

PEACE CORPS



SUBMITTED TO

OFFICE OF FORESTRY, ENVIRONMENT AND NATURAL RESOURCES
BUREAU FOR SCIENCE AND TECHNOLOGY
AGENCY FOR INTERNATIONAL DEVELOPMENT

A FINAL REPORT AND VIEW TOWARD THE FUTURE

FOUR YEARS OF AID/PEACE CORPS COLLABORATION
IN FORESTRY AND NATURAL RESOURCES

SUBMITTED BY

OFFICE OF TRAINING AND PROGRAM SUPPORT
FORESTRY/NATURAL RESOURCES SECTOR
PEACE CORPS/WASHINGTON

SEPTEMBER 1984

ACKNOWLEDGEMENTS

We wish to acknowledge the many individuals who have been instrumental in the development and support of the Peace Corps/AID Forestry Participating Agency Service Agreement (PASA). The initial PASA was signed in August, 1980. Mr. George Mahaffey, Forestry/Natural Resources Sector Specialist of the Office of Programming & Training Coordination (now Office of Training & Program Support), coordinated the efforts in behalf of Peace Corps with Mr. Dan Deely, Staff Forester, of the Office of Forestry, Environment and Natural Resources in USAID's Bureau for Science & Technology. We would like to acknowledge a special thanks to Mr. Deely for all the technical, logistical and administrative assistance he has provided Peace Corps throughout the duration of the PC/AID forestry PASA. Without his assistance the level of success achieved under this joint effort would not have been realized. Other USAID staff members that were and continue to be of invaluable assistance include David Joslyn, Former Chief, Forestry Section, Office of Science & Technology, and the current chief of that office Carl Gallegos.

Our appreciation also goes to the following persons at the USDA Forest Service. Robert Brandt Chief, International Affairs (Retired), Les Whitmore, International Forestry, and Tim Resch of the Forestry Support Program. Assistance from these individuals has always been readily available to the Peace Corps' Forestry/Natural Resources Sector in its efforts to maximize its effectiveness in the delivery of development assistance facilitated by the PASA.

Special thanks and appreciation goes to the staffs of the following offices which have continuously been supportive of the endeavors of the Forestry/Natural Resources Sector at Peace Corps. USAID's Bureau of Food for Peace & Voluntary Assistance, USAID's Regional Bureau Representatives in Washington, D.C. and the Society of American Foresters.

During the life of the PASA, numerous individuals here at Peace Corps had important roles in the smooth operation of the projects and program undertakings by the Forestry/Natural Resources Sector. In the coordination of these activities, we had to collaborate on a day to day basis with Peace Corps offices in charge of regional affairs related to international operations. The Africa, Inter-America and North Africa/Near East/Asia & Pacific Regions must therefore receive commendation on the excellent manner in which they executed these programs and projects related to the PASA. Our special thanks to the Directors and staff of the three regions. Mr. Joseph Radford, Mr. James Bacon and the remaining staff of the PC Contracts Office has provided the Forestry/Natural Resources Sector thorough assistance throughout the life of this PASA; to them we express our thanks.

Through the four years of the PASA, we have used consultants time and time again to augment our limited staff resources. Mr. Bruce Burwell, International Forester has provided services to the Peace Corps in Latin America, Africa and the Asia/Pacific Region and developed and piloted the Forestry Stateside Training Model which is now being widely used with commendable results. We would like to express profound thanks and appreciation to Mr. Burwell. He has been exemplary in the caliber of service provided Peace Corps.

Expressions of thanks goes to Mr. Tom Scanlon, President of Benchmarks, Inc., and his staff consultants, Ms. Jean O'Neil, Mr. Fred Conway and especially Ms. Karen Veek for all their assistance rendered and especially for sifting through the maze of information and documentation of activities facilitated by the PASA and for the invaluable contribution to OTAPS/Forestry/Natural Resources in the compilation of a report on the merits and triumphs of the PC/AID Forestry PASA.

Finally, Mr. Mahaffey expresses his sincere thanks to his present staff of Mr. Julius Weeks and Mr. Jacob Fillion for their relentless support and hard

work in the implementation of the activities outlined within. Also, to Mr. Jay Tuttle, Mr. Robert Kornegay and Mr. James Patric, previous Peace Corps Forestry/Natural Resources staff members. A warm and personal thanks for a job well done by all

Executive Summary

On September 30, 1980, the Agency for International Development (AID) and the Peace Corps signed a Participating Agency Service Agreement (PASA) in which both agencies agreed to share resources in an expanded effort to assist less developed countries to improve management practices for forestry and natural resources.

The agreement was formal acknowledgement that AID and the Peace Corps meet each other's needs remarkably well in the fields of forestry and natural resources -- and that they could join resources and efforts while still preserving the identities and strengths of each agency.

The Peace Corps and AID agreed to a carefully articulated mutual agenda involving programming assistance, pre-service and in-service training programs and material support for Peace Corps projects. After the third year of the PASA, AID requested that the Peace Corps assume an additional responsibility and assess the possibility of placing Peace Corps volunteers in forestry and conservation programs funded by PL 480 in "Food for Peace" programs. A total of \$1.48 million in AID funds were committed to the PASA. The Peace Corps committed \$6 million in volunteer time and staff support.

The AID/Peace Corps Forestry/Natural Resources PASA achieved its goals in every respect. In some cases, it surpassed them. A summary of activities and accomplishments follows.

Programming Assistance

1. Country-Assessments

The Peace Corps agreed to assess the potential for AID/Peace Corps joint programming in forestry and natural resources in 12 countries. In fact it

performed 26 such assessments in a period of six months. A schedule of assessments and a matrix of their basic findings are included as Appendices A and B of the report.

The assessments were performed by consultants who were carefully screened, trained and briefed prior to leaving for the field. Their reports identified an abundance of opportunities for collaboration and joint projects between the two agencies.

2. Programming Workshops

Three were held, one in each Peace Corps region -- Costa Rica, for Inter-America; the Philippines, for the Pacific and Mombasa, Kenya for Anglophone, Africa. A total of 138 participants were trained, representing 23 countries.

The programming workshops consisted of an examination of issues related to collaborative programming which had been identified in the individual country assessments. Collaboration was broadened, by definition, to include an examination of working relationships not only between Peace Corps and AID but with PVOs and host country agencies as well. The programming cycles of different agencies -- as well as of host country governments -- were explained as well as the difficulties of coordinating programming decisions in those agencies with the recruitment and training cycles of the Peace Corps. Both formal and informal collaborative arrangements were examined with the conclusion that each had validity depending on the circumstances.

In workshops, participants performed actual programming exercises, sometimes based on real-life and other times on fictional case studies.

The Peace Corps believes that the increase of 150 Peace Corps volunteers now working in forestry and the expansion of forestry projects in 16 countries were direct results of the programming workshops.

3. Program Consultants

As the workshops followed from the assessments, the basis for the program consultant activities was derived from the lessons learned and issues raised in the workshops. The PASA made it possible for consultants to visit all Peace Corps regions providing technical assistance to Peace Corps country teams on forestry program development, assessment of institutional problems in-country and on creating greater coordination with and among host country agencies working in forestry.

4. Pre-Service Training

In the area of training, the Peace Corps also went beyond the goals of the PASA. It not only conducted the required two model pre-service training programs for forestry volunteers but also created complete and detailed manuals for repeating these courses time and time again. One manual is for an in-country training in the Inter-America region for forestry and natural resource conservation. The other is a curriculum for teaching these same subjects to trainees Africa-bound while still in the United States. The Inter-American manual is for those with some background in forestry; the African manual can be used to teach "generalists" to perform meaningful services in Africa.

Due to the improved quality of training and preparation of volunteers -- made possible by the PASA and to the resultant increase in site and job satisfaction, the attrition rate among forestry volunteers had dropped below 5% -- a level which is substantially below the average agency level.

5. In-Service Training

This activity provides not only "in-service training" for Peace Corps volunteers but also substantial organizational or "institutional" development for host country agency personnel -- at the level of Peace Corps counterparts and then supervisors.

One hundred and fifty volunteers and host country agency personnel have been trained in four different in-service training exercises. These were held in Paraguay, Costa Rica, Upper Volta (Burkima Faso) and the Solomon Islands. In addition, the Peace Corps has provided assistance to Peace Corps teams in the Dominican Republic and Honduras to mount their own in-service training efforts.

In-service training is critical for both volunteers and their counterparts, yet the opportunities for training frequently do not exist. The Peace Corps needs to invest the bulk of its training funds in pre-service training. When it does provide training for volunteers and counterparts, as the PASA funds enable it to do, the Peace Corps imparts new skills, improves communication and increases the effectiveness of host country agencies at levels where few international development institutions can reach.

It has been said that the ultimate validity of the Peace Corps "counterpart" philosophy -- which is to leave something behind so the host country can carry on without the volunteer -- is not so much in the training of individuals as in improving the effectiveness of the institutions with which the volunteers work. This is what was attempted and accomplished in the in-service training activities. It is only possible with AID funds since training for counterparts falls outside of the Peace Corps' Congressional mandate.

6. Material Support

The PASA made \$200,000 available to the Peace Corps for material support to Peace Corps forestry "pilot projects" in nine countries. In this particular program aspect, the PASA anticipated, by several years, the Small Projects Assistance or SPA program which is now a chief vehicle for collaboration for the Peace Corps and AID in over 30 countries. The basic realization which led to material support for forestry projects was that volunteers occasionally need investments of small (even miniscule) resources to get community programs underway. The dividends paid by these investments have been very high indeed. A community education program was designed and implemented for \$75. In Paraguay, six nurseries, which had not been functioning at all, provided seedlings to community groups after receiving material assistance from the Peace Corps. Seeds, fertilizers, scales, measuring tapes and other basic tools of conservation and forestry programs have been made available worldwide to volunteers through this material resource fund.

7. PL 480

In the last year of the PASA agreement, the Peace Corps has conducted a formal examination of opportunities for collaboration between AID, the Peace Corps, host country governments and private voluntary organizations in community forestry projects supported by PL 480 or "Food for Peace" programs.

This examination of joint programming opportunities, completed in June of 1984, involved visits by a team of three Peace Corps forestry specialists (all former volunteers) to seven African countries and to the U.N. World Food Program in Rome.

The new AID/Peace Corps interest in PL 480 opportunities in forestry is based on findings of AID's Office of Forestry, Energy and Natural Resources that PL 480 programs may be responsible for more reforestation -- in terms of trees actually planted and surviving -- than all of AID's direct forestry funding worldwide.

The Peace Corps team interviewed over 400 persons and visited 34 project sites where "Food for Work" programs had reforestation and conservation objectives. It developed joint programming guidelines and models for community projects which will emphasize the importance of community responsibility for project monitoring, distribution of trees and overall accountability. The team also identified important income generation opportunities in Food for Work/Peace Corps projects, but recommended strongly that volunteers not be involved in food distribution itself.

A Program for Future Collaboration

The Peace Corps proposes to continue this coordination of volunteer and AID resources in the years ahead. Specifically, it recommends:

- a continuation of regional workshops aimed at increasing collaboration among AID, the Peace Corps, PVOs and host country agencies;
- an expanded effort to improve the functioning of host country agencies at the level of village level workers and their counterparts;
- increased and continued "seeding" of Peace Corps community projects in forestry with small amounts of material and financial resources;
- further follow-up on AID/Peace Corps joint program opportunities in specific countries;

- additional improvements in training for Peace Corps foresters, especially in Asia and the Pacific;
- continuation of program consultants in an effort to improve Peace Corps/AID forestry and natural resource collaborative programs; and
- a major, four year effort to develop a new capability at the Peace Corps to combine volunteers with food aid programs in appropriate ways and in appropriate program models.

The Peace Corps believes that a four year \$2 million program, stressing AID/Peace Corps collaboration in PL 480 programs, will result in 20 times more trees being planted and surviving in developing countries than is usually the case with this level of AID direct assistance to a host country government. Such a four year effort will also result in greater community development and accountability for PL 480 resources.

The Peace Corps is prepared to embark on a new four year PASA agreement with that as its objective.

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I. Background

This report summarizes the activities carried out under the terms of the the Participating Agency Service Agreement (PASA) between the U.S. Agency for International Development and the Peace Corps, signed September 30, 1980, for cooperative efforts in Forest Resources Management. In this section of the report, background information is provided on the international institutional settings which led to the PASA, the structure of the PASA and its proposed purposes and goals.

Forest Resources: An Important Development Interest

Forest resources are among the most significant for the future well-being of developing countries. About 1.5 billion residents of the developing nations rely on fuelwoods for cooking; about 200 million actually live and farm in forest areas. Forests also provide medicinal plants, shelter for small animals, erosion control and agricultural water supply.

Though efforts are being made to reduce reliance on fuelwood, both through more efficient use of wood and through alternative power sources, it was estimated by the World Bank in 1982 that fuelwood requirements for domestic uses will nearly double by the end of this century.

As populations increase in Third World nations and concentrate more and more in large urban areas, demands for easily transportable fuelwood have led to wholesale clearcutting. Demands for basic foodstuffs as populations increase have pushed farmers to plant more and more fields which once held mature tropical, semitropical and subtropical forests. Compounding food demand, the pressure of fuel needs, technical ignorance, and that the soil fertility of many tropical forests is low means more and more land must be deforested to feed a given population than might otherwise be necessary.

While cooking fuel sources and basic foodstuffs are necessities, wholesale deforestation to obtain them presents grave problems -- including severe soil erosion, reduction of agricultural water supply, and an ultimate perverse need for reliance on imported fuel for industrial development, not to mention outright desertification in extreme cases.

Secondary issues as well weigh heavily in favor of sound management of forest resources. Failure to conserve wisely can sharply reduce species diversity (exposing the economy to a fragile reliance on the remaining few species.) Loss of mature forest habitat leads to erosion that can quickly silt up streams and rivers which had played significant roles in local commerce. Absence of forestland means reduction of the population of plant and animal life which could provide important sources of subsistence and income.

Forest resources are a critical link in the infrastructure available to support local self-help efforts as well as national macroeconomic development programs. Pressures -- indeed requirements -- to use such resources are overpowering. Sound management practices, including reforestation and other modern techniques, can, if consistently and widely implemented, augment these resources and ameliorate if not alleviate negative impacts from their use.

For these reasons, the attention of key U.S. and international agencies has increasingly been focused upon ways and means to encourage, promote and reward good forestry practices, and to develop methods of institutionalizing sound forest management practices throughout the developing world.

