Assessment of the Peace Corps/INECN Biological Diversity Project, Burundi

January 14 to January 26, 1990

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goals. The successes of the Project however, vastly outweigh the problems.

The Assessment Team recommended that the Project continue for another two years. It was suggested that the Project focus on the goals of:

1) Institutionalizing the activities so that the INECN employees can assume the functions of the Project Coordinators and Volunteers. For example, Park Technicians should, over the next two years, fully assume the responsibilty for training park guards and scheduling regular courses.

2) Develop methods to make the INECN self-sufficient through tourism and other revenue-generating activities.

3) Working with communities living in and around the parks and reserves to generate income for the local populations. Agroforestry, small enterprise development or other related projects are some examples.

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Schedule for David Reynolds and Greg Booth January, 14 - 26, 1990.

I. Introduction and Background

On December 18, 1987, Rebecca Mushingi, then the Peace Corps Country Director in Burundi, submitted a proposal to the USAID Africa Bureau requesting funding for a four year Biological Diversity Project (BDP) in Burundi. The project was to be administered by Peace Corps/Burundi in collaboration with the National Institute of Nature Conservation (INCN) (now the National Institute of Environment and Nature Conservation). A total of $180,600. was requested for the four year project.

The BDP's goals were to assist the INCN through the use of project personnel and Peace Corps Volunteers (PCVs), to manage and conserve the country's parks/reserves. The afromontane forests of Burundi, which contain a high percentage of rare and endemic wildlife and plant species, were the focus of the management efforts.

The Project Proposal was accepted and approved for funding by the USAID Africa Bureau (AFR/TR/ANR). It began on September 1988 and will end September 1990. The funding source was the USAID Africa Bureau's regional Natural Resources Management Support project (NRMS) (698-0467). Since the NRMS project was to end in 1990, the Burundi project was only funded for two years instead of four. It was understood at the time that if the NRMS project was extended, Peace Corps/Burundi could submit another proposal to request project funding for another two years.

The funding mechanism was a Participating Agency Service Agreement (PASA) between USAID and Peace Corps/Burundi. The PASA was amended in March, 1989. Fifteen thousand dollars was added to the original $180,600 for the purchase of a project vehicle. The total funding for the project therefore, increased to $195,000.

In 1989, the Peace Corps Burundi Country Director, Erica Eng, requested an assessment of the project to occur in January, 1990. She requested an assessment team consisting of a Natural Resources Specialist from the Peace Corps/ OTAPS in Washington, D.C., a representative from the government of Burundi and two USAID Natural Resources Advisors, one from the USAID Africa Bureau (AFR/TR/ANR) in Washington, D.C. and a Natural Resources Advisor from the USAID REDSO/ESA Office in Nairobi, Kenya. Due to scheduling problems, the REDSO/ESA advisor could not participate in the project assessment activity. The Project Assessment Team, therefore, consisted of Mr. David Reynolds, Natural Resource Specialist, OTAPS, U.S. Peace Corps, Washington, D.C., Mr. Greg Booth, Natural Resources Advisor, USAID Africa Bureau

(Office of Technical Resources). Mr. Jean Rushemeza was not available for the entire project assessment and did not participate in the drafting of the final report.

The goal of the Project Assessment requested by the Peace Corps/Burundi Director in a January 8, 1990 cable (Bujumbura 00067) was, "to assess the project and provide guidance in regard to an extension or second phase of the project. The Project Assessment which is called for in the project Document is needed to ensure that the goals of the project are being met and that these goals continue to reflect the needs of the INECN."

The U.S. Peace Corps entered into service in Burundi in 1982. Its first forestry PCV arrived in 1983. Parks and Wildlife PCVs followed, building to the present level of four natural resource positions assigned to the Institute of the Environment and Nature Conservation.

In December, 1987 the U.S. Peace Corps and the INECN co-hosted a three-day workshop in Gitega for INCN Senior Staff and Park Technicians and Peace Corps Parks and Conservation Education PCVs. The purpose of the Workshop was to identify the most important problems to address in each park/reserve in Burundi, to learn how to write management plans, and to develop Action Plans for each area aimed at solving those problems. The BDP proposal was based on the priority problems identified and action plans developed at this Workshop.

Later, in 1988, a second Workshop was co-hosted by INCN and Peace Corps/Burundi to follow-up on the Action Plans written in the First Workshop. In 1989, a third follow-up Workshop was held to track the progress of the management of each area.

II. Methodology

The U.S. Peace Corps and USAID members of the project assessment team arrived in Burundi on January 14, 1990, and completed their work by January 26, 1990.

The team used the U.S. Peace Corps Assessment/Evaluation format to organize their data and write the report. The assessment method was to see if the contract requirements stated for the U.S. Peace Corps/USAID BDP activity have been met or would be met by the completion of the project in September, 1990. In addition, recommendations for a second phase project were included at the end of the report.

Information was obtained two ways. First, the team conducted interviews with Peace Corps/Burundi staff, INECN employees, the Project Coordinator, PCVs, USAID Mission representatives and the Director General of the INECN. Management, Tourism and Environment. They also talked with the other Burundians, expatriates and Americans familiar with the Project. The team conducted site visits to two of the National Parks/Reserves and spent time at the INECN headquarters in Gitega.'

