

13N 6e087

THE SOCIAL DIMENSION IN THE PALCAZU:
A PRE-EVALUATION OF THE CENTRAL SELVA
RESOURCE MANAGEMENT PROJECT

Thomas Moore
Anthropologist

January 1989

RONCO CONSULTING CORPORATION
Management Planners and Technical Advisors
1629 K St., N.W., Suite 300
Washington, DC. 20006

TABLE OF CONTENTS

	Page
I. EXECUTIVE SUMMARY	1
II. THE LAND, SOCIAL HISTORY, AND EARLY EVOLUTION OF CSRM	2
The Palcazu Valley	2
The Natives and the Colonists	5
The Belaunde Proposal and Reactions to it	12
Project Redesign and Early Execution	15
III. CSRM OBJECTIVES AND GOALS	18
Origins of the Social Component	20
Social Component Objectives and Goals as they Evolved	22
IV. PROJECT EXECUTION	30
Constraints on CSRM Progress during the Belaunde Government	30
The Interregnum and the Great Leap Forward	32
1987 - 1988	36
CSRM Organizational Achievements	42
CSRM Operational Achievements	47
Personnel Trained by CSRM	53
CSRM at Project Termination, 30 September 1988	55
V. CONCLUSIONS	60
VI. RECOMMENDATIONS	61
For Actions within the Palcazu Valley	61
For Alternative Project Actions, Activities, and Support	62
REFERENCES CITED	66

I. EXECUTIVE SUMMARY

Following reviews of the Palcazu Valley geography and social history, the origins of the Central Selva Resource Management Project are traced in their socioeconomic and political context. Originally a colonization and road building project for which road building and start up costs were funded under a 1980 grant agreement between AID and the Peruvian Government, more detailed and serious redesign studies were sponsored by AID, after Indian organizations, environmentalists and human rights advocates responded critically.

The objectives of CSRM were redefined in terms of a natural resource management project with natural forest management, agricultural extension, and conservation components, among others. A condition precedent required the titling of Indian communities' lands in the project area prior to disbursements, under the basic Project Agreement, signed in 1982. Through a series of maneuvers, this process was largely avoided at first, although three Palcazu Valley communities were titled in 1983.

Following GOP delays in properly executing the Project, and some political considerations, the forestry and social development components were initiated in 1985. The key element of both was the Yanasha Forestry Cooperative which is the vehicle for CSRM's sustained yield natural forest management plan. Other grass roots economic organizations and training programs were included as well as an innovative rural health program.

Constraints and achievements in project implementation are described chronologically in terms of policy, personnel, administrative, and other factors, with the best results having been achieved during a two year period in 1985 and 1986. In the earlier period there were serious policy contradictions and in the latter one, major personnel and Project leadership problems. Technical assistance played a major role in achieving CSRM objectives.

On balance, progress was substantial. Indian community land base consolidation was essentially completed. A national park, protection forest and communal reserve were established. A suitable low input agricultural and agroforestry program was developed, and in an extraordinary break with past policies, the forest management plan was organized around an Indian communities' forestry cooperative. Advances in the implementation of this program were impressive, but much remains to be done.

It is recommended that direct or indirect efforts continue in the Palcazu Valley. Suggestions for alternative sites for a similar project are also made.

II. THE LAND, SOCIAL HISTORY, AND EARLY EVOLUTION OF CSRM

Although it may seem tedious, I would like to ask the reader to bear with me as I review briefly the principal features of Palcazu Valley geography and the major developments of the social history of the region before getting into the analysis of the Central Selva Resource Management Project (CSRM) per se. It has been my experience that those who reduce human phenomena to synchronic structural analysis err by oversimplifying what they are observing and the resultant perspective lacks the necessary depth and dynamism.

Moreover, I have found that virtually all of my coworkers, including AID representatives, Project counterparts, and outsiders simply ignore the general picture of this important background to the the Palcazu experience and therefore tend to focus unevenly on fragmentary aspects of it. This is true of most of the reports I have read on the Project. So, in this evaluation, before analyzing where we are, let us first understand where we are coming from.

I have tried to make the analysis sufficiently critical to provoke some reflection before reviewing the data at the heart of the evaluation in the hope that the end result will be a broader and more immediate view of the subject.

The Palcazu Valley

The Palcazu Valley occupies territory located between 400 and 520 kilometers northeast of Lima, nestled between two of the easternmost folds of the central Andes, the San Matias and Yanachaga mountains, which form its eastern and western boundaries.

Current political demarcations place sectors of the Palcazu watershed in three districts (Villa Rica, Palcazu, and Puerto Bermúdez) of Oxapampa Province in the Department of Pasco. The Palcazu District was legally created in 1986; previously, it formed part of the Huancabamba District of Oxapampa Province. Another sector, the Codo de Pozuzo, is in the Puerto Inca District of Pachitea Province of the Department of Huánuco.

Altitudes in the Yanachaga range reach more than 4000 meters; the San Matias range reaches heights of more than 2000 meters, as do the San Carlos mountains to the south. Villa Rica, the gateway to the Valley, and just 15 kilometers beyond its southernmost entry pass is at 1480 meters. The Palcazu River proper is 182 kilometers long, which can be added to 36 or 35 kilometers length of the headwaters tributaries the Bocaz and Cacazu (ONERN 1970: 26).

At its mouth, the Palcazu River's elevation is 250 meters. Iscozacín is at 315 meters and most of the valley floor in the areas where Project activities have been conducted are below 500 meters. This is selva baja or low jungle and not ceja de selva or high jungle, as some CSRM documents indicate.

Rainfall, originally estimated at 2500-4000 mm per year, has been demonstrated to exceed 6000 mm for three years during which measurements were taken by Project staff in Iscozacín between 1985 and 1987. Higher amounts were recorded for Laguna.

Thus, a wide range of life zones in principally wet tropical, premontane wet, and premontane rain forest, with some areas of moist tropical rain forest, occur here, according to the Holdridge classification.

The upper part of the watershed encompasses the basins of the Bocaz, Azulís, and Cacazú Rivers which meet to form the Palcazu within the territorial domain of the San Pedro de Pichanaz Native Community. This area, where production is limited principally to coffee and timber with little long range planning, is the most humid part of the watershed. Except for road maintenance, the protection program--Yanachaga National Park, San Matias-San Carlos Protection Forest; forest district policing--and some health, education and social development activities, it was not included within the limits of the CSRM area for development work.

This sector of the Palcazu watershed was already penetrated by the road by the time CSRM efforts began. Landslides along this road in the rainy season months of January-April are frequent and often defy the efforts of even the best equipped road maintenance team, leaving the road closed for periods ranging from a few hours to many weeks.

To the north of this sector, extending from San Pedro de Pichanaz to the Raya River, is the southernmost sector directly attended by CSRM with production development and extension programs. Elevations along the rivers here range from 600 to 400 meters, approximately. This is the narrowest and hilliest part of the Palcazu Valley proper, but one where cattle raising begins to be significant, along with traditional tropical agriculture, coffee and timber production.

The central part of the Valley, encompassing most of the area of CSRM efforts, ranges from the Raya River, which is the head of navigation for small boats, to the mouth of the Pozuzo River, just below Puerto Mairo. This is a land of rolling hills and more extensive cattle ranches. Here the Valley reaches its greatest breadth, and the drainages of the left hand tributaries of the Palcazu which descend from the Yanachaga mountains provide sites for settlement for both Yanasha Indians and colonists. The

largest of these tributaries are the Raya, Carachama, Gallinazo, Iscozacín, Chuchurras, Lagarto, Lagartillo, Mairo, Pozuzo, and Huampumayo Rivers. The Palcazu River meanders are flanked on their right hand margin by the San Matías mountains, with only small short tributaries--the Pichanaz, Cuacaz, Shebón, and Pihuayo--entering the Palcazu from the right.

The lower Palcazu Valley, comprises the sector below the mouth of the Pozuzo River, where a sharp turn to the east south east occurs, and the Palcazu breaks through the San Matías range to find its way to Puerto Victoria, where it joins the Pichis to form the Pachitea River, a major left hand tributary of the Ucayali. This sector was not attended by CSRM efforts, except for some health and social development activities, since it was assigned to the Pichis component of the Pichis-Palcazu Special Project. Much of this sector is within the Tropical moist forest life zone, according to the Holdridge classification.

An additional sector of approximately 120,000 hectares, the Codo de Pozuzo, was never formally delineated nor approved by AID for inclusion in CSRM territory. Nevertheless, it was the site of one of the Project Rural Development Centers (CDRs) and its inhabitants were beneficiaries of the agricultural and livestock extension program. Thus, it must be considered in any evaluation of Project effort and impact. This is a gently sloping plain of 500 to 350 meters altitude with moderately high rainfall. The difficulties of access to this area and legal control of it by one family, the Cuculizas, until 1970, have left more sparsely populated than the Palcazu Valley proper, and it is here that the only unoccupied land suitable for agriculture and livestock raising within the entire watershed is found.

The Palcazu Valley has been the subject of many studies of its geographical characteristics. Among the most useful and still relatively concise are those of Brack (1981), Hartshorn and Tosi (1981) and McCaffrey (1981). Studies of Valley flora and fauna (Bayley 1981; Brack 1981; Dourojeanni 1981; Foster 1981; Zadroga 1981; and Salick 1987) provide detailed information of great importance for the planning of Project activities.

The GOP has conducted two major studies of the Palcazu Valley area natural resources (ONERN, 1970; ONERN, 1982) which gave rise to substantial discussion over land use capability when comparisons were made with the Tropical Science Center's Palcazu Valley Ecological Map (Bolaños and Watson, 1981). None of these studies covers the entire Palcazu watershed, but the first ONERN study, encompassing 826,650 hectares, also includes major areas of the Pichis basin. Thus there is little consistency in the data.

The second ONERN study (1982), semi-detailed, is limited to 95,000 hectares of the central and lower Palcazu Valley floor, the area with greatest agricultural and livestock raising potential. However, even this semi-detailed study limits soil analyses to 12,230 hectares of the lower part of the Valley (below Iscozacín). Most of the data rely on aerial photography.

The TSC map and analysis, done in 1981 with the benefit of the data from the 1982 ONERN study, covers the same land base, which excludes significant areas of forestry capability land and most of the protection capability land in the watershed. Thus, the figures on percentages for each capability are distorted by the selection of the base area, and we still have no published data on land use capability for the watershed as a whole.

Fortunately, the APODESA mapping and geographical systems analyses promise more complete data, which will then be more suitable for generalizations about the Palcazu Valley as a whole than we are currently able to make. For the Palcazu Valley, APODESA (1987) has made available an analysis of forestry resources in 372,700 hectares of the Palcazu Valley, including all of the watershed except the lower portion from the Pozuzo to Puerto Victoria, and the Codo de Pozuzo area.

Since the central purpose of CSRM is natural resource management, it is essential to be able to provide an integral analysis of the geographical features of the entire Valley and a clear definition of the whole range of its natural resources as a starting point for any serious evaluation of the success or failure of the Project and its possibilities for future development. This is as true for the social dimension of the Project as it is for the technical (agricultural, livestock, forestry, conservation, etc.) components.

The Natives and the Colonists

Arawakan speaking peoples, of whom the Yanasha (Amuesha) and Asháninka (Campa) Indians are contemporary representatives, moved into the central Peruvian tropical forest region before 2000 B.C. and have probably occupied major parts of the region since that time, although they were displaced in the central Ucayali area by Panoan speaking peoples--probably ancestors of the contemporary Shipibo-Conibo, Cashibo, and others--sometime between 650 and 810 A. D. (Lathrap, 1970).

We do not know who the first occupants of the Palcazu Valley were. Archaeological data are still sparse and localized. In a study of 17 sites in the Pichis and Pachitea Valleys, which abut the Palcazu Valley to the east, Allen (1968) found evidence of long time pre-Columbian occupation by tropical forest cultures, of which one relatively recent tradition, the Enoqui, was described as having "significant affinities" with that of the

historical Yanesha (p. 322). Superficial remains analyzed by Jiménez (1986) describe similar sherds and axes in various Palcazu Valley sites, with one radio carbon date of 1630 ± 50 A.D. for pottery from Puerto Mairo (p. 39). It is possible, but not certain, that for a long period in pre-Columbian times all of the Palcazu Valley was occupied by direct ancestors of the present day Yanesha Indians.

In historical times, the first European contacts with the Yanesha Indians was made by Spanish Franciscan missionaries in the 17th Century. The Panatahuas mission on the upper Huallaga River in Huánuco was founded in 1619 and may have had some influence in terms of trade, epidemics, etc., over the inhabitants of the Palcazu watershed. In 1635, Fray Jerónimo Jiménez, seeking a shorter route to the upper Huallaga missions, entered the Huancabamba and Chorobamba Valleys near Oxapampa and reached the Cerro de la Sal, a salt mine not far from the contemporary Puente Paucartambo, which was the heart of Yanesha Indian territory (Izaguirre 1922 i: 158-171).

Missions were established at Quimiri, Nijandaris, Cerro de la Sal, Eneño and Metraro in the Chanchamayo, Paucartambo, and Perené Valleys, and mission censuses recorded 3000 "Amage" and "Antis" (Yanesha and Asháninka Indians) at these posts (Smith, 1977: 38). This missionization effort was frustrated by events of the 1640s when conflicts with the Indians of the region forced the closing of the missions (Amich 1988: 57-60; Smith 1977b: 38; Santos 1980: 36).

One reason for these conflicts was probably competition for control of the salt mines at Cerro de la Sal, which provided the sole source of the principal trade item in the central jungle during the colonial period. The Yanesha had established their position as intermediaries between the Panoans and the Piro in the Ucayali and lower Urubamba Rivers to the east and the Quechua-speaking highlanders to the west. The Spanish Franciscans sought to control the salt mines in order to control the native populations throughout the region (Smith 1977b: 38).

No serious attempts to permanently colonize the central jungle were made during the colonial period, since colonial economic interests were focused along the coast and in the highland mining centers, but the mission posts in the valleys to the south and west of the Palcazu were sporadically reopened and closed between 1691 and 1742. At that time, the Yanesha, Asháninka, and Piro uprising led by Juan Santos Atahualpa expelled the Spaniards from the central jungle and restored the territory to Indian control until 1879-80 when "an extremely virulent epidemic of yellow fever and smallpox swept through the entire territory, devastating the [Yanesha] peoples" (Smith 1977b: 43).

During this period of liberation from Spanish domination, the Yanesha Indians developed an iron forge tradition, which they had learned in the Franciscan missions and which effectively exploited superficial iron ore resources found near the confluence of the Paucartambo and Chanchamayo Rivers. This tradition evolved syncretically with a temple cult in which there were more than 30 blacksmithing ceremonial centers each headed by a cornesha. The physical sites of Yanesha temple forges have been documented for Nijandarís, Cacazú, Eneño, Cerro de la Sal, Metraro and Azupizú (Santos 1986: 35). This complex provided the Yanesha the politico-religious and economic base for a flourishing trade of iron goods with neighboring Asháninka and highland populations during the 18th and 19th Centuries (Santos, 1980: 89-97; 1986: 32-37).

While the upper Palcazu watershed in the areas nearest the Cerro de la Sal undoubtedly were inhabited by Yanesha during this period, there is no evidence of Yanesha Indian occupation of the middle and lower Palcazu during the 17th, 18th, and 19th Centuries. This area probably served as a sort of buffer zone between the territories of the Yanesha, Asháninka, and Cashibo Indians, which provided them with unpopulated hunting reserves and areas for trade and/or hostile confrontations during these times when the European-introduced epidemics were devastating the Amerindian populations of the region (cf. Smith, personal communication; Denevan 1976).

Colonist penetration into the central jungle region began during the presidency of Ramón Castilla, when pressures on the Peruvian Government to repay a heavy load of debt owed the British from the period of the struggle for independence and subsequent political chaos brought new attention to the presumed wealth in natural resources in the tropical forests to the east. At the same time, steam navigation had given rise to an increased Brazilian presence along the western tributaries of the Amazon, and the Peruvian government was faced with the geopolitical need to occupy its eastern territory. Moreover, the freeing of the Negro slaves in 1854 had created a labor shortage. The solution, for the Castilla administration was to import a European immigrant labor force to colonize the jungle (cf. Werlich 1968: 309-351).

These colonization pressures did not reach the Palcazu watershed proper during the 19th Century, but had a major impact on areas of Yanesha and Asháninka Indian territory to the west and south in the Chanchamayo, Pozuzo, Huancabamba, and Perené Valleys.

In 1857, a group of 296 Catholic German colonists from the Rhine Valley and the Tyrol, arrived in Peru under a contract with between the Peruvian Government and Damian von Schutz-Holzhausen, and the following year established a colony at the confluence of

the Huancabamba and Pozuzo Rivers, where they remained in relative isolation for three or four generations and maintained their European manners and customs and the German language (Tamayo, 1904: 88-90; Werlich, 1968: 328-337). Descendants of this group constitute the core of the largest landholders in the Palcazu Valley today, having migrated there beginning in the 1940's (cf. Miller and Martinez, 1981).

Mestizo colonist pressure from Tarma and Huánuco penetrated Yanesha Indian territory in the Chanchamayo and Huancabamba Valleys following the establishment of a fort at San Ramón in 1847, but did not successfully displace the Indian peoples from most of their territory until after the 1880 epidemic. In the 1880's, the Franciscans opened new missions at Quillazú, San Luis de Shuar, and Sogormo in the Chorobamba and Paucartambo Valleys, the heart of Yanesha Indian territory.