AID -- Its Role in LDC Forestry Management Prior to the PASA

The Agency for International Development administers the United States bilateral economic and social foreign assistance programs. It does so through Missions to specific recipient nations and through dispersal of technical assistance, loans and contracts as well as direct financial contributions to recipient governments.

During the 1960s, AID had some forestry expertise, but much of it had been lost by 1980. A Federal Interagency Task Force report on U.S. agencies' abilities to assist with growing problems of tropical rainforests cited AID's (and other agencies') serious deficiencies

...until recently AID's in-house technical expertise in tropical forestry...has been almost nonexistent...Federal agencies, including AID, currently have insufficient personnel assigned to planning, analysis and program implementation in the area of tropical forest management... [AID and other agencies] will have to go beyond reassigning staff and add new technical competence.

AID was not alone in needing to develop new approaches and improved expertise in forestry management. But AID was a focal point of Executive and Legislative Branch pressure for prompt action to protect remaining forest areas against ravishment and to reclaim deforested areas in a productive and cost-effective manner. Congressional direction was clear. The 1979 Amendments to the Foreign Assistance Act expressly and cogently summarized the role forestry assistance was to play in U.S. development aid efforts:

The Congress recognizes that the accelerating loss of forests and tree cover in developing countries undermines and offsets efforts to improve agricultural production and nutrition and otherwise to meet the basic human needs of the poor. Deforestation results in increased flooding, reduction in water supply for agricultural capacity, loss of firewood and needed wood products, and loss of valuable plants and animals. In order to maintain and increase forest resources, the President is authorized to provide assistance...for forestry projects which are essential to fulfill the fundamental purpose of this section. Emphasis shall be given to community woodlots, agroforestry, reforestation, protection of watershed forests, and more effective forest management.

The House Appropriations Committee in June 1979 specifically directed that AID include reforestation in all future rural development programs, that forest management issues be an integral part of AID environmental assessments and that ongoing rural development programs include forestry/firewood components where appropriate.

By mid-1980 AID Missions had begun to respond explicitly to these needs; forestry-related AID Mission assistance more than quadrupled between 1975 and 1979. AID was unhappy, however, with the random nature of these efforts. Its 1980 review noted that:

AID Mission forestry projects are being designed, implemented and evaluated by a wide array of consultants who have been

identified largely on an ad hoc basis without benefit of any systematically organized support network in forestry and related natural resource areas. Knowledge, skills and information which is [sic] being developed through ongoing programs or recent project planning work in LDCs is not being adequately analysed and appropriately transferred to other areas where it might be productively applied. Collective experience is not being examined, and practical directions and approaches for more effective future forestry-related assistance efforts are not being identified and pursued.

AID was faced with a known need and had a sincere commitment to action, but it lacked delivery mechanisms which could provide knowledge about forestry resources or could transmit, refine and preserve this knowledge.

It should be noted here that this report deals only with the AID/Peace Corps PASA and does not explore the networking and other arrangements AID established at the same time with the U.S.D.A. Forest Service.

In a Resources Support Service Agreement (RSSA) signed between AID and the U.S. Forest Service, an International Resources Support Network was developed, at a \$2.5 million cost to AID and \$2 million cost to the Forest Service. The Network was chiefly directed to the needs of AID Missions in lesser developed nations for "socially and technically relevant professional expertise in forestry resources" -- including immediate backstopping for missions in specific cases, establishment of a comprehensive network, and guidance to AID regional and headquarters staff on evaluation of programs and dissemination of promising

approaches and techniques. The Peace Corps volunteers would have access through AID to this technical support staff as well. Both the RSSA with the Forest Service and the PASA with the Peace Corps were part of the same project plan.

Peace Corps and Forestry Management

The Peace Corps, founded in 1961, provides trained U.S. citizen volunteers to assist lesser-developed nations in various self-help projects on a people-to-people level. Peace Corps volunteers live and work with local citizens, providing assistance and instruction in a variety of skills and projects to aid the urban and rural poor in the Third World. The value of Peace Corps assistance in reforestation and forest management has been clear; over 70 nations have specifically sought volunteers trained in forestry and forest management since the Peace Corps' founding. Forestry is one of the three most often requested volunteer skill categories. The Peace Corps has long recognized, however, some of the unique challenges to its participation in LDC forestry development. For example, many cultures do not recognize or manage vegetation as a resource, let alone a renewable resource. Moreover, forestry projects -- whether management or reforestation -- have long payback periods, discouraging to volunteers who serve two to four years and to the farmers and villagers who see no prompt results from their hard work. Forestry projects also demand materials and technical support in amounts beyond the authority of the Peace Corps or even the ability of the host nation to provide. Frequently, host countries -- the accustomed sources of materials and support facilities -- either cannot or do not allocate to their own forestry programs the resources that might profitably be used there, even though they concur in the severity of need.

Peace Corps efforts are also constrained by need for host nation agreement with projects upon which volunteers embark, and in the case of forestry, by the sheer size of some projects -- far beyond the capacity of a village or a small area team to undertake in any meaningful way.

Nonetheless, the Peace Corps joined AID in recognizing the extreme urgency of the need for action and undertook to place volunteers wherever possible in productive forestry/reforestation projects. The Peace Corps has sought to define forestry projects which meet its "basic needs" philosophy of development assistance and which also heighten local awareness of the rationale for resource conservation, impart to villagers the requisite knowledge and technical skills to sustain such projects, and identify replicable projects for application elsewhere. Yet Peace Corps specialists were fully cognizant of their volunteers' inability to implement and sustain productive forest management and reforestation efforts without other sources of complementary assistance.

The PASA -- A "Win/Win" Situation

In September 1980, the Agency for International Development and the Peace Corps entered into an agreement to share their resources toward enhanced forest management and reforestation projects. The underlying assumption of the PASA -- which has been amply demonstrated -- was that the two agencies meet each other's needs remarkably well.

To this partnership, the Peace Corps brought volunteers with technical skills, ability to work effectively with host country counterparts, familiarity with local culture and traditions, fluency in local languages, competence in community development, and the ability to act as effective rural development

agents. AID brought the weight of its total package of development assistance programs, its ability to provide technical assistance and direct material support to projects, its institutional links with host nation governments and its leadership role as the U.S. dispenser of foreign assistance.

AID agreed to provide \$1.2 million over a three year period to the Peace Corps. The Peace Corps would provide about \$6 million in volunteer salaries and benefits in related costs. AID's funds would be used to provide programming assistance, development of pre-service and in-service training materials, and material support to some of the projects undertaken.

Collaboration of Two Independent Agencies

The Peace Corps and AID carefully identified and preserved their agency identities and strengths; AID did not seek to operate one-on-one village level programs; nor did it try to dictate terms of any collaborative program. AID agreed to provide funds for training assistance to host nation counterparts through the Peace Corps, and to provide actual materials for conducting new and expanded projects. In addition, AID made available to the volunteers its Forest Resources Support Network, the result of AID's agreement with the Forest Service, to provide expert guidance on the wide range of variables that are encountered in forest management and reforestation programs in various climates and terrains.

The PASA's anticipated lifespan was at least three years, through FY 1983, with possible renewals to be determined. It laid out an ambitious course for AID and the Peace Corps both.

The PASA officially joined the two agencies in the common goal to reduce forest and related natural resource deterioration which threatens basic human needs of the rural poor in LDCs, and increase sustainable use of forest resources to meet those needs.

The Peace Corps was to aid in this goal by improving delivery of effective forestry assistance to LDCs for the benefit of the rural poor by mobilizing Peace Corps capabilities in support of collaborative local village projects.

To do so, the agencies formally agreed to:

- o Design and implement collaborative Peace Corps projects;
- o Create guidelines for AID/Peace Corps collaboration and local implementation;
- o Seek village level progress toward solving forest-related problems
- o Develop trained counterpart field technicians and training models.

These tasks would be carried out in a multi-step process.

First, baseline evaluations were to be undertaken in several countries. These evaluations would examine the Peace Corps, AID and host nation involvement in, and commitment to, forestry activities as well as the current level of cooperation between AID and Peace Corps and the potential for future cooperative forestry projects. These evaluations were to keep in focus the basic goal of the PASA -- to develop, demonstrate and make available for replication a range of tropical reforestation and forest management techniques. The new techniques would (1) be based on local needs, (2) be capable of incorporation into local resource management practices on a long-term basis, and (3) be appropriated for application in a variety of cultural, biological and political environments.

Second, substantive workshops involving AID and Peace Corps staff as well as host country staff and appropriate Peace Corps Volunteers were to be convened to focus on joint programming of forestry initiatives. In these workshops the perspectives of general rural development programmers charged with forestry responsibilities would be broadened, the significance of forestry/silviculture emphasized, links between forestry and other development efforts shown; project planning demonstrated, and all participants trained in the effective implementation of the partnership among AID, Peace Corps private voluntary organizations and the host nation.

In the third step, on-site programming assistance by Peace Corps headquarters staff, consultants, and AID personnel would be made available on an as-needed basis to help country staffs identify, develop and document potential projects/opportunities to lead to the development of one to three new and one to three expanded or redesigned projects.

In the fourth step, new or expanded country projects were designated as pilot projects: PASA funds, in the way of material support funds, would be made available in varying amounts to enhance these projects.

Fifth and simultaneously with the third and fourth steps, the Peace Corps would enlarge its body of trained forestry volunteers through improved pre-service and state-side regional training programs. At the same time Peace Corps, through the use of PASA training dollars, would be able to enlarge and improve the body of trained forestry host country counterparts through in-service training programs that simultaneously train them with Peace Corps volunteers. This would require the development of specific regional forestry pre-service and in-service training models and manuals.

Goals of the PASA

The Peace Corps under this agreement was to accomplish several specific activities to include: country assessments; three to six pilot country projects; three programming workshops, program consultancies; two pre-service training models; three in-service training workshops; and staff support at Peace Corps headquarters in Washington to focus on the forestry initiative.

The types of pilot projects to be undertaken was concisely addressed in the PASA document itself. Agreement was clear on objectives:

- a) to develop, demonstrate and make available for future transfer a range of tropical reforestation techniques...which can be realistically incorporated into ongoing (local) patterns of resource production and use.
- b) provide personnel adequately prepared and committed to engage in community extension work in forestry.
- c) provide seed money...with reasonable rapidity and flexibility (reducing the current two-year minimum delay).
- d) demonstrate a community-based project design approach which takes into account the variability of local political, cultural and biological environments.
- e) provide training methods and curricula based on adult learning techniques (which can be raised by the host country and which include forestry technical skills, project and community organization skills, and information dissemination skills...)

Potential difficulties were recognized at the outset by AID and the Peace Corps. The PASA document outlines these difficulties as challenges and urges they be viewed as an opportunity for new and bold approaches: lack of prior emphasis on care for natural vegetation; less than full-scale commitment to developmental forestry in some lesser developed nations; the need in forestry projects for significant amounts of both material and technical support; the difficulties in undertaking projects which require such long time frames and the likely conflict between subsistence needs and reforestation priorities.

Despite the above difficulties, the Peace Corps has accomplished -- and in some components exceeded -- all project goals. Responsibility for PASA implementation rests with the Forestry/Natural Resource Sector Staff of the Office of Training and Program Support which will be referred to throughout this report as OTPS/FNRS.

The FY 1983 Amendment -- Public Law 480

As a result of a midpoint evaluation of this PASA conducted by the Society of American Foresters, recommendations were made that additional funds (\$280,000) be provided in FY 1983 to extend the project through December, 1984. Trip provided AID and Peace Corps the administrative mechanism to continue funding host country counterpart forestry training as well as to explore a new aspect of possible AID/Peace Corps collaboration in forestry/PL-480 (Public Law 480 -- food for peace) projects.

PL-480's role in LDC forestry had been spotlighted by the finding that over half of the on-ground tree planting being supported by AID in LDC's was being accomplished under the so-called "food-for-work" provisions of PL-480 rather

than through regular bilateral assistance. The PL-480 examination funded by this PASA extension was to examine the potential for using Peace Corps volunteers to make such projects even more effective and to identify needs for further AID support to Peace Corps, host government and private voluntary organizations.

II. Assessments of AID/Peace Corps Opportunities
for Collaboration in Forestry

The first step in the PASA implementation was the development of country assessments with the potential for AID/Peace Corps collaboration in forestry. These country assessments, to be useful, had to explore not only the objective reality of forestry in the nation in question, but the more complex and crucial question of interrelationships between and among the host nation, the Peace Corps and AID, as well as the AID/Peace Corps climate for cooperation and the likelihood of additional actors in the forms of PVOs, NGOs and other nations' development agencies. As an additional task, the assessments would have to judge not only the actual forestry requirements of the host nation, but the potential for joint projects which the PASA might support in each nation and problems which might be encountered in PASA forestry efforts.

In order to develop this complex portrait, assessment teams had to be multi-disciplinary, skilled not only in technical issues of forestry and development but in interpersonal relationships, and effective in analysis and communication. Equally important, AID and Peace Corps country officials had to perceive the PASA as a worthwhile opportunity and the assessment team as a non-threat with the potential for substantial return on the time invested.

The original agreement required that 12 in-country assessments be completed. Further discussions led Peace Corps to complete 25 in the first six months of the PASA agreement.

To address the field perception issue, the PASA was introduced to the field in October 1980 through a cable inviting Peace Corps Country Directors to self-select for possible PASA involvement, and to do so in a way which provided

sufficient information to Washington to justify their desire to be involved. The AID country officers were likewise encouraged, given the agency's direct Congressional mandate, to become a part of joint efforts under the PASA. Country selections for assessment visits was predicated on positive responses from both Peace Corps and AID. Twenty-five nations were selected -- five from the Far East/Pacific region, seven from Inter-America and thirteen from Africa (both Francophone and Anglophone). Appendix A provides a chronology of these assessments, as well as a list of the team members who conducted them.

To assist in identifying and dispatching the consultants required, the Peace Corps designed a selection process which set forth the selection standards for consultants and which defined their mission and product with equal clarity. To expedite identification of consultants, the Peace Corps staged two two-day workshops in November and December 1980 to which candidate consultants were invited. AID officials were closely involved in the establishment of selection criteria and attended the workshop sessions. Consultant selection was based on tests of writing, communicating and other interpersonal, professional and analytic skills conducted during the workshops.

Meanwhile, the Peace Corps also identified the need for uniform and consistent reports. It recognized that circumstances and critical issues would vary from country to country, but that for the reports to have utility for decision-making, their aim and structure must be essentially parallel. Thus the Peace Corps developed guiding questions for each group of consultants to ask. The questions were integrated into clear instructions issued to all teams and were grouped in a logical and relatively conversational manner.