The other information collection method was to review documents related to the project. Monthly park/reserve reports, PCV files and work products and training programs were reviewed. The evaluation of the project written by each PCV were particularly useful in getting their perspective on the successes and failures of the project.

The quantity and quality of the information used to write this project assessment could have been improved if the Burundian project assessment team member was with the team for the entire project assessment period. Also, more site visits and interviews, in essence, more time, would have been beneficial. Nevertheless, the Project Assessment Team believes that it was able to obtain a fairly clear picture of the condition of the project.

See the Appendix for the Schedule For the Project Assessment Team while they were in Burundi.

III. Findings

General

The contract requirements for the U.S. Peace Corps/U.S. Agency For International Development (USAID) PASA have, with only a few exceptions been met. There still remains seven months before the end of the contract and most of these unfinished requirements could be finished by then.

The Biodiversity Project members have actually accomplished far more initiatives than is stated in the contract requirements. For example, proposal writing, planning, and problem solving sessions are regularly held by PCVs and the Project Coordinator. In the Kibira National Park, trail construction and park interpretation activities have resulted in an increase in tourism in the area, which, in turn, has increased the park revenue collected by the INECN.

Other products produced included a bird list for tourists visiting Kibira National Park, speeches written for the Director General of INECN, slide shows developed for the Jane Goodall Institute for local populations, a Ruvubu Park brochure, a forestry project in Ruvubu where native tree seeds are planted, a hiking trail system developed in Kibira National Park and a road construction manual for use by park technicians and guards.

Also the Project Coordinator has been in contact with organizations such as the University of Bujumbura, the Jane Goodall Institute and the Chicago Field Museum of Natural History to develop mutually beneficial programs between the INECN and those other organizations. PCV Leif Davenport, the Project Coordinator and INECN staff also participated in the regional central East Africa Afromontane Forest Workshop held in Rwanda, June, 1989.

A listing of the project assessment findings are found below. Categories follow the format used in the contract PASA document.

A. Training of INECN Park Rangers

a. Guard and Technician Training

Park/Reserve Guards (primary ed. level)

Contract Requirement:

Seventy-five percent of guards were to be trained during course of project.

Contract Requirements met:

The guards were trained in data collection, reporting methods and development of flora and fauna field survey techniques. The guards were also trained to conduct park patrols for the purpose of monitoring activities within the parks/reserves (e.g., violations, tourism).

Seventy-eight percent of the guards have been trained in the past year. Nine training sessions were conducted by the Project Coordinator and Park Technicians for park guards. Seventy out of eighty-one guards were trained. Basic technical park skills resulted from the training. The goal of the training was to standardize guard activities and assure that they are utilized efficiently.

Additional training is planned for FY 1990. The training will include instruction on map reading, fauna and flora identification and other topics considered to be a priority by the Project Coordinator and INECN. All of these training activities will be conducted by park technicians.

The tourist visitor questionnaire from Kibira National Park (Teza and Rwegura regions) indicated that the trail guides need additional training. For example, many of the questionaires indicated that the guides conducted the field tours too fast and did not identify the fauna and flora correctly.

Additional guard training provided by PCVs:

The PCV at Kibira National Park provided "hands-on" training to guards for the design and construction of trails and camping grounds. The PCV and guards then successfully developed state of the art trails and camping grounds in the field. Both training and construction activities required regular contact with INECN staff and field laborers. All Burundi PCVs and Kibira National Park personnel spent one weekend in Kibira to assist in the field construction of trails and camping grounds.

PCV Don Gay and the Ruvubu conducted training programs in road construction and trail design for the park guards at that park.

Park/Reserve Technicians (secondary school level)

Contract requirement:

A training of trainers activity was to be accomplished for INECN personnel.

Contract requirements met:

One training of trainers activity was undertaken for the park/reserve technicians May 11-12, 1989. These technicians later conducted training for the park/reserve guards.

Contract Requirement:

A training specialist will be selected to conduct short-term training program packages.

Contract Requirement Met:

Andrew Allo, former principal of the Ecole de Fauna in Cameroon was asked to serve as a training specialist to coordinate and conduct training activities. He has not responded to the request. Instead, the project coordinator, working with the park technicians planned and designed the training programs.

B. Plant and Animal Inventories

Contract Requirements:

Flora and fauna inventories will be conducted for each of the five parks/reserves. The inventory information will later be utilized for the development of park/reserve management plans.

Contract Requirements Met:

Due to the effectiveness of the guard training, the guards are conducting fauna and flora inventories to some extent and the technicians are utilizing field data collection forms to record data.

PCVs are conducting inventories in the Kibira and Ruvubu National Parks, and in the Rumonge, Kigwena and the Bururi forest reserves more frequently. The PCV located in the Rumonge and Bururi area is presently focusing more on the development of trail systems in the Kigwena Forest Reserve.

According to both the project coordinator and the PCVs, the flora and fauna inventories are the lowest priority of the four project components (training, management plans, conservation education and inventories). However, these inventory activities take approximately ten percent of the

These reserves are being protected though a collaborative agreement between Catholic Relief Service (CRS) Rumonge Forest Reserve and the INECN and recently, Peace Corps. The CRS has collected most of the information needed for Rumonge and Kigwena management plans. Vyanda is a newly protected area so little has been done to collect data in this Reserve. Mr. Ndikuriyo and PCV Matt Criblez will be working to develop a management plan for all three of these reserves.

