

A Participatory Interim Evaluation of the Pehuen Foundation (IFC 2067)

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May 7, 1996

Executive Summary

1. The interim evaluation examines a Chilean company's (Pangue S.A.) efforts to mitigate the negative consequences of an International Finance Corporation (IFC) sponsored hydroelectric investment and alleviate extreme poverty on three Pehuenche Indian reservations adjacent to the Project. In a major innovation within the World Bank Group environmental programs, Pangue and the IFC created a financial and institutional arrangement to mitigate long term impacts of a private infrastructure development on indigenous peoples in the form of a non-profit foundation. Pangue agreed to lay the base for sustainable development by providing the Foundation up to and including 2001, the greater of (i) an annual amount equal to 0.30% of the Company's net income and (ii) the equivalent of 5,780 Chilean Unidades de Fomento (roughly 130,000 US\$). After the year 2001, the Company will provide the Foundation with an annual amount equal to 0.30% of the Company's net income. This arrangement was intended to provide a small financial platform to overcome undesirable impacts far into the future.
2. The Pehuen Foundation is the institutional arrangement to achieve the IFC/Pangue objectives. Since its beginning in 1992, the Foundation had received 535K US\$, of which 95 percent came from Pangue. Of this, 357K US\$ was spent on direct program costs. Expenditures of two-thirds of these funds were used for bulk discount purchases in combination with over 82K US\$ in Pehuenche family funds.) The program made 5,111 such purchases, moving over 50,000 items. The remaining third of the Foundation funds were spent on charitable gifts to communities (16.8 %), diagnostic studies (7.4 %), road construction (3.7 %), training (4.5 %) and leveraging to capture government subsidies and private donations (1.6 %). Audited administrative costs are high, averaging 52 percent of direct Project benefits per year. If non-audited costs were included, it is closer to 70%.
3. The terms of reference for the interim evaluation calls for a comparison of the Pehuen Foundation performance to the objectives set forth in the IFC/Pangue legal agreement (Agreement) and the IFC Environmental Guidelines. The evaluation finds that, after four years, the Company has yet to incorporate four of the five critical elements of the IFC and Pangue Agreement into the Foundation's statutes and operational agenda: i) make the Foundation a vehicle for sustainable development which will provide long-term benefits to the Pehuenche by promoting their socio-economic development, ii) prepare to mitigate post-boom impacts following construction activities (with construction scheduled to end in 1997), iii) preserve and re-

inforce cultural identity, and iv) make a best effort to arrange for the supply of electric power to the communities.

4. Instead of incorporating the IFC objectives, the Company has directed the Foundation to alleviate the state of extreme poverty by organizing a welfare-like system focusing upon provisioning of short-term, material assistance to alleviate the deplorable socio-economic circumstances of indigenous communities of Callaqui, Pitril and Quepuca-Ralco. Material assistance is being provided through a discount group purchase program (DGP) in which Pehuenche identify their individual, family needs, and agree to provide counterpart funding in combination with the Foundation's contribution. A Pehuenche representative to the Foundation Board presents these requests, they are approved by the Board, and the Foundation staff makes and delivers the purchases. By 1995, the program had grown and is using over 80 percent of the funds the Foundation spends in the communities. Many Pehuenche view the DGP as favorable, commercial rather than cooperative ventures with the Foundation.
5. The funds have been effectively used to supplement the rudimentary demands of poor rural households. They have been used for making household improvements (58.4%), provided input price supports (33.9%), materials for student support (5.2%), and cultural activities (0.6%). Some of their spending for productive inputs represent a change from government programs, which charge interest, to the Foundation program, which does not.
6. Measured by a welfare distribution test, however, the DGP program is not capable of alleviating poverty. Potential indigent beneficiaries are systematically excluded from Foundation programs because they cannot afford the modest co-payments required for discount purchases. Other exclusionary factors include lack of timely information, genealogical and geopolitical distance from the Pehuenche representatives to the Foundation, and fear that cooperation with the Foundation might imply support for Pangue or its owner's agenda. The result is that 20 percent of the household received over half the Foundation's funds. Families which the Pehuenche related as better off in their communities obtained two to three times more benefits than the less fortunate and families living nearer to the Board representative's sector obtained 3 to 4 times greater benefits. Attempts to correct the inequalities through a work-voucher system have excluded women-headed households, the disabled, the elderly, and the most destitute.
7. In sharp contrast to the DGP which focuses on providing material assistance to individual families, the Foundation expenditures for community-wide initiatives and training are small and dwindling. Without a community development or strategic plan, without consultations with the Pehuenche community, the Foundation's community-wide initiatives have essentially been non-Pehuenche Board and staff purchases and gifts dispersed in many directions. Two diagnostic studies were done: a general socio-economic survey of the beneficiary population to assist in the implementation of the DGP program and an educational diagnostic. The studies were conducted by firms without experience in indigenous development and failed to actively involve the Pehuenche in their preparation or execution. The community is un-