The questions also included excellent follow-up and open-ended response sections which permitted discovery of unanticipated features in each particular situation.

Consultants were expected to address the extent and nature of forestry programming in each nation with special attention to the types, frequency and depth of Peace Corps and AID involvement. In addition, the physical and biological needs for forestry programs in each nation and its administrative and bureaucratic climate were to be scrutinized. A third set of judgements was to be formed about the potential for strong cooperative relationships between AID and Peace Corps.

Having selected the consultants and designed the basic questions to be asked in the assessment visits, OTPS/FNRS brought the consultants to Washington for intensive three-day discussions with Peace Corps and AID officials. The individual agencies' perspectives and goals were independently outlined to consultants; criteria proposed by each for joint RASA projects were set forth; regional and country-specific data were shared.

Planning for consultant assessment visits extended beyond AID and Peace Corps Washington offices. In-country AID and Peace Corps officials were encouraged to assist in developing flexible, comprehensive schedules for the assessment teams, with ample time for in-depth interviews, fully supportive introductions to host nation officials and agencies, and actual project site visits. Peace Corps and AID encouraged their field staffs to work closely with the assessment teams, pointing out that no "evaluation" was taking place and that no funding decisions would rest solely on the assessment outcome.

The consultants were required to pass through Washington on their return from overseas for debriefing, and to submit written reports within a week after returning. Thus, impressions were freshly and accurately captured, feedback to headquarters was immediate, and interpretive questions resolved promptly.

This process meant that twenty five remarkably detailed, high-quality, country-specific assessments could be produced within six months from the first team's official send-off briefing. Each report is clearly focussed on the particular individual nation, provides non-standard details as appropriate, and fulfills to the essential goal -- the re-examination of forestry programs to highlight both paths and roadblocks to AID/Peace Corps PASA partnerships in field situations.

The assessment reports contain a wealth of significant and useful detail on forestry-related issues. It is beyond the scope of this report to analyze these documents in depth, but Benchmarks has developed a matrix demonstrating general content and value of the reports. (See Appendix B.) The matrix demonstrates only a limited series of elements -- the current attitude of host nation, the current Peace Corps and AID involvements in forestry, the existence and vigor of other international agencies presence in forestry programs, and the current existence of AID/Peace Corps cooperation in both forestry and non-forestry activities. In addition, an "estimate" of joint forestry project potential, based solely on the assessment reports (not the sole criterion employed by Peace Corps and AID) is provided. Its relatively close correlation with eventual project site is evidence of the significance of the assessment process and outcomes.

The assessments explicitly examined the programming and project execution processes of the chief actors and the social and political climates as well as

the technical forestry situations faced by the nations in question. They also explored training conditions, opportunities and needs for Peace Corps volunteers both generally and in forestry, volunteer-counterpart relationships, sources of material support and program assistance. This helped produce a clearer picture of the environment in which additional Peace Corps volunteers might find themselves placed if a project were developed. It also helped document the nation's ability to absorb and use volunteers productively.

The assessments were of value as well in warning of problems, potential and actual, to new AID/Peace Corps forestry projects or to projects undertaken with PASA funds. These problems were not necessarily insurmountable, but preparation to meet them would clearly be vital in the programming of specific projects. The problems outlined in the assessment reports include issues of cooperation among agencies, institutional weaknesses, lack of resources for forestry initiatives and environmental constraints.

The assessment process was viewed as an initial exploration. One may wonder what course AID and Peace Corps officials might have taken had the actual objective field assessments identified very few or no situations honestly ripe for collaboration. As the assessments developed, however, they identified an abundance of opportunity -- both immediate and potential -- not only for PASA projects individually but for support and (where needed) redirection of host nation forestry and natural resources programs which would help to fulfill the mandates from Congress and the Executive to curb deforestation and desertification in lesser developed countries.

A final but important note: the assessments were written in a candid and explicit style. If bribery in forest management was an issue, it was so termed;

if government profit-taking in hardwoods was the major forestry program, it was stated as such. The assessors' candor in stating their opinions doubtless helped refine key issues to be addressed. Whatever decisions were made on ultimate projects, AID and Peace Corps officials were spared unpleasant surprises.

III. Programming Workshops

The second phase of the PASA agreement was the conducting of workshops to discuss issues and procedures in collaborative forestry and natural resources programs. Programming workshops held in 1981 and 1982 brought together Peace Corps, AID, host country and PVO personnel from twenty-three countries. Three workshops were held: the first, for the Inter-American region, in San Jose, Costa Rica in June 1981; the second, for the Pacific region, in the Philippines in December 1981; and the third, for Anglophone Africa, in Mombasa, Kenya in May 1982.

While each of the workshops had its own agenda, worked out with staff from the region, they all shared a core of objectives. The greatest emphasis was placed on developing the relationships of Peace Corps, AID, host country agencies and PVOs as partners in designing and implementing forestry and natural resources programs. This emphasis can be seen in most of the workshops' activities, among them presentations of each agency's programming system, establishment of informal working relationships through a series of exercises, and the joint preparation of project plans for each country.

Emphasis was also placed on making the participants more sophisticated about the issues involved in program design. The workshops were designed to bring out the institutional, technical and social factors which implementing agencies need to be aware of at all levels, from the home office to those actually working in the field. The activities of the workshops are discussed in some detail below.

Preparations

Preparations for each workshop were elaborate. They began with the visits of the assessment teams, who explained all of the phases of the PASA agreement, including the programming workshops, to Peace Corps, AID and host country ministry staff in each country. The teams elicited informal comments and suggestions about the agenda, timing and site of the workshops in each region. These comments were passed on to Peace Corps/Washington staff.

Before each workshop was held, the OTPS/FNRS staff cabled Peace Corps and AID missions, inviting them to the proposed workshop. Tentative agendas and outlines of activities were later sent to the Peace Corps and AID personnel concerned. The opinions of field staff were solicited on the appropriateness of the proposed objectives and activities, the sequence and timing of the activities, and potential technical resources that could be used. Peace Corps and AID staff were asked to present alternative activities and issues for discussion. With formal Peace Corps and AID responses in hand, OTPS/FNRS prepared detailed agendas and activity schedules for each workshop in advance. These preparations included the design of a series of exercises the participants would be asked to perform, using real and hypothetical forestry project plans and documents as examples. Professional facilitators were contracted to lead the workshops. Peace Corps/Washington staff and the facilitators arrived at each workshop site several days in advance to ensure that logistics would run smoothly and to train Peace Corps staff to conduct the discussions and exercises. This training included several "dry runs" of the workshop activities.

Participants

The three workshops brought together 138 participants from twenty-three countries. Of these, a third were Peace Corps country staff members; 30% were host country nationals working in forestry-related ministries and agencies; 11% were PCVs and 10% were AID staff members. (The rest were individuals working outside these institutions.) The participation of host country nationals was a particularly important aspect of this component of the PASA agreement. Without funding from the PASA, these forestry officials would have been unable to take part in the workshops. Without funds for travel and per diem, normally not a part of Peace Corps workshop budgets, crucial host country personnel would have been absent, seriously reducing the effectiveness of the workshops. AID's limited participation provides further evidence of this. AID staff members were not administratively funded through the PASA and were at that time operating within severe budget and travel restrictions. Exchanges of information and collaboration among these participants were among the workshops' most important outcomes.

Workshop Activities

Each of the workshops was tailored to the needs of its particular region, but they shared several key activities. Among these were discussions of the programming systems of AID, Peace Corps, host country ministries and PVOs; discussion of critical issues in project design; collaborative design of preliminary project plans for each country; and field trips.

Different Institutional Programming Systems

Discussions of how the various agencies designed their projects was an important part of the agenda in each workshop. For example, in the Inter-

America workshop, the AID representative reviewed the various types of programs offered by AID in Costa Rica: Special Development Activities, Operation Program Grants, Basic Grant or Loan Projects, and Guarantee Programs. He explained the planning process, including the contents of the PID, the PP and the logical framework. Among the points that were raised in the ensuing discussion were the complications involved in the fact that all projects entail relationships among AID, the host country government, the specific agency implementing the project and the U.S. Congress. Changes in the AID approach to project design were discussed, as well as the priority given to the forestry sector.

The Peace Corps representative discussed the criteria used in Peace Corps program design, methods used in identifying projects and the volunteer services needed, and the system for recruiting, training and the placing of volunteers. Since ministries from eight different countries were represented at the Inter-America workshop, obviously no uniform set of host country procedures could be presented, but both differences and similarities among them were discussed.

In all three workshops, the private voluntary sector was represented by an individual working in project development with a PVO. The PVO discussant at the Inter-America workshop was a staff member of CODEL, a consortium of forty PVOs. She discussed the shared characteristics of PVO orientation and programming, as well as differences among the CODEL members. Constraints to PVO operations and collaboration with the other agencies were also discussed. (The Pacific workshop featured the Director of the International Human Assistance Program in the Philippines. The Anglophone Africa workshop featured an agricultural specialist from Africare.)

Formal presentations about each agency's programming system were not the only activity devoted to this topic. The participants also met in groups to

discuss the implications of these systems for collaborative forestry initiatives. To continue the example of the Inter-America workshop, the participants outlined the similarities and differences among the AID, Peace Corps, host country and PVO systems, conducting a task analysis of each agency, and devising a table of their complementary activities. A number of concrete recommendations emerged from these discussions. Among them were that host country governments form natural resource program committees, involving both national and international agencies, to help formulate priorities and plans; and that PVOs coordinate the exchange of natural resource project information through agency newsletters.

Discussion of Critical Issues

The discussion of issues critical to the success of forestry and natural resources programs took various forms in the three workshops. Specific discussions to identify these issues were scheduled in each workshop. In the Inter-America and Pacific workshops an additional exercise was used. A hypothetical Peace Corps forestry project plan was presented for critique by small groups. In the Pacific workshop, for example, the hypothetical "Wolo Community Agro-Forestry" project plan was presented. This project involved Peace Corps collaboration with the national Forestry Department, AID and CARE. The standard Peace Corps Project Plan format was used, with a detailed problem analysis section, list of objectives and management indicators, and preliminary TAC sheets describing volunteer assignments provided. Each participant was given a copy of the project plan with a list of questions about it. Small groups met to discuss the strengths and weaknesses of the plan and presented

their conclusions to the workshop as a whole. The responses of all the groups were compiled into a "memo" to the hypothetical Associate Peace Corps Director who devised the project plan.

The Anglophone Africa workshop used a different format to get at critical issues. A series of technical presentations was made by experts with experience in African natural resources projects. The topics discussed were land use planning, agro-forestry, range management, forestry extension, tree nursery development, forest energy and training. After each presentation, the participants from each country met as a group to discuss a specific topical problem in the country and how it could be addressed. For example, after the tree nursery development presentation, the Kenya country team met to discuss the natural, human and financial resources needed to produce 500,000 Croton megalocarpus seedlings in one year.

Field Trips

Each of the workshops included a field trip to a project site. The Inter-America workshop offered alternative visits in Costa Rica to an overgrazed watershed where two PCVs and a local non-governmental group were working, and to an AID watershed rehabilitation project. The entire group also visited the Center for Tropical Agricultural Research and Training (CATIE) to meet with researchers in a variety of fields. The Pacific workshop offered a field trip to a Philippine forestry research center specializing in inter-cropping schemes. The Anglophone Africa workshop participants visited baobab production, fish production and quarry reclamation projects. The field trips were not merely excursions, but were integrated into the general themes of the workshops. For

example, in the Pacific workshop, each country team met before the field trip to discuss how it might fit into the preparation of their draft project plan. After the field trip, there was a general discussion of what had been learned about agroforestry.

Collaborative Project Design

One of the most fruitful exercises used in all three workshops was the preparation of preliminary plans for potential forestry/natural resources projects by the group from each country. In a series of meetings to prepare these plans, PCVs and Peace Corps staff members sat down with AID and host country personnel from the same country to review what had been learned about critical issues and AID/Peace Corps collaboration with other agencies and to draw up a sketch of a collaborative project that would be appropriate for their country. For example, the Guatemala team designed a project to protect small watersheds in eight rural communities, working on 2,000 hectares and benefitting 25,000 inhabitants. The collaborative agencies included AID, Peace Corps and INAFOR, the Guatemalan forestry department. This plan is used as an example because it actually developed into a project which is now being implemented.

Outcome of the Workshops

The most fruitful outcome of the workshops is that the Peace Corps, AID and host country ministry staff met together to discuss programming and to draw up potential forestry project plans. The workshops were the first concrete step towards greater Peace Corps/AID/host country/ PVO collaboration in the natural resources sector in the three regions. The workshops made personnel of

these four institutions more aware of the potential benefits of collaboration and more informed about the goals and programming systems of each institution. In fact, the workshops demonstrated an eagerness on the part of Peace Corps and AID field staff to work together. The negative attitudes sometimes expressed in Washington about Peace Corps/AID collaboration were not encountered among field staff during the workshops.

The setting of the workshops also gave host country officials a better understanding of the potential usefulness of PCVs in collaborative projects. This has certainly been a factor in the increase in requests for PCV foresters since the PASA began. In the Pacific region, for example, Papua New Guinea, Western Samoa, the Solomon Islands, Tonga and Fiji all initiated PCV forestry and agroforestry programs after representatives attended the workshop in the Philippines. The increased understanding of the potential of the Peace Corps came not only from the formal presentations, but from the small "country team" discussions. In these discussions, high level ministry officials were able to sit down with lower-level officials and PCVs in an informal manner that would not have been possible in their usual work setting. In the workshops these participants not only met together but worked together to formulate the potential forestry project plans. This gave them a better idea of each other's perspectives and constraints.

In addition to the awareness of the participants, news of the workshops reached a wider audience. The Inter-America and Pacific workshops, in particular, were well publicized. The Costa Rican Minister of Agriculture and the Director of National Parks both participated in the Inter-America workshop, as did the U.S. Ambassador to Costa Rica and the USAID Mission Director. The

Deputy Minister of Natural Resources of the Philippines addressed the Pacific workshop. This high level participation helped to underline the priority given to collaboration in forestry. The Inter-America workshop was conducted entirely in Spanish, which made it more accessible to host country nationals. English was the common language of the participants of the other two workshops.

The potential forestry plans not only brought the country teams together to discuss steps towards collaboration, but provided concrete examples of how such collaboration might take place in the context of each country's development problems and institutional structure.