Kibira National Park

Most of the information needed to develop a management plan is available but needs to be organized and put into a standard format. Much of that data was obtained by PCVs Jill Reifschnieder and Peter Trenchard and the French Forestry Project, between 1984-87. The information needs to be collected and revised according to the standardized management plan format adopted by the INECN.

D. Conservation Education

The components of conservation education for this project are: (1) development of school curricula; (2) education through the national media; and (3) community development (e.g., agroforestry,environmental awareness). PCV Kevin Doyle is stationed in Gitega and is the conservation education PCV.

Contract Requirements:

A conservation education program was to be developed which would involve secondary schools, national media and socioeconomic surveys.

Contract Requirements Met:

Conservation education materials were developed which include T-shirts, posters and calendars. These materials were distributed appropriately. A Conservation Education book, which was begun by RPCV Colleen Flynn is being revised by PCV Kevin Doyle.

PCV Kevin Doyle has developed a questionnaire for use in the parks/reserves by tourists to determine the effectiveness of park guards and tourism development. This information has been very useful for the project participants to determine the effectiveness of tourism development in the parks and reserves.

PCV's time. Often the inventories are undertaken during other field activities or on the PCVs own time.

Plant presses have been provided some of the park/reserve guards for use in the field. Plants and invertebrate specimens will be collected and stored at the University of Bujumbura. The Chicago Field Museum of Natural History has expressed interest in these collections and will provide some assistance in March, 1990. Assistance will consist of training for PCVs, Technicians and University students in data collection methods.

C. Park/Reserve Management Plans

The development of park/reserve management is considered to be the most important component of the project. The plans will be the basis of future conservation and development activities in each area.

Contract Requirements:

PCVs were to assist the INECN in the development and implementation of management plans for all five parks/reserves in Burundi. Tourism was to be a major component of the plans. In addition, native flora and fauna were to be inventoried and appropriate tourism activities identified.

Contract Requirements Met:

Ruvubu National Park

A draft management plan of the park was completed by PCV Don Gay. The draft plan needs to be reviewed and modified as appropriate by PCV Ann Bartlett, the INECN and the Project Coordinator. The draft plan also needs to be translated into French.

Bururi National Forest Reserve

A management plan for the Bururi Forest Reserve. was completed in September, 1988 by former PCV Paul Cowles and Andre Ndikuriyo (INECN Reserve Chief). The management plan is presently being utilized by the INECN for the management of this reserve. The management plan needs to be revised according to the standardized management plan format adopted by the INECN.

Rumonge, Vyanda and Kigwena Forest Reserves

General:

An INECN counterpart has not been provided for the Conservation Education PCV Kevin Doyle. Since the Ministry of Education is located in Bujumbura and Mr. Doyle is based in Gitega, collaboration between the two is difficult.

PCV Leif Davenport has established trails, a campground and a sign system in the Kibira National Park. However, no socioeconomic surveys have been undertaken for the park.

All of the PCVs have expressed an awareness of the importance of socioeconomic surveys to determine the needs of rural populations surrounding the parks/reserves. The PCVs indicated that addressing the needs of farmers living near the protected areas is critical for the long-term management and susceptibility of the parks/reserves. The PCVs expressed an interest in either implementing or coordinating community development activities near protected areas.

Former PCV Colleen Flynn produced a draft conservation education manual in 1988. PCV Doyle is now in the process of revising the document. It will be completed in May, 1990. The project coordinator and PCVs see this as a priority.

E. U.S. Peace Corps Project Coordinator

Contract Requirements:

The project coordinator was to train an INECN counterpart and carry out coordination of all aspects of the project. Other responsibilities were to include: (1) management of the project program; (2) report on project budget matters to the Burundi country U.S. Peace Corps Director; (3) coordinate training and conservation education activities for INECN park/reserve guards and technicians; (4) make recommendations for future PCV assignments; (5) work closely with the INECN Director General; and (6) work closely with U.S. Peace Corps Burundi and U.S. Peace Corps Washington, D.C. to identify necessary project support.

Contract Requirements Met:

The project coordinator is Peter Trenchard. Mr. Trenchard's INECN counterpart is Mr. Jean Rushemeza, the Technical Director for Parks and Reserves. Mr. Rushemeza has not been able to work closely with Mr. Trenchard due to his other job responsibilities.

Mr. Trenchard has provided the U.S. Peace Corps Director with timely reports on the project budget and activities. He has also undertake administrative activities which include procuring supplies for the project. This has required frequent trips to Bujumbura. The project has increased the administrative workload of the U.S. Peace Corps Burundi Director and the Administrative Officer.

The project coordinator has effectively conducted training for park/reserve technicians and guards. The PCVs indicated that Mr. Trenchard did an outstanding job in this area. He has also worked closely and effectively with the U.S. Peace Corps Washington in order to identify the requirements of future PCV assignments.

Mr. Trenchard has assumed many of the administrative duties which are normally conducted by the Peace Corps Country staff. This has included the procurement of PCV housing, vehicles, materials, coordination with INECN counterparts and other administrative responsibilities.

