551,530	17	548,700
Crop production (irrigated)	26	3,598,100	9	1,660,795			17	1,937,305					1	88,000
Livestock	1	450,000		74,340			1	375,660						
Non-agricultural	17	1,515,320	4	965,160			13	640,160	1	4,950	1	12,495		
Marketing	1	90,000		67,500			1	22,500						
Totals	103	8,390,430	32	4,403,575			71	4,075,855	1	4,950	23	564,025	18	636,700

A third problem involved a portion of our clientele known as the "young farmers", youth who had received two years of practical agricultural training in the hope they would choose farming as a career. Since there was a group of around 150 of these young people in and around Mission Tové when the project began, we had made a special commitment to include them in our activities. Our experience with them has been disappointing. They have proven unrecaptive to our approach, do not put forth the effort required to succeed in agriculture and produce at lower levels than local farmers who have not had the benefit of two years of agricultural education. In addition, most were heavily in debt when they came to PFP, a fact that they did not share with us. With a couple of exceptions, they have shown themselves to be irresponsible in paying back their loans. As of the end of May they accounted for 45 percent of the loans delinquent longer than six months. Most of this money, totalling 228,225 cfa, will probably have to be written off.

Irrigated rice loans have been much less of a problem. All but one from the first season were repaid on time. The exception involved a farmer whose field flooded and who had no harvest. He is working with us this year on a rainfed project in order to pay back last year's loan. Rice from the second season is still being harvested, milled and sold, and reimbursements are being made both in cash and in kind. Unfortunately, 727,325 cfa, or 37 percent of the outstanding rice loans are in the hands of six young farmers whose production was poor. We anticipate eventually having to write off much of this money.

The fewest problems of all have been encountered in the non-agricultural and livestock sectors where 25 percent of loans have been made. A significant contributing factor here is that because of the nature of these activities, people have a steady income. Once they learn to separate working capital from profits there is no real reason not to reimburse. Coming to the office once a month with a payment becomes a habit.

Our goal is to make reimbursement a steady habit with agricultural clients as well. To this end we will be emphasizing more profitable rainfed projects; that is, de-emphasizing maize and encouraging crops like cowpeas, peanuts and vegetables that have a higher value per hectare and can be more easily sold for cash. We will also put more stress on marketing; giving farmers the management and technical capability to better organize the collection and storage of their crops so that they can take advantage of higher prices. Finally, we are going to make people more aware of their responsibility to PFP as an institution; aware of the fact that it can only help them as long as they value and protect it.

Conclusions of 1985

Our overall reaction to the way things had gone during the first year was one of enthusiasm and optimism. We had succeeded in establishing PFP on an operational level in the Mission Tové area and had begun to win the respect of the population. The great majority of our clients had demonstrated improvements in knowledge, technique and attitudes that produced marked increases in productivity and incomes. Development practitioners in other regions and at the national level were beginning to take an interest in what we were doing.

But at the same time we realized that this was only the beginning, for the changes in behavior we had observed were only temporary and our scope of service delivery was very small. Qualitative improvements in our methodology were necessary if we were to become truly effective in bringing about permanent changes in productivity. We also had to develop the ability to work with much larger numbers of clients in order to advance towards the goal of cost-efficient service delivery.

In terms of methodology, one of our strongest points was our production and management techniques. Farmers and small businesspeople who put them into practice saw that they had a favorable impact on productivity. They were sound solutions to technical problems. But as we gained more experience in communicating these techniques we began to realize that we were limiting our explanations to what the client was expected to do and how he or she was supposed to do it. In this respect our approach was one dimensional, for it didn't necessarily result in an understanding of why a given technique was useful or desirable.

To strengthen our methodology in the direction of promoting a greater understanding of productivity, we saw a need to provide our clients, especially the agricultural ones, with more analytical ability. Not only did farmers need to discover the reason behind a certain technique. They also had to begin viewing agriculture not just as one or two fields to be cultivated for a growing season, but as a business that was geared to produce a surplus and make a profit. To do this they would have to take a longer term view of the future, develop skills in planning, be able to calculate the profitability of different crops and develop a marketing strategy.

We also saw the need to inculcate a greater spirit of independence and responsibility in our clients. People had to realize that it was them and not us who were the prime movers in their individual development.