The workshops provided OTPS/FNRS with specific information about how to proceed with two subsequent phases of the PASA, programming consultants and training models. Several of the Peace Corps missions requested programming consultants at the workshops and other requests were made shortly thereafter. In the Inter-America region, for example, programming consultants were sent to the Dominican Republic a few weeks after the workshop. The definition of training needs was a part of the discussions in all of the workshops. In the Pacific workshop, the country teams were asked to identify the tasks PCV foresters would be responsible for, the qualifications needed to complete the tasks, and the pre-service training required to produce qualified volunteers. The discussion focused on training needs in agroforestry and extension.

For OTPS/FNRS the workshops also provided experience in the design and conducting of workshops, a capability which could be used in future AID/Peace Corps collaboration in forestry. OTPS/FNRS staff, for example, learned how to structure the sequence of workshop activities and to train Peace Corps

field staff to conduct the various exercises used. Knowledge about the lead time needed, the best number of days for a workshop and the logistics entailed was also gained.

Proceedings of each workshop were developed by OTPS/FNRS shortly after the participants returned home. The proceedings outlined the agenda of each workshop and summarized both the formal presentations and the discussions on each topic. This enabled, for example, Peace Corps staff who were unable to attend the workshop to get an overview of the AID programming system and an idea of the complex issues involved in forest development. The proceedings include some of the documents used in the workshop exercises and the participants' responses to them. Each country team's potential forestry plan is included as an appendix. The proceedings have been distributed widely to Peace Corps, AID and host country personnel.

The most important outcome of the workshops, after the actual creation of new programs, has been the increase in communication and collaboration between Peace Corps, AID and host country ministries in twenty-three countries. For several of these countries, Kenya for example, the workshop was the first step in establishing the regular meetings among Peace Corps, AID and the host country ministry that have taken place since then. The potential forestry project plans in some cases were not only an exercise to help participant staff think about collaborative programming, but became the basis for actual projects. The informal exchanges in the workshops have led to an increase in both formal and informal collaboration between AID and Peace Corps and between them and host country agencies.

The activities of the programming workshops laid the groundwork for and anticipated the importance of joint planning and programming activities now being encouraged by the AID/Peace Corps Coordinating Committee.

The Peace Corps has developed the capability of conducting AID/Peace Corps programming workshops in a meaningful and productive way, especially in the forestry sector. It is hoped that that capability can be used and expanded on in future joint efforts of AID and the Peace Corps to address the problems of deforestation throughout the developing world.

IV. Programming Consultants

There were three components aimed at program development in the PASA: the assessments, the programming workshops, and programming consultants. Under PASA terms, the consultants were to be available "for specific project exploration and design."

Their role would be to build upon programming workshop results and interest and support for collaboration projects and to provide help to "those country directors and staff who have indicated that there is potential for viable forestry projects."

Consultation on program development was to prove helpful throughout the PASA. In the Dominican Republic, for example, an October 1981 consultant's program review highlighted the need for regularized Peace Corps/Dominican agency agreements, the concept of focusing volunteers' efforts on one sector where the lead forestry agency, FORESTA, has a specific task but no resources to execute it, several timing and resource identification issues, and development of a simplified management information and oversight system, among other useful observations.

A later program review, conducted in December 1983, assisted the Peace Corps staff in its evolving role as the unifier of host country forestry agencies through development of a comprehensive Peace Corps program to address the Peace Corps forestry program's relationships. There were thirteen host nation agencies with which it was then engaged in forestry projects. Guidance was provided not only in the formulation of the substantive program, but in program process to help involve each agency in the overall effort.

A programming visit to Costa Rica in September and October 1981 provided substantive assistance to Peace Corps staff in designing forestry extension service programs, an intentional departure from what had been a "gap filling" approach using volunteers to replace host nation personnel eliminated because of budget restrictions. The lack of host nation agency effectiveness (in reaching village level needs) was incorporated in project programming considerations, and the risks and rewards of the shift from "gap filling" to a relatively free-standing Peace Corps forestry effort were outlined. The same consultant was later available to review the draft Extension Project document and to offer some cogent comments on needs for development of evaluation schemes, setting of intermediate goals, and use of concrete measures.

The use of programming consultants in Fiji in November 1983, however, attempting to restore what had been good relations between the Peace Corps and the Fiji Forestry Department. The consulting team was able to develop joint agreements on a key project for continued efforts and on the contributions which realistically could be made by the Peace Corps and the host nation. Equally important, an agreement was reached on the need for a joint written forestry program. The consulting team provided a draft five-year program as the basis for the Peace Corps and the Fiji Forestry Department to work from.

A consultation visit to Paraguay in April 1983 illustrated still another essential function of programming consultants. Although the visiting teams found that the Peace Corps "forestry extension and biological inventory natural resources programs were running quite well," the team was able to highlight areas where host nation support for Peace Corps forestry efforts was

insufficient and to suggest the need to readjust the bulk of Peace Corps efforts toward other host agencies.

It is important to recall that programming consultants under this PASA were dealing with a relatively small number of self-selected and deeply interested Peace Corps country staffs, many of whom had either strong personal commitment or strong host nation support for forestry efforts, as well as some clear ideas of PASA-suitable projects. Their role would doubtless become even more crucial where interest, support and experience among Peace Corps, AID and host nations were found to be more mixed. In addition, as new projects are developed, programming consultants could play a vital role in identifying how best to institutionalize -- and select for institutionalization -- those projects which Peace Corps, AID and host nations wish to expand and replicate.

V. Pre-Service Training

The PASA agreement called for the Peace Corps to develop two pre-service training (PST) models for generic and project/country-specific skills. The Peace Corps not only produced models for in-country training in the Inter-America region and for stateside training for the Africa region, but published forestry training manuals for the two models, products which went beyond the requirements of the PASA.

The completion of the PST component of the PASA took place in four steps. The first was an assessment of the PCV forester training needs in each of the countries concerned. These were Ecuador and Paraguay for the Inter-America region and Kenya and Senegal for Africa. The second step was the development and testing of training models for sessions in Ecuador for the Inter-America region and Arizona for the Africa region. The Inter-America model was developed during a training session in Ecuador in 1981 and then replicated by Peace Corps/Ecuador in 1982. The Africa model was developed in 1982 and has been replicated in 1983, 84. The third step in the PST component of the PASA was the preparation of forestry training manuals for the two models. (These were published in August 1982 for the Inter-America region and in January 1984 for the Africa region.) The final step in the PST component was an assessment of the Inter-America region model, which took place in April 1983.

Needs Assessment

The assessment of training needs began in effect with the baseline program assessments conducted for the Inter-America and Africa regions in 1981. These were followed up by discussions with Peace Corps field staff and PCVs during

PASA programming workshops in 1981 and 1982. In addition, the technical trainer for both PST models visited Ecuador and Paraguay and later Kenya and Senegal in the months prior to the development of the training sessions. The consultant met with Peace Corps staff and ministry officials in each country to learn their views on PCV tasks and training needs. He visited PCVs, often at their sites, to review with them how well their training experiences had prepared them for their later work. He asked them what specific topics should be covered in training that would best prepare new PCVs to cope with their assignment areas. In addition, he visited prospective volunteer sites to obtain information on the kind of training that would be needed for PCVs to function in them.

The trainers later viewed these needs assessment visits to have been invaluable in helping them to formulate modules for training sessions. The outside consultant, was able to learn the perspectives of most of the institutional actors in PCV forestry projects. While the interviews with PCVs brought out the most direct experience, the meetings with host country forestry officials gave the officials a better understanding of Peace Corps needs and drew them into the training process. This is especially true of Ecuador, where the involvement of Ministry of Agriculture officials in the training helped to transform a lackluster relationship with the Peace Corps into a flourishing one.

The Inter-America Region Pre-Service Training Model

At the time the PST component began, the Peace Corps had no standard approach to forestry training. As the Forest Resources Management PP states, programs ranged too widely in content, approach, success and quality. There were no manuals or guidelines for forestry training, though the trainers did borrow the format and some sessions from several non-technical Peace Corps manuals.

The Inter-America regional model is designed for single-country or multi-country use for trainees who have already received cultural, language and some technical training in the region where they will work. The model accommodates both degreed foresters and generalists i.e., botanist, biologist. The training cycle in the model is a five-week period of intensive technical training. Because of the large number of technical and communications skills to be imparted during the training, it is kept separate from the basic training received by all volunteers entering a country. However, the trainees continue to learn linguistic, cultural and extension skills that are directly related to their future assignments. For example, they expand their forestry and agricultural vocabulary and practice extension talks in Spanish.

The 64 training sessions in the model emphasize learning by doing rather than by lecture or demonstration. A wide variety of technical skills are learned. Among these are nursery layout, seedbed sowing, nursery recordkeeping, planting, pruning, rustic transit use, forest mensuration and composting. The training model includes lessons and practice in extension, with exercises in forming lesson plans, using illustrations and developing slide shows. Managerial skills such as project planning and relations with host country officials are also covered. Among the forestry issues discussed are agroforestry, watershed management and erosion control.

In addition to participation in the group sessions, each trainee prepares a report on a tree species and designs an agroforestry plan. Working in pairs, the trainees also prepare reports on a variety of forestry issues.

Participants with special skills learn to transfer those skills by teaching them to the other trainees. This is one of the most important features of the

model, since it enables the training cycle to incorporate both generalists and and technical forestry trainees. The latter often do not have practical experience with their skills and have no training experiences themselves. Instead of leading to a situation where these trainees are bored and believe the training has nothing to offer them, the model gives them responsibility for becoming trainers themselves.

The model includes weekly evaluations by trainees and individual interviews with trainers. These interviews provide both trainees and trainers feedback about their performance and progress during the week.

The Africa Region Pre-Service Training Model

The Africa regional model is designed for stateside training of prospective volunteers who have not had previous training. The six-week cycle of 60 sessions includes inter-cultural and some language training. Language lessons, conducted by the trainees themselves, are designed to introduce the trainees to the language which they will later study intensively and to reduce anxiety about mastering the language. Like the Inter-America model, the stateside Africa model is designed for single-country or multi-country use.

Many of the modules in the Africa model are the same as those used in the Inter-America model. There is a somewhat different emphasis in the technical sessions, reflecting the different environments of the PCV project sites. The Africa trainees learn about range management rather than watershed management, for example. The Africa model contains modules about basic survival skills which the Inter-America trainees have already received, such as sessions on nutrition, coping and culture shock.

Intercultural skills are taught through a series of field trips to neighboring communities. For example, the trainees in the 1982 pilot training in Arizona had to communicate with non-English speaking residents in a town near the Mexican border and conduct extension and cross-cultural sessions on the Papago Indian reservation.

Another difference between the two training models is that the Africa model includes two sessions on Women in Development, while in the Inter-America model the role of women is woven in throughout the manual. One of the recommendations of the evaluation team, discussed below, is that the WID modules be incorporated into the Inter-America model.

As in the Inter-America model, the Africa model provides "hands-on" training, with trainees responsible for completing exercises, conducting sessions and making presentations.

The Forestry Training Manuals

The PST component of Peace Corps PASA activities produced two separate models along two dimensions: region of volunteer assignments and location of the training. Beyond producing modules outlining the content of the training cycle, the training teams prepared "how to" manuals with specific instructions and materials for future trainers. These manuals were prepared principally by the training design consultant, Joan Bordman, with assistance from the international forestry consultant, Bruce Burwell, and the training administrators, Eugene Braun and Steven Joyce.

A similar format is used for both manuals. Not only is each session described in detail, but guidelines are provided for selecting a training site,

planning field trips, choosing areas for exercises in nursery construction, tree planting and erosion control, putting together a reference library, finding materials and other resources, and handling logistics. Suggestions are made on the timing of the training, the sequence of the sessions, the size of trainee groups, the number of trainers, the management of the staff and ongoing evaluation.

The module for each session describes the goals of the session, the exercises involved, materials to be used and the amount of time to be allotted. The modules outline the exercises step by step, describing the activities of trainers and trainees (in groups or as individuals), detailing the amount of time each exercise will take. If visual materials are needed for the exercises, they are described. The modules for the weekly interviews suggest questions to be asked of the trainees.

Because the manuals are divided into individual session modules, they are designed for flexibility. In the two models, later sessions are built upon earlier ones. Nevertheless, it is possible to change the timing or content of the modules to accommodate particular technical or cultural training needs.

PST Component Assessment

After three training cycles had been completed and the Inter-America region training manual had been prepared, but before the Africa region manual was published, a and OTPS/PNRS team visited Ecuador to assess the training. In the assessment, twenty PCVs who had participated in the pilot training were interviewed. In addition, two third-year PCVs who had been trained in Syracuse, New York in 1980, before the PASA activities began, were interviewed about how their training had prepared them for their assignments.

The responses of the PCVs in the interviews were overwhelmingly favorable toward the pilot training model. The third-year volunteers in particular commented on the superior preparation of the PCVs who came after them.

The assessment focused on a number of methods with which the two pilot training cycles in Ecuador had experimented. One question was whether trainees should be housed together in a dormitory (as in the 1981 cycle) or should live with local families (as in the 1982 cycle). The interview responses were very clear on this point: the former 1981 trainees felt that dormitory living enabled them to concentrate on their intense schedule of technical sessions, while the former 1982 trainees felt that living with families distracted them from their training without providing compensation in terms of language ability or cultural awareness. Moreover the 1981 trainees felt very cohesive as a group, the 1982 trainees much less so. The assessment team strongly recommended dormitory-style accommodations. Other recommendations were made on the nursery and extension components of the training, on the number of trainers and on the incorporation of Women in Development sessions into the Inter-America training manual.

One of the interesting confirmations of the PST assessment was of the importance of extension training. Even though the trainees complained about extension and communications sessions at the time of their training, deriding them as "sociology," they later strongly recommended that future training include more practice in giving extension "charlas" (talks) before the volunteers go to the field. The assessment team recommended that language classes, visits to local schools and field trips be used for extension practice.

Outcomes

The most concrete outcome of the PST component of the PASA was the publication and distribution of the Inter-America and Africa regional forestry training manuals. The production of these manuals went beyond the requirements of the PASA. They were not just summaries of the pilot experiences, but the result of considerable experimentation. The manuals are the first complete guides to overseas and stateside PST. Not only will they be useful to future forestry sector trainers, but are of potential use to Peace Corps staff interested in starting forestry programs or arranging for technical training, to training centers preparing to receive Peace Corps trainees and others, and to host country officials involved with PCV assignments and interested in technical training for their own extensionists. Moreover, the manuals provide a documented training baseline by which future training cycles can be evaluated. Five hundred manuals have been published and distributed.