The Project Coordinator has spent a considerable amount of time working with the INECN Director General. He has provided regular advice on program direction and policy as it relates to the program and has explained the role of PC within the INECN. He is also assisting the INECN to develop management plans for each of the parks/reserves.
As stated in the Contract, the Director General of INECN and the Project Coordinator will work together to review the BDP objectives and develop improved management procedures and direction for INECN. This advisor role has not been as effective as possible because the Project Coordinator does not receive monthly reports and new initiative information from the Director General on a timely basis.

There are a few problems that were identified with the Project Coordinator. Two PCVs have stated that the project has not provided clear direction for the conservation education project component. There seemed to be a lack of understanding as to what materials should be obtained by Mr. Trenchard, what materials should be obtained by the PCVs, and who should be responsible for determining the PCVs work assignments.

According to the PCVs, one of Mr. Trenchard's most significant contributions was the training of park/reserve technicians and guards.

IV. Conclusions

A. Program Goals

Background

The U.S. Peace Corps has been involved in conservation and development activities since the mid-1960's. U.S. Congressional interest in biodiversity and tropical forest management has increased dramatically since the initial development of this Project and is expected to continue. The Directors of both agencies have made environmental protection one of the highest priority initiatives for those two organizations. Consequently, the U.S. Peace Corps and the U.S. Agency For International Development have developed a dynamic collaborative biodiversity program. The Burundi U.S. Peace Corps project falls within the heart of this program.

The INECN and the BDP has not taken full advantage of the support available through USAID, U.S. Peace Corps, the Office For International Cooperation and Development, U.S. Forest Service Forestry Support Program and other international and national non-governmental organizations. For example, there is a strong need to have socioeconomic surveys conducted for several park and reserves of Burundi so that project activities can be designed to better meet the needs of the local populations living near those areas. An expert in designing socioeconomic surveys could have been identified and funded through the U.S. Forest Service Forestry Support Program or Peace Corps Office of Training and Program Support. In addition, many organizations have materials, free of charge, which they could send to the INECN and/or the BDP. Training programs also may be designed and provided by these organizations.

The current focus of the project is to assist the INECN to manage Burundi parks/reserves and to develop a Conservation Education Program. Generally the goals of the project are being met. In particular the park/reserve guard and technician training and the development of park/reserve management plans have been successful.

There are some problems, however. First, the INECN Director General seems reluctant to formally assign Technicians to work as counterparts with the PCVs and Project Coordinator. It was originally foreseen that an INECN staff person would take over the BDP when the Project Coordinator finished his contract. This will not be easily accomplished if there is no INECN counterpart working with the Project Coordinator. The project can be improved in the area of conservation education. These activities need to be more focused.

B. Project Coordinator

Mr. Peter Trenchard, the Project Coordinator, has done an outstanding job in managing the many components of this project. He has been particularly successful in working with the INECN Director General, with the U.S. Peace Corps/Burundi and in conducting the training of INECN park/reserve technicians and guards. Some PCVs in the project have stated that they wished he would have more frequent meetings and provide more advice to them. However, this communication has improved during the latter half of the project.

There appears to be a confusion concerning the role of the U.S. Peace Corps by Peace Corps Burundi and INECN officials. For example, the Project Coordinator is expected to coordinate the project components as well as to provide guidance to volunteers. Yet the extent to which he can influence PCVs is limited due to his position as a contractor. In addition, the INECN questions the ability of the U.S. Peace Corps to advise and manage such a multidisciplinary conservation project.

There have been discussions by Peace Corps/Burundi and INECN staff about the merits and demerits of having another international organization such as the World Wildlife Fund, African Wildlife Foundation or Wildlife Conservation International assume the U.S. Peace Corps role in Burundi. There was discussion over having one of those international organizations would take over the management of the project with PCV's continuing their assignments under direction of that organization.

The Assessment Team believes that, while such organization may be able to assume control of the project, there is no reason to believe it can be done better than the current arrangement. In fact Peace Corps, in many respects, is better suited to meet the multidisciplinary needs of the project due to the experience the Agency has in such areas as agroforestry, small enterprise, development community development, conservation education and natural resource management. International conservation organizations tend to have a narrower wildlife-based focus.

C. Training of INECN Park/Reserve Guards and Technicians

According to the PCVs and project coordinator, the training of INECN park/reserve guards and technicians is the second most important component after the development of park/reserve management plans. The project coordinator has

been quite successful in designing and conducting training programs for the INECN through a "Training of Trainers Workshop." Based on the training, park/reserve technicians are now training park/reserve guards.

The training component goal of providing training for seventy-five percent of guards has been exceeded a total of seventy-eight percent of the guards have been trained. In addition, Leif Davenport (Kibira National Park) has provided training for the design and construction of trails and campgrounds. PCV Don Gay trained guards in effective patrol and reporting methods at Ruvubu National Park.

The training specialist has not been recruited as required in the contract. However, an attempt was made to procure a training specialist. As a result, the project coordinator has spent more of his time training than anticipated. This turned out to be fortunate because the training conducted by the project coordinator was well done.

