

PROJECT EVALUATION SUMMARY (PES) - PART I

PROJECT TITLE Nimba County Rural Technology Project	2. PROJECT NUMBER 669-0163	3. MISSION/AID/W OFFICE USAID/Liberia
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 669 FY 84-5	
<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION		

KEY PROJECT IMPLEMENTATION DATES	6. ESTIMATED PROJECT FUNDING	7. PERIOD COVERED BY EVALUATION
First RC-AG or Equivalent FY <u>80</u> B. Final Obligation Expected FY <u>84</u> C. Final Input Delivery FY <u>85</u>	A. Total \$ <u>3,599,000</u> B. U.S. \$ <u>3,195,000</u>	From (month/yr.) <u>May, 1980</u> To (month/yr.) <u>February, 1984</u> Date of Evaluation Review

B. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<u>RECOMMENDATIONS</u>		
1. PffP should continue with its current agricultural extension approach.	PffP	on-going
2. PffP should implement their upland rice seed exchange program as soon as possible but only on farmers' fields with less than 20 percent slope.	PffP	immediately
3. PffP should eliminate its fisheries program and invite the NCRDP fisheries program to operate in the area.	PffP	immediately
4. Additional swamp rice cultural practices which discourage snail breeding should be included in the PffP extension educations.	PffP	immediately
5. Increase the number of enterprise extensionists.	PffP	9/30/84
6. Add a "Market Investigator/Developer" to the staff of the Enterprise Section.	PffP	9/30/84
7. In the future PffP should select urban clients that have the potential to serve markets outside of Yekepa.	PffP	immediately

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS <input type="checkbox"/> Project Paper <input type="checkbox"/> Implementation Plan, e.g., CPI Network <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Financial Plan <input type="checkbox"/> PIO/T <input type="checkbox"/> Logical Framework <input type="checkbox"/> PIO/C <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Project Agreement <input type="checkbox"/> PIO/P	10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT A. <input checked="" type="checkbox"/> Continue Project Without Change B. <input type="checkbox"/> Change Project Design and/or <input type="checkbox"/> Change Implementation Plan C. <input type="checkbox"/> Discontinue Project
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11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles) Draper Birch, MOA Vivian Diggs, MPEA James Pagano, USAID/L Charles Strickland, USAID/L	12. Mission/AID/W Office Director Approval Signature <i>John Pielemeier</i> Typed Name John Pielemeier, A/DIRECTOR Date 9/20/84
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8. Concentrate project resources on "Production" enterprises rather than "Service" enterprises.	PfP	immediately
9. Readvertise the Administrative Comptroller position and fill the vacancy no later than August, 1984.	PfP	8/9/84
10. Include a Liberianization plan in the OPG extension proposal.	PfP	9/30/84
11. Shift responsibility for preparation of paper work for vehicle maintenance from the Chief Mechanic to the clerk/typist.	PfP	8/30/84
12. PfP/I should submit amended Financial Status Reports (ATD Form FS 269) for the periods that have been disapproved by USAID/Liberia.	PfP	immediately
13. Mechanics of the relationship between PfP/I, PfP/L and the Governing Council should be explained in the OPG extension proposal.	PfP	9/30/84
14. PfP/I should fulfill their obligation as grantsman for PfP/L and secure other donor core funding to prevent project shutdown if an extension is not approved by AID.	PfP/I	immediately
15. PfP should pursue the new extension liaison approach giving special attention to involving PfP clients in identifying and developing technologies for their use.	PfP	immediately

16. The ATC advisor and extension liaison officer should identify technologies that can be extended on a large scale basis (the charcoal project). Pfp should consider soliciting additional funding from EEC or other donors to fund development/extension programs for such technologies.	Pfp	immediately
17. At the end of the OPG, Pfp should conduct a systematic evaluation of the ATC's performance to examine possible changes in ATC's rationale, program and structure. Items to be considered are: A. How effective the new extension liaison approach has been? B. Whether there is the potential of carrying out major development/extension programs in the style of the charcoal program where ATC will conduct extension itself; also, whether additional funding from donors is available.	Pfp	5/26/85
18. Continue the prosecution of delinquent loans.	Pfp	on-going
19. An analysis of the costs and the effects of the new credit requirements should be included in the next six month report.	Pfp	8/30/84
20. Pfp should complete the review and redesign of the women's program as an integral part of the Agriculture and Enterprise Sections' activities.	Pfp	8/30/84
21. Pfp should hire two or three women extensionists in addition to the current extension staff.	Pfp	9/30/84

22. PFP/L and PFP/I should take concerted action to secure core funding from the GOL and other donors to prevent project shutdown.	PfP	immediately
23. EDS should investigate the possible use of fees for its consulting services for larger client businesses.	PfP	immediately
24. While PFP should pursue opportunities for providing consulting services, it should closely examine demands such services, will make on PFP staff and possible detrimental impact on its normal operation.	PfP	immediately
25. Any additions to PFP's present operations must be closely scrutinized for recurrent cost implications.	PfP	on-going

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FINAL EVALUATION

LIBERIA
NIMBA COUNTY RURAL TECHNOLOGY PROJECT
669-0163

Draper Birch, MOA
Vivian Diggs, MPEA
James Pagano, USAID/L
Charles Strickland, USAID/L

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PROJECT EVALUATION SUMMARY (PES) - PART II

13. Summary - Incomplete planning and budgeting in the OPG for advisor benefits and general support costs, change in the agricultural extension model, inflation and harassment following the 1980 coup d'etat, staffing vacancies, a retroactive PfP/International overhead increase and unrealistically high OPG targets were the main factors that contributed to an accelerated drawdown of OPG funds and the projected non-achievement of some of the original OPG targets.

In contrast to this bleak scenario during the first two years, the project has made impressive progress over the past 1 1/2 years. Interference by local officials is no longer a problem and inflation is very low at only 3-4%. USAID/Liberia approved a revised workplan for the remainder of the grant period which set performance targets which are realistic and readily verifiable. PfP has been achieving these new monthly performance targets and is projected to successfully implement the revised workplan by the end of the grant period in May, 1985. The Agriculture Extension, Enterprise Development, and Credit Activities are presently very effective.

The Appropriate Technology Section requires some restructuring to improve its responsiveness to actual PfP client needs. The Administration of the project has improved markedly over the past two years after a change in personnel. The largest issue is the question of the financial viability of the PfP/L program. USAID funding comprises 89% of the project budget and neither provisions for increases revenue generation nor other donor core funding have been arranged to continue operations after the May, 1985 completion date. PfP is working on a two year OPG extension which will be submitted for AID consideration in June, 1984. The evaluation team recommended that the extension proposed be given strong consideration by AID in light of the considerable project progress in calendar years 1983 and 1984, particularly if PfP proposes means to increase revenue generation.

14. Evaluation Methodology - This was the final project evaluation. A four member evaluation team consisting of one representative each from the Ministry of Agriculture and the Ministry of Planning and two representatives from USAID/Liberia. Terms of reference were drafted and distributed to team members and a pre-evaluation meeting was held in Monrovia to clarify evaluation methodology and logistics. The team then spent five working days at the project in Nimba County (three days of field visits and two days of interviews). Each member of the team had responsibility for drafting sections of the evaluation

report. Upon completion of the fieldwork, the team members returned to their respective organizations, wrote the draft sections and submitted them to the USAID team leader for editing and final report preparation.

15. External Factors - There were quite a number of external factors which negatively impacted on project implementation. The OPG was approved in May, 1980, one month after the April 1980 coup d'etat. Following the coup, general economic stagnation and local government interference with project operation slowed implementation. Inflation following the coup and a retroactive PffP/International overhead increase from 15% to 24% authorized by AID/W in 1983 have reduced funds available for the project. In addition, the G.O.L. and LAMCO (Liberian American Mining Company) failed to make their full contributions which resulted in a net shortfall of approximately \$400,000.
16. Inputs - USAID has fully obligated the \$3.195 million OPG. The OPG funded an expansion of the PffP Staff from 18 to 40 (including both expatriate and Liberian), machinery and equipment (including a caterpillar 901 and rototillers), vehicles, a credit fund, experimental and development inputs, and administrative and general support costs. PffP has not been responsive to AID's request to breakdown expenditures by the OPG line items mentioned above. The G.O.L. has contributed \$93,000 of a pledged L.O.P. contribution of \$350,000. This has been used to fund general support costs. LAMCO has contributed \$90,000 of a pledged \$300,000 which also was used for general support costs. The E.E.C., through the Intermediate Technology Development Group (ITDG), has provided \$77,500 in cash and \$94,000 in-kind for the PffP charcoal development project (\$171,500 total). The ITDG itself also contributed \$12,000 cash to the charcoal project. Private Agencies Collaborating Together (PACT), through World Education, Inc., contributed \$32,500 and the United Church Board (UCB) donated \$5,000. Both the PACT and the UCB contributions were used for general support costs. Total G.O.L. and other donor contributions were \$404,000 or 11% of the total project funding.
17. Outputs The original OPG output targets are best presented in chart form.

<u>Description</u>	<u>Planned Output</u>	<u>As of 11/30/83</u>
A. Acres of swamp rice developed	1500	63
B. Percentage of traditional farmers trained in improved swamp rice	42	9.4

C.	Percentage of farmers using improved varieties	50	8.8
D.	Tons of paddy rice-annual	2000	63
E.	Improved varieties and cultivation practices for coffee and cocoa	in use	in use
F.	New farmers in tree crop Production	500	0*
G.	Dry season crops and vegetables suitable for the project area	to be determined	completed
H.	Farmers receiving training	250/yr. in 5th yr.	450/yr.
I.	Farm Jobs created	500	undetermined**
J.	New Small Manufacturers	20	68
K.	New Small Manufacturers- new employment	200	140
L.	New Small Manufacturers - Annual Sales Volume	\$145,000	\$264,000
M.	Small Buisness People Receiving Assistance	100	120

* Promotion of coffee/cocoa plantings discontinued due to drop in market price.

** Direction of the project has been changed to work with existing farmers.

Most of the OPG targets were set unrealistically high and would not have been achievable even if the project started out full swing with no complications. The original targets set by PFP assumed mechanized land clearing to be done by PFP. This model later proved to be economically unfeasible and socially unacceptable and was discontinued. Presently all land clearing is done by hand. Both PFP and USAID agreed that the original targets were out of line and a revised workplan was submitted to USAID and approved in February, 1983 (revised targets are included in the text). The revised monthly targets are achievable and PFP shows every indication of achieving the targets projected for the end of the grant period.

18. Purpose - The approved project purpose is "a) to strengthen and expand the appropriate technical assistance and credit to all non-mining enterprises in Upper Nimba County with particular emphasis on producers in agriculture, small-scale industry, manufacturing and construction, and b) to strengthen the integrated and appropriate approach to economic development in the rural and urban areas of the program by expanding, at all levels, the economic linkages among producers and users."

The project purpose is cumbersome and confusing. In less confusing terms the project purpose is to provide Agricultural and Enterprise Development Extension Services which are supported by a Credit Program and Appropriate Technology innovations. Both the Agriculture and Enterprise Extension Services got off to a halting start. The Agriculture Extension approach was completely revamped from a system based on training farmers at a central training site to a bonafide village based extension service. It was necessary to fire all the extensionists and rehire new ones because the original extensionists refused to relocate in the villages. The agricultural extension service is now working smoothly and is training 450 farmers/year. The Enterprise Development Extension also lost both its extension agents in 1982 due to serious immigration problems and thefts attributed to one agent. This section was inoperative for the following nine months because the Enterprise Development Advisor was appointed Acting General Manager. In January, 1983, ten individuals from 140 applicants were selected for training and seven were actually hired. Since then, PFP has already exceeded three of the four Enterprise OPG targets. Given the slow start of the Enterprise program this is especially encouraging. The Credit Program is institutionalized and has a current portfolio of \$77,000 in loans to agricultural and enterprise clients. The Appropriate Technology Section has been slow to develop and introduce technologies targeted for PFP's clients. Most of the innovations have been produced to assist PFP staff in their jobs and for other development projects. PFP has taken corrective action with the appointment of an extension liaison officer to involve the extension agents and their clients directly and to suggest needed innovations and to test the technologies developed. It is too early to tell if this new approach will be more productive.