Embodied in the manuals are the new PST models themselves. These models can be fitted to four basic situations: training for the Americas or Africa conducted either overseas or in the United States. Among the benefits of the models described above is the solution to a persistent problem: the recruitment of both specialist and generalist trainees for forestry assignments. In the model the problem is resolved by providing both types of trainees with skills they are unlikely to have, such as extension techniques, and by allowing the skilled trainees to pass on their knowledge to their less skilled colleagues, just as they will later do with their host country counterparts. A further benefit of the training is a field manual compiled and written by these skilled trainees themselves.

There are indications that improvements in pre-service training in forestry have contributed to a decrease in the PCV attrition rate in that sector. The attrition rate for trainees in forestry from 1981-1983 was under 5%, a significantly lower rate than in other program areas. The decrease in attrition is due in part to the "hands-on" approach of the PST models, which provide the trainees with the confidence that they can perform tasks such as setting up a nursery and talking to community groups, because they already have done so in their training. This helps the PCVs to survive the often difficult first months at their assignment sites.

Decreased attrition not only helps to preserve the Peace Corps investment in recruitment and training, but also improves the confidence of collaborating agencies, such as AID, the host country Forest Department, and intermediary PVOs in the Peace Corps's ability to "deliver" stable, well-prepared volunteers when and where they are needed for project implementation. For AID, more appropriately trained PCVs are an asset in collaborative forestry projects. Not only do they perform their task better, but they contribute to an improved American presence in the country, which reflects well on other U.S. agencies.

A less evident outcome of the Inter-America PST model is an improvement in Peace Corps/host country agency relations. Because host country officials were involved in the design of the model from the time of the needs assessment, because they made presentations to the trainees and because the training took place at a host country forestry school, it is quite easy for host country counterparts to identify themselves with the Peace Corps program. Indeed, the manuals can and have been adopted for use by host country institutions in their own training programs.

The forestry training models have been used as exemplars in other sectors as well. For example, marine fisheries and agriculture sector training manuals have been prepared which build on the forestry approach. Thus the PASA-funded improvement in Peace Corps forestry training has affected Peace Corps training more generally.

The Peace Corps mission in Nepal has requested that a third model and manual be prepared for pre-service training in Asia. A third model was not anticipated under the PASA agreement, however, and Peace Corps does not have the resources to prepare an Asian model. Consideration should be given to further forestry PST models especially for Asia and the Pacific, in any follow-on PASA.

VI. In-Service Training

With resources provided through the AID/PASA agreement, the Peace Corps has conducted four in-service training (IST) programs for 150 forestry volunteers and their host country counterparts -- both local level counterparts as well as officials of the host country ministries to which volunteers are assigned. Another IST is scheduled to be held in Malawi in the Fall of '84. Also, the Peace Corps Forestry/Natural Resources staff has assisted the Peace Corps country teams to develop their own forestry in-service training for volunteers.

Importance of In-Service Training to the Peace Corps

In-service training is one of the most vital steps to the successful preparation of an effective Peace Corps volunteer. This training takes place after the volunteer has been in the field or is already "in-service." By this time, a volunteer has a much better idea of the technical skills he or she needs to be successful on-site. Also the volunteers have a better sense of their working relationships with the institution in the host country to which they are assigned -- the strengths and weaknesses, opportunities for program improvement, work patterns and communications systems within that agency. Finally, the volunteers have had time to develop their working relationship with their immediate village-level counterparts.

As important as in-service training is to volunteers' development, the Peace Corps is not often able to afford it. Its heaviest investment of training funds goes to pre-service training where trainees are prepared to assume the responsibilities of volunteers and are given cross-cultural skills, language training, basic health orientation and skills development.

The IST under the PASA agreement provides training not only to the volunteers but also to the host country nationals (HCNs), both immediate counterparts and higher officials.

Without AID PASA funds, the Peace Corps would not be able to include these host country representatives in the training courses.

The Proceedings of the Costa Rica In-Service Training Program, held from August 7-13, 1983, point out the importance of training with counterparts.

"The PCV-HCN relationship as counterparts (this word will be used hereafter representing the team of the PCV and his/her HCN colleague) is a very important fundamental aspect of a successful development program. These teams are the ones working at the ground level where help is most needed and the work has the most effect on a large majority of the populace. It is very important that the guest volunteer and his/her HCN colleague have a very strong understanding of each other, the role each other plays and the responsibility that they as a team, have within the community and the development process.

This understanding between 'counterparts' includes being aware of each others backgrounds and cultures; their work ethics and habits and their understanding of development. It also includes recognizing and acknowledging each others skills and abilities and dividing the work accordingly. It means organizing and planning projects and activities together and keeping the other informed of changes in plans or new ideas, which includes developing a work schedule together. Working as a team is a much more effective way of accomplishing the work than trying to 'do it' alone."

The Peace Corps is one of the few international development institutions which reaches these levels of host country institutions with training of any kind. Its in-service training programs have introduced these agencies to new natural resources conservation techniques and has also achieved organization development work for agencies which are often extremely formal and traditionalistic in their operating methods.

Neither AID or the Peace Corps will be the ultimate answer to the natural resources conservation problems of developing countries. Solutions will come from the village-level workers and an increasingly competent and better trained corps of public and private technicians in the agencies of those countries. With the PASA resources, AID and the Peace Corps are jointly making training investments which provide the best hope for adequate reforestation efforts in the future.

Design of In-Service Training

A critical part of the development of an in-service training program is the planning process itself. The planning procedure begins with cable traffic between OTPS/FNRS and the countries in the region in question. Recommendations are requested for the kinds of training needed as well as a suitable location for the training program. In all cases, PASA supported in-service training designs have been based on this kind of input from the field. To give an idea of their specificity, the topics listed below have been requested for the IST to be held in the Kasungu National Park in Malawi on Wildlife Management, October 17-25, 1984.

**Areas of Training Requested by Volunteers for
Wildlife/Parks Management In-service Training Workshop**

Niger

- I. Presentation on wildlife/parks world-wide and especially in Africa.
- II. Presentations from PCVs in each country represented.
- III. Discussion of proper roles of PCVs and objectives of PCV wildlife experts.
- IV. Exchange of ideas on specific problems, e.g., working with untrained national agents.
- V. Technical field trips.

Lesotho

- I. General focus on Programming.
- II. Legislation for animal protection.
- III. Funding for relocation of animals (cooperation and international assistance).
- IV. Major issues/problems concerning parks/wildlife management.
 - A. Wildlife management planning.
 - B. Tourism in national parks.
 - C. Long term park planning.

Burkina-Faso

- I. Methods and procedures of dietary studies of African ungulates and warthogs and their results.
- II. Management plans for harvesting of ungulates, time of harvesting, determination of numbers to be harvested and frequency of harvesting.
- III. Management plans for increasing numbers of wildlife; providing water and burning.
- IV. Wetland management for preserving and increasing bird and fish numbers within parks and reserves.
- V. Use of controlled hunting in wildlife management.
- VI. International assistance available in wildlife/wildlands management.

Swaziland

- I. Fencing techniques.
- II. Disease and insect control for trees including identification of the problem and various control methods available.
- III. International assistance available for wildlife programs including funding and materials that can be supplied by various organizations.
- IV. Beneficial aspects of various tree species as they affect wildlife.
- V. The effects of pressures from outside the reserves on the successful management of game reserves.
- VI. Donga control techniques.

Malawi

- I. Landscape classification and ecological and management consequences of this.
- II. Pressures on protected areas as related to population increase and land shortages.
- III. Problems in non-protected areas; i.e., interaction with pastoralism and fencing.
- IV. Problems of illegal use of wildlife resources.
- V. Problems of development in protected areas; i.e., roads, hotels, etc.
- VI. Problems of damage to communities by wildlife and other strictly ecological issues, i.e., elephants, fires.
- VII. Decision making in wildlife management.
 - A. Technical
 - B. Aesthetic
- VIII. Master plans, objectives (policy and legislation, zoning for utilization options, funding, staffing, training).

Burundi

- I. Inventory and identification techniques and population assessment for both flora and fauna.
- II. Identification of key habitat area.
- III. Layout design and carrying capacity for visitors' areas based on environmental factors.
- IV. Design and development of infrastructures for tourism, research and education.

Liberia

- I. Parks interpretive plans.

In addition to obtaining the above input, Peace Corps teams visit the region prior to developing the final design for the in-service program. A pre-research or planning trip is made several months prior to the training program. It usually consists of representatives from OTPS/FNRS, consultants/experts in the forestry field and frequently representatives from the U.S. Forest Service and the National Park Service. During these pre-research planning trips, potential speakers are interviewed and facilities looked at as possible training locations. Volunteers and Peace Corps staff, as well as host counterpart agency staff, are interviewed for their expectations about the in-service training program.

After returning to Washington the Peace Corps develops tentative goals, objectives and schedules for the conference. These are always developed in accord with responses from the cable traffic as well as based on the information gathered during the pre-research trip. A copy of the proposed schedule for the conference is then cabled to those Peace Corps missions which will be participating in the training program.

Evaluations and other reviews of in-service training programs have established that this kind of planning for IST is critical. It is especially crucial that input from the target audience is gathered and incorporated into the design of the training program. An advance trip to the country where the IST will be hosted is considered to be essential. Not only does this help in identifying speakers and lecturers for the program as well as an adequate training site but it also helps to establish a good working relationship with the Peace Corps staff in that country. Another essential step to project success is for the training team to arrive at the training site a full week to ten days before the in-service training program is to be conducted. This provides the training staff a final opportunity to check logistics, and "dry-run" activities (field trips, etc.) and conduct training staff orientation and role clarification.

All Peace Corps IST programs conducted under the PASA benefitted from this kind of advance research, planning and design. All have received excellent ratings in evaluations from both volunteers and host country nationals.

Training Methodology

An enormous amount of material and ideas is presented at each training program. In order to assist the trainees to absorb this information,

experiential training methodology is used. "Experiential training" means that the learning approach is geared to the adult learning process. The approach is based on the assumption that a curriculum should incorporate a variety of ways through which individuals learn and that learning emerges as a result of experience. Other assumptions are that the learning will be most effective if the goals and objectives of the program have relevance to the participants' own lives and the acquisition of information presented is understood to be important.

A number of different exercise techniques are used in the IST, including the following:

- a. Role play;
- b. Case studies;
- c. Film and slide shows;
- d. Sharing descriptions of specific experience;
- e. Placing participants in actual situations requiring them to react and/or perform;
- f. Participants' performing reciprocal training.

These exercises develop the "experiencing" level of activity among the participants. All sessions allotted a portion of time for the participants to process or generalize their experiences in small groups. Group discussions are held to facilitate processing.

Another aspect of the training methodology used in IST is to encourage the participants to incorporate new information learned into their work by improving and developing project plans which require a higher level of knowledge and skills. Participants are encouraged to develop management plans and other individual projects as a way of applying what they have learned.

In the design of each in-service training program each session is carefully developed and placed in a logical sequence so that each of the events is linked. A training lesson plan is written up for each lesson or exercise. These plans clearly indicated the objectives of each course and the step-by-step procedure for accomplishing these objectives. These plans also indicate the person who would be responsible for the session, the materials needed and the plans for evaluation by the staff and the participants of the particular training program.

Training session plans are discussed in detail with each individual speaker and attention is given to incorporating a large array of the learning activity experiences into each of the program sessions.

The Peace Corps believes that using an integrated training approach and experiential learning concepts enhances the technical knowledge and skill acquisition of the participants as well as improves the relationship between the volunteers and their respective counterparts. The experience of the four IST programs to date have borne out that belief.

Paraguay: Wildlife Planning and Management

The first in-service training program facilitated by the AID/Peace Corps PASA was held in Paraguay from March 17-23, 1982. Consistent with the emphasis on host country counterpart training, the National Forest Service of Paraguay requested the training. The IST focus was on "Wildlife Planning and Management." Two specialists, Drs. Gary Wetterburg and Curtis Freese of the U.S. National Park Service and the U.S. Fish and Wildlife Service, respectively, conducted the training program. Although the course was originally planned for some 25-30 persons, 64 participated. Participants included 5 representatives from Guatemala, 4 from Ecuador and 5 from Costa Rica. The list of participants

included 10 Peace Corps volunteers, 46 Paraguay forestry and park technicians, 3 Peace Corps country staff and 5 other country technical staff.

U.S. Ambassador John Lane assisted in kicking off the training program. Paraguayan government participation in the seminar was high and the national press featured the training sessions in several prominently displayed articles. Among Paraguayan officials who attended the opening session were the Defense Minister, the Director General of the Ministry of Agriculture and Forestry, the National Forest Service Director and the Director of National Parks and Wildlife.

The list of participants illustrates the heavy emphasis the Peace Corps has placed on training host country technicians. While "in-service" training for volunteers was accomplished, an important technical training exercise for Paraguayans in critical positions was conducted at the same time.

Other In-Service Training Programs facilitated by PASA support include:

Technical Forestry In-Service Training for Sahelian Francophone Africa

held in Ouagadougou, Republic of Upper Volta (Burkina Faso), June 13-18, 1983.

Participating in the conference were eight representatives from the Upper Voltaic government, ten Peace Corps volunteers and fifteen representatives from private voluntary organizations.

Inter-America: Regional Technical In-Service Training

This IST was held in San Jose, Costa Rica from August 7-13, 1983. Twenty-four participated, representing six countries. Twelve were Peace Corps volunteers; the other half were counterparts or "colegas" of the volunteers.

Agro-Forestry In-Service Training for Asia and the Pacific Islands

This was held in Honiara, Solomon Islands from October 23-29, 1983.

Participants included Peace Corps volunteers and their host country national counterparts from six countries of the Pacific Islands and Asia. Those countries represented included Western Samoa, Fiji, Papua New Guinea, Philippines, Thailand and the Solomon Islands. Of the 33 participants in the workshop, 21 were Peace Corps volunteers and 12 were host country national counterparts who in most cases worked directly with the Peace Corps volunteers.

Two other in-service training programs merit mention in this report. One was a two-tiered approach to in-service training experimented with in the Dominican Republic in the early part of 1984. The other is a program which will be held in Honduras at the end of the present life of the PASA in December, 1984, again with the assistance of the OTPS/FNRS.