Improved facilities for tourists visiting parks/reserves is one of the visible impacts of the training of guards and technicians. The project coordinator has indicated that another positive impact from the training is an esprit de Corps and self confidence among the technicians and guards. Training has also provided the technicians and guards with the ability to collect fauna and flora data. For example, the technicians have been trained in how to record specific information on data sheets using the guards field information.

D. Plant and Animal Inventories

There have been varying degrees of fauna and flora inventories being conducted in each of the parks/reserves. In general, however, the contract requirements are being met. PCVs spend approximately ten percent of their time conducting inventories.

Although inventories are the lowest project component priority, they are important for the initial development of park/reserve management plans. Also, inventories can be accomplished in the course of other PCV activities. The training of park/reserve guards has made it possible for INECN to conduct inventories over the long-term with limited supervision or financial support. The project coordinator has expressed an interest in training the INECN technicians and senior management to analyze the inventory data once it is collected.

Consistency of data collection has been accomplished by the recording of information in guide field books. The guide

books were developed as part of the project. The guide books are an effective means of organizing the guards work, recording wildlife observations, and monitoring illegal activities within the parks/reserves. The data is collected in the parks/reserves by park technicians every two weeks.

E. Park/Reserve Management Plans

The development of park/reserve management plans appears to be the most important component of the project. The management plans will provide INECN park/reserve managers with guidance on how to manage each park/reserve. For example, the completed Bururi Forest Reserve Management Plan is now being used to carry out management actions.

The INECN is developing environment activities in a wide range of environmental protection areas. The management plans could provide the INECN with a focused approach for the long-term management of its natural resources and provide recommendations for development of communities surrounding the parks/reserves.

Information regarding the progress of each of the five park/reserve management plans is provided below.

Ruvubu National Park - Draft management plan completed.

Bururi Forest Reserve - Completed, but needs to be reformatted and updated to assure its consistency with the other park plans.

Kibira National Park - Information for the management plan is available, but the actual management plan has not been completed.

Rumonge, Vyanda, and Kigwena Forest Reserves - Development of the management plan has not yet begun.

The project coordinator understands that the process of developing a management plan is as important as the final product. The purpose of a management plan is to assist the INECN and rural communities to manage Burundi natural resources effectively. Therefore, community representatives need to understand and have input into the development of the management plans.

The process of developing a management plan depends on the numbers of persons involved and the interest by local communities. Since these are the first management plans being developed for these areas, many INECN employees do not fully understand their benefits. Hence, the development of management plans has not yet been a high priority for INECN.

The project coordinator should be responsible for ensuring that the format of each management plan is consistent for each park/reserve and that the management plans contain practical multidisciplinary recommendations. It is particularly important that socioeconomic information on rural communities surrounding the park/reserves be included in the management plans, as this may have some influence on the design of future community development activities.

F. Conservation Education

Components:

- Development of school curricula
- Education through media
- Socioeconomic surveys for community development

Significant progress has been made to meet the conservation education contract requirements. However, the direction of the program does not have a clear focus. There are several reasons for this: (1) all four PCVs have conservation education in their job descriptions; (2) the INECN has not provided a counterpart to Kevin Doyle (PCV Gitega), therefore his efforts in developing school curricula has been impeded; (3) since Mr. Doyle is located in Gitega and the Ministry of Education is located in Bujumbura, it has been difficult for Mr. Doyle to integrate conservation into the school curricula; and (4) PCVs indicated that they did not receive enough specific information on conservation from the project coordinator.

Much of the contract requirements for this activity were met. Conservation education products include: (1) conservation T-shirts, pamphlets, posters, calendars, questionnaires and other information; and (2) construction of tourist trails and camping grounds which are regularly being utilized by professional East African tourism safaris (e.g., Guerba Expeditions).

The national media (e.g., television, radio, newspapers) has not been effectively utilized. The integration of conservation education into secondary schools has also not been undertaken. The Project Coordinator and evaluation team believe that the conservation education component is a priority, but not more important than development of management plans and training activities.

All PCVs have said that socioeconomic surveys need to be conducted in virtually all the parks and reserves. This information would be used to design appropriate programs for meeting the local communities needs. These have not been conducted primarily due to a lack of funds. For example,

Ann Bartlett (PCV Ruvubu) expressed an interest in determining the needs of people surrounding the Ruvubu National Park.

Tourism has become a major initiative for the government of Burundi. The Burundi National Tourism Office does not have primary authority for tourism in parks and reserves. That authority rests with INECN. There is a potential for the PCVs to develop a relationship with the Office of Tourism and professional tour companies to develop mutually beneficial activities.

The Project Coordinator and PCVs agree that one of the most important target groups to reach in Burundi through conservation education are the decision makers. The use of the media and park interpretation are the best means to reach Burundi educated class.

G. Project Coordinator

The Project Coordinator is doing a good job meeting the requirements of the Contract, particularly in the area of training, working with INECN officials, and developing management plans. He has actually exceeded Contract requirements in many areas, such as collaboration with other organizations (e.g., Jane Goodall Institute). The Project Coordinator's collaborative approach is resulting in increased assistance to the INECN and the BDP.