19. Goal - The two stated goals were "a) to establish, organize and expand appropriate technical assistance and credit programs by means of cooperation among GOL, LAMCO, the people of the program area and PFP, in order that these people may become self - sufficient by 2022 when the exhaustion of the iron ore body is expected, and b) to expand the program area, during the grant period, throughout Upper Nimba County to prepare to link up with the German Development Project for Central Nimba County."

Progress has been and continues to be made towards self - sufficiency in the project area, especially in agriculture. The animal and crop extension services quite measurably (see revised workplan targets in text) improve the collective productivity and self - sufficiency of the agricultural clients. The Enterprise Section needs to concentrate more of its energy on production type businesses rather than on service and retail businesses as it does now. Only production type enterprises would be likely to contribute significantly to the economy after mine closure since the concession economy would no longer be there to support retail and service enterprises.

The second goal has been achieved. PFP has expanded their program area to cover all of Upper Niamba County and together with the NCRDP project they cover the entire county. As detailed in the Administration Section of the report, PFP and NCRDP have development philosophies which are very closely aligned.

20. Beneficiaries - The immediate beneficiaries are the 1670 farmers and employees in 51 villages, the 750 enterprise clients and employees, the 860 members of the two cooperatives assisted by PFP and 12 charcoal producers with 78 employees.

The total number of family members directly benefiting from PFP services is conservatively estimated at 12,550. The total population of the project area is 70,000 of which 30,000 are rural and 40,000 are urban.

21. Unplanned Effects - The most pleasant unplanned effect was the tremendous interest nationwide in the PFP charcoal program. The demand for kilns and technical assistance is more than the project can keep up with. Another unplanned effect was the rapid generation of cash surpluses by some of the PFP vegetable farmers. It was not anticipated that they would do so well so quickly. Aside from these two things, there were no other notable unplanned effects.

22. Lessons Learned

- A. The importance of time cannot be overemphasized in relation to gaining acceptance in a program area (especially rural areas) and affecting permanent development change. It takes a great deal of time to gain acceptance and much longer to bring about the desired change. During this time it is important to have an uninterrupted program with established and unchanging rules. One of the biggest difficulties with development projects is getting to the point where the program has worked out the major flaws, worked out a stabilized policy and maintained the same policy over a long period of time. People will always be skeptical about rapid change. PFP's Agricultural, Enterprise and Credit Programs have reached the stabilized policy stage. The successes they are enjoying now will increase with time.

- B. A major need for development is banking services. In the project area there is only one commercial bank which caters only to larger business clients (\$10,000 checking balance).
- C. The farmer training center did not work. Farmers thought that they were going to be hired by PffP after the training.
- D. In most, but not all cases, the use of machines to create larger farms for individuals or groups has not worked. The farms have been abandoned or managed on a much smaller scale than originally planned.
- E. For subsistence farmers, small loans which have to be repaid have worked well. They have been repaid, they have allowed the farmer to develop a swamp that he can manage, and the individual has had a sense of ownership.
- F. With loan repayment, time has again been an important factor. Over time the message has gotten out that PffP is serious about loan repayment. Loan repayment has been good, especially with smaller loans. PffP has also learned how to use the Liberian legal system (not an easy matter) to get legal action on delinquent loans.
- G. PffP has learned a great deal about hiring staff. It is necessary to be very selective. PffP does this by widely advertising vacancies, receiving large numbers of applicants, administering a test, accepting more trainees than necessary to fill the vacant positions, and hiring only after the training is completed.
- H. A village contribution of at least 25 percent towards the cost of wells and spring boxes has worked well.
- I. Livestock production of non-ruminant animals is going to be very limited as long as there is no locally produced feed. Production of ruminant animals has not been exploited, though there is abundant forage.

Executive Summary - Liberia Nimba County Rural Technology Project
(669-0163)

The Africa Bureau requires certain data to be contained in every project evaluation. The format, as laid out in State 081077 (1982), is an Executive Summary which sets forth ten questions. Each is followed by the answer.

Q 1. What constraints does this project attempt to overcome and who does it constrain?

This project is designed to overcome the problems of low agricultural productivity, low level of entrepreneurial investment and dependency on the LAMCO mine concession which dominates the Nimba County economy.

Q 2. What technology does this project promote to relieve this constraint?

In agriculture the project provides the latest available technical information appropriate in the Liberian context in both crops and livestock (technology and varieties for extension mainly come from the Central Agricultural Research Institute). This includes information on paddy rice, upland rice, poultry, hogs, fisheries, commercial vegetables, banana/plaintain, and coffee/cocoa. In enterprise development, the technology takes the shape of systems for small business in accounting, bookkeeping, inventory, stock reordering, marketing, information on business start-up, legal registration requirements, etc. The appropriate technology section of the project supports the extension sections by developing innovative tools or devices to alleviate development constraints.

Q 3. What technology does this project attempt to replace?

In agriculture the project attempts to bring subsistence farmers into the cash economy through increased production, diversification and improved marketing. The project also encourages swamp rice production as an alternative to slash and burn upland rice. Nimba County is hilly and upland rice production on slopes greater than 20% causes severe soil erosion.

In Enterprise Development the project is not trying to replace a technology but rather to fill a void with the creation of new businesses owned and operated by Liberians.

The appropriate technologies introduced into the project are intended to replace more time consuming, labor intensive technologies that are traditionally used. In Liberia, one of the main constraints to increased productivity is the shortage of labor at peak periods during the agricultural cycle (felling and brushing, weeding, harvesting).

Q 4. Why do project planners believe that intended beneficiaries will adopt the proposed technology? (question 4 and 5 answered together).

Q 5. What characteristics do intended beneficiaries exhibit that have relevance to their adopting the proposed technology?

The private enterprise system is firmly established in Liberia and is inherent in the Liberian culture and society. Liberians are motivated by profit and enthusiastically pursue it. The beneficiaries generally do not have all the information they need to successfully operate a business. Excess production is wasted if there is no concept of active marketing. The project takes advantage of the natural desire of the beneficiary to generate profit by providing the missing information through the extension education service. Again, the credit program and the appropriate technology unit complement the extension education.

Q 6. What adoption rate has this project achieved in transferring the proposed technology?

The adoption rate of extended technology within the PFP loan clientele is high, estimated at 95%. The clients that PFP works with have already manifest a felt need for improvement and are very receptive to PFP extension activities. PFP does not try to pursue clients who are not serious or who simply voice interest to see if they can get something for nothing.

Q 7. Will the project set in motion forces that will induce the further exploration of the constraint and improvements to the technological package proposed to overcome it?

In fact this is already an ongoing operation. The project has linkages with the Central Agricultural Research Institute (CARI) as well as the other integrated agricultural development projects in the country. CARI serves as the main source of information for new technologies. The project also assists CARI with off station testing in Nimba County (most recently with cassava trials).

The project has instituted regular division staff meetings and inservice training (two day training workshops once each month). The staff is encouraged to bring field problems to these forums for discussion and also to share lessons or techniques that have been learned. In this way the extension education and credit extension remain adaptive.

Q 8. Do private input suppliers have an incentive to examine the constraint addressed by the project and come up with solutions?

Basically this is an extension education project. Extension education world wide has traditionally been funded by the government or as with this project, a donor. In the United States input suppliers (fertilizer suppliers, feed suppliers, equipment manufactures, cooperatives) often do provide technical information to their customers as part of their customer service. This is not the case in Liberia.

Q 9. What delivery system does the project employ to transfer the new technology to intended beneficiaries?

The project utilizes village based extension services in agriculture and enterprise development which are supported by a credit program and by an appropriate technology unit which develops needed tools and devices.

Q 10. What training technologies does the project use to develop the delivery system?

The extension education techniques utilized by the extension agents include visits (informal visit by agent wherein he/she interacts with the client for a minimum of one half hour), meetings (occasions when the time has been set beforehand for the extension agent and the farmer to meet), demonstrations (a planned event wherein some technology is presented to a group of clients) and in-the-village meetings (a planned event occurring in one of the extension agent's villages requiring the attendance of all extension agents, representatives of the PFP main office, and local farmers). PFP also airs a weekly radio program entitled "Back to the Soil". In addition, PFP also holds monthly extension agent training workshops involving all extension agents in training and discussion relevant to the extensionist's job.

SUMMARY

Incomplete planning and budgeting in the OPG for advisor benefits and general support costs, a change in the agricultural extension model, inflation and harassment following the 1980 coup d'etat, staffing vacancies, a retroactive PFP/I overhead increase and unrealistically high OPG targets were the main factors that contributed to accelerated drawdown of OPG funds and the projected non-achievement of many of the original OPG targets by the end of the grant period. The remaining project funds will be expended by February 1985, three months before the May 26, 1985 PACD. In addition the PFP/Liberia project is in a precarious position since 89% of their funding currently comes from USAID and they have not yet begun generating significant revenues nor secured other donor funds to assist with core funding. Should the forthcoming OPG extension proposal be unacceptable to USAID the project would need to close down until such time that other donor funding could be identified and programmed. In contrast to this rather dismal scenario during the first two years, the project has made impressive progress over the past 1 1/2 years. Interference by local officials is no longer a problem. Inflation in Liberia at present is very low, estimated at only 3-4%. The revised workplan for the remainder of the grant period sets performance targets which are realistic and are readily verifiable. PFP has now institutionalized their statistical reporting of project progress based upon comparison of actual achievement vs. performance targets. This is a tremendous leap forward since for the first three years the project had no regular statistical reporting and was unable to completely tabulate cumulative achievements. The workplan also offers a complete set of targets covering all active PFP activities. The original OPG did not include a complete set of targets.

The Agriculture Section was reorganized during the second year of the project and modified slightly with the addition of the Town Development Associations in the third year. The current agricultural extension approach is sound and is meeting its targets. The major recommendation is to continue with the present agricultural extension structure.

The Enterprise Section has made an impressive comeback after a seven month period of complete inactivity in the second year of the project. Since then four Enterprise Extensionists have been trained and fielded (third year of project) and they have already met three of the 4 original OPG targets (again the workplan contains a complete set of targets which were not included in the OPG). The

Enterprise Section has had a large impact on the project area and its momentum is growing. It will be totally Liberianized by February 1985. The major recommendations are to increase the number of extensionists, add a "Market Investigator/Developer" to the EDS staff and to select urban clients that have the potential to serve markets outside of Yekepa.

Administration of the project has improved markedly under the present General Manager's tenure. The previously vacant Deputy General Manager position and the vacant Agricultural Advisor position have been filled. Essential financial controls were instituted to prevent further misuse of PFP resources. Although PFP/L is not yet fully institutionalized they have taken a number of steps such as issuance of a PFP/L personnel policy manual, institution of improved management practices (regular statistical reporting, regular senior staff and general staff meetings and computerized word processing), participation in the Nimba County Development Committee, and improved relations with the Ministry of Agriculture. Because PFP is an organization whose main purpose is extension, they will never be self-supporting. However PFP/I and PFP/L can and should institutionalize their donor fund raising capability and this has been sorely neglected. Major recommendations for the Administration Section are to fill the vacant Administrative Comptroller position, draft a Liberianization plan, PFP/I submission of amended Financial Status Reports for the periods that were disapproved by USAID/Liberia, and for PFP/I to fulfill their obligation as grantsman for PFP/L.

The Credit Program functions in a supportive role to the Agriculture and Enterprise Sections. It services small to medium businesses and farmer clients who are too small to obtain loans from SEFO or commercial banks. They currently have a portfolio of 166 loans totaling \$77,000. Default rate on agricultural loans has been 12% and on enterprise loans 4%. The major recommendation is for PFP/L to continue prosecution of clients with delinquent loans. This is critical since an attitude has developed in the Yekepa area that everything will be supplied free of charge by LAMCO.

The women's program is presently undergoing restructuring to integrate it into the Agriculture and Enterprise Sections activities rather than operate it separately. Recommendations are to complete the redesign of the program and to hire two or three women extensionists.