But before we could make these changes, we realized that we the staff of PFP had to undergo some basic changes in our thinking. We also had to consider where we wanted to take our clients beyond the immediate season. We had to pay more attention to promoting basic behavioral change instead of just getting people to follow instructions. We needed to become just as scientific and methodical about storage and marketing as we had been with production techniques. And we had to make a commitment to promoting responsibility and independence within our clients rather than being content to work with the same people on the same projects year after year.

And once these qualitative changes were made, we had to consider the question of how to expand the project to reach larger numbers of producers and businesspeople. The remainder of this report discusses how we used the lessons of 1985 to create a more effective approach to building rural productivity and move towards more cost-efficient service delivery in 1986.

PART II

INCREASED EFFECTIVENESS AND COST-EFFICIENT EXPANSION

The title of this second part expresses our goal for 1986: building on the experience of 1985 in order to effect more profound behavioral change among rural producers and businesspersons and training greater numbers of people at lower and more reasonable cost. In this part we will first present our principal program themes for 1986, underlining the changes from the previous year. We will conclude with an analysis of the content of our field activities through June of this year.

Program Themes

Working with groups

At the outset of the project we had realized the necessity of working with groups of clients if we were to ever hope to have a significant impact on productivity in the region. For this reason, we hired a consultant in May 1985 to propose a producer group strategy and methodology. In his report he emphasized why group promotion efforts often fail: the artificial nature of groups resulting from promoters who oblige farmers to come together in order to have access to credit; the lack of emphasis and training on the management of income generating activities; and the injection of excessive sums of money, in the form of credit, before the group has developed a real sense of solidarity and has the ability to manage the money.

To avoid these errors, we decided to spend an extended period observing groups that already existed to determine their levels of solidarity and competence. Accordingly, our field agents, with the help of the Maritime Region DRDR, identified sixteen groups. From May 1985 until the early months of this year, the agents paid periodic visits to the groups and rated them according to the following criteria: regular meetings with written reports being sent to PFP; accomplishments in the form of a collective economic project; willingness to accept the advice of the field agent and satisfactory repayment performance with previous loans.

We finally selected three groups, comprising 56 members, for collaboration in 1986. During the current growing season, each group is cultivating a one hectare field collectively which serves as a demonstration plot where our agents can present new techniques, and a source of income for the group's fund. In addition, individual members in two of the groups have received loans for their personal fields. As the response to our approach has been favorable, we plan to continue with these groups during the second agricultural season as well as undertake work in the common marketing of food crops.

At the same time we have begun a campaign to identify additional groups for next year. The field agents are currently observing six groups that we hope can be brought into our system.

In addition to this approach, we are experimenting with other methodologies to increase the scope of our service delivery. One is known as the system of "model clients". Since farmers are often the best teachers of their peers, the objective of this system is use the most successful of our clients to teach others to increase their productivity.

This year we are working with four groups organized around model clients, totalling twenty farmers. The four models, three men and a woman, were selected on the basis of their mastery of the technical packages for corn and cowpeas during both growing seasons in 1985 and their general spirit of collaboration. After explaining the methodology, we invited them to propose up to five of their friends and neighbors whom they would like to help train and whom they thought would benefit from the PFP approach. Each associate would receive assistance from PFP to cultivate one hectare of maize and a quarter hectare of cowpeas during the long growing season.

The role of the model is to bring his or her "associates" together for technical demonstrations, assist the field agent in presenting the demonstrations, inspect individual fields to see that techniques are being applied properly and report any problems to the field agent. At the same time, the model receives assistance for his or her own project, which is more complex than those of the associates, and receives inputs from PFP for an agricultural demonstration in his or her field.

The experience has so far been interesting. One group has evolved to a point of solidarity where the members take turns weeding each others' fields to compensate for periodic shortages of field labor. And in some cases, the associates are doing as well as or even better than the models. We have also noticed differences in the quality of leadership among the models, and have concluded that good performance in one's own fields does not necessarily translate into the ability to lead a group.

This approach has resulted in efficiencies within our system. We have eliminated a certain amount of paperwork at the beginning of the season by foregoing the lengthy interview process with the associates, relying instead on the judgement of the models as to their associates' suitability. Our agents are also spending less time demonstrating techniques - once to the group rather than five times to each individual - and less time following up, since the models have assumed part of that function.