There are, however, some problems. The Project Coordinator is not receiving enough information from the INECN headquarters to enable him to make well-informed decisions. For example, he does not receive monthly reports sent from park/reserve personnel or timely information on INECN initiatives. It is difficult for the project coordinator to perform his duties effectively without this information. However, the Project Coordinator's collaboration in the field with INECN and PCVs between Collaboration in the field with INECN and PCVs is very good, with few exceptions.

The INECN Director General and Project Coordinator needs to improve their communication and exchange of information if the goals of the project are to be realized. However, since collaboration at the field level between INECN, the project coordinator and PCVs is good, we do not believe that any drastic measures be considered.

The Project Coordinator needs additional secretarial and technical support for the administration of the project. Administrative activities are currently the responsibility of the Project Coordinator and the U.S. Peace Corps Burundi Administrative Officer in Bujumbura. The project

coordinator has done a good job in providing program management and direction for the project.

V. A. Recommendations For the Existing Project

The following are recommendations on how the current project may be improved. The project contract ends on September 26, 1990. These recommendations, if accepted by the Peace Corps Burundi Director, should be implemented before that date.

1) Training of INECN Park/Reserve Guards and Technicians

The Project should continue its current training plan for the INECN guards and technicians. A priority should be placed on technician training for the next sex months. However, guard training should also be continued where appropriate.

The project coordinator should be responsible for developing the training programs in coordination with the INECN staff and PCVs. A training visit to parks/reserves in neighboring countries, such as Rwanda or Tanzania should be considered for the park technicians.

The training specialist which was requested in the project document and Part II,B of the USAID/U.S. Peace Corps PASA agreement should not be recruited at this time. The project coordinator has shown that he and the INECN staff could conduct the training for the park/reserve guards and technicians effectively and at a low cost. The training cost per park/reserve guard for a two-day session, for example, was only $12.00. The savings realized from this training resulted in more funds available to conduct additional training sessions.

The PCVs should continue to develop additional informal training programs such as the trail and camping ground construction sessions held at Kibira National Park. In addition, they should participate in the INECN guard training and follow-up in their parks.

2) Flora and Fauna Inventories

These programs should be maintained at their current levels. The PCVs should understand that they should not spend more than ten percent of their time on this activity.

The project coordinator should work with the University of Bujumbura to find ways that biology students from the University can conduct research in the parks/reserves

detailed by the park/reserve management plans when they are completed.

3) Park/Reserve Management Plans

General

The INECN and the BDP should have the Park Technicians take an active role in the development and implementation of Park management plans. They should be fully involved in the entire process, especially in conducting meetings with local officials and community leaders to obtain their input into the plan.

a) Bururi Forest Reserve

The Bururi Forest Reserve Management plan should be re-written in the new format currently being utilized by the INECN. The current PCV should assist the Reserve Chief with this activity. The management plan and planning process should be completed in final by September, 1990.

b) Rumonge, Vyanda and Kigwena Forest Reserves

The PCV stationed at Rumonge should work on the Rumonge and Kigwena forest reserve management plans. Since they are still in the development stage, the INECN should finish these by September, 1991.

c) Kibira National Park

The Kibira National Park Management Plan, which is not yet in draft, should be developed by the project coordinator and the PCV at the site. The management plan and planning process should be completed in final by September, 1990.

d) Ruvubu National Park

The PCV stationed at the site should make the revision of the draft management plan a priority. The final management plan and planning process should be completed in final by the time Anne Bartlett finishes her tour in 1991.

4. Conservation Education

The conservation education PCV should concentrate on working with the INECN Director of the Environment and other INECN officials to develop a National Conservation Strategy (NCS) for INECN. The NCS should focus on how to reach key decision-makers in the country.

he NCS should also incorporate the use of a "marketing strategy" or metaphor to use as a constantly recurring theme in the conservation message adopted by the INECN. Peace Corps/OTAPS can provide assistance and written materials on this subject.

Tourism has great potential to increase in Burundi. The conservation education PCV should strive to include tourism promotion through the NCS. Since all project PCVs have a conservation education component in their position descriptions, the conservation education PCV should act as a coordinator for the project conservation education effort in the country. This should be carried out primarily by drafting and then following the INECN NCS. It is important that when a theme, metaphor and target audience is identified, all efforts are focused in that direction.

The INECN Director General needs to work at obtaining a counterpart for the conservation education PCV. This is critical to the development of a NCS.

5. Project Coordinator

The main focus for the Project Coordinator should be ensuring that the park/reserve management plans are completed as scheduled and to continue the park/reserve guard and technician training.

The PCVs need to assume more responsibility for conservation education and fauna and flora inventories so that the project coordinator will be able to concentrate on park/reserve management plans and training activities.

The Project Coordinator should look into the possibility of using project funds to hire a part-time secretary to work on park/reserve management plans, training documents and inventory material.

The Project Coordinator is responsible for advising the INECN Director General on a variety of issues. It is important that the Director General make a greater effort to provide information to the project coordinator so that he may provide the best advice possible. For example, the project coordinator needs to have access to monthly reports from each the parks/reserves. He has not been receiving these on a regular basis.

The Project should develop a short training session for the newly arrived Parks PCVs and their counterparts on how to develop management plans in the next few months, as well as having individual meetings with each PCV.