Another major colonization effort occurred in the Paucartambo and Perené Valleys, beginning in 1891, when British bondholders were granted 2 million hectares of land here in a debt swap arrangement. Most of the Yanesha and Asháninka Indian territory in which this project occurred was divided into lots by the Peruvian Corporation which conducted this initiative to develop large scale coffee production, and Indian land rights were completely ignored (Manrique, 1982).

During this same period, geopolitical and economic pressures to find a shorter route to the navigable rivers to the east continued and the government sponsored the construction of a mule trail, known as the Pichis Trail, from San Luis de Shuaro to Puerto Tucker on the Pichis. This major engineering feat, headed by Joaquín Capelo, was completed in 1891.

Rubber tappers began to appear in the lower Palcazu Valley after 1880, and Carlos Fermin Fitzcarrald established a base at Puerto Mairo from which he moved into the Pampas del Sacramento to the north, before crossing over to Madre de Dios in 1894 (Pennano, 1988: 157).

More significant for the Palcazu Valley was the arrival in 1881 of a north German mariner, Guillermo Frantzen who established his domain at the mouth of the Chuchurras River, where he attracted 60 to 100 Yanesha Indian families to his service. They willingly provided him with rubber tapping labor in exchange for medicines, cloth, and shotguns and for protection from the more aggressive slave raiders who were appearing from the Ucayali River bringing with them measles and smallpox epidemics (Ordinaire 1887: 284, 1892: 139; Tamayo 1904: 122; Smith 1982: 25, 31).

Don Guillermo, unrelated to the Pozuzo colonists, was joined by a Swiss immigrant, Eduardo Zehnder, in 1900. Their

descendants, now mainly intermarried with descendents of the Pozuzo colonists, remained in the area after the collapse of the rubber boom, and are among the largest landholders and cattle raisers in the Palcazu Valley today.

In the early years of the 20th Century, most of the land in the Palcazu Valley was distributed among a handful of rubber companies, each of which controlled many thousands of hectares of forest. At the end of the rubber boom, these large companies abandoned the Palcazu Valley but their land rights were maintained by the local caretakers, most notably the Cuculiza and Pisculich families, who continuously harassed the Yanesha to force them off the concession lands. Thus, significant areas of the central and Palcazu Valley and the area between Puerto Mairo Pozuzo remained virtually uninhabited by both Yanesha and colonists--except for those of European descent--during the first 70 years of this century (Smith 1982: 25).

A subsidiary of the Cerro de Pasco Corporation conducted oil exploration in the Palcazu Valley in the 1960's, accompanied by a new wave of colonists, mostly from San Martin and Ucayali. After several unsuccessful wells were drilled, the oil company withdrew, leaving behind the Iscozacin airstrip, but many of the migrant oil workers remained in the area with the expectation of new roads and development efforts heralded by Fernando Belaúnde Terry (1959). Since the 1960's, additional waves of poor colonists have spontaneously migrated to the Palcazu Valley from the highlands and coast of Peru with similar expectations.

For the Yanesha, the overwhelming colonization forces and accompanying epidemics in the Paucartambo, Huancabamba and Perené Valleys, reduced a flourishing culture and economy to a relationship of dependency with the invading colonists who forced them off their traditional lands. Many then migrated into the still relatively less occupied Palcazu Valley. This process began with the rubber boom but intensified after 1940.

Many of the Yanesha who had remained in their heartland around Villa Rica and Oxapampa as tenants on small holdings were subjected to further colonization pressures as roads made logging profitable, pastures were cleared for beef cattle by the colonists and a rise in coffee prices created a boom in the production of that crop.

Within the Palcazu Valley, the Yanesha who had settled there had no legal rights to their land nor accumulated capital to permit control of the land, natural resources or other people's labor. Some had entered into debt peonage relationships in the areas where land was shortest, but in the central and lower Palcazu Valleys, the large landholders preferred sharecropping arrangements which would permit their control over an increasing number of beef cattle both within and beyond their own lands.

Under this system, called "al partir", the Yanesha clear and cultivate pastures, at their own expense, to raise cattle provided by the colonist patron. The Yanesha provide the labor force and assume the risks; the patron provides the cattle. Later on, and at the patron's option, he retrieves either the original cattle or substitutes and half the offspring. Under this system more than a thousand beef cattle belonging to patrons were being raised by Yanesha Indians within Palcazu Valley native community lands by the time CSRSM began.

Thus, even on lands which the Yanesha Indians formally or informally considered their own, the large landholders had gained control and extended their cattle operations at the cost of cutting increasingly vast extensions of primary forest on community lands. The German colonists consolidated their economic dominance by monopolizing transportation with their small airline, SASA, which was the only effective means of getting market produce out of the Palcazu Valley.

The first formal claim filed by Yanesha Indians for a land base in the Palcazu Valley under white Peruvian law was in 1944, when an Adventist group of Yanesha migrants from the Perené Valley requested 2,000 hectares at Loma Linda. Although this claim was never granted, and the Ministry of Agriculture parcelled the area for the settlement of colonists in 1958 (Smith, 1982: 27), this settlement formed the nucleus of the contemporary Loma Linda-Laguna Native Community.

In 1974, the first Native Communities Law was approved and the military government's development apparatus, SINAMOS, began recognizing Yanesha "native communities" and demarcating their territorial base for land titles. But no effort was made to assure an adequate land base for these newly recognized native communities, and particularly in the communities around Villa Rica, Paucartambo and Oxapampa, land titles for those which received them were limited to the minimal lots on which they remained in debt service to the surrounding colonists. Thus, the conformation of the native communities, for the most part, constituted a legalization of the historical process of land usurpation by non Yanesha (Barclay and Santos 1980).

The agrarian reform of the Velasco government, which came to power in 1968, ended the vast domains of the few families who controlled most of the territory as successors to the old rubber companies; so, there was new interest in Palcazu Valley land. For this reason, only in the Palcazu Valley were somewhat larger community land holdings recognized.

This situation encouraged greater Yanesha migration from the land short communities in the higher parts of their territory to the Palcazu Valley. Meanwhile, the established colonists there expanded their cattle holdings in order to control more of the

available land and to keep it from being titled in favor of the native communities.

In the Villa Rica and Cacazu areas, representatives of SINAMOS were also organizing coffee and timber harvesting cooperatives, which put more pressure on the already drastically reduced Yanesha communities lands in those areas, thus giving rise to additional migrations to the Palcazu Valley.

The land tenure situation and inter-ethnic tensions at the initiation of CSRSM have been accurately described by Miller and Martinez (1981) and by Smith (1981a, 1982). Of 16 Yanesha communities in the Palcazu watershed, only 9 had received titles to a still largely insufficient land base. Moreover, after early rapid and often sloppy movement in this direction in 1975 and 1976, the process of land titling for native communities in eastern Peru had come to a virtual halt; no titles having been issued since 1978.

The Morales Bermúdez administration, which had replaced the Velasco regime in a 1975 coup, had put through a new native communities law in 1978 which had restricted land entitlement rights to agricultural and livestock raising land, while land with forestry or protection classification could only be ceded in usufruct. Simultaneously, and with support of Article 70, a new provision incorporated into this law, a few large Lima based and transnational firms got temporary control over vast extensions of land in the Tambo, Ene, and lower Urubamba Valleys of the central jungle and in Madre de Dios.

Overall, we can say that interethnic man to man relations within the Palcazu Valley prior to CSRSM were gentler than was the case in the previous Yanesha heartland during most of this century. If indeed don Guillermo Frantzen had created a system of unequal exchange of labor for modest material well being in which many Yanesha families were involved at the turn of the century, the gross exploitation of man by man which occurred during the past forty to fifty years in the Chanchamayo, Oxapampa, and Villa Rica areas was relatively uncommon in the Palcazu. In the traditional Yanesha heartland, loggers, coffee plantations, cattle ranches, and citrus groves had displaced the Yanesha from virtually all of their land base and reduced them to poverty in a system of humiliating debt peonage.

With respect to man to land relationships, the plunder and destruction of the forests of the neighboring high jungle areas was still incipient in the Palcazu Valley at the beginning of CSRSM. If indeed increasingly vast areas of forest were being converted to pasture, especially since 1960, the relative difficulty of access and the expense of transportation had spared that valley of the wholesale deforestation and erosion generation that now produces frequent landslides, floods, and human

disasters along the penetration routes of the higher central jungle.

In this regard, road construction had played a key role in the neighboring high jungle areas. As Drewes had demonstrated in 1958, transportation facilities were the key to "development" in the central Peruvian jungle. The success or failure of CSRM will have to be seen in terms of how effectively both natural resources and interethnic man to man relations were managed following the construction of the road into the Palcazu Valley, for which project AID was also the primary source of funding.

The Belaúnde Proposal and Reactions to It

Thirteen days after his inauguration in 1980, President Belaúnde went to Puerto Bermúdez to announce plans for "a great axis of colonization" between the Pichis and Pachitea Rivers. He announced that there were vast areas in the central jungle suitable for producing beef which would eliminate the need for beef rationing in Lima (El Comercio 1980 a; 1980b). This project was to complement the continuation of the Jungle Marginal Highway, a Belaúnde project first announced in 1959 and initiated in the first Belaúnde presidency, 1963-68.

USAID representatives and other Embassy officials accompanied Belaúnde on this trip. At that time, when a popularly elected government had replaced 12 years of military rule, there was enthusiasm to support new development projects with bland credits and thus demonstrate political as well as economic support.

Sympathy for Belaúnde in U.S. diplomatic circles dated from his 1962 and 1963 election campaigns, at a time when a populist democratic alternative to Fidel Castro was being sought in Latin America. Moreover, the concept of road building as a key to rural development was a central theme in international development circles of the day. The U. S. Government had sponsored a study by Syracuse University Professor Wolfram Drewes to demonstrate the importance of transportation facilities to development in Peru's central jungle (Drewes 1958), and there had been substantial U. S. economic aid to support development projects during the first Belaúnde administration, 1963-68.

On September 28, 1980, a grant agreement was signed between USAID and the GOP to finance initial operations and studies for the Pichis-Palcazu Special Project. Nine days earlier, the Ministry of Agriculture had closed a major land titling project for native communities in the Pichis and Palcazu Valleys funded by the Swiss Government (COTESU), thus clearly signalling that colonization and road building would take priority over jungle Indian land rights.

Under the terms of the grant agreement, \$235,000 was to be donated by AID of which \$75,000 was to finance initial operating expenses of the PEPP Executive Office, \$110,000 was to fund studies to determine the route for a "penetration" road into the Palcazu Valley and \$50,000 was to prepare the Project Document for the larger loan proposed for the Palcazu Valley.

Apart from this donation, additional funding totalling \$6,465,000 was to be budgetted from other previously approved sources, including: \$160,000 to be taken from the budget of the Central Huallaga/Lower Mayo Special Project for the semi-detailed ONERN studies of the resources of the Palcazu Valley; \$6,000,000 to be taken from PL 400 Title 1 funds to cover initial operating costs of the PEPP Executive Office (\$140,000), topographic maps of the Pichis and Palcazu Valleys (\$100,000), mapping of property boundaries and a plan for colonizing the Pichis and Palcazu Valleys (\$300,000), road maintenance equipment and Bailey bridges plus construction costs for the penetration road into the Palcazu Valley (\$4,210,000), the final design for the penetration road (\$50,000) and agricultural experimental stations in the Pichis and Palcazu Valleys (\$1,200,000).

Public treasury funds totalling \$305,000 were to cover property boundary maps (\$100,000), agricultural experimentation station activities (\$105,000), and Palcazu Valley road construction costs (\$100,000).

It is clear from the terms of this grant agreement that the objectives of the Project were to be road building, colonization, and agricultural extension. There was no mention of forestry, conservation, land titling for native communities or any sort of social development program. However, there was the requirement that plans for the Palcazu road "take into consideration land use classification, existing land claims, indigenous settlements, and other legal and environmental considerations."

By this time, however, the Yanesha Indians had gained experience through the Amuesha Congress, organized in 1969 and reorganized as FECONAYA (the Yanesha Native Communities Federation) in 1981. During this organizational process a great deal of consciousness had been raised within the communities and among their leaders. So, there was no longer a willingness to sit back and accept the wholesale invasion and plunder of their lands by non-Yanesha with the full support of the state.

A parallel consciousness was being raised among Indian rights specialists and environmentalists in Peru, the United States, and Europe, and such matters were analyzed in both national and international forums. In late 1980 the situation of the Asháninka Indians of the Ene River was the subject of a widely publicized review by the Russell Tribunal in Rotterdam and serious human rights abuses were documented following the

colonization programs and large scale forestry contracts awarded outsiders in traditional Asháninka territory. The Lima press gave widespread attention to this and similar environmental and Indian rights issues. Moreover, in late 1980 there had been a heated debate in the House of Deputies over the stalling in granting land titles to jungle Native Communities.

It was in this climate that under the auspices of a forum organized by the Peruvian Institute for Amazon Studies (IPEA) in February 1981, attended by this advisor, PEPP Executive Director Edmundo Del Aguila presented the objectives of the Pichis-Palcazu Special Project. A vigorous public debate ensued, and Del Aguila's proposals were thoroughly and critically analyzed from environmental and human rights perspectives.

A declaration subscribed by leaders of the Amuesha Congress and the Campa Congress which requested that all Pichis and Palcazu Valley native communities' land titles be granted prior to the road construction, that community forests be protected by creating reserves for environmentally sound forest management, that PEPP support a storage center for the agricultural produce of native communities, that native communities' market bound produce be allowed to pass police controls freely, and that a series of educational, health, and social development activities be implemented (reproduced in Smith 1982: 108-110).

A Lima-based NGO, Copal-Solidarity with Native Groups, published a study of the environmental dangers of the Project (Smith 1981b) and an analysis of its implications for the Yanésa and Asháninka peoples of the Pichis and Palcazu Valleys (Tello, 1981) as well as an alternative proposal for the development of these two valleys (Copal 1981). These included the titling of a total of 60,000 hectares in favor of Palcazu Valley native communities, the creation of the Yanachaga National Park and communal reserves, as had been proposed in a 1976 Integral Development Project for the Pichis and Palcazu Valleys elaborated with input from Antonio Brack, Stefano Varese and Richard Chase Smith.

A Committee for the Defense of Native Lands was formed in Lima, including human rights groups, church organizations, and Indian support organizations, which conducted a prolonged and vigorous campaign to force the reorientation of the Pichis-Palcazu Special Project.

Outside Peru, this campaign was supported by U. S. and international environmentalist and Indian rights groups, and pressure was brought on USAID by Congressmen Don Bonker and Michael Barnes and the press. Within AID there were similar pressures, and the new AID Administrator, M. Peter McPherson, began questioning the Lima mission over the feasibility of the Project.

Project Redesign and Early Execution

In response to these developments, AID contracted consultants Charlotte Miller and Héctor Martínez to conduct a social soundness study. This was followed by a team of consultants contracted through JRB Associates, a firm based in McLean, Virginia, for more detailed research on the environmental and social constraints and the feasibility of the Project as designed, with alternative proposals. These reports reinforced the public criticism of the poorly planned, ill considered Project and made a series of specific recommendations for its redesign.

Miller and Martínez (1981) analyzed power relations, land tenure, and resource utilization of natives, colonists and government workers in the Palcazu Valle and recommended that the Project de-emphasize colonization; establish a rural cadaster; complete land titling; create communal reserves and protect forests; establish a revolving credit fund; provide native communities with legal, accounting, and leadership training, as well as technical extension programs which should include an appropriate technology center; simplify bureaucratic procedures and provide an incentive program for government workers with community and other beneficiary population evaluation of health and extension workers; and reinforce ethnic identity with support for bilingual educational and cultural programs and encouragement for the existing Yanesha Indian organizations including Agro Yanesha and the Casa Cultural.

Miller and Martínez also recommended that this reorientation of Project activities be accompanied by extensive additional studies on land use management, forestry problems, and other environmental constraints with strong AID input and that there be detailed annual evaluations of progress and recommendations for further Project reorientation.

The Miller and Martínez social soundness study was complemented by the JRB reports (1981). Smith (1981a) expanded the recommendations of Miller and Martínez in his analysis of "land, natural resources and economic development of the Amuesha native communities in the Palcazu Valley", stressing the character and history of inter-ethnic relations in the Valley, and the limitations of available land and renewable natural resources in existing Yanesha communities.

He advocated safeguards against the negative effects on the native population of the Palcazu penetration road and colonization; proposed an expanded land base for the already demarcated Yanesha communities with the completion of land titling according to specified minimum need limits, the creation of communal reserves, and the adjudication of new lands in the

Codo de Pozuzo area in favor of the most seriously land poor communities of the neighboring upper Palcazu watershed areas.

Among the social components proposed in the Smith paper were actions to improve nutritional levels and implement preventive health care delivery systems; mechanisms to guarantee that the Yanesha Indians receive benefits from the Project on an equitable basis; land use management planning in coordination with existing community assemblies, the recognized authorities, and Agro Yanesha; a Valley wide program for the planning, training, and implementation of community based natural forest management for industrial wood production, including the management of natural rubber stands.