Our third approach to group action is the one we are pursuing in the irrigated perimeter. Rather than working with individual clients dispersed throughout the perimeter, we have decided to concentrate our efforts on developing the productivity of the farmers in a single section. We have chosen the Assomé section, a tract of 38 hectares which depends on a single tertiary canal for it's water source. Working in this section will be 29 individual farmers. While each will be responsible for his own plot of land, there are a number of actions which must be done in a collective or at least coordinated way within the section if the individual efforts are to succeed. These include the repair and maintenance of irrigation and drainage canals and dikes, the leveling of paddies, land preparation with rototillers, water management, adherence to the agricultural calendar, agricultural demonstrations and the processing and marketing of the harvest.

To date, our field agent responsible for irrigated rice clients has succeeded in organizing these 29 individuals to collectively improve the dike and drainage system, an effort which will make it possible to cultivate land that was formerly flooded, and which will give all farmers better control over the water level in their fields. These farmers have also agreed to pay a users fee which will be used to finance repairs and improvements to the

system that they cannot do themselves. In the future we hope to use this group mechanism to enable farmers to acquire their own rototillers and to coordinate the milling and marketing of their harvest.

Unfortunately this whole strategy has been delayed by the late arrival of a shipment of eight rototillers which are essential for land preparation. This delay has been the most serious problem we have had to face, as it has meant the loss of an entire season for these farmers. As the rototillers are scheduled to arrive in Togo in July, we will at least be able to salvage the second half of the year.

A fourth group strategy we have used is to work through the structure of local savings and credit cooperatives known as COOPEC's. We are working with one COOPEC on an experimental basis this year, offering both it and its members our technical services. We began by explaining our technical packages to the COOPEC's loan committee and showing them how to do a feasibility study of an agricultural project. We then offered to provide our extension services to any member who obtained an agricultural production loan from the COOPEC and who was willing to pay us for our technical follow-up. Three farmers signed contracts with us to receive technical assistance during the long growing season. This system is interesting to us because it lessens administrative costs connected with making a loan, reimburses the costs of technical assistance and utilizes an established credit institution controlled by farmers. Assuming that this year's experience succeeds, we would like to become more involved with the COOPEC movement and work with non-agricultural as well as agricultural clients.

A final approach we have taken to collective action has been to informally group clients from the same village for the purpose of agricultural demonstrations. This has come about largely on the initiative of our field agents who see the technique as a more efficient way of providing training. What is interesting, however, is that in certain villages association with PFP is serving as a bond to bring farmers more closely together, not just for training, but also for cooperative field work. Observing this phenomenon, we believe that some of these loose associations might later evolve into more formal producer and marketing groups.

The effort to work with groups has resulted in our being able to deliver our services to a much greater number of clients in a more efficient manner. In Table 16 below we compare the agent/client ratio for agricultural producers during last and this year's long growing seasons. While the number of clients per agent has more than doubled, we feel that we will be able to realize still greater efficiency without sacrificing effectiveness as our group methodologies develop.

Table 16

Field Agent/Client Ratio for Agricultural Clients
(Long Growing Season)

<u>Year</u>	<u>Number of Agents</u>	<u>Number of Clients</u>	<u>Agent/Client Ratio</u>
1985	4	40	1/10
1986	9	195	1/22

Improving the Extension Methodology

It is one thing to work with large numbers of producers and quite another to have any lasting impact on the way they carry out their economic activities. As we mentioned above, our impression at the end of the first year was that most of our clients had learned how to do things differently, but did not always understand why the new techniques were better. Consequently, in 1986 we have worked to develop our extension methodology so as to have a greater impact on understanding in order to effect permanent behavioral change.

The approach we use is the experiential training cycle. Instead of an agent merely explaining what he or she wants the client to understand, this approach gets groups of clients to live an "experience". The experience is related in some way to the theme of the training session, although the relationship may be indirect. The experience could consist of a game, a puzzle, a role play or a situation from the clients' lives; things with which they can identify and, above all, which make them active participants in the learning process.

Following the presentation of the experience, the agent acts as a facilitator, first trying to get the clients to express their reactions to what they have just lived. From there he asks them to generalize about the experience, guiding them away from the specifics of the exercise and towards general lessons and principles. Finally he gets to the end point of the exercise by asking them to apply those generalizations to their own work and lives, thus completing the cycle. When this approach is correctly utilized, the clients have the impression that they discovered the principles and lessons of the session themselves. This impression of self discovery combined with the graphic recollection of the experience has a much profounder influence on behavioral change than a simple explanation.