6. Jane Goodall Institute

The project should continue to work closely the Jane Goodall Institute on the Chimpanzee Sanctuary Project. There is a tremendous potential for tourism income generation projects and conservation education programs to evolve out of a relationship between the Sanctuary, INECN and the PCV project.

However, it is not recommended that the conservation education PCV spend more than ten percent of his time on the Sanctuary Project, since the NCS development and other duties would demand most of his time.

7. The project coordinator should continue to work with the INECN Director General to obtain legislative approval for the creation of parks/reserves. This would create a legal basis for the enforcement of laws within the parks/reserves. It would go a long way in increasing protection for these areas. However, this is not an appropriate activity for PCVs.

V.B. Recommendations For the Proposed Second Phase

General

An impressive amount of work has been accomplished since the project began in September, 1989. The development of Park/reserve management plans has progressed and training programs have been conducted. More importantly, informal training and information exchange has been taking place on a day-to-day basis at the INECN headquarters and on the field levels.

Despite the problems with the project (e.g., inconsistent communication between PCVs and INECN, unavailability of INECN records and other information for the project coordinator and staff) the benefits of the project far outweigh the disadvantages and problems.

It is recommended that the project be continued for another two years, beginning at the same time that the first contract ends. There are basically two reasons for this recommendation: (1) the project is making significant advances which are increasing the skills of the INECN personnel and resulting in more effective protection of the natural areas of Burundi; (2) there is an opportunity for the second phase of the project to evolve into focusing on the areas of income-generation from tourism in the parks/reserves and from community development (e.g., agroforestry or small enterprise development) in areas surrounding the parks/reserves. The second phase Project should also continue its emphasis on conservation education,

training and development of parks/reserves. The U.S. Peace Corps as an organization is uniquely suited to carry out these activities.

The second phase of the BDP should continue to build on the achievements and progress made in the first two years. The activities of the next two years should be designed to ensure that each subject area becomes institutionalized within the INECN. For example, training of trainers for Park Technicians should continue so that they could, in turn, train park guards on a regular basis. Training guides and handbooks should be made available to all Park Technicians and when applicable, Park Guards. A Park Technician should be assigned to the Project Coordinator to from the INECN so that the management plan process and the training design process may be learned by the Technician and carried on when the Project ends in 1992. The next Assessment of this Project should evaluate its success by how many components have become institutionalized within INECN.

It is important that the INECN Director General be fully involved in the Project planning and implementation. He should work closely with the Project Coordinator to plan the programs for the next two years and to schedule his activities in it. At the same time, he needs to assume equal responsibility to ensure that the project is carried out.

This process of collaboration should be re-enforced by the development of a formal agreement between the U.S. Peace Corps and the INECN. The agreement should clearly define the roles of each person in the BDP. It should clearly indicate how the funds should be spent and who is responsible for accounting. Also, the specific type of information which needs to be shared between parties, who is responsible for delivering the information, and when, should also be included.

Peace Corps/Burundi has made the requests for replacements for Leif Davenport (Kibira National Park) and Kevin Doyle (Conservation Education) for Fiscal Year 1991. In addition, an Agroforester has been requested for the time. The current positions should remain at those sites. We recommend the Agroforester be assigned to the Kibira National Park. Training recommendations for these positions are found in another section of this report.

Specific Recommendations

U.S. Peace Corps Burundi should obtain an Administrative/Clerical Assistant part-time to handle the increased administrative workload of the Biodiversity

project. The INECN should also assign a Park Technician to work with the project on the park/reserve management plans, training documents and conservation education materials. A secretary should also be obtained to assist in producing training documents, management plans and other items.
The focus of the second phase should be increasing sources of revenue for INECN, completion of the park/reserve management plans, implementation of INECN's NSC, continued training for park/reserve technicians and guards and income generation for local communities living in and around parks/reserves through agroforestry and other related projects.

The following is a listing of recommended contract and PCV positions for the second phase of the project. The number of PCVs would remain the same as now. It is recommended that the Ruvubu National Park PCV complete her term and not be replaced and an additional PCV position be assigned to the Kibira National Park.

1. Project Coordinator

Retain the position under the U.S. Peace Corps and continue the duty station in Gitega.

2. INECN Technician

A new position should be assigned to the BDP and supported by INECN. The duties of the Technician would be to help coordinate meetings for management plans, develop training materials and act as a conservation education counterpart to the Peace Corps Conservation Education PCV.

3. Computer Operator/Secretary

This would be a new position and his/her duty station will be located in Gitega. The person would be hired as an employee for the BDP.

4. Administrative/Clerical Assistant (part-time)

This will be a new part-time position funded by the BDP and duty stationed in Bujumbura. The assistant would assist the U.S. Peace Corps Director and Administrative Officer in carrying out the administrative aspects of the project.

5. Kibira National Park PCVs (2)

The current PCV position in Kibira National Park should be retained. This PCV should concentrate on tourism, revenue for the park and conservation education activities.

In addition, an agroforestry PCV should be assigned to the park for the purpose of designing and implementing a

community development agroforestry activity component. The activity will provide a source of income and wood products to the rural community surrounding the park. It also would serve to protect the park's natural resources through planting trees on degraded park property and outside park boundaries in "buffer zones."