aware of their findings and the Board and staff have not used them for program development or monitoring.

8. The most promising return on investment is coming from leveraging Foundation funds to capture federal subsidies for eligible Pehuenche families. In the first attempt at this strategy, the Foundation has used its knowledge of the Chilean welfare system to leverage 58 US\$ in Foundation funds and 29 US\$ of Pehuenche money to obtain \$2,460 US\$ homes for 74 families. This amount exceeds Pangué's annual contribution to the Foundation.
9. Without the agreed upon focus on sustainable socio-economic development, sustainability, mitigation, cultural development, and provisioning of electrical power, the impacts of the Foundation programs are negligible. In 1992, all households in Callaqui, Pitril and Quepuca-Ralco were below the National Poverty Line (NPL). After four years of Foundation expenditures and with 30% of Callaqui and Quepuca-Ralco households temporarily employed at the Project site, only 1% of the households have risen above the NPL. A third of the population remains indigent. Incomes and poverty indicators show the 3 communities falling substantially below the adjacent, non-Indian settlement of Ralco.
10. The Foundation's inability to initiate the objectives of the Agreement is a result of the Company's self-imposed cultural-intellectual isolation and tight circumscription on Pehuenche "participation" within the Foundation. Isolation is evident by the Company's failure, for four years, to comply with the Agreement that Pangué recruit someone of recognized prestige and experience in the field of social development of indigenous people to be at all times on the Board of Directors; the absence of a properly constituted, effective, Advisory Board; and, the absence of any attempt to build the institutional capacity of the Pehuenche communities and their leadership.
11. Pehuenche participation is narrowly circumscribed, primarily to issues and decisions related to the discount group purchase program. From the Project's inception, the Pehuenche have not been informed participants of Pangué and IFC actions which have a substantial bearing on their future. Pehuenche Board members had little knowledge of Foundation statutory objectives, finances, their juridical and fiduciary rights and obligations as Board members, or staff salaries or benefits. Several leaders were uncertain that the Foundation would outlast the construction phase. Misunderstandings and lack of information is even greater within the community. Most commonly, the belief was that signing up with the Foundation as a member was a prerequisite for employment on the Project. Some Pehuenche leaders who are not Board members and members of the communities believe that criticism of the Foundation may lead to loss of benefits and opportunities for employment with the Company.
12. To manage and run the day-to-day affairs of the Foundation, the Company has carefully selected well meaning, but culturally untrained, development inexperienced, and Spanish-speaking only non-Mapuche Foundation staff and consultants. They have made culturally inappropriate gifts and continue to draw a sharp "we/they" distinction. The consultant survey teams have shown cultural insensitive in some of

their questions on diagnostic studies and conducted survey research without using Pehuenche or Mapuche cultural translators and assistants.