The remaining JRB studies provided more detailed information on the natural resources of the Palcazu Valley--fish, other fauna, forests, plant communities, water--and on agricultural and animal production systems and possibilities, as well as analyses of land use capacity, the climate and hydrology, and recommendations for land use management, natural forest management, an environmental conservation and protection program, and a health program. Thus, a sound scientific basis was laid for redesign of the Project as a natural resource management program.

The first volume of the JRB report presented the Project Synthesis Paper, an Environmental Assessment, a Social Analysis, and a Colonization Systems Analysis. The Project Synthesis Paper proposed a regional development strategy including the protection of the upper Palcazu watershed through conservation units--a national park and a protection forest; no mention here of communal reserves--a natural forest management program; credit and extension programs for agricultural and livestock production; and a program of land base consolidation and land use planning and management. Additionally, there would be a health program and systematic evaluations of program advances. (pp. 1-60).

The Environmental Assessment dealt in detail with the problems generated by the penetration road, analyzed a series of alternatives, and recommended that the construction of the road entering from the south, already underway with funds from the PL 480 component of the September 1980 Grant Agreement, be discontinued in favor of a new approach from the north which would eventually link up with the road then being constructed from the south.

This would allow time to protect the more fragile upper watershed and implement the Project programs for land use management, and various natural resource management programs in the central and upper portions of the Valley before the road reached them. It would also provide earlier access to markets

for the lower Palcazu sector which has the best potential for commercial agricultural and livestock production.

The Palcazu Social Analysis also recommended a road entry from the north rather than the south, stressing the need to title the lands of the native communities in the upper watershed which were the most vulnerable before the road got to them and opened up their forests to invasions by loggers and colonists. Similarly, the conservation units and other protection measures should advance before the road endangered them.

The Colonization Systems Analysis reviewed the previous record of directed and spontaneous colonization efforts in the Peruvian jungle and analyzed their many problems which were attributed to a lack of adequate design. Colonization on fragile jungle lands per se was not questioned. Proposals were made for a schedule of infrastructure development; agriculture, livestock, and forestry credit and production schedules; technical assistance and extension programs; and the participation of the "target" population in the planning stages. The key to Project success was said to lie in a "combined GOP-USAID ... commitment to the careful design and implementation of these parameters in an integrated form."

Thus, even at this stage of Project redesign, a colonization program was still considered central to CSRM objectives, and there was no social development component other than the proposals for native communities land base consolidation and the health program. The natural forest management component barely mentioned the native communities and appears to have been designed to favor colonists or at best the Valley population as a whole. The vague land titling proposals depended upon GOP willingness to carry them out, and there was no proposal for communal reserves. Moreover, there was no proposed mechanism to guarantee that the native communities lands to be titled could be defended against invasions of loggers, traders, and colonists once the road came in.

III. CSRM OBJECTIVES AND GOALS

When the Project Agreement was signed on June 25, 1982, it was called the Central Selva Resource Management Project (CSRM) and defined in terms of "testing a methodology to promote sustained productivity in the Palcazu watershed ..." Thus, it reflected the integral natural resource management concept and specifically committed the GOP to create the Yanachaga National Park. It also committed the GOP to open and maintain a branch of the Agrarian Bank in Iscozacin and to assure the availability of agricultural credit.

An important condition precedent (Section 5.2) required that prior to disbursement of Project activities the GOP furnish AID with "evidence that the indigenous, native Indian communities in the Project area (my italics) have received legal title or legal permits for use and enjoyment of their tribal lands."

However, the Pichis-Palcazu Special Project (PEPP), executor for the GOP of the CSRM Project, redefined the "Project area" to exclude the untitled native communities of the uppermost part of the watershed and, even more critically, those of the lower Palcazu Valley where one of the prime PEPP contractors was already acquiring vast amounts of land and PEPP was organizing the settlement of colonists in the lands of two Yanesha native communities, Hauswald and Enock/Flor de un Dia.

This was the area where Belaúnde's dream, Constitution City, was planned and a large suspension bridge was to be built to permit Jungle Marginal Highway traffic a crossing of the Palcazu River. The exclusion of these Yanesha native communities from the Palcazu Project area, relieved PEPP of this legal obligation to grant them land titles and allowed the IDB-funded Pichis program of PEPP to favor the contractors with land grab opportunities and settle colonists in and around these Yanesha native communities' lands.

The CSRM Project Paper Outline, approved in May 1982 prior to the signing of the Project Agreement, constituted its detailed description. Although many of the 1981 consultants' recommendations were indeed incorporated, others were modified or watered down, and there were some glaring omissions. These were conspicuous AID concessions to the GOP position, which still conceived of the Project as a road building, colonization, and agricultural development project, even while they nominally accepted the natural resource management concept.

The forestry component incorporated Tosi's (1982) program for sustained yield natural forest management, with systematic clearcutting of narrow strips and natural regeneration of up to 50,000 hectares of forest capability land, of which 17,000 hectares were within native communities. Community forests were

to be managed communally, and the rest were to be divided into industrial units and family sized plots for forestry colonization. Neither Yanasha Indians nor established Palcazu Valley colonists were consulted on this or on any other CSRSM proposal; so, there was no consideration of what the reaction might be among the "target" population with respect to plans for the use of their lands.

Up to \$3,000,000 in CSRSM loan funds was to be channelled through the Industrial Bank for loans to the family units and native communities in order to finance the infrastructure and initial running costs of this effort. There was no mention of cooperatives nor any preference for initiating the program in native community forests.

The agricultural component of CSRSM vaguely proposed to improve existing crop systems while considering the farmers' ability to absorb new technologies. This program would combine an on-farm research program with training, extension, and the marketing and processing of locally produced crops. There was no specific mention of coffee, pifayo, tropical fruits or agroforestry and no characterization of the extension program.

The livestock component was to improve pasture and pasture management on lands suitable for pasture, improve cattle yields, encourage swine raising in conjunction with permanent crops, improve animal health, and prevent the establishment of new pastures on unsuitable lands. There was no mention of hair sheep or guinea pigs.

A protection component was to designate and protect lands in the the Palcazu watershed classified as having only protection capability. A national park was to be included in this effort, but there was no mention of either protection forest or communal reserves.

Continuous land use inventory constituted another loan funded component of CSRSM, designed to complement cadaster and titling work required of PEPP employing GOP counterpart funds. The purpose was to aid local farmers and forest producers to identify the areas most suitable for each kind of productive activity and to assist in the evaluation of the development efforts.

A health and environmental sanitation component was to train and supervise health technicians, promoters, and midwives; equip and supply health posts; and construct potable water systems and latrines.

Another component provided \$2,799,000, for feeder road location planning and road maintenance. This was in addition to the PL 480 grant funds already appropriated for road construction

in the 1980 Project Agreement. While this effort was planned to "provide access to the most productive lands while avoiding environmental degradation", no specific methodology nor route was defined, and by this time, the road from Villa Rica was already advancing toward the central Palcazu Valley using the PL 480 funds; no movement was made to initiate an approach from the lower Palcazu as recommended in the JRB environmental and social assessments.

A communications component was to build a satellite station to improve communication among Project participants.

Finally, a national level policy making body was to be created in the Office of the Prime Minister in order to insure the rational design and monitoring of "high jungle" development projects and assure that they be evaluated according to common criteria.

Origins of the Social Component

Apart from the health program, there was no social development component and, aside from the condition precedent in the Grant Agreement, no systematic or effective mechanism to assure that the GOP met its responsibilities for community land titling nor to encourage the active participation of the Yanasha Indians or other Valley residents in Project planning and decision making, much less any grass roots economic development program. The Project design was vertical and not oriented toward Yanasha Indians nor even specifically the poorer colonists. Indeed, the principal actors in CSRSM were the Project staff and contractors, for whom the Palcazu Valley population was the object of their plans and experiments.

The cadaster unit of the Palcazu program of PEPP began land titling actions in late 1982 in three Yanasha native communities of the central Palcazu Valley--Santa Rosa de Pichanaz, Loma Linda-Laguna, and Nueva Esperanza. In partial compliance with the terms of the condition precedent contained in section 5.2 of the Project Agreement of June 1982, this work had been completed when the PIL was signed authorizing disbursements for CSRSM in 1983, and Ministerial Resolutions approving the titles had been signed. However, the titles were not actually received by the communities themselves until several months after the PIL was approved and CSRSM disbursement begun, and no effort was made at this time to have the titles recorded in the Book of Deeds in Huancayo, so as to assure that no other claims to the communal lands could be superimposed on the titles territories.

Meanwhile, in the lower Palcazu Valley community of Enock/Flor de un Dia, gerrymandered into the Pichis project area of PEPP but with the tacit understanding that the Palcazu program would provide health and extension services, the Pichis program

began adjudicating land to colonists settled by PEPP within this Yanesha Indian native community's untitled lands in clear violation of both Peruvian law and the intent of the CSRM Project Agreement. Most of these colonists remain today on fertile river front land within the community's territory.

Moreover, land titling efforts in behalf of the Hauswald community, near Constitution City, were stalled while the contractors for that planned city and the nearby suspension bridge and marginal highway began acquiring most of the unadjudicated land in the area, without any plans being made for the Yanesha Indians who were the majority population in the area.

In the southernmost sector of the Palcazu watershed, land titling efforts in behalf of two Yanesha native communities, Machca Bocaz and Palma Bocaz had also halted, and loggers were eyeing their forests. Although much of the non community land in this area was to be included in conservation units under the aegis of CSRM, these communities were officially outside the CSRM Project area and thus not subject to the requirements of the condition precedent; they and two others near Villa Rica were assigned to the Oxapampa program of PEPP which prior to 1985 made no efforts to title their lands.

Meanwhile, the penetration road from Villa Rica was advancing from the south toward Iscozacín, and as it progressed the staff of the principal road construction contractor began systematically extracting large quantities of timber from the lands of the Yanesha Indian native communities through which it passed--Puellas-Yuncullmás, San Pedro de Pichanaz, Santa Rosa de Pichanaz and Loma Linda-Laguna. Under Peruvian law, wood within immediate access to a road may be used in local road construction and maintenance activities by the State or its contractors. But this wood was being marketed outside the Valley and clearly did not fall within these provisions.

Moreover, with the road came traders who arrived at road construction sites and set up stores, some of them within the territories of the Yanesha Indian native communities. The communities themselves organized defensive actions and successfully prevented colonist invasions, but they were not always successful in keeping out the loggers and traders who were accompanying the Project contractors and staff.

CDRs were established in Iscozacín, Laguna, and Puerto Mairo, as well as the Codo de Pozuzo. However, there was initially no integral extension program but rather a confusion of technicians visiting communities and colonists with often contradictory information, a vertical approach and little ability to communicate effectively with the Yanesha Indians or other Valley residents. Moreover, there were no credit arrangements.

Most of CSRM efforts in the Palcazu were limited to the road building effort and the construction of the camp in Iscozacín for Project staff. Valley residents, particularly the Yanesha Indians began to see the potential benefits of the Project as occasional construction of schools or health posts. For the colonists, the Project was interpreted in terms of the advances in the road construction, although in the town of Iscozacín a larger health center was built with the help of extensive local, NGO and other foreign government support, in addition to the modest CSRM input.

The key unit of the Palcazu program of PEPP was called Public Works and Social Development, and social development was construed as primarily the construction of buildings. The land titling activities were conducted by the separate Cadaster and Titling Unit, which had essentially no relationship with the so-called "social unit".

This combination of situations did little to endear the Project to the well-organized Yanesha Indians, and FECONAYA publicly denounced Project abuses. Moreover, PEPP staff had made many unfulfilled promises to the Yanesha communities and also to Valley colonists for schools, health posts, and other benefits.

Meanwhile, in Lima, AID's CSRM Project Manager, William Sugrue, and Coordinator, Nicholas Metes, negotiated with the PEPP Executive Direction over the nature and content of CSRM technical assistance and particularly over the planned consultant anthropologist. The first AID proposal was to hire Dick Smith, who had around 15 years experience working with the Yanesha Indians, had been an early critic of the Project as first proposed, and had served as a consultant with the JRB team.

This proposal was considered unacceptable to PEPP Executive Director Edmundo Del Aguila who resented the early criticism. There followed an attempt to contract for the collective services of social scientists through the Cambridge, Massachusetts-based NGO, Cultural Survival, Inc., but when, after difficult negotiations, the PEPP Executive Direction accepted the proposal with conditions, Cultural Survival backed off. Until mid 1984 there was still no consultant anthropologist. At that time, AID and PEPP finally agreed to hire Anthony Stocks for the position which had been formally agreed upon a year earlier, and in September 1984 Stocks arrived (Sugrue, personal communication).

Social Component Objectives and Goals as they Evolved

Stocks was hired to reorient the work of CSRM in a way that would be more acceptable to the Valley residents, especially the Yanesha Indians, and develop a substantive social component for the Project. In the terms of reference, the objectives were stated as:

1. to strengthen communication between native communities and PEPP, sensitizing natives to PEPP goals and PEPP personnel to native needs and priorities.

2. to strengthen PEPP extension activities in a way that is effective working with native communities and colonists.

3. to train natives in skills that will create a viable economic infrastructure in the future, while supporting subsistence security.

4. to provide impact monitoring of short-term and long-term effects of the Project.

5. work with PEPP staff to develop the management and administrative capacity of the Project beneficiaries.

Stocks's earliest efforts were devoted to the reorganization of the health and extension programs and to the development of a comprehensive social component in the Project.

Following a survey of health needs and services conducted in conjunction with the Project physician, Dr. Oscar Jaime Chang, and health promoter trainees and after many difficulties in convincing the local PEPP leadership, particularly that in the Public Works and Social Development Unit, a satisfactory reorganized health services training and supervision program was inaugurated and carried out under the direction of Dr. Luis Tam, Chang's successor. This complemented the program of health post construction and equipment which was also reorganized and reoriented to the needs of the health promoter trainees, who were now volunteers selected by their own communities.

Extension specialist Gerald Murray was brought in under a short term contract to recommend the necessary reorganization of the CSRSM extension program into a single extension service, whereas previously each Project component had its extensionists who often entered into contradictions among themselves creating mass confusion among Valley residents.

Murray's (1985) recommendations called for reorganizing the extension program so that extension workers would be removed from the technical units and grouped into a single Social Development and Extension Unit along with the staff of the health program. It was hoped that this would provide more unity to the program in that extension workers with different technical experience in forestry, agriculture, and livestock raising would share their responsibilities and experience and more effectively reach out to the entire community, not just the nucleus around the school, by treating the beneficiaries as family productive units rather than as community members with the false presumption of verticality and chiefly authority.

The core of the program was to be a system of native promoters, who were to be selected by their communities and who would receive modest compensation, not salaries, for their part time efforts from the Project. The native promoters were to be trained by the PEPP extension team and the consultant advisers and should be able to better communicate the nature and importance of the "menu" of "technological packages" which were the objects to be transferred from the Project to the Valley residents, both Yanasha Indians and colonists.

This new emphasis would change the notion that the purpose of the Project was to build public works and make clear that the main objective was to transfer technology in order to increase income among the beneficiaries. The results would be systematically and quantitatively recorded by the native promoters and the extension workers.

The importance of these changes was that they would create a more dynamic "hard" extension as opposed to the more traditional "soft" talks, slide shows, leaflets, and posters. Both native promoters and extension workers would work directly in the field, although the latter would be based in the CDRs.

Although formal approval of these changes through a new PIL amending the Project Agreement did not come until 1986, they began to be made in early 1985 in practice. The new native health promoters program followed a similar structure, and a corps of social promoters under the supervision of specialists in a Social Supervision Subunit was also proposed.

With important input from Stocks in coordination with his social supervision subunit counterparts, the basic social development program was also reorganized to deemphasize construction of public works and concentrate on the equipment of the already built or soon to be finished schools and health posts, and especially on the training of the Yanasha Indians and other Valley residents in socioeconomic organization and empresarial activity. Simultaneously, specific research activities were conducted to provide information for continuing and improving aspects of the program.

For the studies and some training activities there was a budget for short term local hire assistants to aid in empresarial organization and to provide accounting, administrative, or other technical training.

The most important objective in this redesigned social development program was the Yanasha Forestry Cooperative which was to be the grass roots vehicle for the sustained yield natural forest management plan. Since the Tropical Science Center forestry specialists had determined that the best production forest in the Valley was on community lands, while the large

landholders had already converted much of their land to pasture and the smaller scale colonists' holdings were fragmented and dispersed, the choice was a logical one. Moreover, by law, community forests were subject to community rather than private use. Thus some associative form of empresarial organization was necessary and multicomunal enterprises had not yet been legally authorized, the cooperative mode was chosen.

Parallel to the forestry cooperative effort, communal stores were to be organized, and the storekeepers trained and supervised by the local hire training assistants. Accounting and administrative training was to be emphasized. These grass roots economic ventures were designed to respond to the invasions by traders near the bridge construction site at Raya, within the Loma Linda-Laguna native community territory. The bridge construction by the PEPP public works program had concentrated a Project labor force which, along with the PEPP extension staff at the Laguna Rural Development Center (CDR) constituted a clientele for the invading traders. The solution was sought in the form of competitive community operated stores which could provide an alternative supported by the Project.

A revolving medicines fund under the aegis of FECONAYA and supported by the CSRSM health program was also to be organized in another grass roots effort to respond to the increasing dependence on ill supplied and exploitative outside traders for basic commercial medicines.

As a complement to this program a medicinal herbs garden at the Shiringamazu native community supervised by a traditional curing shaman was to provide an alternative to Western commercial remedies and to strengthen effective traditional Yanesha responses to illness.