We have formalized this approach in the form of an extension handbook for our field agents. The handbook contains structured lessons on the themes we have mentioned throughout this report: the reasons behind the different technical and managerial techniques we promote; financial analysis of a small agricultural enterprise; planning the development of a small farm; assuming responsibility for repaying a loan; and storage techniques and marketing. All of our field agents have integrated these sessions into their schedules of follow-up work with their clients.

Selecting and training field agents

The cutting edge of this project is the field agent. Consequently, PFP's management and technical staff spends a lot of time on their selection and training and provides them with maximum support in the field. A field agent's skills and qualities need to be varied. He or she needs hard skills in agriculture, financial analysis, business management, planning and organization. Also required are the ability to communicate effectively, an approach to training, an understanding of the development processes, good judgement and the ability to accept heavy doses of responsibility. People with all of these attributes are not readily available in Togo, but they can be developed.

To expand the program in 1986 we have hired six additional field agents. They were chosen in the same manner as the first team of four in 1985. We began in October 1985 by soliciting written applications. From the the seventy-five responses we selected thirty-five candidates for interviews. The twelve best were chosen from this group and hired as enumerators to conduct a socio-economic survey of the Avé region, the zone into which the project was to expand in 1986. Most of this group were secondary school graduates who had received formal training in agriculture from Togo's National School of Agriculture at Tové. Eleven finished the survey in November 1985, and based on their

favorable performance, were invited to compete for the position of field agent during a four week training session in January-February 1986. Seven successfully completed training and were hired on a three month probationary basis. During this time six performed satisfactorily and had their employment confirmed in June.

The heart of this process was the period of training in early 1986. As in 1985, training centered around several principle themes: agricultural technical packages, financial analysis, problem solving, planning, communication and PIF systems. But in order to bring about the changes in methodology we thought necessary, we made certain modifications. One was to present the experiential training model much more clearly, so that the trainees would understand the process they were undergoing and which they would later use with their clients. Another change was to put more emphasis on those areas where the first group of agents had proved the weakest, planning and financial analysis. In addition, we added a section on working with producer groups. The four original agents were invited to participate in order to further develop their skills and to help train the new group.

This entire process has been documented in the form of a training manual entitled "Manuel de Formation des Agents de Terrain" which will serve as the basis for future training sessions.

Expanding into Zone 2

In addition to increasing our coverage of the Mission Tové zone and working with larger numbers of rice producers in the Zio River Irrigated Perimeter, our major focus of expansion in 1986 has been the Avé sub-prefecture to the north and west of Mission Tové which we refer to as Zone 2.

Our introduction to this region was in October when we conducted our socio-economic survey which has provided us with good baseline data. Agricultural cultivation patterns and incomes are very similar to those in Mission Tové, the only real difference being that more Avé farmers cultivate rainfed rice and peanuts.

A significant difference in the organization of work exists, however. People in Avé have a much greater propensity to work in groups, and as a result we have centered our producer group development campaign here. Related to this is an active savings and credit cooperative movement in several villages, which as we stated earlier, we are attempting to collaborate with. Finally, commercial and artisinal activities are much more developed in the Avé region, especially in the commercial center of Assahoun, and we anticipate working with many more non-agricultural clients than in Mission Tové.

We opened our Avé office, located just south of the administrative center of Kévé, in March 1986. It is staffed by four field agents, one of whom also has administrative responsibilities and serves as Zone Chief. This staff is currently working with 102 agricultural clients.

Storage and Marketing

Dramatic gains in agricultural productivity should translate into equally substantial gains in farmers' incomes. We have observed, however, that this is unfortunately not always the case among farmers who do not have access to improved storage facilities and no

organized marketing strategy. Among our clients we noted individual farmers who, in order to satisfy cash needs, sold parts of their crop soon after the harvest when the price was the least advantageous. Others stored their crops for longer periods to obtain better prices, but experienced losses in storage (storage losses in traditional graneries in the Maritime Region of Togo can be as much as 30 percent), and since they sold in relatively small quantities, had little negotiating power in terms of price with grain traders. As we observed earlier, the lack of a comprehensive storage and marketing system also had a negative effect on timely loan reimbursements.

We had all but ignored storage and marketing during the first year, believing that the local system would take care of the small increases in total production that our small sample of clients would produce. But our experience in 1985 impressed us with the fact that we rapidly needed to get more organized and methodical about storage and marketing to enable farmers to receive the maximum return from their increased production and to facilitate loan recovery. We decided, therefore, to make storage and marketing as much a part of our extension approach as improved production techniques.