Dominican Republic

The Dominican Peace Corps country team requested assistance from OTPS/FNRS for an in-service agro-forestry workshop for Peace Corps volunteers and their host country co-workers. A team made up of Jacob Fillion, OTPS/FNRS Bruce Burwell, forestry consultant, and John Palmer, FSP/USFS, visited the Dominican Republic from November 30 to December 14th in order to provide this assistance. The team recommended a unique two-tiered approach to training which was based on agro-forestry, fruit trees and tree identification. The two-tiered approach consisted of providing the training in two sections, one in March and the other a two-day reunion of the volunteers in July. The purpose of this was to enable

the volunteers to receive training in developing forestry project plans, to attempt to develop the plans further in their communities and then to have them critiqued in the second phase of the in-service training program.

The two-tiered approach also enabled the designers of the workshop to evaluate the effectiveness of the initial training more directly.

OTPS/FRNS recently summarized the impact which the AID PASA has had on its in-service training activities as follows:

- o From the beginning of the development process of an IST, the PASA has had a positive effect. With the additional staff that the PASA allows, the forestry sector is able to devote at least one person to the entire IST -- from the original needs assessment through the final implementation. This person assists and helps develop the Peace Corps field staff's capabilities in IST planning so that they can do it on their own in the future.
- o Helps to complete the second goal of Peace Corps to assist in the transfer of technical skills, and leaves a technically stronger, more capable Host Country technician on the project once the volunteer leaves.
- o During the planning phase, Peace Corps/Washington and Peace Corps field offices have been working in close collaboration with AID both in Washington and the field. This close collaboration and cooperation has strengthened, and in some cases greatly improved, the relationship between the two agencies at both levels and facilitated additional cooperation.
- o The PASA has facilitated the documentation of some of the IST models which have been distributed to the field in the form of training aids to assist them in the development and implementation of their own ISTs.
- o Through the ISTs, Peace Corps has strengthened its relationship with other international institutions by providing the institutions with information generated by the trainings and utilizing resources and staff of the organizations. Two principle institutions are CATIE (Centro Agronomico Tropical de Investigacion y Ensenanza) in Turrialba, Costa Rica and the East-West Environment and Policy Institution in Honolulu, Hawaii.

- o Through lectures, slide presentations and field visits to actual agroforestry sites, the participants have developed the capacity to recognize traditional agroforestry systems, analyze the situation and feel comfortable in expanding and/or improving existing agroforestry systems or recommending new, introduced systems where appropriate.
- o Participants gain knowledge in both tree and plant species identification and selection. They discuss symbiotic relationship and compatibility between trees and crops.
- o Through lectures and an actual field practice, the participants develop their skills in the community analysis and farm systems research process. The importance of including all members of a community in these activities, especially women, is stressed. they recognize the importance of these activities for insuring a successful forestry project.
- o In the workshops the participants learn the small project planning process and actually have an opportunity to put it into practice for immediate feedback from the trainers and the rest of the group.
- o The participant's skills in nursery management are improved, this includes: seed collection, seed bed preparation, seed preparation, sowing, seedling maintenance, outplanting and nursery care.
- o It provides an opportunity to skill train the participants through lectures and hands-on practice in fruit tree propagation. This includes root stock selection, bud selection, a variety of grafting methods, care and maintenance both in the nursery and in plantations and pruning.
- o According to the majority of the evaluations written by the participants, simultaneous training has strengthened and helped to develop a more confident working relationship among them. It is a unique opportunity for them to learn and develop methods together under professional instruction.
- o The participation of both creates a greater, broader exchange of information with the viewpoint of both expatriots and HCNs. The information is not only technical but also cross-cultural, which can greatly effect projects.

VII. Material Support

A critical element in this PASA -- one that foreshadowed the Small Projects Assistance Fund created two years later under another AID/Peace Corps arrangement -- was the provision of \$200,000 in material support funds toward pilot projects. These funds were for "minimal" financial support to new and expanded project initiatives. The funds would be used to meet transportation, equipment and nursery development needs of volunteers working in forestry programs.

The material support provisions recognized that volunteers require occasional investments of resources -- miniscule amounts by most standards, to be sure -- but investments nonetheless. Seedlings (sometimes of new species or varieties) must be produced; soil and water conditions must be made appropriate for trees to survive; and equipment for cultivating the more mature trees must be acquired that often goes well beyond the means of local farmers.

Normally, Peace Corps volunteers have no means to provide these resources. Host country governments provide housing and sometimes transportation, but little direct project assistance. Available Peace Corps resources usually consisted of libraries at country headquarters of uneven quality with respect to forestry. Country assessment teams in 1981 variously described material support to volunteers as follows:

Senegal: ...an extensive technical library. Peace Corps/Senegal intends to expand its forestry/natural resources collection and to establish a second smaller library at Diourbel, the center of the forestry project area.

- Zaire: ...Many parts of the country are inaccessible from Kinshasa...a number of PCVs are quite isolated...(the APCD) has an AG/RD library in his office, which can be consulted by PCVs...
- Tunisia: ...Peace Corps/Tunisia has a library with a wide array of publications on agriculture and animal husbandry, but documents concerning arid land reforestation and conservation techniques are limited. Limited project material support (e.g. small farming tools, tools for mechanics) is provided to PCVs from the Peace Corps/Tunisia budget...
- Ecuador: The material resources available from Peace Corps to support the volunteers are nominal. A limited number of technical supplies and books are available in the Peace Corps office. Very little pertinent information about forest management in Ecuador...no natural resources (audio-visual) presentations available...a Peace Corps pick-up truck that can be utilized by volunteers for important program work...
(emphasis added)
- Guatemala: Peace Corps provides no material resources for the volunteers but the Conservation Project Manager has a limited technical library in his office. A disorganized and minimally useful library exists in the Peace Corps office. Audio-visual equipment is minimal and outdated.
- Liberia: Peace Corps/Liberia has not provided material support to its forestry volunteers.

Given the importance of forestry and the inventiveness of Peace Corps volunteers, solutions were sometimes created:

Burkina-Faso: Some PCV foresters receive small sums of money from Catholic missions in their communities, while others receive small amounts from the Ambassador's Self-Help fund...Interest was expressed by many volunteers in having more information made available to them about sources of small-project funds.

Costa Rica: PCV effectiveness in utilizing PVO and NGO resources was judged as good to excellent...

Guatemala: ...Save the Children helped support nursery development (by a PCV) in Southern Quiche....

Benin: (Despite a paucity of NGOs and PVOs)...Peace Corps/Benin's new APCD will make a strong effort to obtain material/technical support from donor agencies.

The PASA support for material assistance at the Peace Corps Volunteer level paid enormous dividends.

Mali's forestry group developed audio-visual materials for the Mopti region and secured projectors, slides and photography equipment to support this effort. A national language cassette designed to build villager awareness of forestry conservation needs was developed and produced for only \$75.

Ecuador benefitted from nursery establishment, which provided sources of reforestation seedlings for villagers; the creation de novo of forestry promotion and awareness materials including print and audio-visual items and a school curriculum on forestry-related environmental education; the development

of previously non-existent exhibits and informative hand-outs on national parks (which include large forested areas); and seed purchases, not only to start nurseries but to test the potential of exotic species in experimental plots.

Despite these benefits to the Ecuador program, the country team had numerous other needs for material support which were not fulfilled. These included: educational materials on soil conservation and land management, transportation for volunteers in forest areas (i.e. motorcycles), propagation of nearly extinct valuable native tree species; solar seed drying to improve locally based reforestation efforts; seminars on pesticide management and on extension work for counterparts; and demonstration plots to persuade farmers to switch methods of land use to benefit forest areas.

Material support funds in the Dominican Republic meant that the Peace Corps could help create otherwise non-existent community fruit tree nurseries, rural school nurseries, and forestry education materials for groups ranging from rural villagers to formal high school and college classes (including a set of first-ever slides illustrating the ecosystems of the Dominican Republic for educational use). Other uses of the fund were for the purchase of key tools (e.g. barbed wire, hand tools) and seeds for a large number of small projects by individual volunteers. APCD Rodriguez commented that

"Lastly and most importantly...PCVs can implement small projects with a relatively small amount of money...The allocation of funds directly through Peace Corps without the usual complicated bureaucratic processing has increased tremendously the effectiveness of PCVs in the DR forestry program."

Paraguay provides another interesting case study of how material resources provided by the PASA were used. The Peace Corps/Paraguay forestry APCD told Peace Corps headquarters, "This (PASA) monetary input has had an impact far beyond what the simple dollar value might indicate." He went on to document

PASA funds had enabled the first-ever decentralization of Paraguay's National Forest Service, the funds making possible a flexibility and responsiveness "essential in third-world countries where spot shortages, sporadic excesses and rampant local inflation are the norm." PASA monies also provided transportation for volunteers, supported demonstration plots, and actually gave the program such a strong impetus that "in some regions the demand for trees far surpasses the current production capacity of the nurseries."

A Peace Corps program consulting team visited Paraguay, and offered the following observations about use of PASA funds:

There appears to be no doubt that the PASA funds were well spent and supplied the key to getting at least six (of the nine) forest nurseries to produce seedlings. It is almost certain that if these funds had not been available, there would be few if any PC-SFN nurseries producing seedlings in Paraguay. (emphasis added).

This team also spoke directly with volunteers, who highlighted the value of PASA funds:

All the PCVs stated that the materials supplied to them by the PASA funds were absolutely necessary for the establishment

of the nurseries. Although some PCVs indicated that they might have obtained some materials (i.e. wood, labor, etc.) by bartering or scrounging, most of the funds were spent on materials that would have had to be purchased.

In January, 1984 Benchmarks prepared An Assessment of AID/Peace Corps Collaboration, and proposed material support funds as an area of outstanding program potential for AID/Peace Corps cooperative efforts. It saw a natural "fit" between AID's financial resources and the Peace Corps volunteers' needs for small but flexibly available amounts of capital. This conclusion is supported totally by the results of the Forestry PASA material support investments. The goals of the PASA and indeed the core goals of both agencies were mutually enhanced -- with minimal paperwork and maximum returns on investment.

VIII. Collaboration through PL480

As part of the Forestry PASA between USAID and Peace Corps, the OTPS Forestry/National Resources Sector has been conducting a formal examination of opportunities for collaborating with AID missions, PVOs and host country governments in community forestry projects supported by Public Law 480 Agriculture Trade Development and Assistance Act, more commonly referred to as the Food for Peace Program.

In June, 1984, a Peace Corps fact-finding team completed a four-month investigation of PL480-supported forestry activities, which took them to seven countries in Africa as well as to the Rome headquarters of the U.N. World Food Program, a major recipient of PL480. The investigation was carried out in close cooperation with AID's Bureau for Food for Peace and Voluntary Assistance, Bureau for Science and Technology, and Bureau for Africa. AID's support for the team's mission was based on surveys conducted in late 1983 by its Office of Forestry, Environment and National Resources indicating that PL480 programs and U.S. contributions to the World Food Program may actually be responsible for more reforestation than all of AID's direct forestry assistance projects worldwide. This research conducted by Peg Clement is documented in her report, Food Aid and Forestry. (Office of Forestry, Environment and Natural Resources, Bureau for Science and Technology. USAID, March, 1984.) Ms. Clement later was contracted by the Peace Corps as a member of its three-person fact-finding team.

All the members of the fact-finding team, which in addition to Ms. Clement, included Bruce Burwell and Steven Joyce, are former Peace Corps volunteers. Mr. Burwell is a private forestry consultant with twenty years of international forestry experience with the U.S. government and with private corporations.

Mr. Joyce, also a private consultant, has co-developed several training models for Peace Corps, including pre-service training models for forestry and marine fisheries, an in-service training model for food preservation, and the newly revised core curriculum training manual, The New Role of the Volunteer in Development. Ms. Clement, prior to her work with AID's Forestry Support Program, was a member of the Experiment in International Living Management Training team in Somalia. Ms. Clement is now with CARE in Mozambique.

The team's primary goal in its four month long investigation of forestry "food-for-work" activities was to identify possible avenues for collaboration, including:

- o options for placement of Forestry Peace Corps volunteers;
- o Technical assistance to AID missions, PVOs and governments; and
- o Technical "backstopping" for planning and implementing forestry projects supported by PL480 programs.

In each of the country visits, the team met with Peace Corps staff and volunteers, USAID staff (designated Food for Peace officers in particular), community organizations and community leaders.

Averaging 10 days in each country, the team interviewed over 400 people and visited 34 project sites. Interviews focused on the programming, training, logistical, staffing and institutional aspects of those projects, as well as the more technical elements.

Prior to departure from each country, the team held formal debriefings for AID and Peace Corps officials, and informal debriefings for PVOs with PL480 programs. In four countries, formal debriefings were also held for senior host government officials. The purpose of these debriefings, as defined by the team, were twofold:

- o To enable in-country AID, host country and PVO representatives to validate and/or qualify team observations and information gathered from interviews and site visits; and
- o To provide country-specific programming advice vis-a-vis forestry and food aid.

A written report now being finalized by the team will use the information gathered from the country visits and other sources to:

- o present a broad overview of existing forestry projects supported by PL480 food programs as well as projects planned for 1985-1988;
- o document specific programming factors that would strongly influence future Peace Corps/PL480 food program forestry projects;
- o discuss the advantages/disadvantages and potential programming benefits/difficulties of collaboration between Peace Corps, AID and PVOs on PL480 food program forestry projects; and
- o provide a basis for the development of programming guidelines, strategies and regional programming workshop model(s) around the PL480-supported forestry project theme.

The Field Investigation: Washington

The field investigation by the team was conducted during two overseas trips. The first trip, from January 31 to March 11, included Ghana, Senegal,

and Niger, as well as a three-day stop over in Abidjan to meet with AID officials at REDSO-West. The second trip, from April 7 to June 11, included Rwanda, Kenya, Rome (headquarters of the U.N. World Food Programme), Somalia and Lesotho, in that order.

One week prior to the first trip, the team convened at Peace Corps Washington headquarters for briefings and planning sessions. Meetings took place during the week between the team and officials from the following:

Peace Corps

- o Africa Region
- o OTPS Forestry/Natural Resources Sector
- o OTPS Agriculture Sector

USAID

- o Food for Peace Bureau
- o Africa Bureau
- o Bureau for Science and Technology

State Department

- o Office of Disaster Assistance

In addition, the team members placed a heavy emphasis during the course of the preparation week on "team building," since they had never worked together as a team before. To facilitate the team building process, team sessions included: role clarification, giving and receiving feedback, and a skills inventory. Planning sessions focused primarily on the team's approach to data collection and documentation, as well as the type of information that would be needed. Team members' interviewing skills were also sharpened through a series of role plays, e.g. the team with host country officials, with PVO representatives, with AID officials.

Following the first trip, the team spent one week in Washington together completing project descriptions, case studies and country summaries. Informal debriefings were held with Washington Peace Corps staff at this time as well.