An existing Yanesha organization of bilingual teachers, ABBA, the Amuesha Bilingual Bicultural Association, later called the Yanesha Bilingual Bicultural Association (ABBY), was to be supported by CSRSM in efforts to produce teaching materials for the bilingual schools throughout the Yanesha territory and thus strengthen identity with the traditional language, the vehicle for cultural expression. Another existing Yanesha organization, the Casa Cultural, which sought to preserve traditional songs and other forms of Yanesha cultural expression was not given any support by CSRSM, since its headquarters near Cacazú was officially outside the CSRSM Project area.

To complement these traditional educational efforts, CSRSM support was to be provided in the construction, equipment, and staffing of technical high schools at Iscozacín, Laguna, Villa América, and San Pedro de Pichanaz. These schools were to be integrated into the CSRSM extension program.

Moreover, carpentry training was to be provided the local population who were to assist in the construction of the technical high schools. Other social program training activities included support for sewing, weaving, and handicrafts production activities mainly through mothers' clubs in the Yanesha Indian communities.

Additional educational support was to be provided Valley residents in the form of modest scholarships to permit their attendance at area technological and pedagogical institutes.

One economic development program initiated by the Yanesha in 1977 with NGO support and the supervision of a British volunteer agronomist was a program of communal cattle enterprises, designed to provide a grass roots alternative to the sharecropping systems which unequivocally favored the patrons. A central marketing organization, Agro Yanesha, supported these communal cattle enterprises.

By the beginning of CSRM, 155 head of beef cattle were being raised on 241 hectares of pasture in 6 Yanesha communal cattle enterprises in the Palcazu Valley (Smith 1982: 32-33). A seventh communal cattle enterprise was organized in 1982 (Waschman 1985: 7-8). These complemented approximately 1800 cattle individually owned and raised by Yanesha Indians on communal lands which constituted the herds developed out of the sharecropping arrangements.

While increased beef cattle production was not a CSRM objective, the Palcazu extension program of PEPP did distribute cebú and cebú-criollo crosses to both colonists and Yanesha Indian communal cattle enterprises between 1982 and 1985 (Waschman 1985: 7-8). Within the social development program, there was also an effort to encourage the communal cattle enterprises to consolidate their organic structure and gain recognition by the State. Pasture improvement and more technical veterinary attention were to be encouraged along with the agroforestry and hair sheep, under the extension program as alternatives to the beef cattle.

Agro Yanesha had originally been designed to facilitate direct marketing of beef by the Yanesha, who were otherwise dependent on patron-controlled transportation monopolies, SASA and the trucks which came in over the road. However, in the CSRM social development program Agro Yanesha was to be encouraged to reorient its activities to provide marketing services for the new commercial agricultural products developed by CSRM, rather than beef.

In the colonist town of Iscozacín, the Project was inspiring an urbanization process which was proceeding in unorderly fashion. So, as a part of the the redesigned CSRM social

development program, a census was to be conducted and subsequently more orderly urban planning.

As mentioned above a health center had been constructed, equipped, and staffed in the town of Iscozacín, partially with CSRM support. The only electricity in the town was provided by the health center's generator. However, there was no potable water supply. To remedy this situation potable water systems for the town of Iscozacín, Puerto Mairo and four to six native communities were to be built and put into operation in order to improve overall health conditions.

To assist better planning and land base consolidation among the established colonists and demonstrate the absence of suitable land for additional colonization, a colonist census was to be conducted. This would also provide useful information to APODESA, the Lima based central policy planning organ for the jungle special development projects.

The work on land titling for the Yanesha native communities in the immediate CSRM Project area had been completed in 1983. However, FECONAYA continued to protest about the still untitled Yanesha communities in adjacent areas which had been excluded from the Palcazu Project area, particularly Hauswald and Enock/Flor de un Día. So, by agreement with the Pichis program of PEPP and AID, in 1986 CSRM assumed the responsibility for the technical work in the field necessary to achieve the titles for these Yanesha communities.

Moreover, although the titles had been formally issued, to secure their recognition by the competent public authorities and the private sector, they still needed to be recorded in the Public Book of Deeds in Huancayo. This was also assumed as a responsibility of the social development component of CSRM.

Most of these activities were developed by Stocks, in close coordination with the PEPP sociologists in the Social Supervision Subunit of the Palcazu program. These activities were consolidated as social component objectives during 1985 and incorporated into CSRM operating plans beginning in 1986, following a Project Agreement amendment which created a new budget line for "social development" activities.

When this adviser replaced Stocks in mid 1986, the groundwork for a solid social program had already been laid and was proceeding with great effectiveness. It became our task to encourage the continuation of this scheme with some changes in emphasis.

During this period the social development program of CSRM assumed as an objective a closer working relationship with FECONAYA, the native communities, the forestry cooperative, Agro

Yanesha, the native promoters, the health promoters, the mothers' clubs, the PTAs (Asociaciones de Padres de Familia), the Iscozacín Development Committee and other Valley residents' organizations. Efforts were to be made to encourage more direct participation of these organizations in CSRSM planning and decision making.

Although any intent to democratize vertically imposed structures such as those of CSRSM is inevitably plagued with difficulties and opposition from the leadership, the groundwork had been laid in 1984-86 in reorienting the content of the social development program to make it more responsive to Valley residents' needs. Thus, there was more openness and willingness on the part of these Valley residents' organizations to coordinate their needs and priorities with the Project staff and particularly the advisers. So, significant efforts in this direction were assumed, at least formally, as Project objectives.

Another objective which had been abandoned in the early period of CSRSM but was reassumed as a CSRSM objective in 1987 and 1988 was the establishment of a communal reserve, a sort of hunting preserve and buffer zone on the hilly slopes between titled native community lands and the Yanachaga National Park.

Other land base consolidation objectives during this period included the completion of the land titling for Hauswald and Enock/Flor de un Día and through support for FECONAYA, also that corresponding to Machca Bocaz and Palma Bocaz in the upper watershed, and El Milagro near Villa Rica. Moreover two new Yanesha communities were to be recognized within the Pichis Project area--Unidad Yanesha, adjacent to Hauswald, and San Francisco de Azupizú, in the upper Pichis watershed near San Pedro de Pichanaz. Through coordinations with FECONAYA these efforts were to be provided support.

In spite of negative recommendations from this adviser, new objectives were assumed by the CSRSM social development program in terms of the creation of four new forestry and agroforestry cooperatives in the Valley. The criticisms referred to a lack of technical and economic feasibility (cf. Stocks 1988) and the competition that these efforts would mean for the consolidation of the Yanesha Forestry Cooperative at a time when a sound forestry extension and land use management program had not yet been satisfactorily implemented Valleywide.

During this period greater attention was to be provided Agro Yanesha in the hope of developing a mechanism for coordination with the native promoters, now called communal promoters, and the assumption of some of the CSRSM experience by this Yanesha organization, particularly with regard to the marketing of CSRSM developed achiote, coffee, and other produce. A revolving

veterinary medicines fund was proposed to be administered by Agro Yanesha.

A more technical orientation for ABBY with the publication of larger editions of fewer readers in coordination with the Ministry of Education was assumed as a complement to the original objectives with respect to this activity.

The traditional medicine herb garden was to be expanded to training and practice in other communities and coordinated with other institutions currently working on similar programs, particularly AMETRA (Application of Traditional Medicine), which had effective programs operating in Ucayali and Madre de Dios.

Handicrafts promotion was to be given new life, and although initially there was no coherent direction to this activity, subsequent coordinations were designed to attempt to provide it with more purpose and coincidence with the needs and priorities of the women of the communities and their traditional culture.

Finally, with the impending termination of CSRM, an important new objective was to find alternative support for some of the CSRM activities which were developing in a positive direction but would need more orientation and funding before they could be consolidated and continue on their own.

IV. PROJECT EXECUTION

In a useful analysis, Stocks (1987) discusses the context of tropical forest development in Perú, based on his experience in CSRSM. In his final observations (pp. 6-7) Stocks describes a number of structural, institutional, ecological, and research constraints on current development efforts in the Peruvian Amazon as a whole, to which the reader is referred for more background perspective.

Among the positive comments made by Stocks was that the Special Projects concept, circumventing sectorial bureaucracies is a useful one. He also points to the need for a more realistic interpretation of the nature of the ecosystems involved before planning jungle development projects. Here again, CSRSM has demonstrated more sophistication than other projects in similar areas. One important demand, however, is for additional research, and no matter how fine the initial studies conducted at the beginning of CSRSM were, there remained and remains a need for substantially more testing of the models being transferred than has occurred in CSRSM or anywhere else in tropical South America.

In a constantly changing political context, an evaluation of CSRSM execution must assume a comparative time framework. In these terms, the constraints on and achievements of the Project are analyzed below.

Constraints on CSRSM Progress During the Belaúnde Government

Among policy constraints, there was little clear GOP identification with the CSRSM objectives of ecologically sound natural resource management. This will be evident from the discussion in Chapter II above. There were constant pressures to revert to a traditional road and pork barrel public works construction project which would have made colonization a priority over sustainable natural resource management.

Within PEPP, this tendency was most evident in the delays and frustrations around efforts to achieve land titles for the native communities, particularly Hauswald and Enock/Flor de un Día. During the first two years following the 1980 Project Agreement, activities were limited to implementing the PEPP Executive Direction in the Office of the Prime Minister and construction of the penetration road from Villa Rica and Cacazú north toward Iscozacín. No attention was paid to JRB and other consultants' recommendations that the road enter from the north and not from the south.

Following the June 1982 Project Agreement which formally launched CSRSM under the basic \$30 million project, another two years was spent mainly devoting CSRSM energies and resources to the road construction, to the construction of the Project camp in

Iscozacín and to other construction efforts. During this period, the construction of the health center in Iscozacín, which could have benefitted from more generous support from the Project, was completed largely from local effort and other foreign financial support with only modest support from PEPP.

The cadaster and other field efforts to secure land titles for three Palcazu Valley native communities was done only to comply with the condition precedent in the Project Agreement. After that, there was no further movement on titling the lands of the Yanasha native communities for the rest of the Belaúnde administration. Other land titling needs were manipulated by gerrymandering, sabotaged, or simply avoided by PEPP officials who were clearly more interested in favoring their friends and meeting the conditions of Belaúnde's dreams--the Marginal Highway, Constitution City, and agricultural colonization. Even for the colonists the completion of the adjudication contracts for land in the Palcazu Valley--except for the lower Palcazu area outside the CSRSM Project area--was postponed until the 1985 elections approached.

Crops and livestock experiments were conducted with coffee, cacao, tropical fruits, and hair sheep, but no serious extension program was developed, although some beef cattle were distributed among Valley residents. More attention was given to the construction of the Rural Development Centers from which the extension program would operate than in designing the program. Moreover, the forestry component, which for AID was the centerpiece of the CSRSM Project, was simply not initiated. Nor were continuous inventory of land use management or other natural resources management activities conducted. And AID's efforts to assure a socially sound orientation to the Project by contracting a consultant anthropologist with grant funds were consistently frustrated until 1984.

Personnel constraints during this same period involved mainly the low technical level of nearly all of the Project specialists and technicians and the traditional, often frankly racist, attitudes toward jungle Indians. Some, the best, were recent graduates or graduates-to-be from small regional universities or else had little or no previous technical training. These initially green technicians, with the conscientious support of the AID-sponsored advisers, became the technical cadres upon whose dedication and hard work the later successes of the Project hinged.

Key members of the Project leadership misused CSRSM funds personnel or political purposes. This was especially true in the "Public Works and Social Development" Unit and in the Executive Office.

Administrative constraints grew out of an inadequate structure for channeling Project resources efficiently to the Valley population. The PEPP bureaucracy was cumbersome, and there was no effort to work with or through the grass roots organizations. Procurement problems, customs clearances, and logistical limitations caused major delays in the implementation of the Project with its most basic needs, and there was neither the will nor any adequate structure to assure an easier and more non-political flow of goods and services from PEPP sources to the beneficiary population, much less beneficiary population participation in CSRM planning and decision making.

This situation improved somewhat when PEPP was transferred from the Prime Minister's Office to the less political and more technical National Institute for Development (INADE) in 1983.

The Interregnum and the Great Leap Forward

The most productive period of CSRM occurred during an interlude covering the months immediately prior to and following the 1985 elections and the first year of the APRA administration. At the beginning of that period the politicians in PEPP were devoting their energy to the Acción Popular campaign, particularly that of PEPP Executive Director Edmundo Del Aguila for a seat in the Peruvian Senate. Then after the APRA administration assumed power in July 1985 it took the Apristas more than a year--until October 1986--to consolidate their control within PEPP. During this period of approximately two years, many of the most important decisions in the CSRM Project were left to the technicians who by then had gained more experience.

AID played a major role in engineering the progress that occurred during this period. Until 1984 only one adviser, Charles Staver, the crops-livestock advisor, had been contracted. In 1984, Robert Simeone and Ned Herring were brought in as forestry and road maintenance advisers under Tropical Science Center (TSC) and RONCO contracts, respectively. Later that year anthropologist Anthony Stocks was hired via RONCO and Michael Kroner via TSC.

The commitment and dedication of these advisers, who initially had very little support from PEPP, paid off in terms of the elaboration of serious programs--first crops and livestock and later forestry and social programs--which would later be incorporated into CSRM operating plans and put into effect in the absence of the politicians. Moreover, these advisers played a major role in the training of the PEPP technical staff with whom they worked closely.

The differences, and frequently confrontations, with the leadership in PEPP during the early period were profoundly

frustrating. All of these advisers have confirmed this to me and in great detail. Fortunately, the advisers had the unwavering support of CSRM Project Manager Sugrue and Coordinator Metes who helped them fight their battles astutely and intelligently.

Among policy constraints, there was a tendency for the earlier problems to continue but much less so when the PEPP Executive Direction did not get involved. Within the Valley, the principal obstacles were the objections, manipulations and pressures from the chief of the Public Works and Social Development until he left in September 1985. Fortunately, he did not get involved in the crops and livestock work which made some progress there possible. The main difficulties were in launching the forestry and social development programs, in the face of many obstacles created by PEPP, although these confrontations engendered solidarity among the technical staff which began to work more closely with the advisers.

In early 1984, Ing. José Isla became the Palcazu program Director and he brought in Ing. Víctor Cueva as Deputy Director. While Isla had the confidence of PEPP Executive Director Edmundo Del Aguila and followed the Acción Popular directives, later assuming a role in Del Aguila's political campaign, he preferred to assume the responsibilities for public appearances and political negotiations in Lima and elsewhere. During Isla's frequent absences from Iscozacín he left Cueva in charge of the Project locally with the authority to commit PEPP to most of the decisions that were made there. As the elections approached, Isla's absences increased and Cueva's authority filled the gap.

Cueva proved to be an-unusually dynamic, capable, honest, and committed substitute Director, who understood the objectives of CSRM and believed in them. Moreover, he mastered Project operations to the ultimate detail and did not avoid responsibilities. Although initially he distrusted the advisers, he began to respond to the priorities of the technical staff and served as an intermediary with the PEPP leadership to resolve as many problems as they tried to create.

Apart from the top levels in the Project, the personnel situation began to improve substantially during this period. In part this was because with a larger budget more staff was hired among whom there were more technicians willing to gain experience in this unusual project and learn from the advisers. If indeed some of the more traditional and racist attitudes continued among some of the PEPP staff, with the support of Cueva and the unit chiefs it was possible to relocate some of the more intractable staff members to areas such as Puerto Mairo, where they had less contact with the natives and would cause fewer problems.

The main problems were administrative and logistical. As Project activity increased, the inability of the PEPP

administrative staff to resolve problems did as well. Moreover, funds were taken from key CSRM budgets, particularly forestry, and used for other Project and political purposes, including Del Aguila's Senate campaign. But in September 1985, a new administrator, Gamarra, was hired. Both Isla and Cueva had worked with him previously elsewhere, and their relationship proved to be smooth and effective. Although the difficulties by no means ended at this point, Gamarra at least made significant efforts to see that the flow of funds, equipment, supplies, and personnel responded more closely to Project needs.

Not all Project objectives were addressed with equal administrative support, however. In one conspicuous example, the potable water systems that had been promised the town of Iscozacín and some of the native communities were simply not delivered, since supplies and funds committed to this purpose were repeatedly used for other purposes. In one Yanesha community, Buenos Aires, Stocks decided to wait no longer and took a Project handyman and the necessary materials to personally install a water system above the school in that community. This system functioned for about a year until it was damaged by cattle from the community and never repaired.

The failure to deliver on the Iscozacín town water system created major friction between the Project and the Iscozacín Development Committee, the civic group which was organizing labor brigades and local support for and participation in the work. Both Stocks and this adviser were constantly frustrated in our efforts to get the Project to implement this activity in coordination with the beneficiary population.

As for the beneficiary population, in the early stages there was generalized distrust of the Project from both colonists and natives, as a result of the many unkept promises and few benefits preceived by both groups. Among the Yanesha Indians, there was special anger over the manipulations and stalling on land titling in the lower Palcazu and also over the abuses committed by Project representatives and contractors in the course of the road construction--timber theft, invasions by traders of communal territory, abuses with native women, etc.