Our strategy is based on two elements, producer groups and a fumigable warehouse which is being promoted by the Plant Protection Service. We have decided to begin with producer groups which are already generating an agricultural surplus, and over a three year period, train their members in the techniques of collecting, storing and selling the surplus.

In the first year group members will work closely with PFP agents to organize the collection of their own surplus. They will also learn drying and fumigation techniques, and a bookkeeping system to allow them to manage their stock of grain. In addition, they will gain the experience of selling their surplus in bulk. A fumigable warehouse owned by PFP will serve as the storage point for the grain and the center where training will take place. In the second year the lessons of year one will be reinforced, and if progress has been made, the group will become eligible for a marketing loan that will enable it to purchase other farmers' grain as well as their own. Part of this loan could also be used to buy basic equipment like scales, moisture testers, pesticides and burlap sacks that the group will need. By year three the group should become relatively independent. If its performance has been satisfactory, it would be eligible for a five year construction loan to build its own warehouse.

The warehouse we will be using is one developed jointly by West German assistance (GTZ) and the Togolese Plant Protection service. It is especially suitable for producer groups, having a 25 ton capacity which enables a group to pay for it in five years. It is constructed from local materials and requires no specialized construction techniques. Its great advantage is its airtight construction which allows fumigation. Thus if the grain has been sufficiently dried, the group should experience no loss, either from moisture or insects, with a minimum of attention and maintenance. GTZ has helped finance the construction of one of these warehouses at Mission Tové which will soon serve as a demonstration and training model.

This year we will begin work with four groups totalling about 85 farmers. Within three years we hope to have 20 groups comprising 300 members initiated into the system.

Project analysis

The more deeply we delve into the question of rural productivity and the more we grow, the greater is the need we feel for information; information that we can analyze to see if

we are being effective, and that we can use to report the impact of the project to others. During the past year we have developed three systems to provide us this information.

The client monitoring and evaluation system is a series of forms that agents fill out on the progress of each client during the implementation and directly following the completion of each project we assist. The centerpiece is a post-project evaluation questionnaire which records data on economic performance, knowledge and skills acquisition, entrepreneurial qualities and social gains. Through a rating system, this questionnaire allows the client to see how he or she stands in relation to others. For those clients interested in continuing with PFP, it also serves as a planning tool for the client and agent to develop the next project.

The management information system provides us with aggregate data on service delivery - numbers of clients, amount loaned, projects by economic sector, clients who are members of groups, numbers of agricultural demonstrations, etc. In addition, it gives us a detailed picture of loan repayments and aggregate figures on the impact of the project on productivity and incomes. This data is collected and synthesized monthly by the appropriate field staff for service delivery and loan performance, and on a seasonal basis for productivity and incomes. Yet to be developed is a way of aggregating the data we have on the impact of the project on social and human development.

We are also interested in generating information on our own productivity and chances for sustainability. To this end we have just reorganized our financial management system and are in the process of converting our old accounts to the new system. By the end of 1986 we will be closely tracking the costs of different project components and services in order to improve our own productivity.

Policy dialogue

We in PFP/Togo have benefitted enormously from the experiences of other rural development practitioners. For this reason, as our ideas and methodology develop and we see their impact on our clients and their economic activities, we have the urge to share our ideas on such subjects as credit as a training tool, the delivery of extension services how to effect permanent behavioral change to increase rural productivity, and the role of the private sector in development.

One of our interlocutors has been the Ministry of Rural Development. We are fortunate to have a project coordinator at a high level in the ministry, the Director of the Maritime Region DRDR, who has taken an interest in what we do and has made the effort to make our activities known to others. We are pleased to have been able to express our ideas in the series of conferences and meetings that have been held over the past year to define and implement the ministry's new rural development strategy, and to have been the recipients of a very substantive visit from the Minister of Rural Development during his recent tour of development projects in the Maritime Region. We look forward to making our contribution to help the new strategy succeed.

Another good opportunity for policy dialogue came in October 1985 when PFP/International organized a conference, bringing together representatives from its eleven programs in Africa as well as participants from USAID, the World Bank and Togolese and foreign non-governmental organizations to discuss the question of a long term development strategy for Africa. The Zio River project's methodology was featured as an example of one approach to building sustainable rural productivity.