The original design for the Appropriate Technology Center in the OPG was for the ATC to operate as a factory. Rather than compete with local manufacturers, the ATC limited itself to developing and producing prototypes or highly specialized items and products. After prototype development, ATC then encourages local entrepreneurs to meet the public demand for the product. Originally it was planned that ATC have its own extension agents and do all vehicle maintenance. Instead, the ATC has used the Agriculture and Enterprise Extensionists to bring in requests and disseminate

technology. This has been a less than satisfactory arrangement because the extensionists are busy and they don't really have a grasp of how to identify what the client's technology needs are. PffP is addressing this by an ATC extension liaison person who will constantly work with extensionists in the field. Also the vehicle maintenance has been separated from the ATC activities to allow more time for technology development. Relatively few of the projects undertaken by the ATC have been for use by small farmers and entrepreneurs. The ATC has had much more success in meeting the demands for PffP in-house use and other development projects. The charcoal program is independently funded and has made fast progress in development and extension of improved charcoal technologies since its initiation in July, 1983. The demand for charcoal kilns outstrips the supply and the program is quite successful. Major recommendations for the ATC are to pursue the new extension liaison approach, attempt to identify technologies (like the charcoal program) that can be extended on a large scale, and conduct an in-house evaluation of the ATC at the end of the grant period to examine possible changes in the ATC.

The low cost construction program has been discontinued due to the lack of demand for housing construction in the Yekepa area, the contracting economy and the LAMCO retrenchment of 1/3 of its workforce.

The financial viability of PffP/L hinges upon the ability of PffP/L and PffP/I to institutionalize their grantsmanship. Some funds can be generated from consultancies secured by PffP/L, but this would be small compared to their overall budget of approximately \$700,000 per annum. Other revenue generating means require exploration.

The three major recommendations are for PffP/I and PffP/L to take concerted action to increase revenue generation from prototype commercial operations to secure core funding from GOL and other donors to prevent project shutdown and to examine any additions to PffP's present operations for recurrent cost implications.

The unanimous opinion of the evaluation team is that PffP operations should be continued. The project has overcome the impediments of the first 2 years and is now fully operational. PffP appears quite capable of achieving its targets set forth in the revised workplan. The major problem now is to identify means to increase resource generation and core funding to continue the program after the current grant funds are exhausted in February 1985. The team recommends that the USAID Mission give strong consideration to the OPG extension proposal that will be forthcoming from PffP/L.

BACKGROUND

PffP/Liberia (PffP/L) was established in 1974 as a non-profit development foundation by an Act of the National Legislature. Its chartered purpose was to provide the following services in Liberia generally and in Nimba County in particular:

A) Render advice, counsel, and assistance to business and farmers; B) provide technical and financial assistance to promote economic development; and C) engage in research/activities relating to all problems concerning small enterprise and agricultural development and productivity.

The membership of the Foundation was chartered not to be less than five nor more than twenty-five. Members are representatives of associations, agencies and government bodies either involved in rural development in Liberia or contributing funds to the Foundation or both.

PfP/Liberia also has a Governing Council of not less than seven nor more than fifteen persons, of which no more than three persons are non-members of the Foundation. The members of the Foundation nominate, elect, and appoint individuals to the Governing Council and by majority vote, terminate the appointment of individuals to the Governing Council. All powers relating to the formulation of general policies are vested in the Governing Council. The Governing Council appoints the General Manager, Deputy General Manager, and the Comptroller. Members of the Governing Council do not receive salaries but receive reimbursement for any expenses incurred in attending to the duties of PfP/Liberia.

At the top of the management hierarchy of PfP/Liberia is the General Manager who is charged with operational responsibilities for implementing policies of the Foundation and for overall development, daily management, promotion, regulation and executive control of the Foundation. In performance of his duties, the General Manager is assisted by a Deputy General Manager and a Financial Comptroller. PfP also employs advisors who are serving as Section Heads until Liberianization takes place.

Operationally, PfP is divided into the following four functional areas:

1. Administrative/Finance Section (AFS) which is responsible for:
 - A) Personnel administration and training;
 - B) Credit administration, credit policies and procedures, loan evaluation, training and follow-up (including prosecution of delinquent clients);
 - C) Administration and maintenance of all matters and records pertaining to the accounts and finances of PfP, including budget preparation, conducting internal audits, and preparing financial reports for management, the Governing Council and donor agencies;

- D) Logistics, customer services, public relations, general legal matters, secretarial work and vehicle maintenance.
2. Enterprise Development which is responsible for all duties related to the creation of and assistance to small enterprises and cooperatives. Assistance includes management/technical advice and on-site training as well as the preparation of loan applications for financing by PfP or other financial institutions.
 3. Appropriate Technology which performs tasks related to research, design and construction of prototype tools or machines and agricultural devices appropriate for the local Liberian situation to improve the effectiveness of small enterprises and farms.
 4. Agriculture Section which performs all functions related to agricultural extension. It provides technical and management assistance to local farmers in order to help improve agricultural efficiency and productivity. This is done by developing with a farmer a farm plan. Farm calendars are also being developed and information is being gathered on farm systems.

Originally PfP was invited to Liberia by LAMCO, a Swedish/American owned mining concern, to gradually relieve LAMCO of the non-mining functions of the concession such as transportation, the sawmill, electrical wiring etc. PfP Liberia evolved from that base by branching off into agriculture as well and establishing a farmer training center with a twenty-five acre demonstration farm.

Prior to the Operational Program Grant (OPG) AID funded a small Improved Rural Technology (IRT) Project with PfP/L in 1979 to establish a fired clay brick enterprise in Nimba County. This was to be done in conjunction with a LAMCO Workers Union "own your own home" project which never materialized. Of the \$50,000 authorized, roughly \$27,000 was spent in moving a kiln from Ganta to Yekepa, for materials and other items leaving a balance of \$23,000 which was eventually deobligated.

In 1980 the \$3,195 million OPG was awarded to PfP/International (PfP/I), the parent organization of PfP/Liberia and also a charter member of the Foundation and the Governing Council. The OPG was authorized May 27, 1980 and runs through May 26, 1985. Its dual purpose as stated in the OPG log frame is: a) to strengthen and expand the appropriate technical assistance and credit to all non-mining enterprises in Upper Nimba County with particular emphasis on producers in agriculture, small-scale industry, manufacturing and construction, and b) to strengthen the integrated and appropriate approach to economic development in the rural and urban areas of the program by expanding, at all levels, the economic

linkages among producers and users. The OPG funded an expansion of the PFP staff (both expatriate and Liberian), machinery and equipment (including a Caterpillar 901 and rototillers), vehicles, a credit fund, experimental and development inputs, and administrative and general support costs. The total population of the project area is estimated at 70,000 of which 30,000 are rural and 40,000 are urban.

Scheduled life of project contributions by the G.O.L. and other donors were to be: G.O.L. - \$350,000, LAMCO - \$300,000 and unspecified other donor contributions of \$150,000. The G.O.L. made their first contribution in year three of the project. The total G.O.L. contribution to date is \$93,000. LAMCO announced in June, 1982 that they would make no further contributions to PFP because the company was operating at a loss. The total LAMCO contribution to date is \$90,000. The EEC through the Intermediate Technology Development Group (ITDG) has provided \$77,500 in cash and \$94,000 in-kind for the PFP charcoal development project (\$171,500 total). The ITDG also contributed \$12,000 cash to the charcoal project. Private Agencies Collaborating Together (PACT) through World Education, Inc. contributed \$32,500 and the United Church Board (UCB) donated \$5,000. Total G.O.L. and other donor contributions were \$404,000.

In February, 1981, four new expatriate advisors arrived (Agriculture, Enterprise Development, Cooperative Development, Credit) and began planning the PFP staff expansion with the General Manager and Deputy. It was soon discovered that the budget was out of line because the expatriate contract salaries were higher than the budgeted amount, no benefits for the expatriates were included in the budget (actual benefits estimated at 25% of salary) and there were funds budgeted for ordering the equipment and vehicles but corresponding funds for their operation were either underbudgeted or not budgeted at all. In addition, the first years funds had already been spent and funds budgeted for the second year were being used. This was the result of poor planning and lack of coordination on the part of PFP/L and PFP/I. Because of this, all programs were cut back from what was originally budgeted in the O.P.G. As a result five rather than ten agriculture extension agents were hired, the two enterprise development extension agents were hired but the two planned counterparts were not, and no extension agents were hired for the AT center.

The OPG was approved in May, 1980, one month after the April 1980 coup d'etat. Following the coup, general economic stagnation and local government interference with project operations slowed implementation. Interference has since been considerably reduced and is no longer an impediment to project implementation. The project also experienced staffing vacancies of key positions for varying periods of time (Deputy General Manager, General Manager, Agricultural Advisor, Comptroller). Also, inflation following the coup and a retroactive PFP/International overhead increase from 15% to 24% authorized by AID/W in 1983 have reduced funds available for

the project. Compounding these problems, some of the OPG targets were set unrealistically high (i.e. develop 1500 acres of irrigated rice) and required revision. The cumulative result is that existing grant funds will not be sufficient to operate the project through the scheduled completion date or to achieve all the original targets of the OPG.

PfP/L has worked closely with USAID/Liberia over the past year to develop revised and achievable targets and a workplan for the remainder of the grant period. The Mission approved the revised PfP OPG workplan in February, 1984. In agriculture, PfP currently provides livestock and crop (mainly rice) extension services to 105 groups totaling 454 farmers in 51 villages. The Enterprise Development Section has assisted 139 clients in either setting up businesses or in business management. It also has assisted two cooperatives with total membership of 860. To date, PfP has 157 loans totaling \$77,000 to small agricultural, commercial, and cooperative clients. The appropriate technology section currently is extending low-cost surveying equipment, training users, and testing clay samples for use in ceramics production.

PfP intends to submit a two year OPG extension proposal to consolidate the gains made to date, continue their agriculture and enterprise extension education, improve the ability to provide small scale technology to the rural poor, cover the shortfall in their funding and to diversify their funding sources.

AGRICULTURE SECTION

The mode of PfP agricultural extension was changed dramatically from the model originally approved in the OPG. The original model entailed bringing the farmers to PfP rather than the present method of PfP extension agents going to the farmers. Prior to the OPG, the extension program consisted of a 25 acre demonstration farm, a dormitory near the farm, an agriculture section head and 8 extension agents. Farmers were invited to the demonstration farm where they stayed for an eight week training session. Financed by the OPG, a Caterpillar 901 front loader and five rototillers were purchased. The PfP philosophy at that time was to use the PfP frontloader to clear and level unimproved swamps for irrigation and to use rototillers for land preparation.

A tractor on the demonstration farm (purchased prior to the OPG) was used to do all land preparation for the upland crops which were grown. Small demonstration plots were also done in selected farmers fields. When the advisory team arrived in February, 1981, they reviewed the current program and found it inappropriate. Basically mechanized agriculture for small holders was uneconomical, not sustainable and the cost of the input package was prohibitive as well. Also, there was no follow-up after the farmers left the training center because the extension agents all lived in Yekepa and served merely as instructors at the training center. There were a number of other drawbacks to this approach as well. For instance:

the sense of ownership among farmers was lacking (Pfp did the land development, not them); supporting the farmers during training and operating the demonstration farm resulted in an accelerated drawdown of grant funds; and farmers completing the training exercise thought that Pfp/Liberia was going to employ them. For these reasons, the agriculture advisor completely scrapped the old method and reorganized it in its present form. Pfp's program now consists of the Agriculture Section head, a deputy, one supervisor and eight extension agents who assist farmers in the four clans (Zor, Yarmein, Sehyi and Gboe) that comprise upper Nimba. The eight extensionists reside in the four clans and each is responsible for working with 7-8 surrounding villages. All agricultural extensionists are graduates from the Rural Development Institute or Booker Washington Institute and were given further training by Pfp. When the shift was made to this approach, the 8 extension agents employed by Pfp at the time refused to relocate into the villages. Consequently, they were fired and five new extension agents were hired and trained in 1981 and another three were added in 1982. The shift to a bonafide extension program provided a sense of responsibility and independence to the local farmers. At that time Pfp formulated a policy to work only with groups. As they gained experience with this approach they found the formation of groups to be time consuming and that the group activity was in direct competition with each farmer's individual activities. Now the group approach is used only in special instances such as the development of a water control system. In this case, the farmers usually work together to complete the lay-out, but then divide the swamp so that each owns a particular part for his own use. In the more recent past, Pfp has changed the focus from farm groups of mixed households to a group composed only of the members of one household. This has proved to be very successful because the household is a natural working unit and the members are motivated to work to advance the family.

As with extension, credit is no longer predicated on group formation. This spread the responsibility for loan repayment. With the new credit policies recently finalized, credit is given to individuals. Even in a mixed group such as mentioned for swamp development, each household applies for its own loan. It is true that training is extended to more people in the group approach, but it takes longer for the farmer to become productive. The group project is outside of his regular farming responsibilities and he only works on the group project when the group gets together. The household approach that Pfp now uses attempts to incorporate the new activity directly into the farming system and the farmer can work on the new activity at any time.