However, in 1985, with major input by Stocks and Simeone and with the support of the technical staff and Cueva, significant progress was made in planning and the first steps in organizing the forestry cooperative, which by then had been decided upon as the vehicle for the sustained yield natural forest management plan. FECONAYA's opposition to the Project and to the advisers began to soften when it became clear that the Yanesha were to be the main beneficiaries of this project and, after initial lack of agreement, Manuel Lázaro, who had FECONAYA confidence, was chosen as organizer. Even more important, and mainly in response to the

insistence of Stocks and Simeone, the communities began to participate actively in the decisions that were being made.

The establishment of the first communal store in Laguna and Project support for ABBA and the medicinal herbs garden--FECONAYA projects--also went a long way to create confidence among the Yanasha at this stage, as did the improvements in meeting PEPP promises and objectives within the communities in the form of health post and school construction and some technical input in agriculture and livestock.

The gradual improvement in this Yanasha-Project relationship correlated directly with the gradual improvement in the flow of Project benefits to the Yanasha and, even more so, the ability of the PEPP technicians and particularly the advisers to communicate CSRM objectives and plans to them. From that time on, both the Yanasha and the colonists began to place more confidence in the advisers and PEPP technicians than they did in the PEPP leadership.

For the social development program, the transition was difficult. Some opportunistic "leftists" in the social program were openly critical of the "imperialist" advisers and tried to pit the natives and, to a lesser extent, the colonists against them. To do so, they formed an alliance with the Public Works and Social Development chief, although his manipulations and misuse of Project funds were widely known among Valley residents. This strategy backfired and Stocks and the more technically serious members of the unit, particularly Eduardo Paucar and Adela Reátegui, gained support from both natives and colonists.

In 1986, however, the situation began to change. Luis Llanos de la Matta was named Executive Director of PEPP in September 1985, and although he immediately replaced some key personnel in the Executive Direction, he continued to work with Claudio Saito as PEPP Coordinator with AID and left the Palcazu program leadership intact at first while he began surrounding himself with trusted advisers from his party in the Executive Direction. These "asesores chichas" had little technical competence and, at first played little role in affairs of the Palcazu program which they did not understand. Moreover, since by this time the AID-funded advisers played an important role in CSRM and some of the successes were becoming known, they preferred to interfere first in the Pichis and Satipo-Chanchamayo programs of PEPP where the character of the programs was less well defined and there would be less resistance to some of their technically deficient schemes, such as plans for "integral farms" with fish ponds and other elements which did not coincide technically with the Palcazu program for crops and livestock development developed mainly by Staver, in coordination with the Palcazu technical staff (Staver, 1986).

Toward the end of this period, the APRA party apparatus, particularly the local Iscozacín committee, began to demand personnel changes so that more party members could have jobs in the Project. These tensions were increasingly felt on all levels of Project staff, but vacancies for new staff and the unit chiefs' positions were the first targeted. Although some key staff members--most notably Administrator Gamarra--resigned in anticipation of these problems, matters came to a head in October 1986 when, after a campaign of private pressures, rumors, and anonymous leaflets, Isla, Cueva, Saito, and nearly all of the Palcazu program unit chiefs presented their resignations and most were accepted, effective November 1, 1986.

The insecurity generated by this personnel tension in the preceding and following months was so great that real progress in the Project was essentially paralyzed. Economist César Castañeda was named interim Director of the Palcazu program until the new Director, Witsen Barreto, could be named in January 1987. During this interim, Castañeda made every effort to assure a smooth transition and the continuation of the successful Project activities, but his authority was limited and his future insecure.

1987-1988

The period which followed, under the Direction of Witsen Barreto was one of decline in meeting CSRSM objectives. Initially Barreto appeared open and friendly with most of the staff, advisers and the Valley residents, although promising more than he could ever deliver. Since he had little understanding of the Project, he relied on Eduardo Paucar, who had been named Deputy Director, replacing Cueva, for information and advice.

Policy constraints during this period were secondary to personnel, administrative, and financial constraints. The Apristas professed support for cooperatives as a part of their ideology and accepted in theory most of the activities in the forestry and social programs, which had been developed with great difficulty during the previous administration.

The earliest policy confrontation over the crops and livestock program content had already occurred. Staver completed his contract and was replaced by Jonathan Wyland as adviser in October 1986. The personal resentment between Llanos de la Matta and Staver was not transferred, but confusion over the character of the crops and livestock program made Wyland's task difficult, although he handled it well.

One contradiction which arose was the adoption, on a national level, by the GOP of a policy of liberal and lost interest Agrarian Bank credits to farmers as incentives for increased agricultural production. Since Bank officials promoted

these loans on a widescale basis, with no restrictions of their use according to land use capability, CSRM efforts to use credit in kind incentives to follow land use capability criteria en agricultural development were often undermined.

In February and March 1987 there was a serious confrontation between the PEPP Executive Direction and the Yanesha Forestry Cooperative with its participant communities. Although formally organized in May 1986, there were a number of administrative requirements that had to be met before the Cooperative could be legally recognized as such by the corresponding GOP agency, INCOOP (the National Cooperatives Institute). The social supervision subunit chief, Adela Reátegui, and this adviser worked closely with the Yanesha Forestry Cooperative in order to assure compliance with these requirements, both in the Palcazu Valley and in Lima. But INCOOP consistently objected and created new requirements.

When these requirements were all finally met, PEPP Executive Director Llanos de la Matta intervened to try to pressure the Cooperative to change its statutes and become an "agro-forestry" cooperative so that it could fit his scheme of "integral farms" in which he proposed cultivating the production forest strips after they were clear cut. This proposal was in direct contradiction with the sustained yield natural forest management plan which had been much discussed and accepted by the Yanesha communities, their Cooperative and FECONAYA, as well as by PEPP and AID.

In a major confrontation in the waiting room of the INCOOP Executive Director's office in March 1987, in the presence of this adviser, PEPP Executive Direction adviser, Germán Cárdenas, told Yanesha Forestry Cooperative representatives, including Manager Manuel Lázaro, that the Executive Direction had decided that the Cooperative had to be an "agroforestry" cooperative and not a "forestry" cooperative; otherwise, there would be no further support from PEPP. The Cooperative's representatives insisted that they had to respond to their members and not to the PEPP Executive Office.

At this point, the INCOOP Executive Director, having read documents directly submitted by the Cooperative and been convinced of its objectives, intervened to support the Cooperative's position and committed INCOOP to recognizing Peru's first forestry cooperative as such. This was done and the matter has been a source of resentment toward both the Yanesha Forestry Cooperative and this adviser ever since.

Additional policy contradictions arose over the theme of new forestry and agroforestry cooperatives in the Valley. Clearly a political manipulation, these technically and socially unsubstantiated activities became a mechanism for dividing

FECQNAYA and its member communities and threatened to siphon off important financial and material resources from the Yanesha Forestry Cooperative. Four of these new "cooperatives" were in fact formally and legally--although not socially, technically, and financially--created.

Although one of these new cooperatives was an ill conceived but fairly innocuous school experiment, and another, in the Lagarto River area, was a fiction composed entirely of APRA party members who were members of the PEPP staff, two others were taken more seriously. On the upper Iscozacín River, a group of colonists was organized into the Pan de Azúcar agroforestry cooperative with modest objectives, but this cooperative threatened lands included in the Yanesha Communal Reserve which had been established in benefit of the native communities of the Valley.

The most serious problem was an "agroforestry" cooperative set up in the Santa Rosa de Pichanaz Native Community in the upper Palcazu watershed. This cooperative effectively divided FECQNAYA and support for the Yanesha Forestry Cooperative with a parallel operation. It still threatens to deplete the available production forest within that community, wood from which would be sold to truckers in order to pay for the equipment needed to process the remaining wood, if any.

Problems also arose around a proposal by a specialist in the social supervision subunit, beginning in July 1987, to conduct weaving courses in several Yanesha communities using a highland loom, wool yarn, and highland designs. When FECQNAYA, supported by this adviser, requested that weaving instruction in Yanesha native communities respect Yanesha designs, which have religious significance, and respond to Yanesha needs and priorities. The program was stalled, mainly for lack of funds, and, after the specialist left the Project, the activity was reoriented to assume a more culturally sensitive content.

The most serious policy contradiction, however, was over the extension of the penetration road beyond Iscozacín to the Chuchurras River and eventually to Puerto Mairo. U. S. law now forbid the use of AID funds for this purpose, including the road equipment acquired by the Project to maintain the stretch between Villa Rica and Iscozacín and to build production forest access roads in support of the Yanesha Forestry Cooperative. PEPP officials, however, insisted on proceeding with the road and using the AID-funded equipment for it.

In 1987, six kilometers of road was built from the main road to Pan de Azúcar, a point on the upper Iscozacín River, whence the road was to cross the river and continue to Villa América and the Chuchurras River before continuing on to Puerto Mairo. This road would pass through the communal territories of both Alto

Iscozacín and Siete de Junio Native Communities. Both of these communities wanted access to their production forest in order to supply the Yanasha Forestry Cooperative. Although the route chosen was not the most technically appropriate one, it offered at least an alternative in this regard.

But in 1988, PEPP changed its plans and abandoned that route along with the wood which had been cut by the two native communities as their contribution to it; this wood was left to rot along the inaccessible road route. PEPP then began pushing the road through from Iscozacín through the Buenos Aires Native Community to the Chuchurras River where the most favored beneficiaries would be the colonists, using the road maintenance equipment in spite of AID protests. By CSRM termination, this road had reached the Chuchurras River but had not been ballasted. These illegal road construction activities with no environmental or social impact studies, were a constant source of tension.

In spite of these policy problems, however, PEPP support for land titling efforts, the creation of the Yanachaga National Park, San Matías-San Carlos Protection Forest and the Yanasha Communal Reserve was solid, and there was close cooperation on these efforts between the technical units, this adviser, the PEPP Executive Direction, and the successive levels of authority in the Ministry of Agriculture. Significantly, it was on these issues that the most serious problems has arisen during the previous administration and the fewest problems occurred during the APRA administration.

The most critical constraints on progress in CSRM during this period were in personnel. The tension, which had surfaced in late 1986, continued to spread and staff replacements proceeded at increasingly lower levels. Gradually, some 80 % of the technical staff and even the unskilled labor force was replaced by new staff recruited from APRA party circles. Among those who left were most of the best technical cadres carefully trained by the advisers. The replacement staff had little understanding of or commitment to CSRM objectives and responded mostly to either party decisions or policies determined elsewhere and passed down by the Project Direction, with increasing input from the Executive Direction, including the asesores chichas.

With Eduardo Paucar's promotion to Deputy Director, the responsibility for the social supervision subunit was given to Adela Reátegui, who had been the most competent and committed specialist in the unit. However, since she did not have the party's confidence, new staff was hired and incorporated into the unit, including the former administrator, Hilario Rojas, two former INCOOP employees, who were charged with organizing the new cooperatives, and a man who purported to be an accountant.

Social subunit activities were divided into "operating plan" and "non-operating plan" activities, with Reátegui put in charge of the "operating plan" activities and Rojas in charge of the "non-operating plan" activities, in which both the cooperativists and the "accountant" participated. Reátegui was left to try to meet the established CSRM social development goals with the support of only two accountants and this adviser.

Then the two accountants, who had key roles in organizing and training the Forestry Cooperative staff and the participants in the communal stores, revolving medicines fund, and other grass roots activities, were fired, having sinned by not belonging to the political party in power. Although one was reinstated, following pressure from Reátegui and this adviser, it became increasingly difficult to work within the Social Development and Extension Unit.

Another PEPP staff member assigned to the social supervision subunit during this period was Oswaldo Alva, previously the kitchen manager, but who was elected mayor of the new Palcazu District in November 1987 on the APRA ticket. He was also assigned to "non-operating plan" activities where he served his function as mayor while drawing a salary on the PEPP payroll.

Although, to some degree it was possible to fill the gap and make some progress on CSRM objectives with support from RONCO contract technical trainers, the social development program operated in parallel fashion from that point on. Reátegui resigned in frustration in December 1987 and was never formally replaced. Her responsibilities were mostly assumed either by the unit chief, agronomist Teófilo Alata, or by a social promoter, Yanasha Indian Augusto Francis, who was out of favor with FECONAYA and the Valley native communities and whose possibilities for effectiveness were extremely limited.

From that time on, it became necessary for this adviser to work directly with the Valley residents' organizations, particularly the Yanasha Forestry Cooperative, FECONAYA, Agro Yanasha, the communal stores, the revolving medicines fund, the mothers' clubs, and the Iscozacin Development Committee, with relative independence from the Social Development and Extension Unit. There was substantially better coordination with the Protection, Cadaster, Forestry, Crops and Livestock units, however, and the most significant advances came in areas of general cooperation, in which the Social Development and Extension Unit played little role.

This was not the case for extension activities as such, however. Here, there was better coordination between this adviser, the unit chief, and some of the extension staff, with important input from Wyland, Extension adviser Charles

Walkinshaw, and also Simeone, who was brought back for a short term contract in February 1988.

The main problem with extension was in forestry extension, and this was a personnel problem. The forestry extension staff was never trained in the content and importance of the sustained yield natural forest management plan, and there was never satisfactory coordination between the forestry extension staff and either the Forestry Unit, the Yanasha Forestry Cooperative, or the Forest District of the Ministry of Agriculture.

Key members of the forestry extension staff were subverting the sustained yield natural forest management plan and encouraging both native communities in the upper and central parts of the Valley and to establish the new cooperatives which would follow the more traditional selective cutting plan. That these extensionists were allowed to continue had more to do with their party loyalties and personal support from from PEPP leadership than considerations of Project objectives which were simply ignored.

Initially, the administrative problems during this period were personnel problems. In January 1987, Hilario Rojas, a former warehouseman in the Pichis Project with no higher education nor administrative training, was named Palcazu program Administrator. Within two months he was replaced when a substantial sum of money could not be accounted for. The solution for the PEPP leadership was to transfer him to the Social Supervision Subunit where he would be in charge of "non-operating plan" activities, including the management of Oswaldo Alva's campaign for mayor. Rojas abruptly left the PEPP staff in January 1988 when he was formally charged with responsibility for the missing funds.

Rojas's successor as Administrator, Félix Gutarra, proved more competent, although unconditionally loyal to Director Barreto. Apart from policy constraints, Gutarra's difficulties in meeting CSRSM objectives were more financial and time constraints than administrative ones. By this time AID was seriously concerned about proper accounting for funds disbursed both during Gutarra's tenure and before, and thus demanded documentation of expenditures from previous disbursements as a condition for future disbursements.

One of the reasons for these more rigid controls was that it was clear that some of the funds were being used for road construction and other improper purposes, but this was a policy problem, not essentially an administrative one. The result was repeated delays in programmed disbursements which held up meeting CSRSM objectives during the times for which they were programmed.

Another serious problem was time constraints. Although Project extension to 1989 or 1990 had been proposed as early as 1985, the delays in getting this extension approved, and the subsequent short term stopgap extensions, left the future of CSRM unclear up until the very last minute. Given this uncertainty, some of the more competent technicians preferred to submit to political pressures and look for employment elsewhere rather than fight to keep their positions and continue their good work. Moreover, even those who stayed were unwilling to commit themselves to Valley residents and others, as was PEPP generally, since there was no certainty of being able to continue more than a few additional months.

Finally, when CSRM II budget figures became known, there was general disillusionment, since the amounts budgetted were clearly inadequate to continue operations as before. Some streamlining was inevitably necessary, but the lack of commitment to continue a reasonable level of effort in CSRM II convinced many key technicians and Project leaders that there was little future in the Project, and their efforts diminished accordingly.

CSRM Organizational Achievements

Any large government organization with corresponding bureaucracy is always cumbersome. This was certainly true in the Palcazu program of PEPP and even in AID during the time of CSRM. Moreover, the verticality of such structures is always a problem. When goods and services are disbursed, those nearer the top of the structure tend to be favored over those nearer the bottom, and similarly, those outside the structure--the presumed beneficiary population--seldom derive benefits on the scale of those obtained by those within--the Project staff.

During the period of execution of CSRM, all of these problems continued to plague the Project and inhibit possibilities for meeting CSRM objectives. Nevertheless, the experimental character of the Project, and the relative autonomy it had with respect to other agencies of the public sector as a Special Project, made possible some innovations which should serve as references at least, if not as models, for other projects in future.

Those changes which were made often followed political criteria rather than considerations of executional efficiency. Moreover, in actual practice the Project did not always work according to design, and many of these changes were difficult to put into practice; Project staff often ignored them either intentionally or carelessly. However, some of the innovations in CSRM organizational structure deserve special attention for their unique and sometimes effective character.

One unique feature of CSRM was the hands on participation of grant funded ex-patriate advisers under the technical assistance program in all levels of CSRM activity. Our presence was not to inspect and evaluate progress in meeting Project objectives, but most importantly to orient and train both PEPP staff and Valley residents. At times our role was resented by those who had other agendas or something to hide, but more often there was a recognition on the part of all or most involved that we were supportive of Project efforts and compensated for many of the deficiencies.

Many of the CSRM achievements owe more to adviser effort than to PEPP staff effort, but PEPP staff and leadership tended to prefer to claim credit for these positive results themselves and therefore appreciated our silent collaboration. This arrangement was as it should have been, since the role of the advisers was to see that Project objectives were met, not to claim credit for them.