Finally, having a project so close to Lomé opens the opportunity for contacts with other governmental services, international and non-governmental organizations and foreign visitors, including the press. We consequently spend considerable time receiving visitors who are interested in our approach. In this respect we have especially close relations with the USAID mission in Lomé and the American Ambassador who have done the most in helping us to establish contacts and in making our activities known to others.

Sustainability

Nothing that we have written up to this point has much meaning or importance unless the effort we have embarked upon is sustainable over the long term. For us sustainability is basically a question of generating a surplus; of lasting, of growing, and most importantly, adding value to what already exists.

Surplus generation, in terms of this project, can be divided into two phases. The first consists of creating more value in economic, human and social benefits than one spends. The ability to do this lies first in the effectiveness of one's program - creating as many benefits as possible - as well as its efficiency - creating those benefits at the least possible cost and spreading them as widely over the population as possible. As we have tried to show in this report, this is the phase we are in now.

But sustainability can only be reached by successful completion of the second phase which is the progressive creation of a financial surplus that will cover recurrent program costs and gradually replace the subsidy which got the program going. This question is of vital importance to this project and to all of PFP/International, as donors change their foreign assistance priorities and funds for long term development become scarcer. Although certain PFP programs have made substantial progress in the direction of financial sustainability, PFP/International does not yet have an effective sustainability methodology as it does, say, with credit or small business management extension. PFP/Togo will, consequently, devote a great deal more time to developing and implementing a financial sustainability plan as this project goes on.

Clients and Projects Assisted in 1986

Since we are still in the middle of the long agricultural season, it is impossible to report any qualitative results from the changes we have made in our methodology. So we conclude this report with a quantitative comparison of what we have done so far this year as opposed to last.

As Table 18 on page 31 shows, our total clients are up by 80 percent from 104 to 195. Projects assisted have correspondingly increased by 63 percent. Women are playing a more important role in our activities, especially in agriculture, and now comprise 26 percent of our clients as opposed to 15 percent last year. The lower amount loaned and smaller average loan in this year's figures are a reflection of the fact that not all of the loans had been disbursed midway through the season.

One bit of information not shown in this table is that among the 161 rainfed projects no one is cultivating just maize. Our insistence on diversification has meant that each farmer must cultivate at least two crops; some are doing three. We give the comparison for area cultivated for each crop between this long season and last on Table 17 on the next page.

Table 17

Surface Area Cultivated by Crop
Long Agricultural Seasons 1985/1985

<u>Crop</u>	<u>1986</u>	<u>1985</u>
	<u>Farmers/Hectares</u>	<u>Farmers/Hectares</u>
Maize	132/102.9	31/36.6
Cowpeas	110/46.5	16/6.5
Peanuts	36/17.5	3/0.9
Rainfed rice	17/8.6	--
Okra	1/0.5	--
Red Pepper	8/2.5	--

Another important difference is the number of clients who belong to groups. This year 86 clients, or 44 percent of the total are participating in some sort of group mechanism.

Our projections for the rest of the year total 210 additional clients assisted: 150 in rainfed food crops, 50 in irrigated rice, 90 in agricultural marketing and 30 in other non-agricultural activities. Our feeling is that the lessons we have learned over the past year and the changes we have made in our methodology will result in qualitative changes that will match the quantitative ones.

**CLIENTS/PROJECTS ASSISTED BY
ECONOMIC SECTOR
1985-1986**

Table 18

SECTOR	January-May 1986					1985				
	Projects	Clients		Amount loaned(CFA)	Average loaned(CFA)	Projects	Clients		Amount loaned(CFA)	Average loan(CFA)
		M	F				M	F		
Crop Production (rainfed)	161	137	48	6,407,340	39,797	62	54	4	2,737,010	44,145
Crop Production (Irrigated)	7	7	-	600,790	85,827	26	33	1	3,598,100	138,388
Livestock	-	-	-	-	-	1	1	-	450,000	450,000
Commerce-Consumer goods	2	-	2	334,200	167,100	5	-	5	529,200	105,840
Commerce-Raw materials	-	-	-	-	-	-	-	-	-	-
Commerce-Food crops	-	-	-	-	-	1	-	1	90,000	90,000
Commerce-Food processing	1	-	1	27,800	27,800	5	-	5	276,800	55,360
Artisan Production						4	4	-	347,320	86,830
Artisan Repair						-	-	-	-	-
Transport						-	-	-	-	-
Totals	171	144	51	7,370,130	43,100	104	92	16	8,028,430	77,196