At the conclusion of the second trip, June 11, the team held a debriefing at Peace Corps in Washington for key staff members of OTPS, the Africa region and the Director's office. A first draft of the team's report was completed June 18. A brief summary of team activities in each country visited follows:

Ghana

In Ghana from February 2-12, 1984, the team interviewed 61 individuals representing 21 different groups and organizations.

Much of the data collection in Ghana, as well as in the other six countries visited, centered on the following subject areas:

- o the current food situation, with short- and long-term projections;
- o the forestry situation;
- o organization profiles; and,
- o past, present and future food aid programs.

For both food aid and forestry, the team emphasized as a major issue the level of collaboration among the various entities involved. Other major issues included: impact (i.e. who is benefiting); technical field performance; levels of technical assistance; community participation and logistical support, particularly with regard to basic requirements and problems encountered.

Despite logistics difficulties with petrol and vehicle availability, the team visited four project sites during their ten day stay in Ghana. These included:

- o The Catholic Relief Service (CRS) food-for-work community cassava project in Akobima Village where the team met with the chairman of the local People's Defense Committee (PDC), members of the PDC Executive Committee, the Cassava Project Committee, the Akobima Women's Group and local farmers and food-for-work volunteers;
- o the World Food Programme/Forest Department Jemira Forestry Project near Kumasi, where the team met with Ghana's Forest Department regional officers, project forestry technicians and food for work laborers;
- o a WFP Forest Department tree nursery near Kumasi, where the team met with the nursery manager, and with food-for-work laborers; and
- o a Salvation Army forestry project in Begoro, which is directed by a former Peace Corps volunteer, who had worked with a CRS PL480 program during 4 years of Peace Corps service.

Senegal

In Senegal from February 13 - 26, the team met with 46 individuals, and visited four project sites.

Unlike Ghana, massive amounts of food aid were already pouring into Senegal from several donor sources, which provided the team with special insight into the problems of food aid coordination, logistics, and organizational

accountability -- all of which varied widely among the various donor agencies. Moreover, five Peace Corps forestry volunteers were working in a World Food Programme food-for-work supported GOS community forestry project; and three of these PCVs were trained by team members Burwell and Joyce during a forestry SST at the University of Arizona in 1982. The contributions made to the team's mission by these volunteers have proved to be particularly valuable.

The sites visited were the following:

- o the village woodlot project in the Dioubel Sector, a WFP food-for-work supported program in which five Peace Corps forestry volunteers provide technical assistance;
- o the village woodlot project in the Bombay Sector, also supported with WFP food-for-work commodities, and where technical assistance is provided by GOS Forest Department technicians;
- o the GOS/USAID Sand Dune Fixation Project in which laborers are compensated with "cash-for-work", derived from PL480 Title III; and
- o the GOS/UNDP Sand Dune Fixation Project, in which laborers receive WFP "food-for-work" as compensation.

Abidjan: REDSO West

The team spent two days in Abidjan, February 26-28, meeting with REDSO-West officials, as well as with the Director of Energy Initiatives for Africa. The regional West and Central Africa Food for Peace officer is based at REDSO-West, serving those USAID missions which do not have a Food for Peace representation, such as Ghana and Niger.

Niger

In Niger from February 29 - March 10, the last country visit of the first trip, the team interviewed 30 individuals and visited 1 project site.

Unlike its Sahelian neighbors, Niger was holding its own in terms of food self-sufficiency. Though drought had affected many areas of the country, good harvests were recorded in 1983 in parts of the North and in the Niamey area. There was even mention of a double harvest in some places. For this reason, AID did not have a current PL480 program and did not anticipate implementing one in the near future.

However, CARE had recently phased out a WFP-sponsored food-for-work community forestry program, and was in the process of re-establishing the program on the basis of voluntary community participation. The project experience and insight which the CARE staff shared with the team proved extremely valuable to its mission, particularly with regards to such issues as food aid dependency.

Rwanda

Rwanda was the first country visited by the team on the second overseas trip of their field investigation. In Rwanda from April 9-20, the team interviewed over 60 individuals, and visited four project sites. Among those interviewed, were directors of the following agencies and organizations:

- o Forest Department
- o World Food Program;
- o Catholic Relief Services;
- o Seventh-day Adventist World Service;
- o World Bank; and
- o Oxfam.

The Peace Corps program in Rwanda is very small, consisting of five volunteers at the time of the team's visit, including a newly arrived forestry volunteer. The forestry volunteer was to have provided technical assistance to an USAID/GOR community forestry project about to be implemented; however, he has since been terminated for medical reasons. In addition to the Deputy Chief of Mission, who also serves as Peace Corps Director, the team interviewed AID officials and contractors.

The four projects visited by the team were the following:

- o the WFP/FAO/GOR Gikongoro Integrated Rural Development Project where laborers -- who are paid 50% of their wages in cash and 50% in WFP food commodities -- have been reforesting 800 ha of abandoned badly eroded land each year since 1979;
- o the GOR/Swiss Pilot Forestry Project, where reforestation activities -- both communal woodlots and agroforestry -- are occurring through community participation;
- o the GOR/German Agro-Pastoral Project, considered very successful in agro-forestry research and extension; and,
- o the World Bank Reforestation Project, which is concentrating on reforesting state land.

Of these four projects, only the WFP Gikongoro project is located in a region which the GOR considers food deficient.

Kenya

In Kenya, from April 20-May 3, the team met with Peace Corps staff and volunteers, USAID/Kenya and USAID/REDSO-East officials and with the directors and senior staff of several PVOs.

Unlike Niger and Rwanda, Kenya is experiencing a food shortage at this time. Food imports are on the increase including WFP and PL480 commodities. While in Kenya, the team visited two WFP food for work supported forestry projects, and one CRS food-for-work tree planting project:

- o the multidonor supported Buja Resettlement Scheme, where food-for-work laborers are maintaining two nurseries, and a 20 ha woodlot;
- o the GOK/Australian Baringo Afforestation and Soil Conservation Project, where food for work laborers are planting community and private woodlots, maintaining a GOK Forest Department nursery and rehabilitating eroded and through soil conservation activities and tree planting; and,
- o the GRS-sponsored Makindu Tree Planting Project, where one hundred parents received food-for-work rations to plant trees in a school yard.

There are no Peace Corps forestry volunteers working on any of the above projects at this time, although the Baringo project director requested three PCVs in late 1983.

Rome/World Food Programme

From Kenya, the team flew to Rome for one week, May 4-11, to meet with officials of the World Food Programme and FAO. In addition to WFP's chief forester, the team met with heads of the Program Planning Division, the Evaluation Division, and the Africa and Asia Divisions. The team also met with the U.S. Ambassador to FAO, and with the USAID Food for Peace liaison officer to WFP.

While at WFP headquarters, team members researched documentation on project designs and evaluations of past and present Food for Work/Forestry projects.

Somalia

The U.S. government is considered the lead donor in Somalia for Forestry programming. It sponsors community forestry projects primarily in refugee resettlement areas. CARE, Save the Children and Africare are implementing these projects in coordination with the National Range Agency, a parastatal housing the governments forestry department. All laborers in the projects, most of whom are refugees receiving emergency food aid, receive cash for work. Prior to 1983, however, the projects received WFP food for work to support their activities. The team visited the Africare project and the Save the children project in Jalalagsi and Qorioley respectively.

Other project sites visited by the team were NRA/WFP-sponsored food for work forestry and soil conservation activities. They included:

- o Nurseries in Mogadishu, Afgoi, Hangeisa, Berbera and Burao;
- o the UNSO/UNDP/NRA Shalambod Dune Control Project;
- o the NRA Berbera Dune Control Project; and,
- o the FAO/Kuwait Fund Northern Rangeland Development Project in Burao.

Somalia offered the team an opportunity to compare cash-for-work and food-for-work programs in forestry. Like Senegal, Somalia has received massive amounts of emergency food aid in recent years, a situation which requires special attention to food-for-work program design issues.

Lesotho

Over the course of its ten day visit to Lesotho, the team interviewed 64 individuals, and visited 9 project sites.

Twelve Peace Corps volunteers were also interviewed at the conclusion of their Close of Service conference, including a Peace Corps volunteer forester managing a food-for-work supported nursery in Qacha's Nek. In addition to the forester, three other PCVs attending the conference were involved in food-for-work projects.

The team visited the food-for-work nursery in Qacha's Nek, accompanied by the Peace Corps Director. Other food-for-work sites visited included the following:

- o the Lesotho Woodlot Project (LWP) Lescheboro plateau site, and the project nursery in Maseru;
- o the Ministry of Cooperatives and Rural Development soil conservation activities at Thaba Busin, Lejakeme and Kilolokoe; and,
- o the Ministry of Agriculture soil conservation sites at Gidione, Moriga and Sekameng Aa Bagomi.

Program Development

Following the completion of the final written report, OTPS/FNRS with the assistance of Mr. Joyce and Mr. Burwell, will be developing program guidelines and models for community forestry projects supported with PL480 food-for-work. These models will likely provide entirely new approaches to both community forestry and food aid programming as well as to AID/Peace Corps joint programming.

General conclusions reached by the fact-finding team, which these program models will be based on, are as follows:

Food Aid

- o Food-for-work programs must be seen by both sponsors and laborers as employment and not as compensation for time volunteered. Without this distinction, community motivation and participation can become dependent on food aid.
- o Local community organizations sponsoring food-for-work activities must take on more responsibility for project monitoring, food distribution and accountability not only to cut down on the administrative costs of the sponsoring PVO -- an often cited disincentive to food-for-work programming -- but also to build local management capability.
- o A prime target of food-for-work programming should be income generating activities, with food aid seen as a short-term input, i.e. as start-up capital. If the community organization, or "business" managing the activity is unable to convert employees to cash-for-work from profits generated by the activities in a reasonable time period, the food aid should be withdrawn.
- o Peace Corps volunteers working with food-for-work programs should not be involved in food distribution. However, PCVs can make valuable contributions to these programs in a technical role, i.e. forestry, and in a management role, i.e. small business/cooperatives advisor.

Forestry

- o Tree nurseries and woodlots, both communally owned and private family woodlots, can be very profitable with proper planning and management. Profit incentive is an underutilized development tool in reforestation/afforestation efforts.
- o Most community woodlot projects are unsuccessful because they are managed by governments, with the communities taking on little responsibilities for their success. For most community members, in these cases, how they will benefit from the woodlot is unclear, unknown, or disbelieved.
- o Extension to farmers on agroforestry principles and private woodlot development and management -- virtually nonexistent in most countries visited by the team -- should be a core component of community forestry initiatives.

Through appropriate models, forestry projects supported by PL480 food programs can not only address fuelwood needs, but also build village-level management capability and create employment opportunities in the rural sector, providing greater incentive for local-level participation in reforestation/natural resources management schemes.

IX. Towards the Future

In thinking about the future of AID/Peace Corps collaboration in the field of forestry, it is best to begin with a summary of benefits both agencies have derived from the PASA agreement. The benefits have been incorporated into seven categories.

1. Increase-in Peace Corps Volunteers in Forestry

In sixteen countries affected by PASA activities, the number of forestry volunteers has increased from 10 to well over 150 by FY 1984. The chart below illustrates this growth.

<u>Country</u>	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>
Haiti		3	1	11
Dominican Republic	1		25	
Ecuador	9	34	31	25
Guatemala (Parks)			5	
Paraguay		9	15	18
Burundi			1	4
Senegal		6	15	13
Niger			15	19
Morocco			0	4
Liberia		0	1	2
Mali			5	10
Philippines			30	37
Western Samoa			3	3
PNG			6	6
Benin		0	0	5
Lesotho		0	0	4
TOTAL	10	52	153	155

There are now a total of 500 Peace Corps volunteers working in the forestry sector in 39 countries. The increase is due directly to the increased quality of pre- and in-service training and, of course, programming. Attrition rates of volunteers working in forestry are among the lowest the Peace Corps has seen in recent years. Better programming has also assisted recruitment efforts.

The value of the 150 volunteers serving in the programs for which the PASA is directly responsible -- in terms of cost alone -- is over \$3 million a year. With few exceptions, these volunteers are serving AID's long-term and short-term goals, as well as carrying out the purposes of the Peace Corps. Thus, AID can point to a leveraging of human resources that alone are twice its original investment in the program. This does not even include the host country nationals who have been trained through the PASA. For its part the Peace Corps has improved its ability to design programs, recruit, train and assign volunteers in projects for which they are prepared and in which they are more likely to remain.

2. An Increase in Forestry Programs

Due in large part to initiatives stimulated by a programming workshop, the forestry program in the Dominican Republic has expanded from one forestry volunteer in 1982 to its current level of 25 volunteers working in forestry/natural resources. New forestry/natural resources programs have also been developed as a result of these workshops in Burundi, Liberia, Guatemala, Botswana, Benin, Lesotho, Morocco and Papua New Guinea. Thus the PASA has helped at least nine nations to expand their commitment to environmental restoration and conservation. The new programs offer U.S. agencies the opportunity to expand their contribution in forestry and natural resources, thus helping both AID and the Peace Corps to fulfill their Congressional mandates in this sector.

3. Improved Training for Host Country Personnel and Peace Corps Volunteers

In the last fourteen months through the in-service training model developed as a result of the Peace Corps/AID Forestry PASA, the Peace Corps has

successfully implemented simultaneous training of approximately 90 host country ministry officials/local-level counterparts, with approximately 80 Peace Corps volunteers in nursery management, agroforestry, and fruit tree culture.

Over 130 government ministry officials, local-level counterparts, AID staff, Peace Corps staff and PVO representatives augmented their forestry/natural resources training and programming skills simultaneously through the regional programming workshops.

For AID, this contributed to the goal of building host country institutional capacity in the forestry/natural resources sector. AID personnel themselves also benefitted directly. For the Peace Corps, the PASA provided a rare and much needed opportunity to train its volunteers' counterparts. This training improved the Peace Corps's capacity to enable counterparts to replace volunteers at the end of their assignments, a basic agency goal. Furthermore, the joint in-service training strengthened PCV-counterpart working relations at the local level and Peace Corps-Ministry relations at the central level. In addition, Peace Corps staff ability to conduct pre- and in-service training was greatly improved.

By bringing Peace Corps, AID and host country personnel together, the PASA created unique new opportunities for host agency personnel to learn new skills and to relate to one another -- and to their Peace Corps counterparts -- in more productive ways. The PASA enabled both Peace Corps and AID to recognize the essential relatedness between the Peace Corps training of counterparts and AID's own institutional development goals.