Not all advisers who played a positive role in this sense were ex-patriate. Notably, during most of 1988, when the TSC budget no longer allowed for a full team of ex-pat advisers, and these were replaced by Peruvians in activities in support of the Yanasha Forestry Cooperative, the results were equally encouraging. However, these Peruvian advisers worked together with the ex-patriate advisers and often had been oriented by them beforehand either in the Project or elsewhere.

One of the positive features about having separately funded advisers in such a Project is that there are always expenses that are not budgetted for or activities not specifically allowed for at a given time in the more regimented Project plans, but which arise with urgency and need to be addressed. Advisers tended to have more freedom of budget, movement and work plan and could often cover gaps or deficiencies in ways that made things work. For example, loans or trips out of the Valley to acquire important materials which were unavailable in the Valley at the moment they are most needed.

This adviser frequently provided gasoline for Project boats, when the Project had no gasoline and subsequently recovered it from the Project. The crops and livestock advisers frequently bought tools used in the extension program, when the Project had not foreseen this need, and subsequently billed the Project, eventually recovering their output of funds.

An important area in which organizational policy changes favored the accomplishment of CSRM objectives was in the area of beneficiary population participation in CSRM planning and decision making and, generally, the level of communication between PEPP and both the natives and the colonists of the Palcazu Valley.

Strategically, PEPP functionaries and APRA party leaders considered this policy a means of promoting Party and Project hegemony over the grass roots organizations, both civic and economic. But neither colonists nor natives were willing to play a submissive role, and both demanded increasing representation and participation. There were many attempts to manipulate both groups which almost always failed.

Beginning in 1987, at the insistence of this adviser, and with strong support from CSRM Project Manager, Ray Waldron, the PEPP leadership, reluctantly at first, agreed to allow representatives of the Yanasha Forestry Cooperative and of FECONAYA to attend PEPP-AID coordination meetings, and eventually planning sessions over the 1988 Operating Plan and a range of other Project activities.

Many PEPP leaders considered these meetings to discuss PEPP policy as a sort of window dressing, while the most important decisions were made in Party meetings. This of course was true, but those meetings and planning sessions that did occur offered a forum for substantially wider communication than had been the case previously.

As a part of this policy of wider communication, FECONAYA was asked to designate a representative to be put on the Project payroll, provided a small office in Iscozacin, and serve as full time Coordinator between the Project and FECONAYA. This was done, and although there were some difficulties, it provided for much smoother Project operations vis a vis the native communities of the Palcazu Valley.

In late September 1986, this adviser participated, along with five other representatives of the Palcazu program of PEPP in the Rimanakuy or "chief to chief" meeting in Pucallpa organized by the Ministry of the Presidency. This meeting, although organizationally flawed, provided an important forum for communication between the Peru's native communities and the government and essentially committed the government to dialogue. Thus it became a landmark in efforts to achieve greater communication between the APRA administration and the native communities and their regional organizations.

Following this policy on a local level, PEPP representatives began to become more actively involved in FECONAYA meetings and other Valley and regional forums provided by the native communities themselves. Prior to 1986, PEPP participation in FECONAYA events had been minimal both because of PEPP disinterest and FECONAYA restrictions.

In October 1986, two representatives of the social supervision subunit, Eduardo Paucar and Adela Reátegui, and the

forestry unit chief Nora Carrillo accompanied this advisor to a FECONAYA assembly, where we were allowed to be present for only a part of the deliberations, and mainly to present PEPP's positions on specific issues.

In successive meetings, this involvement increased to the point where in the July 1988 FECONAYA Congress held in Laguna, not only most members of the social supervision subunit and three advisers, but also the PEPP Executive Director, the Palcazu Director and Deputy Director, the Administrator, all PEPP unit chiefs, the forestry district chief, and the mayor of the Palcazu District were present and most of them for the entire four days of deliberations, during which there were frequent strong criticisms of PEPP actions and fruitful discussion of each issue. At this Congress FECONAYA welcomed the presence of all PEPP representatives during all discussions, which were completely open, even though some of those present were considered hostile to FECONAYA. Such an event could never have occurred during Edmundo Del Aguila's tenure as PEPP Executive Director.

Moreover, the dialogue was not limited to FECONAYA meetings. Extension meetings after mid 1987 consistently included all native promoters, later called communal promoters, even in planning sessions to hash out problems. Whereas, previously, they would have been summoned only to receive the classes provided in each CDR. A similar pattern emerged among health promoters, with the enthusiastic support of Dr. Tam. And in the social supervision subunit, there were efforts to incorporate community representatives, storekeepers, those responsible for various grass roots organizations and projects in a number of policy planning sessions.

Structural reorganizations within the Project also produced models which in varying degrees proved effective and provide a useful experience for future Projects. One of the most significant of these was the reorganization of the extension and social development programs in 1986. The participation in this program of the native promoters as representatives of their communities has already been mentioned.

Apart from that the structural importance of the change is the grouping of all extension agents as a team in a single unit, rather than having separate extensionists working sometimes at cross purposes with each other in agriculture, livestock, forestry, and social development. While the system did not function entirely as was designed, the problems were in policy and personnel, not organization.

Important changes in extension methodology began in 1987 with the input of extension adviser Walkinshaw. Coinciding with the new emphasis on beneficiary population participation in Project organization, the new approach emphasized two way,

immediate and existential communication, in the field rather than in the classroom. New emphasis was also placed on land use management as a whole, rather than the separate "technological packages" as discrete units of extension content. Toward CSR termination, there was a much clearer awareness of the need to incorporate sound forestry extension into an integral land use management program.

The reorganization of the health program and resulting successful training of Yanesha Indians and some colonists as rural health promoters has gained national attention. As a result, seven of these health promoters have been placed permanently on the Ministry of Health payroll, so that the continuation of their services to their communities is assured.

After evaluating this model, the West German Foundation for the Natives adopted it to continue similar health training activities in the central jungle, including the upper Palcazu watershed. Unfortunately, they too have withdrawn from the area. However, there is interest among both Ministry of Health officials and NGOs to reproduce this model for providing health services in other parts of Peru and the world.

Among Valley residents the most important organizational achievement of CSR is clearly the Yanesha Forestry Cooperative. In an extraordinary effort at grass roots organization, representatives of five Yanesha communities of the central Palcazu Valley and of FECONAYA formed an organizing committee in February 1986. The statutes were approved and the Cooperative formally launched in June 1986 with 70 initial members.

The success and rapidity of this organizational process can be attributed to "the direct participation of the natives in all aspects of planning and implementation" of the Cooperative (Simeone 1986: 6; underscored in the original). This experience is described in more detail elsewhere (Moore, 1987). At CSR termination there were 121 Cooperative members from seven Yanesha communities in the Palcazu Valley.

Among other successful grass roots organizational successes were the communal stores of which nine were carried to fruition; three others were attempted but never fully launched. These stores were begun with minimal capital provided by the communities themselves and/or small loans. Subsidies were provided from the Project, which covered some freight costs and, in some cases, modest compensation to storekeepers for their time and work. The communities provided seed or sometimes bailout capital and mostly volunteer labor.

The result is that in two years two of the stores were flourishing as successful businesses competing effectively with colonist operated stores. If indeed two of the stores had closed

and, at CSRM termination, were awaiting fresh capital before reopening, the empresarial organizational training has been very effective, and the losses--occasioned by excessive credit and small thefts--provided useful experience. The importance of adequate training in this process was also demonstrated.

Among other successful CSRM grass roots organizational experiences are the FECONAYA revolving medicines fund, the medicinal herbs garden, community mothers' clubs, and a communal dining facility--mainly used by visitors, in Laguna.

Although FECONAYA and its predecessor, the Amuesha Congress, have been around for 20 years, it is fair to say that the presence of CSRM within its sphere of activity has gone a long way to strengthen it and make it more representative of and responsive to its member communities' needs and priorities. Moreover, the interaction between FECONAYA and PEPP had a salutary effect on raising consciousness in both organizations. This was not a CSRM objective, but it was a result.

The process can be seen in two stages. In an initial stage the relationship was one of confrontation and generally of contradictory positions and interests. The PEPP leadership wanted to bring in colonists and a road, while FECONAYA wanted land titles and protection from invasions. Later, there was a period of productive dialogue, brought on in part as a result of the successes of CSRM in meeting some important FECONAYA needs and priorities, including land titles, grass roots economic enterprises, training experiences, etc. In both the confrontation and the dialogue both sides learned important lessons and both sides improved their organizational forms.

Some grass roots organization also occurred among the Palcazu Valley colonists. The Iscozacín Development Committee sprang up in part to respond to PEPP's attempts to manage the townspeople's affairs for them and not take them into consideration. One of the main issues of contention was the water system, long promised but never delivered. In the battles that ensued, needs were made known and mutual responses were necessary. As a result the townspeople of Iscozacín gained more participation in PEPP decisions that affected them and organized themselves more effectively.

The other grass roots organizational efforts made among colonists were the new "cooperatives" of which one, the Pan de Azúcar Agro-forestry Cooperative, had consolidated some usually individualistic colonists into a more effective organized effort, even though their objectives were to some extent in contradiction with other priority objectives of CSRM.

CSRM Operational Achievements

The most important achievement of CSRM, in the light of the original plans of the Belaúnde government, was the prevention of widespread colonization and deforestation in the Palcazu Valley. The physical presence of a large Project staff with alternative development options, and with a forest district staff to more carefully regulate spontaneous settlement and deforestation were important factors here as were the repeated studies and demonstrations that there was virtually no land suitable for colonization left in the Palcazu Valley.

The penetration road was and continues to be a major threat to the Valley forests, which in the absence of CSRM might have been rapidly destroyed by action of Yanesha Indians in need of an economic surplus as well as colonists and loggers from outside the Valley. Some spontaneous deforestation of community, colonist and State-owned protection lands did occur during this period, but the CSRM forestry development options, too slow to be put into practice, nevertheless did raise expectations and slow the conversion of community forest to pasture.

Ultimately, and in spite of deliberate delays and avoidance of the issue during the early years, nearly all Yanesha Indian-occupied lands in the Palcazu Valley were granted legal titles to their lands. The 10 Yanesha communities in the immediate CSRM Project area had all had been titled by 1983, in fulfilment of the condition precedent of the Grant Agreement. Also, the titles for all ten of these communities were recorded in the Public Book of Deeds in Huamcayo, nine of them in 1986 and one, Alto Lagarto, in 1987.

The land titles for the communities of Hauswald and Enock/Flor de un Día in the lower Palcazu, which had been avoided and stalled for so long in the early years of CSRM, were finally granted in 1987. The colonists who had been settled in Enock/Flor de un. Día lands by the Pichis program of PEPP, remained there, while additional, less productive upland was added to their territorial base.

Similarly, the upper watershed communities of Machca Bocaz and Palma Bocaz, the Huacamayo community on the upper Pachitea River--invaded by members of the "Israelita" religious sect--and two other Yanesha communities near Villa Rica received their land titles in 1987.

In addition, two new Yanesha communities, Unidad Yanesha, adjacent to Hauswald in the lower Palcazu Valley, and San Francisco de Azupizú in the Pichis headwaters were recognized in 1988 as native communities and titling procedures were underway at CSRM termination. Two Palcazu Valley communities, Nueva Esperanza and Shiringamazú formally requested territorial

amplification in 1988, and these requests were pending in the Ministry of Agriculture.

All of these land titling efforts received support in varying degrees from CSRM efforts, including, in most cases cadaster work in the field, soil analyses, land use capability classification, etc. This is true even in those communities formally outside CSRM jurisdiction. This progress responded more to the organized efforts of FECONAYA than to the initial objectives of PEPP. However, with the benefit of a new perspective which came with the new government, these achievements ultimately were possible.

Community lands were also defended via a number of mechanisms, not the least of which has been community organization and self defense, with PEPP representatives frequently present and encouraging the shared solution of the problems. With CSRM support many communities of the Palcazu Valley have more clearly established the boundary markers and signs which show where the property limits are. The communal stores have also had an important role in community land base defense.

In addition to the native communities, a substantial number of colonists received adjudication contracts in the Palcazu Valley. Most of these were already established colonists, although some were brought in by PEPP or spontaneously settled in the Lagartillo and Huampumayo Rivers of the lower Palcazu basin. Some members of the PEPP staff working in CSRM were among those who obtained these adjudication contracts to lands they had begun to cultivate in the Huampumayo and Lagartillo areas.

One of the most significant achievements of CSRM was the establishment of the Yanasha Communal Reserve. Although Peruvian forestry legislation has permitted these units since 1975, and one or more had been proposed for this area since that time, none had been created nor even contemplated in the CSRM Project Paper of 1982.

A mechanism for setting aside mainly protection capability land as a hunting preserve in benefit of the ten Palcazu Valley native communities, it also serves as buffer zone for the Yanachaga-Chemillen National Park, which it borders, thus protecting these slopes against deforestation and inappropriate use. It is now serving as a model for similar communal reserves proposed for a number of locations elsewhere in eastern Peru.

In this effort, there was excellent collaboration between the PEPP Protection Unit, the Palcazu Cadaster Unit, the PEPP Executive Direction, advisers, and Ministry of Agriculture officials at all levels, which permitted an effective follow up and achievement of the objective in May 1988.

The Yanachaga-Chemillen National Park itself is a major CSRM achievement. This proposal also dated from the mid-1970's, and it was a CSRM objective from the start, included in the Project Paper. Although initial proposals recommended that a total of 225,500 hectares be included in this Park in a range extending from the Cacazu area to the Codo de Pozuzo (Smith 1977a; Dourojeanni, 1981), given the agricultural and cattle interests in the northern portion of this area, it must be considered a major success that the current Park, including 122,000 hectares was in fact established in August 1986.

A Master Plan for the management and development of the Yanachaga-Chemillen National Park was elaborated with AID and The Nature Conservancy support and officially approved in September 1987. This document, in the opinion of this adviser, is of superior quality to a similar Master Plan for the management and development of the Manu National Park, where there had been more previous experience.

The creation of the San Matias-San Carlos Protection Forest, with a total extension of 145,818 hectares, legally protects the eastern flank of the Palcazu Valley from inappropriate land use, deforestation and erosion generation. This unit was formally created in 1987, and there have been concerted efforts to relocate sawmills and spontaneous coffee growers from the territory.

Together with the Yanesha Communal Reserve, these two conservation units have effectively closed off the vast majority of the State-owned fragile lands in the Palcazu watershed from the threats of colonization and timber extraction. One major danger remains, however, and that is the proposal by the mayors of Huancabamba and Oxapampa to build a road from the Tunqui area, near Huancabamba, across the Yanachaga National Park and the Yanesha Communal Reserve to the Chuchurras River, where it would connect with the penetration road from Villa Rica to Iscozacín.

If this road were to be built, with the accompanying invasion of 1200 colonist families promised by the mayors, it would effectively undo the benefits of these achievements. However, the current opposition in the Ministry of Agriculture, CORDEPASCO, PEPP, and other sectors of the government to this project, may be attributed in part to the consciousness raised by CSRM efforts in this regard.

The Yanesha Forestry Cooperative, in addition to its importance as an organizational achievement, constitutes a major operational input of CSRM; indeed, it has been the main focus of CSRM effort during the past three years. So far, we can claim credit for the successful completion of the detailed topographical mapping of the first production forest blocks and strips, by the Yanesha Indian members of the Cooperative.

Obviously, they had important technical orientation and support from both advisers and the PEPP technical staff, but the work was essentially conducted by them and not for them.

The importance of this shared productive effort, in addition to the organizational achievements, is that it has permitted another major achievement, the commitment of more than 4000 hectares of production forest from seven native communities in the Palcazu Valley to the sustained yield natural forest management plan, and once its success and operational capacity are more concretely demonstrated, the communities are prepared to commit much larger extensions of forest to the plan under Cooperative management.

Thus, until these forests are exploited by the Cooperative, they will be left intact. Several communities, most notably Shiringamazu, have overcome major internal struggles and agreed to require individual members of the community to relocate their agricultural plots to more suitable areas, thereby respecting the Cooperative's forest management plan. This comes at a time when there is increasing pressure of these communities to sell their wood to truckers coming in from Villa Rica who offer them immediate payment for standing timber, something the Yanesha Forestry Cooperative is not yet able to do to the extent necessary.

The achievements in infrastructure construction for the Yanesha Forestry Cooperative have been a slow, tedious, shared experience between the Cooperative members themselves and PEPP staff under the supervision of advisers. A number of important design experiments have been made, and we now have a much better knowledge of what works and what does not work. This experience, in addition to its immediate benefit for the Yanesha Forestry Cooperative, will be useful for attempts to reproduce the experiment elsewhere.

Once the Yanesha Forestry Cooperative is demonstrated to be successful--if it is--it will provide a model for ecologically sound and sustainable forest management which could create a revolution in tropical forest management in the world and eventually spare many millions of hectares of primary tropical forest.

Additional concrete operational achievements include the technical input provided by CSRM efforts to improve agricultural and livestock production in the Palcazu Valley. Through the credit in kind program, a substantial number of Valley residents have become beneficiaries of this program, and introduced tropical hair sheep, robusta variety canephora coffee, and pifayo palms in addition to achiote, mostly acquired independently, in addition to the agroforestry and pasture improvements efforts, also oriented by the CSRM extension program.

These achievements will probably not reflect a favorable balance under any normal short term and localized quantitative cost-benefit analysis, but they must be seen in the context of the whole system and the experience itself. Here, a technically substantiated model has been tested in the field and demonstrated to work, stressing the use of the best lands for subsistence production and the hillsides for the hair sheep, permanent crops, etc., for market production.