The Pfp front loader is on lease to the Nimba County Rural Development Project (NCRDP) when they can use it at \$2,500 per month, exclusive of fuel and maintenance, and is being used to construct feeder roads. NCRDP is an integrated rural development (agricultural extension, feeder roads, wells and latrines, health program) project funded by the West German government. The rototillers are idle, except one which has been leased to the Ganta

Mission. A tiller rental program was tried for a while, but the real demand for a tiller rental program is small. As the farm size and number of farmers increase, it is expected that the tiller rental program will be resumed. Possibly at that time, a privately owned tiller rental program could be developed through the services of Enterprise Development Section for the project area.

TOWN DEVELOPMENT ASSOCIATION (TDA)

The former Cooperatives Section of PFP (now incorporated under the present Enterprise Development Section) had previously been working with Town Cooperative Units (TCU). These groups consisting of the agricultural extension agent (supervised by a person from the Co-op Section), the town chief, and the town elders in a particular town were intended to provide a link between PFP and village authorities for implementing activities related to cooperative development. The strategy worked with varying success, and it was felt that by redesigning the concept somewhat, its effectiveness might be improved.

In July of 1983, a meeting was held between the agriculture, enterprise development, and credit sections to discuss the potential for expanding the involvement of other sections in implementing an improved TCU strategy. From this meeting, the Town Development Association (TDA) idea emerged. The TDA would incorporate functions of the TCU, but it would also include functions related to developing the town, facilitating group participation for development, and educating villagers for development. Membership in the TDA would be broadened to include both the agricultural and enterprise development extension agents, town elders, the town chief, the clan chief, leader farmers, other governmental officials residing in the town, and prominent business people.

Since that meeting, the extension agents have been working to establish TDAs in all of the villages of the project area. Two significant problems have emerged. First, there have been difficulties coordinating the schedules of the Agriculture and EDS extension agents so that both can be present at the TDA meetings. Secondly, the program suffers for lack of a clearly defined supervisory structure for implementing the TDAs. The strategy involves input and support from nearly all sections of PFP, but there is no person or persons delegated to coordinate and supervise the activities. PFP will be addressing these problems in the next few months.

Project Targets

The original life of project targets and achievements for agriculture as of November 30, 1983 are as follows:

	<u>Planned</u> <u>Targets</u>	<u>As of</u> <u>11/30/83</u>
1. Acres of swamp rice developed	1500	63

2. Percentage of traditional farmers trained in improved swamp rice (based on total of 2,500)	42	9.4
3. Percentage of farmers using improved varieties	50	8.8
4. Tons of paddy rice - annual	2000	63
5. Improved varieties & cultivation practices for coffee and cocoa	in use	in use
6. New farmers in tree crop production	500	0 *
7. Dry season crops & vegetables suitable for the project area	to be determined	completed
8. Farmers receiving training	250/yr. in 5th yr.	450/yr
9. Farm jobs created	500	undetermined**

* Promotion coffee/cocoa plantings discontinued due to drop in market price

** Direction of the project has been changed to work with existing farmers

Most of the OPG targets were set unrealistically high and would not have been achievable even if the project had started out with no complications. The original targets set by PFP assumed mechanized land clearing and preparation and represented an ignorance of the social and economic setting of the project. Monitoring performance of these targets was virtually impossible until 1983 when present management instituted regular statistical reporting at the urging of USAID. Both PFP and USAID agreed that the original OPG targets were out of line and in early 1983 PFP began drafting in revised set of OPG targets in a workplan for the remainder of the project. The workplan was finally approved by USAID in February, 1983. The workplan targets reflect the structure of the PFP extension program and specific crop and animal extension activities are readily measured. Targets for each quarter are set through the remainder of the grant period. Targets for the quarter ending November 30, 1983 (latest statistics available) and for the end of the grant period are listed below and followed by a discussion afterward:

PADDY RICE TARGETS

	Total Acres Planned/Actual	Total Farmers Planned/Actual
November 1983	70/63	230/235
May 1985	170/	470/

UPLAND RICE TARGETS

	Households Using LAC 23 Planned/Actual	% of Total Upland Farming Households Planned/Actual
November 1983	Feasibility study	
May 1985	1000/	20/

POULTRY TARGETS

	Total Finished Chickens Planned/Actual	Total Farmers Planned/Actual
November 1983	5000/5776	30/23
May 1985	8000/	42/

HOG TARGETS

	Total Mature Breeding Sows Planned/Actual	Total Farmers Planned/Actual	Total Finished Hogs Planned/Actual
November 1983	10/24	5/9	50/35
May 1985	10/	5/	80/

FISHERIES TARGETS

	Total Ponds Planned/Actual	Total Farmers Planned/Actual	Total lbs. Fish Harv. Planned/Actual
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November 1983	3/2	3/4	150/0
May 1983	13/	13/	450/

COMMERCIAL VEGETABLE TARGETS

	Total Acres Planned/Actual	Total Farmers Planned/Actual
November 1983	12/15.9	60/67
May 1985	24/	90/

BANANAS/PLANTAINS TARGETS

	Total Suckers Planned Planned/Actual	Total Farmers Planned/Actual
November 1983	3000/3333	20/17
May 1985	8100/	44/

COFFEE/COCOA TARGETS

	Total Acres W/improved Mgmt. Planned/Actual	Total Farmers Planned/Actual
November 1983	75/71	50/53
May 1985	105/	68/

VILLAGE DEVELOPMENT SELF-HELP TARGETS

	Total Latrines Planned/Actual	Total Wells Planned/Actual	Total Spring Boxes Planned/Actual
November 1983	15/13	5/8	1/1
May 1985	26/	13/	5/

EXTENSION TARGETS

	Visits Planned/ Actual	Meetings Planned/ Actual	Demos. Planned/ Actual	In Village Meetings Planned/ Actual	Agent Training Workshops
November 1983	480/400	300/240	16/11	1/1	1/1
May 1985	480/	300/	16/	1/	1/

As is readily noted from the charts above, targets relating to swamp rice and tree crops have been considerably reduced from the original OPG targets. All agricultural operations in Liberia revolve around the upland rice crop and at certain times of the year the upland crop consumes all available labor (January/February for men and July/August for women). At all times agricultural operations required for upland rice take precedence over lowland rice, tree crops and vegetables. As a result, farmers are able to free up enough labor to develop only small acreages (1-2 acres) of swamp rice. The original targets were predicated on the use of mechanized land clearing which was discontinued for reasons mentioned earlier. Without mechanized land clearing, the original targets are unachievable. The revised targets for all crops represent realizable goals which can be achieved by the farmer population themselves, without PFP doing the land clearing.

Note also that PFP has provided animal extension from the beginning of the grant even though there were no targets in the OPG.

The upland rice targets are for a seed exchange program similar to the ones administered by Bong County Agriculture Development Project and Lofa County Agriculture Development Project. PFP is still examining the anticipated demand for LAC 23 seed and the mechanics of exchanging LAC 23 for the farmers' traditional seed rice. This program has had a large impact in Bong and Lofa Counties and should be encouraged in Nimba as well. One critical prerequisite for exchange of seed should be included so as not to encourage soil erosion from cultivation of excessively steep slopes - no seed should be exchanged for upland fields that are greater than 20 percent slope.

As can be seen, attempts to encourage new hog farmers have been discontinued. This is because of a problem marketing pork in the Yekepa area and because of the high price of imported feeds. The established meat markets and transport services are controlled by Moslems. Also, farmers have refused to substitute local feed stuffs for the traditional use of imported feed.

The fisheries program is a weak appendage of the agricultural program and is not well integrated into the extension service. The program is run by one Peace Corps Volunteer who attempts to get the PFP extensionists to do fisheries extension. In addition, the PCV has devoted part of his time to assisting with general PFP program development which has lessened his impact on fisheries development. The evaluation team visited two small fish ponds in Sanniquellie, one of which had no source of water in the dry season. Only one was stocked. This program is floundering and is having essentially no development impact. PFP plans to have a fisheries training workshop within the next six months. The team recommends that PFP eliminate the fisheries extension from their program. The NCRDP Project has a very viable fisheries component which is staffed by extensionists who do only fisheries extension. The PFP extensionists are already over extended and fisheries extension (which was not in the OPG) is an additional responsibility which will never get the attention it deserves. The team further recommends that the NCRDP fisheries extension program be invited to operate in the PFP program area.

PFP's extension activities in general are effective. The extension agents are exceptionally well qualified and are very enthusiastic about their work. PFP works mostly with small farmers who crop small acreages and as such the program is very small-scale and is limited by how much labor the farmer can spare from his upland rice activities. PFP does have full time commercial farmers (mostly poultry, hogs or vegetables) but with the exception of a few larger farms the average size is only 1-2 acres. PFP's impact is on a very grass roots level of development dealing on a microeconomic scale. The packages being extended are low input, do not require mechanized land clearing or preparation and are easily replicable and sustainable.

A last issue which is always raised in conjunction with irrigated rice production is how to control the incidence of schistosomiasis. It is beyond the resources of PFP to establish a Schistosomiasis Surveillance Unit (SSU) like those at BCADP and LCADP. A survey done for PFP by the Liberia Institute of Biomedical Research (LIBR) during the rainy season concluded that swamp development did not promote an increase in schistosomiasis transmission because schistosomiasis was not currently being transmitted in the project area (no infected snails could be located). There were, however, individuals tested that already had schistosomiasis indicating that the disease is present in the area. The disease is spread at water contact sites (washing/bathing areas in swamps, streams and rivers found close to human habitation which are generally contiguous with water drawing and defecation/urination sites). The spread of the disease is controlled by breaking the cycle, by minimizing snail populations and by drawing water from uncontaminated sources. PFP is addressing this problem through their Village Development Committee (VDC) program by building latrines to isolate waste from water contact sites and building wells and spring boxes to provide uncontaminated water (which

reduces contact between man and snail and greatly reduces transmission of schistosomes). This is done in conjunction with health education talks. Also, all PFP credit packages for swamp development contain a line item for irrigation boots, and the water control obtained after the irrigation system is built can be used to inhibit snail infestation through proper water management. On the aspect of water management, the team believes PFP can implement some simple additional techniques which are known to prevent snail breeding. The following methods cause radical alteration of the snail habitat and disrupt breeding:

- clearing of vegetation in irrigation channels to deprive snails of food and resting places;
- intermittent irrigation will result in sudden changes of water level and wave action;
- flooding (harmful for all snails);
- changing speed of water flow in irrigation channels;
- straightening and deepening margins of irrigation channels and paddy bunds.

Special efforts should be made to educate the farmers as to why these additional steps should be taken.

RECOMMENDATIONS

1. PFP should continue with its current agricultural extension approach.
2. PFP should implement their upland rice seed exchange program as soon as possible but only on farmers' fields with less than 20 percent slope.
3. PFP should eliminate its fisheries program and invite the NCRDP fisheries program to operate in the PFP area.
4. Additional swamp rice cultural practices which discourage snail breeding should be included in the PFP extension education.

ENTERPRISE DEVELOPMENT SECTION

LAMCO, during the mid 1970's, felt that a viable community in Upper Nimba County, independent of the iron ore concession, could be forthcoming if the development of industrial and commercial enterprises was encouraged. This led LAMCO to invite PFP/International to Liberia to establish PFP/Liberia in the Yekepa area.

It was originally planned that this organization was to develop and work with medium size businesses in Yekepa utilizing locally available materials to serve other markets as well as Yekepa, and that establishment of these businesses could finally result in the preparation of a community capable of absorbing the LAMCO work force after the iron ore was depleted. It was thought at the time that the most promising activities to attain long-term viability were the forestry, sawmilling and woodworking enterprises. Other enterprise development opportunities include: food processing, mechanical services, transportation, metal working, charcoal, tool making, soap making, tailoring, handicrafts and retail enterprises.