6. Ruvubu National Park PCV

The Ruvubu National Park PCV position should be phased out when the current PCV, Anne Bartlett, finishes her term. The park would by then have a completed management plan which would be picked up by INECN employees. The park technicians and guards should continue to be involved in the biodiversity training program. The PCV's vehicle would be re-assigned to another PCV in the BDP upon Anne Bartlett's completion of her assignment.

7. Conservation Education PCV

The current position should be continued and based in Gitega. The PCV should be responsible for working with INECN officials in the development and implementation of a NCS for INECN. The PCV should also be responsible for working with other PCVs under the project to ensure that all PCVs are working in areas which carry out the NCS. The target audience for the NCS should be the key decision makers of Burundi. The Conservation Education PCV should also look into small enterprise and income generation opportunities for populations living in and around the parks. There is a possibility that this position would require a 4X4 vehicle to enable the PCV to get around the country. It is recommended that the BDP and INECN first develop a National Conservation Strategy and then determine if a vehicle would be required to carry this out.

7. Rumonge Forest Reserve PCV

The current PCV position should be retained but should be re-focused so that the new PCV would have responsibility for working with INECN personnel to develop and implement forest reserve management plans for the Rumonge, Kigwena and Vyanda Forest Reserves.

Other recommendations for the project's second phase include:

a) Training For PCVs

The BDP should fund and coordinate in-country pre-service and in-service training for PCVs in natural resources, park management and conservation education. Training for park

and conservation education PCVs should be more structured and tailored to PCVs individual needs more than in the past. Such training should be held in Burundi as either pre-service or in-service sessions. The training should include information on park management, conservation education and other appropriate skills. Peace Corps/Washington, D.C. (OTAPS Office) could assist with the design of such training.

The agroforestry PCV should also receive pre-service training and orientation. U.S. Peace Corps Burundi should coordinate with the Washington, D.C. (OTAPS Office) to look into having the trainee attend a Peace Corps agroforestry training program in another Francophone country prior to his/her arrival in Burundi.

b) Training For Park Technicians and Guards

The training for technicians and guards should remain a top priority of the INECN BDP. The Program should consider conducting hands-on training trips for Park Technicians to parks in other countries, such as Rwanda or Tanzania. In addition, the proposal could include funding for one or two Park Technicians to attend the College of African Wildlife Management in Mweka, Tanzania or the Ecole de Fauna in Garoua, Cameroon.

Other training opportunities could be included in the proposal for senior level INECN managers so that they keep up to date on the latest management techniques being used throughout the world.

c) Flora and Fauna Inventories

The PCVs should maintain the same amount of time (ten to twenty percent) for the flora and fauna inventories.

The project coordinator needs to look closely at the data collection process within the INECN to determine if more efficient ways can by developed to analyze the data, while, at the same time training INECN officials. A computer may be useful to the INECN as long as the use of it becomes an ongoing institutionalized function within INECN.

d) Legislation

The Project Coordinator should continue to work with the INECN to develop legislation to better protect wildlife and parks/reserves in Burundi. If necessary, the INECN could request a park/wildlife legal specialist through the U.S. Peace Corps (OTAPS Office) to work with the GOB in drafting such legislation. The PCVs should not spend time working on this issue however. On a related subject, the Project Coordinator should also work with the INECN Director General

on developing management policies for the parks and reserves in Burundi.

VI. Follow-Up Action

A. Peace Corps/Burundi and INECN should get together to decide of they want to continue the project for another two years. If the decision is made to continue the project, then a proposal needs to be submitted (via DHL) to Greg Booth (Africa Bureau, AFR/TR/ANR) through Peace Corps/Washington, D.C. Africa Regional Director and the ENV OTAPS by March 15, 1990 for review and consideration.

Prior to sending the document, Peace Corps/Burundi should discuss the proposal with the USAID/Burundi Mission Director and obtain their concurrence. Once concurrence has been obtained, a cable should be forwarded from the USAID Mission to Mr. Booth which confirms the USAID Mission's concurrence and requests funding for the activity from USAID/Washington, D.C.. A copy of the project proposal should also be forwarded to USAID REDSO/ESA for their review and comments.

The Peace Corps OTAPS Office would be willing to work with Peace/Burundi in reviewing early drafts of the proposal.

B. The Peace Corps OTAPS Office will send the reference materials requested by the present project to the project coordinator in February, 1990.

C. The Project Coordinator, through the Peace Corps/Burundi Director should pursue avenues to obtain a computer, either through donations or purchase for use by the project and the INECN.

D. Peace Corps/Burundi, if deciding to go into a second phase, should prepare the necessary paperwork to continue requests for PCV's for the project. In addition, it should work closely with Peace Corps/OTAPS to coordinate pre-service training for the Agroforester requested for October, 1990.

E. According to the newly adopted Peace Corps PATS Manual, all project assessments (such as this project) need to be reviewed and commented on by the Peace Corps country staff within thirty days of the completion of the assessment. Peace Corps/Burundi, therefore should respond in writing to the seven questions by February 26, 1990. The response

should be sent to the Director of Peace Corps OTAPS Office through the Peace Corps Africa Regional Director.

F. The Peace Corps Director should work with the Project Coordinator to establish either pre-service or in-service training for the parks and wildlife PCVs arriving Fiscal Year 1991.