To any serious analyst having similar objectives, this model offers a tested and effective alternative to the "green revolution" and some of the other schemes that are being proposed around Peru and the world. Its primary benefit is that it is designed to assure low input sustainable subsistence as its first priority, and market production as a second priority, in contrast to most models which lend themselves to excessive and too intensive market production at a cost of the loss of the subsistence base and a resultant dependency on ever more intensive market production. And this too often means progressive impoverishment and malnutrition.

The formal PEPP continuous land use inventory which should have accompanied these forestry and agricultural achievements was in its incipient stages when CSRM terminated. This was an aspect of the Project which always received short shrift, and only in the last year was any significant work done. However, it does constitute a start which should be followed up.

Parallel to this effort, and not satisfactorily coordinated with it, was the elaboration by most of the Yanesha Indian native communities of the central part of the Palcazu Valley of their own land use inventory and maps of their future land use options. This was done in response to both the efforts of advisers and the requirements of the Yanesha Forestry Cooperative.

Among the social programs for which CSRM can claim substantial achievements is the health program. As reorganized under the direction of Dr. Tam, with substantial orientation from Stocks, this program developed into a first rate rural health program, in which we now have four advanced health technicians, another 12 with moderate level training and an additional 10 with some practical field training under supervision. It would be difficult to find a rural health program which has accomplished so much. The trained Yanesha Indian health workers can operate pedal dental drills, perform minor surgery, diagnose the most common illnesses, provide appropriate medication from a revolving medicines fund which they themselves manage, and perform many other essential skills. The ELAS group is now in a position to train future health workers in the Valley.

Moreover, there are now five functioning and reasonably well equipped health posts in four native communities and in Puerto Mairo, in addition to the health center in Iscozacín. Three of these have cold chains to preserve vaccines and pedal operated dentist drills. To complement this equipment, the Iscozacín Health Center now has high speed dental equipment and X-Ray equipment. The latter is awaiting the construction of an annex to the Health Center to house it.

Five technical high schools have been established in the Valley and partially staffed with Ministry of Education personnel, partially with PEPP technicians. While questions might be raised about the quality of these schools, a substantial number of Yanesha Indians and colonists have gained access to a secondary education which was not locally available to them prior to CSRM. These schools are equipped with basic furnishings and some books.

Moreover, a scholarship program covered the costs of secondary school completion programs for five or six Yanesha Indians in Pucallpa and Villa Rica, while ten Valley residents, among them both Yanesha and colonists, were attending a Technology Institute in Oxapampa in 1988, on CSRM funded scholarships.

More than 20 bilingual education booklets were published in editions of 100 by ABBY with CSRM support, and this program was recognized by the Ministry of Education in 1988. The Ministry also trained some of the ABBY staff in Lima in early 1988, and funded the publication of two bilingual readers in editions of 1000 each, thus facilitating a more widespread distribution in bilingual Yanesha community schools.

Personnel Trained by CSRM

During more than five years of CSRM activity in the Palcazu Valley, more than 1000 people have been a part of the PEPP staff there at some time during the CSRM Project. The experience gained by these Peruvian technicians and workers is unique in the world. Almost none of them had had significant tropical forest development experience previously. Now, many of the former members of the PEPP technical staff in CSRM have important positions in other governmental and NGO agencies and projects elsewhere in eastern Peru where their CSRM experience will be incalculable.

Many of these technicians were initially sceptical of CSRM objectives and now fervently embrace them based on their experience in the Palcazu Valley. Many of the unskilled PEPP staff have similarly been convinced of the merits of natural resource management as a viable perspective. This has become increasingly evident to me in conversations with former laborers

from the PEPP staff who have come to Lima or whom I have encountered elsewhere since they left the Palcazu Valley.

Another 400-500 Palcazu Valley residents have had direct experience in CSR activities, as full fledged staff members; in service trainees; scholarship beneficiaries; participants in specific CSR programs as Yanesha Cooperative members and/or workers, communal promoters, health promoters, communal storekeepers, teachers and bilingual education specialists, herbalists, and participants in grass roots organizations which have coordinated their activities with PEPP and other CSR staff. Most of them will remain in the Valley and continue to contribute to its future development with the benefit of their CSR experience.

Those of us who have served as advisers under the technical assistance program have learned a great deal about what works and what does not work, and also about how to make things work that nobody else believes will work, in an immediate and concrete practical laboratory. All of us will employ that experience in our future activities to great advantage. And all of us have a much broadened philosophical perspective in light of our experiences.

Among the skills transferred as a result of CSR, the Yanesha Forestry Cooperative offers an impressive and substantial record of how jungle Indians, almost none of whom had more than primary level formal education--or perhaps because they had not been sufficiently contaminated by Peruvian secondary and higher education--proved themselves extraordinarily keen observers and quick learners and must now be considered the equivalent of middle level technicians in any industrial enterprise.

We have a Forestry Cooperative staff which is fully capable of operating complex sawmill, wood preservation, mechanical and other equipment in a safe and efficient way. Of special significance is the ability and seriousness with which the Pres Cap staff now handles toxic chemicals with care and respect, demonstrating an understanding of the dangers of sloppiness in handling these chemicals. Indeed, the two minor mishaps that occurred with the CCA salts were caused by PEPP technicians, not Cooperative personnel. And in one of these instances, the Forestry Cooperative staff found a solution to the problem before the PEPP staff did.

Seven members of the Yanesha Forestry Cooperative are now able to conduct topographical surveying, produce technically drawn maps and plans of production forest blocks and the strips included, and also explain these procedures to others with clarity and precision.

Another group has the ability to manufacture charcoal in the appropriate kilns, while the carpentry team has already produced everyday practical furniture--tables, beds, etc.--of respectable quality. Two Yanesha accounting trainees now completely handle the bookkeeping for the Cooperative, under the supervision of a professional accountant, and others can handle other complex administrative responsibilities. In the field, chainsaw, winch, and other equipment operation are skills shared by Cooperative members. And two operate motor vehicles for which they have licenses.

The success of the health promoters program is a testimony to the level of skill acquired there. This program is being copied by a number of NGOs and other agencies and has inspired great interest in the Ministry of Health. At some point, trained Yanesha Indian health workers may be able to teach their skills and forms of organization to others in rural areas of Peru.

Similarly, the Yanesha who have served as communal promoters have mastered many of the complexities of land use management and can map their own communities.

Approximately 25 storekeepers in nine communal stores have undergone accounting and administrative training and have kept their books in order, along with monthly balance sheets. The same is true for the organizers and persons responsible for the revolving medicines fund, and several other grass roots economic organizations.

Leadership skill has increased markedly among Yanesha Indians and colonists in the Palcazu Valley. Often this has been in spite of the Project's deficiencies or sometimes, in confrontation with the Project as advocates of their rights and needs. Nevertheless, FECONAYA is one of the best organized and most effective regional native organizations in Peru today, and part of that ability has come out of their experience with PEPP and other CSRSM protagonists.

CSRSM at Project Termination, 30 September 1988

Some of the most important CSRSM objectives and others which had not initially been contemplated as CSRSM objectives had been met by Project termination date. An alternative model of sustainable natural resource management had been tested, and appears to offer excellent prospects for success, especially if some of its elements are carried through to completion.

The Palcazu Valley penetration road, which was the GOP's most important initial objective in CSRSM, has been extended north to the Chuchurras River and has a firm base as far as Iscozacín. This road was almost entirely funded by USAID under PL 480 funds and maintained with equipment acquired under the CSRSM agreement.

This road passes through the communal territories of seven Yanesha Indian native communities whose lands are thereby threatened with invasion by outsiders, although CSRM presence has inhibited that process to an impressive degree.

A more immediate problem is the forest resources opened up by the penetration road and which are extremely vulnerable to short-term market pressures which tend to generate irrational use and depredation of these resources.

Land titles and usufruct contracts over forestry concessions had been granted all of the Yanesha Indian native communities, which had been recognized by the State when CSRM began, and two additional Yanesha Indian native communities had been recognized with land titling procedures underway by CSRM termination. Moreover, the titles for 10 of these communities within the immediate CSRM Project area had been registered in the Public Book of Deeds in Huancayo, and land base defense measures had been adopted in most of the communities.

The land titling efforts for the two new communities, Unidad Yanesha and San Francisco de Azupizú need to be followed up until the titles are finally granted, as do the requests for territorial amplification by the Nueva Esperanza and Shiringamazu communities. The titles for these and nearly all of the Yanesha native communities outside the immediate CSRM Project area need to be registered in the Public Book of Deeds in Huancayo to avoid careless or intentional superimposition of contradictory claims.

Three important conservations units had been officially created and programs elaborated for their management and defense with both CSRM and NGO support. These include the Yanachaga-Chemillen National Park, the San Matías-San Carlos Protection Forest, and the Yanesha Communal Reserve. The last of these is the first of its kind in Peru, and it is already serving as a model for similar units elsewhere in the Peruvian jungle.

Native communities in seven of the CSRM Project area had determined their own land use capability, set aside production forest and formed committees to elaborate land use management plans, based on their detailed knowledge of their own lands and natural resources. This effort needs to be carried through to completion.

The Yanesha Forestry Cooperative, a unique and complex grass roots forest industry enterprise involving Yanesha Indians from seven native communities, had been organized and officially recognized by the appropriate GOP agencies. Production forest for the accompanying sustained yield natural forest management plan had been designated and mapped, while the first three strips had been partially processed by CSRM termination. Experimental test strips in Iscozacín had demonstrated the regenerative

capacity for clear cut strips, according to this model, which augurs favorably for the eventual success of the model, if it is allowed to be carried to its conclusion.

Basic infrastructure for the industrial plants of this industrial experiment had been partially completed, including a basic sawmill plant, Pres Cap post preservation plant, charcoal ovens, carpentry workshop, administration offices, and staff dormitory and dining room. About six kilometers of forest access road had been built in three communities.

Here, however, I would like to stress what has not yet been completed. The Pres Cap plant requires expansion, including the north wing, with the installation of the remaining caps, especially the larger ones which have not yet been tried out, and the whole structure put under a new roof with greater slope. Some modifications, recommended by adviser Illsley, should be made in the hydraulic and pole transport systems.

Additionally, modifications are required in the sawmill plant, and a new shed with installations is required to make the resaw functional. Drying rack areas for both the sawmill and Pres Cap plants need to be put under roof, and the carpentry workshop needs to be expanded and better equipped. The charcoal plant needs to be reassembled and put back into operation, as does the pole testing system.

An additional 10 to 12 kilometers of production forest access road need to be constructed to assure that available production can be processed. Care must be taken to assure that the road routes and quality respond to the needs of the natural forest management plan and not to other criteria.

The capital goods purchased for the Yanesha Forestry Cooperative need to be transferred to it by the GOP. These include the platform truck, purchased and delivered to PEPP, but not yet received by the Yanesha Forestry Cooperative. Additional transportation facilities will probably also be required if a satisfactory volume of production is to be met and sustained.

A much larger reserve capital fund needs to be created--and perhaps can be self generated--to cover capital infrastructure maintenance and replacement costs. Moreover, capital reserves need to be set aside and optimally used to buy timber at the most advantageous times from the communities and elsewhere in order to both protect sources of supply and assure the continuity of the sustained yield natural forest management plan in the face of increasing pressures for more immediate short term benefits at the expense of long range resource sustainability.

Substantial and impressive progress has been made in training the Yanesha Indian members of the Yanesha Forestry

Cooperative in all aspects of production operations and administrative functions. These trainees have learned with extraordinary rapidity and facility. Particularly impressive in this regard is the care and respect with which toxic chemical are handled for the post preservation process. However, prolonged and continuous additional training will be required before such a technologically complex and potentially dangerous industrial process can be consolidated to the point of safe and efficient autonomous operation. For this purpose, five to ten years of continuous additional technical assistance is still required.

Other important grass roots economic enterprises have been established and with them important empresarial experience has been gained by Yanasha Indian native communities and their representatives. These include Agro Yanasha, the communal stores, the revolving medicines fund, and a communal dining facility at Laguna. Other grass roots activities supported by CSRM include ABBY, the medicinal herbs garden, community mothers' clubs, etc. If these efforts are abandoned under current conditions of inflation and economic unpredictability, given the limited amount of training received so far and the precariousness of the level of working capital, many of these enterprises will fail. Even so, valuable experience has been acquired which will be extremely useful in future grass roots economic development efforts both in the Palcazu Valley and elsewhere.

A first rate health program has been carried out and a corps of native and colonist health workers has been trained, with seven of the trainees now put on the Ministry of Health payroll and some assurance that the program will continue, even in the absence of additional training. Five new health posts and the Health Center at Iscozacín have been constructed, equipped, staffed by the trained health workers. A revolving medicines fund makes more accessible to these communities a supply of commercial medicines, which the trained health workers know how to administer.

Ideally, additional training is required to effectively consolidate the program. The high speed dental equipment purchased under with loan funds can not yet be used in the Iscozacín Health Center for lack of training of the staff in its use. Similarly, X-Ray equipment which has been received but not yet installed in the Iscozacín Health Center.

Technical high schools have been established in five remote areas of the Palcazu which make secondary education available to several hundred Valley students for whom it would not be available otherwise. CSRM technicians have collaborated in the teaching program in these schools, thereby transferring some of the CSRM natural resource management experience to the students.

An additional 16 Yanesha Indians have benefitted from CSRM scholarship programs which have permitted completion of their secondary education and some additional higher education experience in area technological and pedagogical institutes. There is still a need for support for scholarships for Yanesha Indians to pursue higher education in Lima and regional capitals.

An important agricultural and livestock extension program was designed and carried out with important achievements and significant deficiencies. Among the former are experience with appropriate alternatives to beef cattle production, including pasture renovation and agroforestry activities, the introduction of tropical hair sheep, the commercial production of robusta variety coffee, pifayo palms, achiote, and a number of tropical fruits. The deficiencies include the inability to consolidate an effective forestry extension component into the program.

If abandoned at this point, this extension experience is far superior to those being conducted under the aegis of INIPA and other agencies. Moreover, it is an experience which has emphasized the needs and priorities of the people of the Valley themselves over the needs and priorities of the external market.

A satellite communications component was originally contemplated as a CSRM objective but never carried out. Given the potential for politicization and misuse and the limited benefits that would be provided Palcazu Valley residents, that is probably a very good thing.

At this point the most serious problems that need to be addressed with respect to CSRM are:

1. meeting the commitment to the Yanesha Forestry Cooperative, leaving it fully implemented, trained, and functioning, thus avoiding social and environmental disaster which would be a public relations disaster for AID and PEPP;

2. preventing the violation of the new conservation units by road construction over the Yanachaga mountains through the Yanachaga-Chamillen National Park and the Yanesha Communal Reserve, which would be accompanied by massive timber extraction and colonization of unsuitable lands, before appropriate land use management concepts are fully established and functioning;

3. overcoming external divisive pressures among the Valley population, inspired mainly by the previously mentioned proposals and parallel "cooperative" schemes, which tend to block effective sustainable forestry development, land use management, and consolidation of grass roots native and colonist organizations.

4. depoliticizing technical decision making affecting the development of the Palcazu Valley.

V. CONCLUSIONS

Substantial progress has been made in meeting CSRM objectives and a unique and impressive experimental model for tropical forest natural resource management has been developed which can be adapted, expanded upon and improved elsewhere. However it cannot be left at that.

Under CSRM and the earlier grant agreement, both AID and the GOP took the responsibility for the construction of a penetration road, which will never be justified in any cost-benefit economic analysis, quantitative or otherwise, and thus opened up previously intact primary tropical forests to the dangers of widespread misuse and subsequent erosion, silting of waterways, loss of wildlife, etc., not to mention the territorial base of the original inhabitants of the land. Therefore, it is AID's and the GOP's moral responsibility to assure that effective natural resource management policies are continued in the Valley and that an ecologically sound alternative forestry development program, such as that developed by CSRM, be continued via the Yanasha Forestry Cooperative.

This responsibility cannot honestly be avoided under pretext of security precautions. If the assurance of absolute safety for a few advisers, be they ex patriate or Peruvian national, is considered more important than prospects for the conservation and effective management of an entire watershed which sustains the livelihood of 8000 people, then we have a distortion of values.

Clearly, better security information and procedures are required, but decisions with respect to security should be made on the basis of solid information, not rumors. Moreover, security concerns should be the same for Peruvians as for Americans.

CSRM II is seriously underfunded. The corresponding decisions were taken on the basis of political criteria, at a time when the GOP sought greater assistance in developing the Andean Trapezoid. There continues to be a need for a solid tropical forest natural resource management program which should be developed on an integrated regional basis, as was done in CSRM.

CSRM II needs to be revamped and put under different, less politicized local administration with effective and continuous input in decision making by the local grass roots organizations. Important progress was beginning to occur in this respect by the time of CSRM I termination, and it should be continued and expanded.

VI. RECOMMENDATIONS

For Actions within the Palcazu Valley

1. Future action and support in the Palcazu Valley is necessary. This could be administered indirectly, so as not to associate AID's or the U. S. Government's identity with the Project, if that course is preferred, but the Palcazu Valley must not be abandoned entirely at this point. There are several NGOs and international development agencies interested in pursuing these efforts, and they should be encouraged to do so. Satisfactory arrangements and follow up be made to assure that the most important programs be continued.