After the founding of PfP/Liberia in 1974 and after several years of operation, PfP/Liberia realized the need for expansion and that funds provided by the GOL and LAMCO were inadequate to support this need. They appealed to USAID and in 1980 USAID assistance to PfP/Liberia began. At this point policy changes were made to emphasize agriculture and the rural poor. It was reasoned that the stimulation and diversification of agricultural production offered the best opportunity to create an economic base and that a larger portion of the population was already involved in agricultural activities. Hence agriculture was the central focus and the other PFP activities took second place. The Enterprise Development Section hired two extension agents initially, one at the very beginning of the OPG and one nine months later. Both had serious emigration problems resulting in one agent running away. The other was fired later on for stealing. From April 1982 to December 1982 the Enterprise Development Section was essentially inoperative, no new agents were hired and the Enterprise Development Advisor was appointed Acting General Manager in August. From January 1983 to June 1983 over 140 applicants were screened for 7 positions as extension agents. The training program was designed and 10 of the applicants were selected for training. The two month training consisted of business planning, financing, marketing and record keeping. Of the 10 selected for training, seven were employed, one in the Credit Office and six in the Enterprise Section. The program actually got underway in August of 1983.

The Enterprise Development Section (EDS) has seven members: the Section Head, Deputy Section Head, Extension Supervisor and four Extension Officers.

The four extension officers live in the rural areas (one to each clan) and cover the fifty towns and villages of the project area under the direction of an extension supervisor. As outlined earlier in the Agriculture Section, both the enterprise extensionists and the agriculture extensionists are actively encouraging the formation of new Town Development Associations (TDA) and working with existing TDAs.

The Section Head and Deputy Section Head maintain responsibility for the overall EDS activities but concentrate the majority of their time working with clients in the major urban areas of Yekepa, Camp 4 and Sanniquellie. They also maintain a close relationship with the Small Enterprise Financing Organization (SEFO) which maintains an office within the project area in Sanniquellie*. PFP works with SEFO upon request to review the technical feasibility of loan requests. PFP also provides assistance to business people preparing loan requests for SEFO and also to those who have already received loans.

PfP has gradually moved away from organizing the formation of new cooperatives. At the time of this evaluation PfP was giving assistance to only one cooperative (Wala Laakeh). Cooperatives in Liberia have not served the interest of their members and most of those registered are inactive for several reasons. Cooperative credit societies are controlled by a board of directors who often manage to obtain large loans for themselves. In this situation they have little desire to pay back the loan and failure of the credit society relieves them of their debt burden. Cooperative marketing societies often fail because the little money earned in commissions is often spent or lost through poor business management such as:

1. purchasing a truck before an adequate produce base supply is obtained;
2. poor control over use of vehicles;
3. paying too high a price for produce ignoring proper deductions for moisture and defects;
4. poor control over produce and loss through theft from warehouse and trucks; and
5. grants of loans to members are often never collected.

PfP has found that management of formal cooperatives is non-responsive to suggested management changes even though PfP has loaned funds to them. Also the ACDB has been rolling over loans to the cooperatives when they come due thereby perpetuating the present system and minimizing the leverage of PfP to effect implementation

of standard business practices. For these reasons they no longer work with formal cooperatives but prefer to work with informal traditional "koos" (work cooperatives).

* SEFO is a private, non profit lending organization formed to encourage small enterprise development. It has Dutch funding and is submitting a proposal to USAID for technical assistance. Their loan ceiling is \$30,000 and their loan floor is zero.

OPG targets for this section were as follows:

	<u>Planned</u>	<u>11/30/83</u>
New Small Manufacturers	20	68
New Small Manufacturers - New Employment	200	140
New Small Manufactures - Annual Sales Volume	\$145,000	\$264,000
Small Business People Receiving Assistance	100	120

As can be seen, PFP has already exceeded three out of four of the OPG targets. Given the slow start of the Enterprise program this is especially encouraging. The Enterprise Section interacts with 30 rural and 17 urban business activities which include retailing, carpentry, weaving, welding and tailoring. The evaluation team visited 13 projects supervised by this Section including a thread making and weaving group, a drug store, a bakery, furniture makers, three carpenters, a gas station, and various retail stores.

The team also visited the Wala Laakeh supply store which was established through the aid of PFP. Aside from the Wala Laakeh cooperative which has substantial management problems, the other businesses were active and successful. There is tremendous potential for this Section as evidenced by the progress since reorganization, and the evaluation team feels that the momentum here is building. PFP plans to expand enterprise extension into the NCRDP project area and the team believes this is a sound idea if the enterprise promoted are production oriented. NCRDP does not have an enterprise development program so this is not a duplication of effort. This would entail hiring additional extensionists which appears to the team to be necessary anyway due to the increasing volume of client requests for assistance.

One aspect of this program which is somewhat weak is the need for more attention to marketing concerns. Most PFP clients are weak in their ability to understand the dynamics of the marketplace and would rather worry only about producing. PFP does provide technical advice to clients to help them be responsive to market demand, but PFP itself seems less aware of the overall marketing picture than they should be. The county-wide and country-wide marketing potential for PFP client activities needs to be studied so that marketing links outside the LAMCO area can be maximized. This is especially important because many of the small businesses that are assisted by PFP are totally dependent on the LAMCO/Yekepa economy and will not be able to continue in operation should the mine close unless other markets are developed for their goods. Although the Enterprise Section is just "gearing up" after a long period of inactivity, the team feels that staff time should be devoted soon to marketing.

In this regard a full-time staff member of the Enterprise Section concerned only with developing markets would be well justified.

Another issue is the large proportion of the urban clients that are engaged in activities that cannot take advantage of markets outside of Yekepa. For instance, a fish depot, tailor, photo studio, tea shop, drug store, restaurant, cassette retailer, gas station, etc. are all enterprises dependent solely on the Yekepa economy with no potential to serve outside markets. In the future PFP should select only clients that do have potential to serve outside markets in the event of a phasing down of the LAMCO activity and subsequent contraction of the local economy. Along these same lines PFP should concentrate activities on "Production" enterprises rather than "Service" enterprises.

RECOMMENDATIONS

1. Increase the number of enterprise extensionists.
2. Add a "Market Investigator/Developer" to the staff of the Enterprise Section.
3. Select urban clients that have the potential to serve markets outside of Yekepa.
4. Concentrate project resources on "Production" enterprises rather than "Service" enterprises.

ADMINISTRATION SECTION

The Administration Section was reorganized in 1983. Originally its staffing pattern included the General Manager, Deputy General Manager, an executive secretary, and the Comptroller's Office. The recent reorganization expanded the Administration Section to include the credit office and the vehicle maintenance operation as well. What was formerly the Chief Accountant position has now been expanded to an administrative financial management position which will officially be termed "Administrative Comptroller." This individual will be responsible for credit administration, accounts and finance, vehicle maintenance, and program administration and will report directly to the Deputy General Manager (see appendix 1, organizational chart). Until very recently, Credit was a separate section along with Agriculture, Enterprise Development and Appropriate Technology, and the Program Administrator (formerly called office manager) reported directly to the General Manager. When both the General Manager and Deputy General Manager are absent, the Administrative Comptroller will be acting General Manager.

The former Chief Accountant was dismissed in June, 1983 and the position has been vacant since then. This prolonged vacancy has been hampering project implementation. The Credit Advisor has been

required to cover not only the credit activities but budget preparation and project planning exercises as well. The Accountant's experience is inadequate to qualify her for the expanded responsibilities of the new administrative comptroller position. With the administrative comptroller position vacant, the backup in the Accounting Office is extremely weak. When the Accountant is absent there is no one capable of filling in for her. This severely constrains PFP operations.

Both the General Manager and the Deputy General Manager are required to divert an inordinate portion of their time to handle routine administrative functions. The net result is administrative ambiguity. The new administrative comptroller position has been advertised, four resumes were received, and interviews with candidates were held in January and February 1984. There were only four responses to the advertisement and of these only two appear to be serious candidates. Due to the importance of recruiting a strong individual for this position, the position should be readvertised immediately to attract a larger selection of applicants and the position filled within one month of the advertised application deadline.

A. Financial Controls

Because of two cases of financial impropriety and because PFP has expanded from 18 to 40 employees during the course of the OPG, the present General Manager has instituted some necessary financial controls which were not in place before. New purchase and inventory control procedures are now being strictly enforced: proformas must be obtained, a check authorization requiring two authorized signatures (4 people are authorized signatories), one of which must be the General Manager's, and when goods arrive, an inspection and receiving report is filled out and the goods are then inventoried by the appropriate section. As mentioned earlier, the Administrative Comptroller will be bonded for \$30,000. In addition, PFP is developing financial reporting procedures that will generate fiscal reports on a regular basis.

B. Institutionalization - PFP/L is well along the way to institutionalization. They were established in 1974 as a non-profit development foundation and their Governing Council is composed of Liberian associations, agencies and government bodies. They are well established and well known in Liberia and Nimba County in particular. However, both PFP/I and PFP/L have neglected the fund raising aspect of operating an organization like PFP/L. PFP/L is essentially an extension service and as such the cost cannot be levied as a fee directly on the immediate beneficiaries. Everywhere in the world the cost of extension services are borne either by the government by commercial operations or by outside donors. The prospect for immediate improvement in the Liberian economy is poor. The GOL

ability to contribute the core funding necessary to operate PffP/L is limited. PffP/L will not become fully institutionalized until they have the capacity to secure core funding to keep their operations going without interruption. Traditionally PffP/I has performed this function for PffP/L, but they have been non-responsive to PffP/L's present fund raising needs.

PffP continues to make progress in other aspects of its institutionalization. Present PffP management has instituted a number of improved management practices. Senior staff meetings and general staff meetings are now held on a regular basis rather than on an ad hoc basis as before. Also, the PffP-office has recently been computerized with the addition of two Apple II computers for processing of all PffP correspondence and internal documentation. As outlined earlier under financial control procedures, PffP has taken a number of steps to insure accountability. In addition, quarterly statistical reporting was instituted for the first time in the third year of the grant. Up until that time, there was no regular tabulation of project achievements and PffP reporting consisted mostly of estimates (for instance, the total acreage of swamp rice developed under the project was not surveyed until 1983). The present workplan is organized into a series of performance targets against which project progress is measured. This is a tremendous step forward.

Because of the increase in the number of Liberian project personnel under the OPG, the need for a personnel policy manual became obvious. Although PffP/International has a personnel policy manual applicable to all the expatriate employees, a manual for the Liberia staff taking into account Liberian labor laws had never been developed. PffP/Liberia has recently developed such a manual.

The interface between PffP/I and PffP/L regarding hiring of expatriate personnel is ambiguous, although this is not a big issue since there should be little or no hiring of expatriates for the remainder of the project. The contracts of all expatriate personnel should be signed by the PffP/L General Manager as well as by PffP/I. In the past this sometimes was done and sometimes not. This should be instituted as policy since actual supervision of employee performance is done here in Liberia and not in Washington.

Surprisingly, PffP/L does not have a Liberianization Plan, nor even a target date for complete Liberianization. The OPG target date for complete Liberianization is by the end of the project in 1985. By February/March 1985 there will be only three expatriates remaining on the project - the General Manager, the Agricultural Advisor and the Appropriate Technology Advisor (the Enterprise Development Advisor and the Credit Advisor will have completed their contracts). Reasons given for the lack of a

formalized plan were that PffP/I and the Governing Council (GC) need to be involved along with PffP/L in developing the plan and that the funding future of PffP is uncertain which makes long term planning difficult. Management intends to include the topic of Liberianization on the agenda for the March, 1984 meeting of the Governing Council. The evaluation team feels that this issue has been neglected and that PffP/L should take the lead to draft a plan and coordinate between PffP/I, the G.C. and USAID. The plan should be included as part of the OPG extension proposal.

PffP/L was a primary mover in the establishment of the Nimba County Development Committee whose members include the County Superintendent, all ministries and parastatals represented in the county, NCRDP, PffP, and private sector representation. The committee's purpose is to plan and coordinate all development investment and activities in Nimba County to avoid duplication of efforts. This is the only active committee of this type in Liberia.

Present PffP management has developed a much closer relationship with the GC and the Ministry of Agriculture. This has been especially beneficial since the membership of the Governing Council includes a wide cross section of the government and private sector. The net effect has been the effective utilization of the G.C. to solve problems by keeping them informed on all issues and using the varied skills and contacts represented on the council not only to direct but to assist management. The former management did not have such as effective working relationships with the G.C.

Of major concern to PffP/I and PffP/L is the need for income diversification. USAID/Liberia currently provides 89% of total project costs under the OPG. Although USAID/L has indicated it will consider funding an extension of the OPG, should USAID decide against an extension the PffP program would virtually collapse. A discussion of PffP's options for income diversification is included in the Financial Viability section.