The pre-service training models and manuals, have greatly improved the preparation of Peace Corps volunteers, both in forestry and in other sectors,

such as marine fisheries. These materials are also available to host country agencies and to AID for training technicians and extensionists in their own forestry assistance programs. Other valuable documents produced through the PASA, such as the assessment reports, proceedings of workshops and summaries of in-service training programs, have been distributed widely to other Peace Corps countries, AID and host country personnel. This has spread the insights gained in PASA activities well beyond those who were able to participate.

4. Material Support for Peace Corps Forestry Efforts

The PASA demonstrated that small amounts of AID funds can have a major impact on community nursery and environmental education programs when combined with Peace Corps volunteer services. Material support from AID helped volunteers to overcome resource problems which, though they may seem small, can often block progress on a forestry program altogether. Collaboration with the Peace Corps has at the same time helped AID to deliver its resources quite directly to rural communities.

5. Expanded International Forestry Network

Through the PASA, the Peace Corps obtained access to the Forestry Resources Support Network, obtaining the services of U.S. Forest Service specialists on numerous occasions. At the same time, increased Peace Corps programs and volunteers in forestry increases AID's network of foresters who are experienced in developing countries, have language skills and can work in cross-cultural institutional settings. In this sense the PASA contributed to the goals of the RSSA with the U.S. Forestry Service as well.

6. Use of PL480 Resources in Forestry Programs

Through an amendment to the PASA to explore the possibility of joint programming in forestry using PL480 food resources, AID has already obtained an assessment of forestry "food-for-work" programs in Africa. It is expected that similar assessments for the Inter-America and NANEAP regions will follow. It is expected that this component of the PASA will generate new program models for the use of PL480 food in AID/Peace Corps village-level reforestation projects.

7. A Postive Experience with Collaboration

A current priority of both the Peace Corps and AID is to seek for ways to accomplish joint programming and planning both in Washington and the field. The Forestry/Natural Resources PASA was not just a forerunner of this emphasis and initiative. It has, in fact, demonstrated that joint programming is feasible and that mechanisms exist for stimulating the two agencies to plan together.

Programming workshops, discussing the issues and problems related to collaboration, were held. These workshops stimulated greater communication and coordination in the field. And joint projects emerged from them.

Another thing the PASA taught about collaboration is that for a given period of time, at least, it must be pursued across a continuum of activities and not just in a single workshop. The assessments raised issues and collected data on the status of collaboration between AID and the Peace Corps; the workshops generated the ideas and the base of communications and the program consultants provided assistance with problems in project development. One may even speculate that more forestry projects, involving more extensive uses of volunteers and AID resources, would have been created if the Peace Corps had the additional staff resources to promote collaboration even further.

An issue which must remain open is whether AID/Peace Corps joint programs in the field are better planned formally or informally. The drawback of formal planning is that unless the two agencies proceed at the same pace in their program cycles, volunteers can arrive in country before the AID project has begun. The advantage of formal planning is that the needs of the volunteers, if they are to be effective forestry extension agents in their communities can be foreseen and provided for systematically.

The Future

The aforementioned results of the AID/Peace Corps PASA agreement should be viewed not so much as projects and goals accomplished but as capabilities and opportunities created. The real question is how these capabilities can best be applied in the years to come. This is especially true since the present policy of both agencies holds that AID and the Peace Corps can accomplish more for the foreign assistance efforts of the United States by working together than by pursuing their programs separately.

Both the Benchmarks' assessment of AID/Peace Corps collaboration and an evaluation conducted by the Society of American Foresters recommended continuation of the PASA agreement through FY'88. What activities seem to hold the ripest promise for Peace Corps and AID collaboration in forestry in the years ahead? We believe they are the following:

1. Renewal of AID/Peace Corps efforts to conduct workshops aimed at increasing the level of AID/Peace Corps collaboration in forestry at the mission level. These workshops should be conducted at least once every other year in each region. A possibly more effective mechanism would be for a travelling

workshop staff to conduct country-specific programming workshops in carefully selected countries. In all cases, these workshops should include host country agency and PVO personnel. These workshops should lead to the design of projects with specific and "hard" reforestation goals.

2. The capabilities of OTPS/FNRS for "in-service training for forestry," developed under the PASA, should be used even more extensively, both in regional and country specific programs. Efforts should be expanded to assist Peace Corps country staff (and training contractors) to conduct IST training. Guides or manuals should be developed for IST and counterpart training. Small sub-contracts could be developed with Peace Corps training centers for volunteer and counterpart in-service training. This would reduce costs and expand the impact of IST programs. A change in the name of this activity may be in order since "in-service" seems to refer to the volunteer more than to the counterpart on the host country institution.

3. Pilot project material support should be expanded and extended to other countries.

4. Additional follow-up, or updating of the assessments conducted in 1981, should provide new baselines, uncover progress made but not reported and suggest even more joint programming opportunities.

5. The early emphasis of PASA activities on collaborative planning between the two agencies (which seemed to wane in recent years) should be reviewed -- especially given the present emphasis on collaboration. This seems to be occurring now with the emphasis on PL480. This emphasis should be encouraged, but joint programming should be encouraged which uses AID resources as well.

6. A pre-service training model and manual should be developed for Asia in an attempt to institutionalize optimum forestry training practices there.

7. Peace Corps program consultants should be made available to all regions (not only Africa) to advise on appropriate forms of Peace Corps support in implementing AID PL480 programs in forestry. Programming assistance materials should be developed from these countries.

8. Peace Corps staff should receive training in the appropriate program links between the Peace Corps and food aid programs. A staff training model should be developed.

9. Models and manuals for pre-service and in-service training for volunteers working with PL480 Food for Work/forestry programs should be developed.

10. The Peace Corps should make a special effort to document, monitor, record and evaluate the efforts to combine volunteers and food and programs in appropriate ways and with appropriate program models.

PEACE CORPS FORESTRY ASSESSMENTS

<u>Country</u>	<u>Assessors</u>	<u>Station</u>	<u>Dates</u>
<u>INTER-AMERICA</u>			
Honduras	J. Shores	U. of Michigan	1/6 - 1/31/81
	R. Birdsey	USFS (Detail)	1/6 - 1/31/81
Guatemala	J. Shores	U. of Michigan	1/6 - 1/31/81
	R. Birdsey	USFS (Detail)	1/6 - 1/31/81
Ecuador	J. Burchfield	USFS (Detail)	1/5 - 2/7/81
	R. Donovan	Assoc. in Rural Development	1/5 - 2/7/81
Jamaica	J. Burchfield	USFS (Detail)	1/5 - 2/7/81
	R. Donovan	Assoc. in Rural Development	1/5 - 2/7/81
Dominican Republic	J. Burchfield	USFS (Detail)	1/5 - 2/7/81
	R. Donovan	Assoc. in Rural Development	1/5 - 2/7/81
Costa Rica	J. Shores	U. of Michigan	2/23 - 3/27/81
	B. Cross	U. of Michigan	2/23 - 3/27/81
Paraguay	J. Shores	U. of Michigan	2/23 - 3/27/81
	B. Cross	U. of Michigan	2/23 - 3/27/81
<u>AFRICA</u>			
Tunisia	A. Blade	U. of W. Indies	3/25 - 4/3/81
	A. Gibbs	Dept. of Interior BLM (Detail)	3/25 - 4/3/81
Morocco	A. Blade	U. of W. Indies	3/25 - 4/3/81
	A. Gibbs	Dept. of Interior BLM (Detail)	3/25 - 4/3/81
Benin	A. Blade	U. of W. Indies	3/25 - 4/3/81
	A. Gibbs	Dept. of Interior BLM (Detail)	3/25 - 4/3/81

Country	Assessors	Station	Dates
Liberia	J. Fickes	U. of Georgia	2/19 - 4/6/81
	Dr. F. Conway	Consultant	2/19 - 4/6/81
Zaire	J. Fickes	U. of Georgia	2/19 - 4/6/81
	Dr. F. Conway	Consultant	2/19 - 4/6/81
Senegal	J. Fickes	U. of Georgia	2/19 - 4/6/81
	Dr. F. Conway	Consultant	2/19 - 4/6/81
Mali	Dr. F. Conway	Consultant	4/20 - 6/15/81
	A. Blade	U. of W. Indies	4/20 - 6/14/81
Upper Volta	Dr. F. Conway	Consultant	4/20 - 6/15/81
	A. Blade	U. of W. Indies	4/20 - 6/15/81
Niger	Dr. F. Conway	Consultant	4/20 - 6/15/81
	A. Blade	U. of W. Indies	4/20 - 6/15/81
Mauritania	Dr. F. Conway	Consultant	4/20 - 6/15/81
	A. Blade	U. of W. Indies	4/20 - 6/15/81
Botswana	D. Heinz	USFS (Detail)	2/23 - 4/8/81
	M. Davis	USFS (Detail)	2/23 - 4/8/81
Kenya	D. Heinz	USFS (Detail)	2/23 - 4/8/81
	M. Davis	USFS (Detail)	2/23 - 4/8/81
Tanzania	D. Heinz	USFS (Detail)	2/23 - 4/8/81
<u>Far East/Pacific</u>			
Philippines	S. Todd	U. of Michigan	5/5 - 6/30/81
	D. Reynolds	Nat'l Park Service (Detail) Dept. of Interior	5/5 - 6/30/81
Fiji	S. Todd	U. of Michigan	5/5 - 6/30/81
	D. Reynolds	Nat'l Park Service (Detail) Dept. of Interior	5/5 - 6/30/81

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Country	Assessors	Station	Dates
W. Samoa	S. Todd	U. of Michigan	5/5 - 6/30/81
	D. Reynolds	Nat'l Park Service (Detail) Dept. of Interior	5/5 - 6/30/81
Solomon Islands	S. Todd	U. of Michigan	5/5 - 6/30/81
	D. Reynolds	Nat'l Park Service (Detail) Dept. of Interior	5/5 - 6/30/81
Tonga	S. Todd	U. of Michigan	5/5 - 6/30/81
	D. Reynolds	Nat'l Park Service (Detail) Dept. of Interior	5/5 - 6/30/81

Results of Forestry PASA Assessments Conducted
January - July, 1981 for the Peace Corps

Legend: ? = Unknown
X = None
√- = Some but not substantial
√ = Considerable but not extensive
√+ = Extensive and substantial

AFRICA

Country	Current Host Nation Commitment To Forestry as Development Sector	Current Peace Corps Involvement in Forestry	Current AID Involvement in Forestry	Other Int'l Development Agency Involvement in Forestry	Current AID/PC Cooperation		Joint Forestry Project Potential	Comments
					For.	Non-For.		
Tunisia	✓	X	X	X	X	X	X+	MC interest in control of desertification. AID withdrawing.
Morocco	✓+	✓-	✓	✓+	X	✓-	✓-	Extensive program development would be required.
Benin	✓	X	X	✓-	X	✓	X+	PC would need consult. help AID has 0 new project planned in this country.
Liberia	✓-	✓+	X	✓+	X	✓	✓	No current AID forestry projects. MC would use more PCVs if had money.
Zaire	✓+	X	X	✓	X	✓+	✓+	No prior forestry but considerable AID/PC interest.
Senegal	✓+	✓+	✓+	✓+	✓	✓		MC pushing more of forestry as development, not police. Recent AID/PC collaboration.
Mali	✓+	✓+	✓	✓+	✓+	?	✓+	Full, current AID/PC/MC cooperation on forestry project. First AID forestry program. Local MC officials lack technical skills.
Upper Volta	✓+	✓+	✓+	✓+	✓+		✓	MC in moving coordination among its own agencies. PC/MIN & PC/AID rel. solid Quest: What scale projects?
Niger	✓-	✓	✓	?	X	✓-	X	MC Government controls assignment of PCVs.
Mauritania	✓-	✓	✓+	✓	✓	✓	✓+	PC forestry now being added AID sees forestry as high priority. Villagers ask PCVs for help.
Botswana	✓	X	✓	✓-	X	X	✓-	MC forestry officer job just filled after 8 years. Need extensive program development.
Kenya	✓+	✓	✓	✓	✓	✓+	✓+	Need for supervision of skill-trained PCVs. Many donor projects PCVs have initiated own local forestry projects.
Tanzania	(Report not available from the Peace Corps)							

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INTER-AMERICA

Country	Current Host Nation Commitment To Forestry as Development Sector	Current Peace Corps Involvement in Forestry	Current AID Involvement in Forestry	Other Int'l Development Agency Involvement In Forestry	Current AID/PC Cooperation		Joint Forestry Project Potential	Comments
					For.	Non-For.		
Honduras	✓-	✓+	X	?	X	✓	✓	HCA is primarily commercially & profit oriented. PC has clear ability to innovate in soc. forestry.
Guatemala	✓	✓	X	✓	X	✓-	✓-	AID interest in forestry. HCA has "policing" reputation. PCVs view as negative.
Jamaica	✓-	✓-	X	✓	X	✓-	✓	HC efforts "fragmented". Agency profit oriented. FASA/PC viewed as potential catalyst.
Dominican Republic	✓-	X	X	?	X	✓	✓-	HCA - chiefly warden role. severe environment degradation?
Costa Rica	✓+	✓	✓	✓+	X	✓-	✓+	AID/PC relations "improving" PC will increase forestry volunteers, HCA still suffers image problems.
Paraguay	✓-	✓+	X	✓+	X	✓	X←	HCA gets funds from timber sales. AID leaving in FY'84.
Ecuador	✓+	✓+	✓	✓	✓	?	✓+	All see pressing need for extension work. PC & HCA need <u>staff & resources</u> .

PROJECTED PL-480 OPERATING BUDGET FY'85 - '88

	1985	1986	1987	1988
o Regional PL-480 Programming Workshop(s)	95	80		
o PL-480 Consultants Core Model development/im- plementation	50	50	25	
o PL-480 Staff training model(s)	50	50		
o PL-480 forestry/food-for-work pre-service train- ing model & manual	145			
o PL-480 pilot project model country funds (4-5)	40	60	80	80
o PL-480 forestry/food-for-work in-service train- ing model		40	60	75
o PL-480 monitoring/evaluation			50	50
o PL-480 recorded findings			30	20
o Staff - Washington	90	95	100	105
Sub-Total:	470	375	345	330
o Regional forestry programming workshops for AID, HCNs, PVOs and Peace Corps staff	80	80	80	80
o Regional (multi-country) in-service forestry training for HCNs and PCVs.	100	150	150	100
o Pilot project material support	65	65	65	40
TOTAL:	715	670	640	550