2. Top priority should be given the implementation, training, and support of the Yanesha Forestry Cooperative, as the most viable option for sustainable forestry management in the Palcazu Valley. The transfer to the Yanesha Forestry Cooperative of the capital goods acquired for them needs to be achieved.

3. Future extension activities in the Palcazu Valley should effectively incorporate forestry extension following the sustained yield natural forest management plan in coordination with the Yanesha Forestry Cooperative. The emphasis should be on integrated land use management rather than on specific technological components, and an effective existential methodology, such as that being developed by Walkinshaw, should be employed. For the agricultural and livestock dimension of this program, Agro Yanesha should be given a greater role and their members adequately trained in administrative, marketing, and agronomy functions.

4. The conservation program for the Yanachaga-Chemillen National Park, the San Matias-San Carlos Protection Forest and the Yanesha Communal Reserve needs to be maintained and developed with direct area population participation in local and committee vigilance committees, conservation education programs, etc. A concrete plan needs to be developed to relocate current occupants or invaders of Park and Protection Forest lands to other locations, such as the Codo de Pozuzo or the Pachitea Valley.

5. Road construction over the Yanachaga mountains and consequent timber depredation and colonization need to be blocked and technical planning and environmental measures need to be taken before the spur road to Iscozacin and the Chuchurras River is extended any farther north.

6. Many of the other sound but still unmet objectives mentioned in Chapter III could be carried to completion, were CSRM II to be continued and reorganized in an appropriate manner.

7. Serious and concrete data on the Palcazu watershed geography, population, productive activities, land use, etc., should be collected in the Valley and these data should be made available to and processed by APODESA.

8. The CSRM experience in the Palcazu Valley and its significance for tropical forest natural resource management elsewhere should be widely publicized.

For Alternative Project Actions, Activities, and Support

1. New tropical forest natural resource management and biodiversity development efforts should be made in other appropriate locations, with the benefit of the CSRM experience.

2. INADE is more suitable than other, more politicized GOP agencies which might administer such projects. Nevertheless, local institutions, particularly grass roots organizations of the local populations should be incorporated into every stage of planning and decision making. In this regard the CSRM experience offers important lessons.

3. Emphasis should be made on developing programs for integral sustainable land use management rather than isolated concrete technological elements. Extension programs can benefit from the structure of the CSRM program and the existential methodology developed by Murray and Walkinshaw, but the key to success is two way communication with the beneficiary population.

4. Funding should be adequate and the commitment long term. Given the present budget possibilities and time limitations of CSRM II, if a new location or locations be selected for carrying out the Project, research and feasibility studies might be more appropriate than full blown Projects at this point.

5. Among possible alternative sites for conservation and appropriate land use efforts, the following should be considered:

a. The Manu area of Madre de Dios, where the Manu National Park has been established since 1973 and where substantial research and some useful infrastructure already exist. CSRM experience could be drawn upon to develop and effect proposals for communal reserves in adjacent areas in the Alto Madre de Dios and Isirihue Valleys which would benefit Machiguenga, Piro, "Mashco Piro", and Amarakaeri populations, long established in the area and threatened by colonization pressures.

Moreover, smaller scale (than in the Palcazu) sustained yield natural forest management programs in the Diamante, Cruz de Mayo, Palotoa-Teparo, Shintuya, Santa Rosa de Huacaria and Queros Native Communities would be a useful alternative to the

prevailing extensive current selective cutting being encouraged by a local Spanish Dominican priest. The native communities mentioned are well organized and are members of the Madre de Dios Native Federation (FENAMAD) with which ample coordination is possible.

The Manu National Park conservation program has been principally funded by the Madre de Dios Development Corporation (CORDEMAD) but recent budget restrictions have reduced their possibilities of meeting their responsibilities adequately. Among programs eliminated in the face of these budget restrictions was an unusually sound native peoples program, which should be continued in some form.

Some support has been provided the Park by the World Wildlife Fund, since the Park's beginnings and this is continuing on a modest scale. Appropriate coordinations with WWF and the Peruvian Foundation for the Conservation of Nature (FPCN) would be necessary. Other NGOs including the Peruvian Association for Conservation (APECO), the Association for the Conservation of the Southern Jungle (ACSS), the Eori Center for Regional Research and Development are also working in the area, and have recently formed a Conservation Coordinating Committee for Madre de Dios, which will meet quarterly for joint strategy sessions and planning efforts.

b. the Tahuamanu region of Madre de Dios where interesting possibilities for integral conservation of endangered Brazil nut (Bertholletia excelsis) and rubber (Hevea brasiliensis) stands along with valuable timber species such as mahogany (Swietenia sp.) and cedar (Cedrela spp.) exist. Currently, widescale selective cutting of the most valuable timber species, including illegal cutting of Bertholletia is proceeding uncontrolled in the area along the road from Puerto Maldonado to Iberia and along the Piedras River.

Moreover, several large companies, including the Zanatti and De Negri financial groups, have entered the area in the last two years and are attempting to acquire vast extensions of land for beef cattle, although this operation is a possible cover for drug operations, which so far have not been common in Madre de Dios. These projects should be blocked if we are to avoid the deforestation of many hundreds of thousands of hectares of primary tropical forest.

A sound forest management plan for this region is a very urgent need. The experience in the neighboring Brazilian state of Acre with extractive reserves granted by the State in support of allied grass roots organizations of rubber tappers, Brazil nut harvesters, and tropical forest Indians has been very positive and has received attention in Madre de Dios. This experience has been given widespread international publicity following the

assassination of the rubber tappers' leader, Chico Mendes, in December 1988. Very similar environmental and social conditions exist in Tahuamanu, and an effort to reproduce the experience here could be an extraordinarily useful move.

Currently, the Tahuamanu area, for the purposes of regional planning, cadaster work, and natural resource management is the responsibility of the Madre de Dios Special Project (PEMD), a parallel institution to PEPP within INADE, but one probably less plagued with political and administrative problems, since they have not previously had a sufficiently attractive budget to produce the institutional tensions and jealousies that might have resulted in situations similar to that in PEPP. PEMD does have some useful infrastructure in previous studies of forest resources, aerial photography and mapping, etc., as well as a small staff and modest equipment.

One problem is that PEMD has always had the traditional colonization focus, and many of their efforts have been devoted to relocating Peruvians from other regions to the Iberia-Iñapari area, where the GOP has geopolitical interests in consolidating a Peruvian population in this border area with both Brazil and Bolivia. If a Project were to be initiated in coordination with PEMD, care should be taken to assure the natural resource management content of the program, as opposed to colonization efforts.

c. the Tambopata-Candamo area of Madre de Dios and Puno, where a proposal for a conservation unit has been included in the Ministry of Agriculture's Plan de Acción Forestal, 1988-2000. This is the Tambopata River basin, which adjoins the Pampas del Heath National Sanctuary, and three Ese'ejá Native Communities, Palma Real, Sonene, and Infierno. Included is the area of the 5,500 hectare Tambopata Reserved Zone, created in 1977 and previously managed by a tourist lodge company, Peruvian Safaris, based in Lima.

This area has a great deal of biodiversity as evidenced from the numerous botanical and zoological studies conducted from the Explorer's Inn Lodge there. The upper watershed, the Candamo area, is an impressive scenic and wildlife area currently threatened by colonization and gold mining pressures from overpopulated highland areas of Puno. The proposal for a conservation unit currently before the Ministry of Agriculture could be improved to include a combination of use possibilities, including complete protection, scientific research, tourism, natural forest management of timber, extractive reserves or other mechanisms for protection and developing Brazil nut stands, among others. The area in question is larger than the Manu National Park and should not be left either to wholesale deforestation nor to a use limited to tourism, as some vested interests are proposing.

Contrary to some tendentious press reports, there has been no "terrorist" activity in Madre de Dios, and the area seems unlikely to become a target area for such activity.

d. the Pacaya-Samiria National Reserve area of Loreto, where extraordinarily rich ichthyological resources occur, in association with aquatic plants, boas, and similar flora and fauna. This reserve of 2,080,000 hectares is virtually unprotected at present and has suffered from the impacts of oil exploration, and invasions by commercial fishermen, among other problems.

e. the Yarinacocha Tourist Reserve area near Pucallpa, where Travel Planners director Conner Nixon has been promoting the conservation of an oxbow lake near the Ucayali River for tourism and recreation purposes. (He owns a lodge there.) Some tension has arisen locally, since several Shipibo Native Communities and other residents are claiming their rights to subsistence activities such as agriculture and forest collection activities for house construction materials, etc., are being threatened by this proposal. An appropriate Master Plan for the management of this area as a conservation unit with substantial local population input in planning and decision making could be a very useful move here. If nothing is done, river dolphins and other aquatic species are severely endangered.

One disadvantage to this last proposal is that, recently, the Pucallpa area has been the scene of some activity by both "Sendero Luminoso" and the MRTA.

.

Whatever decisions are made about the future of CSRM II, the experience of CSRM I has been an extraordinarily important one, from which many lessons have been learned. There have been many conceptual, organizational, and operational errors, and there have been impressive innovations to respond to and correct these errors. The result has been unusual and often very effective adaptations to previously misunderstood, new, and changing realities which offer an example of how rural development work can become more effective, as well as what pitfalls should be avoided.

Since there is an increasingly urgent need for more and better socially sound natural resource management efforts in rural development work, this experience should not be filed away and forgotten.

REFERENCES CITED:

- ALLEN, William L.
1968 A Ceramic Sequence from the Alto Pachitea, Peru.
University of Illinois PhD dissertation in Anthropology. Ann
Arbor: University Microfilms.
- AMICH, José
1988 (orig. ed. 1784) Historia de las misiones del Convento de
Santa Rosa de Ocopa. Monumenta Amazónica B3. Iquitos: CETA.
- APODESA
1987 Notas para la evaluación del recurso forestal en posesión
de colonos y nativos del Palcazu. ms.
- BARCLAY REY DE CASTRO, Frederica, and SANTOS GRANERO, Fernando
1980 La conformación de las comunidades Amuesha. Amazonia
Peruana 3(5): 43-74. Lima.
- BAYLEY, Peter
1981 Fish resources in the Palcazu Valley: effects of the Road
and Colonization on Conservation and Protein Supply. In JRB
Associates. Central Selva Natural Resources Management
Project, Vol. 2, pp. A1-A22. Lima: USAID.
- BELAUNDE TERRY, Fernando
1959 La conquista del Perú por los peruanos. Lima.
- BOLAÑOS, Rafael, and WATSON, Vicente
1981 Report on the Palcazu Valley ecological map. In JRB
Associates. Central Selva Natural Resources Management
Project, Vol. 2, pp. C1-C15. Lima: USAID.
- BRACK EGG, Antonio
1981 Ecological evaluation of the Palcazu River Valley (Pasco,
Peru) and guidelines for an environmental conservation
program. In Jrb Associates. Central Selva Natural Resource
Management Project, Vol. 2, pp. D1-D40. Lima: USAID.
- COPAL, Solidaridad con los Grupos Nativos
1981 El desarrollo de los valles Pichis y Palcazu:
Alternativas. Amazonia Indígena 1(3): 14-23. Lima
- DENEVAN, William Maxfield
1976 The aboriginal population of Amazonia. In The Native
Population of the Americas in 1492, ed. William M. Denevan,
pp. 205-234. Madison: University of Wisconsin Press.
- DOUROJEANNI RICORDI, Marc J.
1981 Management of fauna and wildlife in the Palcazu Valley.

In JRB Associates. Central Selva Natural Resource Management Project, Vol 2, pp. E1-64. Lima: USAID.

DREWES, Wolfram U.

1958 The Economic Development of the Western Montaña of Central Peru as Related to Transportation. Lima: Peruvian Times.

EL COMERCIO

1980a Un gran eje de colonización entre ríos Pichis y Palcazu. 10 August. Lima.

1980b El Perú podría autoabastecerse con recursos de la selva. 11 August. Lima.

FOSTER, Robin

1981 Brief inventory of plant communities and plant resources of the Palcazu Valley. In JRB Associates. Central Selva Natural Resource Management Project, Vol 2, pp. F1-F33. Lima: USAID.

IZAGUIRRE ISPIZUA, Bernardino

1922-29 Historia de las misiones franciscanas y narración de los progresos de la geografía en el Oriente del Perú: Relatos originales y producciones en lenguas indígenas de varios misioneros. 14 vols. Lima: Talleres Tipográficos de la Penitenciaría.

JIMENEZ, Joseph A.

1986 An archaeological reconnaissance of the Río Palcazu. ms. New York: City University of New York.

JRB Associates, Inc.

1981 Central Selva Natural Resource Management Project, 2 vols. Lima: USAID.

LATHRAP, Donald Ward

1970 The Upper Amazon. New York: Praeger Publishers.

MANRIQUE, Manuel

1982 La Peruvian Corporation en la Selva Central del Perú. Lima: CIPA.

MCCAFFREY, Dennis

1981 Environmental Assessment. In JRB Associates. Central Selva Natural Resources Project, Vol 1, pp. A1-A40. Lima: USAID.

MILLER, Charlotte I., and MARTINEZ, Héctor

1981 An analysis of planned agricultural development in the Palcazu Valley, Pasco, Peru: Power relations, land tenure, and resource utilization of natives, colonists, and government workers. ms. Lima: USAID.

- MOORE, Thomas
1987. La Cooperativa Forestal Yanasha: una alternativa autogestionaria de desarrollo indígena. Amazonia Indigena 7(13): 18-27. Lima.
- MURRAY, Gerald F.
1985 Extensionistas y promotores nativos en la selva peruana: pautas para la participación de comunidades nativas en un proyecto de desarrollo. ms. Lima: RONCO Consulting Corp.
- ONERN (Peru. Oficina Nacional de Evaluación de los Recursos Naturales)
1970 Inventario, evaluación e integración de los recursos naturales de la zona Villa Rica-Puerto Pachitea: Ríos Pichis - Palcazu. Lima.
1982 Inventario y evaluación semi-detallada de los recursos naturales de la zona del río Palcazu. Lima.
- ORDINAIRE, Olivier
1887 Les sauvages du Perou. Revue d'Ethnographie 6: 265-322. Paris.
1892 Du Pacifique a l'Atlantique par les Andes Peruviennes et l'Amazonie. Paris.
- PENNANO ALLISON, Guido
1988 La economía del caucho. Iquitos: CETA.
- SALICK, Jan
1987 Ethnobotánica de los Amuesha, Valle Palcazu, Peru. ms. Bronx: New York Botanical Garden.
- SANTOS GRANERO, Fernando
1980 Vientos de un pueblo: síntesis histórica de la etnia Amuesha, siglos XVII-XIX. Licenciado thesis, Pontificia Universidad Católica del Perú. Lima.
1986 The Power of Love: the Moral Use of Knowledge amongst the Amuesha of Central Peru. PhD dissertation in Social Anthropology, London School of Economics. London.
- SIMEONE, Robert J.
1986 Informe final. Tropical Science Center ms. Lima: USAID.
- SMITH, Richard Chase
1977a The Amuesha-Yanachaga Project: Peru. Survival International Document No. 3. London.
1977b Deliverance from Chaos for a Song: a Social and a Religious Interpretation of the Ritual Performance of Amuesha Music. Cornell University PhD dissertation in Anthropology, Ann Arbor: University Microfilms.
1981a Land, natural resources, and economic development of the Amuesha Native Communities in the Palcazu Valley. In JRB

- Associates. Central Selva Natural Resource Management Project, Vol 2, pp. L1-L38. Lima: USAID.
- 1981b La selva peruana: ¿Paraiso agropecuario o desastre ecológico? Amazonia Peruana 1(3) 6-8. Lima.
- 1982 The Dialectics of Domination in Peru: Native Communities and the Myth of the Vast Amazonian Emptiness. Cultural Survival Occasional Paper No. 8. Cambridge, Massachusetts.
- STAVAR, Charles
- 1986 Chacra integral para el Palcazu: actividades agropecuarias agroforestales de rendimiento sostenido con pocos insumos para el comunero Yanasha y el pequeño colono. ms. Lima: USAID.
- STOCKS, Anthony Wayne
- 1987 Tropical forest development in Peru. Development Anthropology Network Bulletin 5(2): 1-8. Binghamton.
- 1988 Informe: las cooperativas nuevas del Palcazu y la extensión del Proyecto. ms. Lima: Ronco Consulting Corp.
- TAMAYO, Augusto E.
- 1904 Informe sobre las colonias de Oxapampa y Pozuzo y los rios Palcazu y Pichis. Lima: Imprenta Liberal Unión.
- TELLO C., Luis
- 1981 Los valles Palcazu y Pichis. El mito del "gran vacio". Amazonia Indigena 1(3): 24-31. Lima.
- TOSI, Joseph A.
- 1982 Sustained Yield Management of Natural Forests. Tropical Science Center Consultant Report. Lima: USAID.
- WASCHMAN, Ronald S.
- 1985 Estudio piloto de la competencia entre los usos de la tierra ganadera, forestal y agricola. ms. Lima: USAID.
- WERLICH, David Patrick
- 1968 The Conquest and Settlement of the Peruvian Montaña. University of Minnesota PhD Dissertation in History. Ann Arbor: University Microfilms.
- ZADROGA, Frank
1981. Some important water and related resource considerations affecting the capability and suitability for development of the Palcazu Valley, Peru. In JRB Associates. Central Selva Natural Resource Management Project, Vol. 2, pp. 01-22. Lima: USAID.