- C. Administration of Vehicle Maintenance - In December, 1983 vehicle maintenance was separated from the Appropriate Technology Section and placed under the Administration Section. In the past the AT advisor had been required to spend an inordinate amount of time administering vehicle maintenance even though there was a vehicle maintenance staff headed by an excellent mechanic. This change was intended to allow the ATC to concentrate on its activities and to shift the administrative tasks of vehicle maintenance (including paperwork) to the chief mechanic with supervision by the Administration Section. Although this was a logical change, the AT advisor still remains burdened by the vehicle maintenance paperwork. The chief mechanic still sees the AT advisor as his "boss man" and continues to report to him as before. He also is unaccustomed

to the paperwork and requires assistance every time reporting requirements are due. Vehicle maintenance is physically located in the ATC (for tool sharing) which makes it easy for the chief mechanic to depend on the AT advisor. In affect the vehicle maintenance operations are still under the ATC, even though they have been transferred on paper. The team recommends that the clerk/typist assigned to vehicle maintenance be given additional responsibilities for administering vehicle maintenance paperwork and a commensurate increase in salary. In this way the chief mechanic can go back to being a mechanic. When the Administration Comptroller position is filled the situation should improve since he will be tasked with supervision of vehicle maintenance. Adding the additional responsibilities to the Clerk/Typist position should be delayed until the new Administrative Comptroller is oriented and can supervise and direct the changes.

- D. PfP/L's Relationship with NCRDP - The relationship is excellent and both projects are very closely aligned in their development philosophy. PfP/L provides coverage in the Yarmein, Zor, Sehyi and Gboe clans in Upper Nimba County and NCRDP covers Southern Nimba County. Both of these projects provide agricultural extension and each contain their agricultural extension activities to their designated areas. NCRDP has a county-wide health extension component to the project which does operate in the PfP area. PfP has plans to expand their enterprise development extension activities into the NCRDP area and eventually all of Nimba. The two projects mutually complement each other by this exchange. NCRDP is staffed by Ministry employees and their payroll is made by the MOA as their contribution to the project. PfP extension personnel are not MOA employees although the PfP salaries are based on the MOA salary scale. Both projects agree that free inputs to farmers do not work, that mechanization of small farmer land preparation is rarely economically feasible (including power tillers) and that formal cooperatives have not worked.
- E. The Relationship between PfP/I, PfP/L and the Governing Council is extremely ambiguous. The General Manager currently is an expatriate and has two bosses (PfP/I who hired him and the Governing Council). When the position is Liberianized it is not known what will be the relationship between PfP/I and the Liberian General Manager. Most likely PfP/L and the G.C. will still require the assistance of PfP/I to obtain funding. At this point in time the three parties involved should define their relationship. An excellent forum for this is the PfP extension proposal which should include a section devoted to explaining the mechanics of a working relationship between the three under the proposed extension.
- F. PfP/I OPG Fiscal Reporting Performance has been poor. Payment under the OPG is disbursed under a Federal Reserve Letter of Credit to PfP/I in advance of their needs. PfP/I is then

required to submit to AID/W "no pay" vouchers (Standard Form 1034) and a "Financial Status Report" (Standard Form 269). The AID/W Financial Management Office then forwards a copy of the Financial Status Report (FSR) to USAID/Liberia for verification that the funds were indeed spent for project activities. PFP/I had been incorrectly filling out the FSR in that they did not itemize expenditures by OPG budget line item but rather filled in only the total expenditures column of the form. The financial information contained on the FSR is the basis for the USAID Project Officer's approval or disapproval of the PFP expenditures for the period specified on the report. Unless the report is itemized according to the OPG budget, there is no way for the Project Officer to verify the expenditures, especially since PFP/I and PFP/L expenditures are all submitted on the same voucher. For this reason, the USAID Project Officer sent PFP/I a letter on November 19, 1982 explaining the need for itemization on the FSR and requesting itemization on all future submissions. PFP/I has been non-responsive to this request and as a result the FSR's for the following periods were disapproved by the USAID Mission:

July 1, 1982	-	September 30, 1982
October 1, 1982	-	December 31, 1982
January 1, 1983	-	March 31, 1983
July 1, 1983	-	September 30, 1983

PFP did make a proper submission for the period April 1, 1983 - June 30, 1983 which was approved, however, no amended FSRs for the periods specified above have been received. It should be noted that the disallowances did not interrupt AID/W disbursements into the Federal Reserve Letter of Credit.

This points out a major flaw with the OPG mode of assistance. The Mission is tasked with monitoring the field performance of the OPG but has no control over administration of grant funds. Disallowance by USAID/Liberia of the FSR's mentioned earlier has not stopped the flow of funds to PFP.

The evaluation team strongly recommends that administration of OPG grant funds be transferred directly to the USAID Mission so that proper monitoring of grant funds (including review of actual receipts submitted) can be instituted.

Recommendations

1. Readvertise the Administrative Comptroller position and fill the vacancy no later than May, 1984.
2. Include a Liberianization plan in the OPG extension proposal.

3. Shift responsibility for preparation of paperwork for vehicle maintenance from the Chief Mechanic to the Clerk/Typist.
4. PffP/I should submit amended Financial Status Reports (AID Form FS 269) for the periods that have been disapproved by USAID/Liberia.
5. Mechanics of the relationship between PffP/I, PffP/L, and the Governing Council should be explained in the OPG extension proposal.
6. PffP/I should fulfill their obligation as grantsman for PffP/L and secure other donor core funding to prevent project shutdown if an extension is not approved by AID.

Appropriate Technology Center

The Appropriate Technology Center operates a workshop with various equipment for working metal and wood. Its staff is composed of an expatriate advisor, his assistant, and an appropriate technology aide. Recently, a Peace Corps Volunteer has joined the Center. The ATC's annual budget is approximately \$60,000.

The role of the Appropriate Technology Center differs considerably from that of PffP's other sections. The ATC does not have a specific target group or a program with specific development objectives. (An exception is ATC's Charcoal Development Program which will be treated separately below). The ATC's principal function has been to respond to specific requests for technologies, products and services from PffP's other sections (and from other development projects). These requests have included new tools and techniques to be used by PffP's clients, special devices needed by PffP's staff to carry out its work, and more mundane administrative requirements such as maintaining and repairing PffP's equipment. The ATC's tasks have varied from developing new devices and producing prototypes to modifying existing technologies to suit local conditions and manufacturing products that otherwise would have to be purchased at great expense.

As envisioned in the OPG, the ATC was to have four objectives:

- 1) to operate a workshop to produce appropriate tools and technologies for PffP's client group;
- 2) to extend these new tools and technologies to the client group;
- 3) to train apprentices and local artisans at the ATC workshop; and
- 4) to maintain PffP's vehicles and other equipment.

The ATC workshop was to serve as a factory, producing appropriate technology items to be sold to Pfp's clients. Employment in the workshop would provide opportunities for local artisans to serve as apprentices to develop new skills. ATC's extension agents would link the workshop to the target group of technology users. Vehicle maintenance would be a vital if peripheral activity.

In implementing the project several major modifications have been made. As originally envisioned, the workshop would have been in direct competition with traditional small-scale industries which Pfp was attempting to promote under its Enterprise Development Service. Moreover, ATC would have to market the new products it was promoting. Rather than adopting this "factory" approach of mass production and direct sales, ATC has limited itself largely to developing and producing prototypes, highly specialized items and products that are required in very limited numbers. Usually after the ATC workshop has produced a prototype it contracts with local artisans to produce additional copies for testing or Pfp's own use.

If demand for the product by the general public develops, it can be met by these local establishments.

This approach seems a much more efficient approach than the OPG's original plan. The ATC's resources can be devoted to designing, developing and testing products while production is handled by existing establishments. These establishments themselves are aided through the new skills learned by being shown how to produce new product lines that they can then sell. Thus, the ATC has used contracting to local firms as a means both of producing new products and improving the capabilities of local industries.

A second modification of the OPG approach was deleting ATC's extension component. Originally, the ATC was to employ 2 extension aides. However, because of shortfalls in Pfp's budget during its first year, it was decided to delete the ATC's extension tasks. This has meant that it has been up to the extension aides of the Agricultural and Enterprise Development Sections to identify technological constraints and opportunities and ask the ATC to devise a suitable technology or product. Once ATC receives a request, it sets about developing and testing a prototype. When satisfied with the product, ATC would turn it back over to the extension personnel to introduce it to their clients. In many cases, the technology or product requested by the other Pfp section has not been developed for use by their clients but developed to address a Pfp staff need. Simple planometric and topographical survey instruments for laying out irrigated rice swamps are a case in point. Also, requests have come not only from Pfp sections but from other development projects as well, notably NCRDP and AID's Zero-Tillage project. Again, in most cases, these projects have required special tools to be used by project staff rather than technologies or devices to be adopted by some target group of farmers or artisans. ATC has also manufactured some more common "household" items for Pfp's use such as window bars and trailer

hitches. Presumably, in these cases it was judged to be cheaper to devote ATC's existing resources to fabricating these items than purchasing them from a local or foreign manufacturer.

Because the workshop has not engaged in large scale production it has not had the opportunity to provide training for apprentices. Instead, ATC's contribution to training has come through showing artisans how to fabricate items that it was contracted for.

One final change in the ATC's operation has been the recent separation of the vehicle maintenance operation from ATC. While ATC was responsible for vehicle maintenance for its first three years of operation, it was decided that the vehicle maintenance staff had gained sufficient capabilities to operate without the supervision of the ATC advisor. This has relieved the ATC advisor of a considerable burden though he is still called upon to provide maintenance service for other equipment on an ad hoc basis. An administrative problem did develop with processing the vehicle maintenance paperwork, and this is discussed in the administration section.

Table 4 lists the major projects and products on which the ATC has worked during the OPG period (except for charcoal-related products) along with the status of the product/project. One can draw several conclusions from this list. First, the ATC has been requested to make relatively few items for use by PFP's client group of small farmers and entrepreneurs. Of these, few if any have been widely accepted by their intended users. In cases like the metal bread oven or rice parboiler, PFP's extension agents have not been able to interest the target group in adopting them. None of the products manufactured by local workshops for ATC are now being manufactured for sale to the general public (except in charcoal production as will be discussed below). The ATC has had much more success in meeting the demands for tools to be used by PFP itself and other development programs.

Table 4
Major ATC Projects During OPG

<u>Technology</u>	<u>What ATC Did</u>	<u>Status</u>	<u>Requested</u>
Chicken feeders waterers, brooders	Producer prototypes, Introduced to local manufacturers	Used on PFP demonstration farm and Diggs Poultry farm	PfP/Agr.
Farrowing pig pen	Produced prototype	Used at Dumbar Piggery, Camp #4	PfP/Agr.

Reinforced cage and ladder for Sacleipie water tower, water drainage system	Manufactured	Water tower in use	NCRADP
Charcoal briquette press	Designed and produced prototype	Not in use	PfP/ATC
Rice planter for "no-tillage" system	Produced prototype, modified designed, manufactured 9 units	In use by CARI "zero-tillage" project	USAID
Rice parboiler, soil sterilizer	Produced prototype,	Used in demonstrations, none in use	PfP/Agr.
Wire twisting machine for rebar	Designed and Produced for low cost construction	Used in building Sacleipie NCRDP office and Garnaglay bridge	PfP/low cost construction Cinvaran block
Press	Modified design, introduced to local manufacturers	Produced as required by private business	PfP/low cost construction
Topographical and planometric surveying equipment	Designing low-cost instruments (i.e. \$50)	Topographic still in developing; planometric completed, used by PfP, 5 ordered by Cuttington	PfP/Agr.
Cement pouring chute	Designed and manufactured	Used in building Garnaglay bridge	NCRDP
Steel bridge components	Manufactured	Used in Garnaglay bridge	NCRDP
Log splitter	Designed but the design is too sophisticated for local production	Not in use	PfP/ATC
Tree planter	Designed and manufactured 2 units	Used by FDA	FDA
Cement molds for well culverts	Modified design	Used by NCARDP, PfP, MRD	NCARDP

Well culvert installation equipment	Designed and manufactured units	In use; redesign for a new type culvert underway	NCRDP
Irrigation dam and system	Designed	Pending Agriculture sections "go ahead"	PfP/Agr.
Palm kernal oil extractor	Designed and produced prototype	Further design work needed	PfP/ATC
Well pulleys	manufactured 8 units	in use in various villages	PfP/Agr.
Metal bread oven	Produced prototype	Prototype to be sold; one sold	PfP/ women's program
Brick oven	Designed	Bricks currently being produced	PfP/ women's program
Soap Manufacturing	Designed and equipment produced		PfP/ women's program
Metal strips for keying door and window frames	Machine designed and produced	Used in construction of Dulay-NCRDP and better homes	PfP/low cost construction
Rebar tying tool	2 manufactured	NCRDP Garnaglay Bridge	NCRDP
Rebar bending tool	2 manufactured	NCRDP Garnaglay Bridge	NCRDP

Many of its products, such as a rice planter especially developed for zero-tillage cultivation in Liberia, are unique. Some of these could not be fabricated elsewhere in Nimba.

The ATC's failure to introduce into general use any major new technologies is probably due to the very weak links between ATC and PfP's clientele. The ATC has virtually no direct contact with PfP's target groups. As it has had no extension staff and the ATC advisor rarely visits the field, ATC's approach has been to respond to the requests of others rather than actively to identify and promote potentially useful technologies. In responding to specific requests it has been very effective. For example, during the evaluation team's field visit to a client farmer's field, it was suggested that there was a need for a simple, inexpensive scale for measuring

harvests since conventional scales costing \$100-200 are far beyond the means of small farmers. Within two days of being given the suggestion, the ATC was testing a simple prototype. However, the extension aides of PFP's other section have not been an effective link for the ATC either in identifying technological opportunities or in promoting the adoption of improved technologies. Furthermore, once such an opportunity has been identified, the potential users have not been consulted again until they are presented with ATC's final product. This lack of involvement probably accounts for their failure to adopt new technologies. While the technology developed may be socially as well as technically sound, the intended recipients have had no stake in making the technology work since they took no part in developing it. Without a sense of ownership that would come from participating in developing a technology, the recipient may be unwilling to invest their time and effort to try a new technology to see if it really works. Thus, such evidently sound ideas as the metal bread oven and rice parboiler have never been really tested by the intended users.

It would seem, then, that the ATC faces two major tasks: to develop a system by which opportunities can be identified to introduce new technologies and institute a system which will involve the intended beneficiaries throughout the development and testing process. PFP has already identified both of these needs and, in response, is in the process of developing an extension program to serve both of these tasks. This program will not field AT extension agents but rather will create a stronger link between the ATC and other sections by having a full time ATC extension liaison (at present a Peace Corps Volunteer who joined the project in February, 1984). The extension liaison will conduct training sessions for agricultural and enterprise development extension agents on how to identify technological constraints and opportunities. She will also accompany extension agents in their field work to help in this process. The extension liaison will also develop a program to involve the recipient groups in the ATC's work.

Charcoal Development Program

The Charcoal Development Program is a discrete activity under the ATC. It has its own budget provided by the EEC and ITDG which is larger than the ATC's. Its staff consists of an expatriate advisor and extension aide. The program has been in operation since July, 1983 and is scheduled to end in July, 1984. At present PFP is considering requesting an extension of the program.

The charcoal program is an outgrowth of the ATC's earlier work in improved charcoal technology. However, the charcoal program's operations differ markedly from ATC's other activities. Most notable is that the program has its own extension/education component and has constant contact with its target group of charcoal makers.

When it started, the program was intended to introduce the use of a 7 m³ metal kiln with an efficiency of 25%, compared to 10-15% for a traditional earth kiln. The metal kiln to be introduced consists of two metal cylinders stacked one on top of the other and covered by a conical top. The F.O.B. price from its British manufacturer is over \$2000. However, PFP was able to contract with a Monrovia firm to make the kilns for \$1075.

The charcoal program, however, anticipated serious problems with the appropriateness of the metal kiln for charcoal makers in Nimba County. It was feared that even at its reduced price the metal kiln would be beyond the financial means of most Nimba charcoal makers. However, this has not been the case and the demand for kilns has been great (the first 12 kilns have been sold and over 20 more have been ordered). The metal kilns can produce a load of charcoal in 48 hours (as compared to a week for the traditional method) and requires a great deal of organizational and management skill to be run efficiently. Unless the maker can have at least two burnings per week, he will not make a return on his investment.

A more fundamental problem with the charcoal program's initial approach was the limited market for charcoal in Nimba County. The urban areas of Ganta, Yekepa and Sanniquellie offer small markets which are already well served. Monrovia, the only really substantial charcoal market, is already supplied by Montserrado and Bong Counties which are the most important charcoal-making areas in Liberia. However, the charcoal market in Monrovia is far from saturated.

The charcoal program has responded in two ways. It has developed a new technology using a pit technique which requires only a third the investment that the metal kilns require and runs on a five-day cycle rather than a two-day one. The program has also been expanded beyond Nimba County to encompass the entire country. Because of delays in the local manufacture of the metal kilns, the extension effort was only started in earnest in February, 1984. The main vehicle of the extension effort will be a two-week course on charcoal production which will include instruction with the metal and pit kilns. The first courses will be given in Nimba County but will also be offered in other areas as demand warrants. The charcoal program staff will also advise on other aspects of charcoal production including more efficient management. Likewise, EDS staff will participate in the program, particularly in helping charcoal makers manage funds and finance the purchase of kilns and capital equipment.

As the extension effort has just started, the impact of the charcoal program cannot yet be evaluated. However, preliminary indications are that the program may have a significant impact among major charcoal producers. Already, the manufacturer of the metal kilns has received orders for 32 units of which 12 are in operation, even though the program has completed only one demonstration and that for a single private company.

The potential impact on local charcoal makers in Nimba County may not be as great. Pfp has come to realize that management, organizational ability and marketing are probably greater constraints than technology for the numerous small charcoal makers in the county. Moreover, some operations are so small and primitive that they need assistance in financing just a cutlass, shovel and axe. Pfp has made some efforts to address these problems including encouraging Nimba producers to sell their charcoal in Monrovia. So far this has had limited success because of the distrust between charcoal makers and transport operators.

Summary and Conclusions

The operation of the ATC has in many ways been peripheral to Pfp's objectives. It has produced numerous useful tools for Pfp staff and for NCRDP and USAID as well. It has saved Pfp money by producing inexpensive, simple items rather than purchasing more expensive and complex ones which are often foreign made. However, such services hardly seem essential to Pfp's operation or goal. Nor would they justify ATC's existence on the grounds of cost saving.

The principal rationale for ATC would seem to be the development and introduction of technologies that will better the lives of Pfp's client group. As of yet, ATC has made little progress towards this goal - save possibly for the charcoal project. Pfp has taken corrective action in this area with its appointment of an extension liaison and plans for closer coordination between ATC and the extension agents of the other sections and for involving the intended technology users in the development and testing of technologies. While this is a creditable approach to the problem, its implementation will not be easy. The effectiveness of the extension liaison program should be closely monitored.

An alternative approach would be to identify and target a few technologies which would have the greatest impact rather than responding to requests for assistance on an ad hoc basis. Once particularly attractive technological opportunities are identified, they could be the subject of a concerted development and extension campaign by ATC. Essentially this is the format adopted by the charcoal development project. This approach would hold the promise of reaching a large number of the target group (possibly beyond the Upper Nimba region) rather than just the group who sought out the technology and those others who might hear of it by word of mouth. This approach would, of course, require additional time and resources for the ATC, especially in developing an extension campaign. This makes this approach impractical during the remaining period of the OPG. However, the process of identifying areas suitable for such concerted campaigns should be initiated by the extension liaison.

Ultimately, one must also question whether there is in fact a need for an ATC, especially after the AID grant runs out and Pfp is faced with fewer financial resources. Before the end of the AID grant

period, PFP should reevaluate the role of and need for the ATC. The success of the extension liaison campaign and the opportunities for major new programs using the format of the charcoal development project must be closely examined. Unless significant progress is made through the extension liaison effort or major opportunities are identified for new interventions, the rationale for the ATC must be reconsidered.

The success of ATC in meeting the demands for specialized equipment for PFP, NCRDP, USAID etc. suggest one possible alternative approach for the ATC: that of an AT "consulting firm" that performs specialized work for other organizations, not just development projects and agencies but private firms as well. To a certain extent, the ATC has been doing this already for other projects on a reimbursable basis. Actively seeking "for profit" work may be a means of supporting ATC's costs or at least defraying the costs of services to PFP's client group.

The charcoal program seems to be well on target, especially for the larger producer. If small producers are to be helped, more emphasis may be needed in management and marketing -- tasks probably more suited for EDS than ATC. Improvements to the traditional earth kiln may be possible which would be affordable to all charcoal makers. AID's Energy Initiatives for Africa project may have relevant experience in this area which can be made available free of charge to PFP.

RECOMMENDATIONS

1. PFP should pursue the new extension liaison approach giving special attention to involving PFP clients in identifying and developing technologies for their use.
2. The ATC advisor and extension liaison officer should identify technologies that can be extended on a large scale basis (the charcoal project). PFP should consider soliciting additional funding from EEC or other donors to fund development/extension programs for such technologies.
3. At the end of the OPG, PFP should conduct a systematic evaluation of the ATC's performance to examine possible changes in ATC's rationale, program and structure. Items to be considered are:
 - a. How effective the new extension liaison approach has been.
 - b. Whether there is the potential of carrying out major development/extension programs in the style of the charcoal program where ATC will conduct extension itself; also, whether additional funding from donors is available.
 - c. Whether ATC can be restructured as a "for profit" consulting firm doing jobs for public and private sector firms.

Credit Program

The PfP Credit Program provides capital to PfP's clientele of small farmers and businessmen to complement the technical and managerial assistance provided by agriculture and enterprise development extension. It was established because of the lack of credit institutions in the area serving small and medium sized enterprises.

The credit program's objectives are:

1. To ensure that credit reaches all PfP clients, both farmers and small entrepreneurs who need it;
2. To maintain sufficient capital in the loan fund to meet the needs of small farmers and businessmen in future years;
3. To educate the clients to both the responsibilities of and opportunities created by the proper use of credit; and
4. To develop linkages with existing financial institutions.

Originally, the program was administered by the Credit Officer and Cooperatives Officer. However, it became clear that effective monitoring of clients could not be done adequately by the Credit Officer and the Co-op Officer alone, especially in view of the projected increase in loan demand from new EDS clients. Also, PfP decided that Credit should be integrated more fully with the Enterprise Development and Agriculture Sections in the evaluation of loans.

As a result, credit committees were formed for both the Agriculture and Enterprise Development Sections, follow-up, and collection duties were devolved to the agriculture and enterprise field staffs; and a new Credit Aide was hired to liaise between the field and the office.

Membership on the Credit Committees is as follows:

<u>Agriculture Committee</u>	<u>Enterprise Committee</u>
1. Credit Advisor	1. Credit Advisor
2. Credit Officer	2. Credit Officer
3. Agriculture Advisor	3. Enterprise Development Advisor
4. Agriculture Officer	4. Enterprise Development Officer

5. Agriculture Extension Supervisor

5. Enterprise Development Extension Supervisor

6. Management Representative

6. Management Representative

The Enterprise Development Credit Committee reviews applications from large agricultural enterprises as well as other businesses. The Agricultural Credit Committee handles applications from small, semi-subsistence farmers.

The Credit Program has extended a total of 157 loans through November, 1983 with a value of \$66,124. Farmers have received 102 loans totaling \$27,953. PFP's loan ceiling is \$5,000 and their loan flow is zero. Table 5 shows a breakdown of agricultural loans by type of activity.

Table 5

<u>Activity</u>	<u>Number of Loans</u>	<u>Value of Loans</u>	<u>Value as % of all Loans</u>
Poultry	29	\$ 15,122.24	54
Swamp Rice	31	5,230.55	19
Commercial Vegetable	27	3,678.90	13
Piggeries	2	3,281.00	12
Plantain/Bananas	4	341.45	1
Cocoa/Coffee	9	299.15	1
Total	102	\$ 27,953.29	100

The average agricultural loan has been for less than \$275. Loans for swamp rice, the most numerous category, average less than \$170, while poultry loans have averaged over \$520.

Some \$7,453.54 in loan repayments are in arrears (i.e., more than 60 days overdue). This represents 27% of all agricultural loans extended. Of this, \$3,379.48 or 12% is in default or is considered very likely to be defaulted. Table 6 shows the break down of arrears by activity. Poultry and plantain enterprises have proven to be the most secure credit customers while swamp rice and especially vegetable enterprises the greatest risks.

Table 6

<u>Activity</u>	<u>Arrears as % of Loans to each Activity</u>
Poultry	10%
Swamp Rice	41%
Commercial Vegetables	77%
Piggeriers	25%
Plantain/Bananas	---
Cocoa/Coffee	32%
Total Agricultural Loan Arrears	27%

In Enterprise Development, 55 loans have been extended as of November, 1983 with a total value of \$38,171.25. Table 7 gives a break down by activity.

Table 7

<u>Activity</u>	<u>Number of Loans</u>	<u>Value of Loans</u>	<u>Value as % of all Enterprise Loans</u>
Small Industry			
Start-up	5	\$ 4,383.00	11
Expansion	13	5,442.00	14
Retail/Services			
Start-up	13	18,596.25	49
Expansion	24	9,750.25	26
Total	<u>55</u>	<u>\$38,171.50</u>	<u>100</u>

Of the 55 loans, only 4 with a value of \$1500 are classified as rural. The balance have gone to urban enterprises. By far the greatest demand for credit has come from the retail and service sector which accounts for 67% of the loans and 75% of value of the portfolio.

The arrears on loan payments for Enterprise Development Credit is \$7,541.55 or 20% of the total portfolio. Of this some \$1,402.99 or 4% is classified as in default or very likely to default. Table 8 shows the distribution of arrears by activity.

Table 8

<u>Activity</u>	<u>Arrears as % of Loans to each Activity</u>
Small Industry	
Start-up	22%
Expansion	12%
Retail/Services	
Start-up	8%
Expansion	47%
Total Enterprise Development loan arrears	<u>20%</u>

Loan repayments have been a major problem, especially for agricultural loans. As a rule, agricultural loans are not secured because farmers do not have freehold title to land that could serve as collateral.

For rural loans, PFP's strategy has been to prosecute all delinquent clients through the Clan Chief Courts. All Clan Chief Courts' decisions have been rendered in favor of PFP. However, these have had little effect on repayment of most of the overdue loans because of the Courts' lack of enforcement authority.

Because of this disappointing record, PfP initiated a policy of taking delinquent clients to Justices of the Peace (JP's) who have greater enforcement authority. However, this new policy has been held in abeyance since all JP's were suspended by the Ministry of Justice because of a dispute with the judiciary regarding to whom the JP's were responsible. In the interim, prosecutions through the clan courts have continued. In Yekepa, four cases have been successfully prosecuted in Magistrate's Court. Though this process has been difficult and expensive, it seems to have had an exemplary effect on other delinquent customers.

Stricter security requirements have been enacted for the loans in EDS. Clients are required to sign mortgage deeds over their real property and chattel mortgages over their personal property, as well as finding two co-makers to stand bond. A Loan Investigation Fee of 1.5% was instituted to partially defray some of these increased costs. An analysis of both the costs and the effects of these new requirements, including probating the loans in the Sanniquellie court, should be possible at the end of the next six-month period.

Recommendations

1. Continue the prosecution of delinquent borrowers.
2. An analysis of the costs and the effects of the new credit requirements should be included in the next six month report.

THE WOMEN'S PROGRAM

INTRODUCTION

The purpose of the Women's Program was to expand the income earning opportunities of rural women in Upper Nimba and to provide training.

The program has operated over the past two years only in the Yekepa area. Its primary foci were in the areas of baking bread for sale and consumption, sewing of children's clothing, child care and food preparation, local dye-making and marketing techniques. These foci were underscored by direct cash credit to rural women. However, it was observed that the Agriculture and Enterprise Extensionists were involved with larger income-generating activities with the very same clients that were specifically addressed on a smaller scale by the Women's Program. Thus, the program was duplicating the efforts of PfP's other sections.

Therefore, in early November, 1983, PfP abolished the Women's Program as a separate activity. Rather, the agricultural and enterprise development sections have assumed the objectives of the program and will hire female extension agents to increase their contact with women clients. The new female extensionists would be assigned to specific areas just like their male counterparts and would be responsible for the same activities as the other extensionists. The advantage of women extensionists will be largely

realized during the extension workshops which are held every two months. The female extensionists will help sensitize the male extensionists to the needs of women clients as well as to conducting extension in their assigned areas.

Recommendations

1. PfP should complete the review and redesign of the Women's Program as an integral part of the Agriculture and Enterprise Sections' activities.
2. PfP should hire two or three women extensionists in addition to the current extension staff.

The Low-Cost Construction Program

The PfP low-cost construction program was included in the OPG because of the large demand for new housing brought about by the rapid population growth of the areas (like Camp 4) surrounding the concession area. There was in-migration of non-LAMCO employees to the LAMCO area at that time because of the strong local economy supported by the spending patterns of LAMCO and LAMCO employees. Prior to PfP involvement, the initial attempts by LAMCO to start Liberian-owned and managed construction firms proved unsuccessful. The objectives of the PfP program were to: 1) set up a contractor's association, 2) work with them until they could stand on their own, 3) and "spin-off" the activity by phasing out PfP assistance.

A Peace Corps construction specialist spearheaded the program which began in 1977, and was later hired by PfP when his Peace Corps service was over. He conducted evening courses in the rudiments of estimating, bidding, work planning and job and financial management. The courses also served to identify several contractors with motivation and potential. At the start of the OPG in 1980, PfP efforts were already underway to form a contractor's association. PfP contracted for the jobs directly and then subcontracted to the various contractors. The construction specialist supervised construction and provided instruction on construction methods and use of cinvaran blocks (90% laterite, 10% cement) which are very lowcost and strong and durable. Under this arrangement, PfP and the fledgling contractor's association completed a substantial number of contracts including the NCRDP compound in Sacleipie (1978) and Dulay Village (1978-1979) which was built to relocate an entire village whose homes had been damaged by mine run-off.

During the OPG they built an office building for the contractor's association, built an extension for the PfP office building, built the Carol High School, and completed several bridges. Almost coincidental with the PCV's departure in February 1982 and the attempted spin-off of the contractor's association, LAMCO began experiencing depressed demand for iron ore and began a program to cut expenditures (setting off a series of retrenchment and expenditure cutbacks which continue to date). The contractor's

association experienced increasing difficulty finding construction contracts culminating with the collapse of the association in 1983 and the relocation by most of the contractors to other parts of Liberia. Given the 1983 retrenchment of 1/3 of LAMCO's workforce and the continued economic decline in the greater Yekepa area, Pfp has no plans to revive the program.

FINANCIAL VIABILITY

The greatest problem to institutionalizing Pfp/L is securing a source of continued funding once AID's OPG has run out. For the past four years, AID has been the principal source of Pfp/L's funding, providing approximately 89% of its cash income. Because of the economic and financial problems that have beset Liberia and the iron ore sector, contributions from the GOL and LAMCO have not been as great as originally anticipated. The GOL has contributed \$93,000 and LAMCO's support has totaled \$90,000. Besides these, Pfp/L has generated limited income from the rent of surplus equipment and property, interest and other charges paid by Pfp's credit customers and cost reimbursement received by the Appropriate Technology Center for services performed for NCRDP and USAID on an ad hoc basis.

Pfp/L's financial requirements, once its operations are fully Liberianized, will probably be approximately \$600,000 per annum. Several proposals have been made on how Pfp/L can secure this level of funding. These include initiating a profit-making business to underwrite Pfp/L normal operations; selling Pfp's expertise as a consulting firm; imposing user charges on Pfp's clientele; and diversifying Pfp's sources of donor support. These strategies are not mutually exclusive. However, few hold the promise of contributing significantly to Pfp's financial requirements. Moreover, some may divert vital resources and managerial attention away from Pfp's principal goal and, thus, may be counterproductive.

Starting profit-making enterprises seems the least promising of these options. Pfp operations in other countries have used this approach. However, there are several factors that make its success in Liberia dubious. First, the potential for profitable enterprises is limited in Upper Nimba County which is undergoing economic contraction because of LAMCO's reduced operations. Secondly, to operate such enterprises, Pfp would require trustworthy and competent managers which are not easily found. Also, outside enterprises would require close monitoring and administration by Pfp. Given Pfp's limited administrative resources and past problems, this may be beyond its capabilities. Finally, it is doubtful that this approach could generate sufficient revenue to make a significant contribution towards meeting Pfp's needs. Even if it were assured a 10% return on its investment, Pfp would need \$6 million in capital to produce profits to match its regular operating budget.

A more promising approach is selling PffP's expertise as a consulting firm on Liberian economic and social issues. PffP has already some experience in this field. Its general manager undertook a study for the EEC on its Buto oil palm scheme in Sinoe County (\$35,000), and PffP is presently discussing another study on a proposed EEC rice project in Grand Gedeh (to be conducted by the Deputy General Manager). In a sense, the Appropriate Technology Center has also been employing this approach in selling its expertise to other development projects (though usually only on a cost reimbursement basis rather than for profit). It has been suggested that PffP actively pursue consulting work from donors, the GOL and even private firms. Its work could include not only project feasibility studies, designs and evaluations but also act as a broker for investors in identifying business opportunities and local entrepreneurs. Given its low overhead, its experience and its contacts, particularly among businesses in Nimba County, PffP would have a considerable comparative advantage in these areas.

Two qualifications should be made, however. First, to date PffP's consulting work has basically involved surplus PffP resources and probably carried little cost (in the sense of opportunity cost) to PffP's normal operations. While the General Manager was engaged in doing the Buto study, his deputy was present to assume management of PffP's day-to-day operations. When PffP's staff becomes fully Liberianized, it will not have its present depth (especially if additional Liberian staff is not added when the expatriate staff leaves). This consulting work may divert resources from PffP's principal goal. Secondly, any profits from PffP's consulting work will undoubtedly cover only a fraction of PffP's financial requirements.

User charges have been another proposal. Already, PffP's credit customers are charged 18% and a one-time 1.5% investigation fee. These do not fully cover the cost of the credit program, however. Likewise, the Agricultural Section now charges for the use of equipment (e.g. roto tillers) which were previously provided free of charge. The objective of these charges is more to instill a sense of responsibility in the user rather than to recover costs. It is doubtful that any but a nominal fee could be charged for most of PffP's services given the generally low income and small scale of its clientele. Also, most of PffP's services are in extension which is normally provided free. It is doubtful that PffP's farmers would be willing to pay any extension fee when they know that farmers in the lower portion of the county receive comparable services for free from NCRDP. One potential area for user charges may be the larger enterprises served by EDS (e.g. a gasoline station with projected sales of \$30,000 annually). Businesses of this scale can be expected to pay something for PffP's services.

Diversifying sources of donor contributions is probably the most promising approach. To date, neither PffP/L nor PffP/I have made a major effort in this area. Besides USAID, GOL and LAMCO, only the EEC has provided funding and this has been for a discrete activity

-- the charcoal development project -- rather than for Pfp's general operations. Other donors that might be approached include UNDP, UNICEF, the Near East Foundation, the Rockefeller Foundation, the African Development Foundation, UK, FRG as well as the EEC. Likewise, continued funding from the GOL should be sought. In essence, Pfp is serving as the agricultural extension service for Upper Nimba. Since the GOL supports similar agricultural extension efforts (NCRDP, BCADP, LCADP), a strong argument can be made that Pfp deserves the same support.

SUMMARY AND CONCLUSIONS

Securing sources of continued funding after the OPG expires should be Pfp's first priority. There are a variety of strategies Pfp can use but only continued donor assistance is likely to provide funds of the magnitude needed to keep Pfp operating. Consulting work user charges can make at least some marginal contribution to Pfp financial requirements. On the other hand, the risks involved in profit-making enterprises and the demands this would place on Pfp's management are probably greater than any benefits that might be derived.

In addition, there may be some opportunities for cost cutting however, there are no obvious areas where major cost savings can be realized. Staffing levels are not excessive; nor are salaries. Any cost savings, that can be made by economizing measures will be small compared to Pfp's need for sustained, financial support.

RECOMMENDATIONS

1. Pfp/L and Pfp/I should take concerted action to secure core funding from the GOL and other donors to prevent project shutdown.
2. EDS should investigate the possible use of fees for its consulting services for larger client businesses.
3. While Pfp should pursue opportunities for providing consulting services, it should closely examine demands such services will make on Pfp staff and possible detrimental impact on its normal operation.
4. Any additions to Pfp's present operations must be closely scrutinized for recurrent cost implications.