13. On occasion, the Foundation programs have stepped outside its statutory community boundaries, involving communities whose lands and opinions were felt to be in the direct interest of the Company or its owner and ignoring those who are not. The Foundation's model of Pehuenche culture and their inexperience with Indigenous development led them to ignore the fundamental linkage between the ecosystem and Pehuenche culture. This prevented it from detecting an imminent Project-related environmental problem which is confronting Pehuenche culture.
14. Measured against the generally accepted standards needed to sustain the organizational integrity, the Foundation is found wanting. Pehuenche Board members need increased training in their fiduciary and legal obligations. Policy guidelines have not been prepared to resolve the material conflicts of interest of Board members and support of training and hiring of Pehuenche staff. The organization's purpose is oblique to the IFC/Pangue Agreement by not focusing on mitigation, sustainable development, preservation and reinforcement of Pehuenche identity. Program operations outside the three communities fall outside the Foundation charter, especially those in Ralco-Lepoy in which the Foundation objectives are at cross-purposes with its Founder and its Founder's owner, ENDESA. Information on Foundation activities is not shared with the beneficiaries. No mid or long range planning and budgeting takes place, even though a solid financial platform has been provided. Audited statements do not include all Pangue contributions and expenditures to the Foundation. And program and management categories do not match the audited financial statement in the annual report.
15. For the past four years, human resource development has been a relatively insignificant part of the Foundation's approach, accounting for less than 4 percent of its direct expenditures. The little training that has been done has yielded over a 200 percent return on investment in four years into the local economy. Despite initial successful efforts to develop training programs that will increase Pehuenche access to job opportunities, the training activities ceased in 1993.
16. Without a properly constituted Foundation as envisioned by the Agreement, the Pehuenche now face a more uncertain future than they faced before the Project as the construction phase draws to a close. Threats to Pehuenche economy and culture which require immediate mitigation include high deforestation, serious threats of involuntary resettlement, unemployment, and increased non-Indian (*huinca*) encroachment on their culture and lands.
17. Deforestation is increasing the impoverishment of the communities and, unless checked, threatens the physical survival of the people and their culture. Pehuenche culture, subsistence, health, and economy are based on the sustained use of the forest as a renewable natural resource. Recognizing this, the Agreement calls for actions to mitigate damages. There is very little room for environmental resiliency or experimental error when dealing with a group already below the poverty line and many of whom are indigent.

18. Measured strictly in economic terms, at this point, the net loss to the Pehuenche economy from their loss of natural resources far exceeds the benefits the Foundation put back into the communities. The Project road opened up access to the Pehuenche forest, whose exploitation may have been made easier by the privatization of communal land. From 1988 to 1994, between 3 and 18 million dollars of timber has been stripped from community lands. Since 1991, the deforestation rate has been unacceptably high, between 1.3 and 8.5 percent per year. Little income from the mining of their forest reached Pehuenche pockets. The cutting by non-Indians on Indian land has left some Pehuenche threatened with huge fines that they are unable to pay and is eroding their civil rights. Pangué's agreement with the forest ministry (CONAF) has not been put into effect and reforestation programs have failed. Lacking monitoring, the Foundation is not even aware of this problem and has spent an insignificant, 4 percent of its funds on forestry programs.
19. Three, possibly four, involuntary resettlements of Pehuenche of the Foundation communities loom in the immediate future. Any one of these resettlements will substantially undermine the Foundation's ability to complete the objectives set forth in the Agreement and may increase impoverishment of the Pehuenche by reducing their access to land, health security, food security, housing security, income, and access to common property. These may also increase the socio-economic marginalization and socio-cultural disintegration of the three communities. One is on the shore of the Pangué reservoir, at Los Avellanos, in the northwestern sector of Quepuca-Ralco, where a potential indigenous resettlement problem is materializing exactly as predicted by the government planning agency, MIDEPLAN, before Board Presentation in 1992. A resettlement plan has neither been prepared nor contemplated.
20. The other three are upstream related impacts of the Ralco dam which is being proposed by Pangué's owner, ENDESA. Although not an IFC project and technically unlinked to Pangué, the Pehuenche view these as related events. This perspective has been reinforced by the expansion of extensive Foundation activities into Ralco-Lepoy. These three pose a substantial threat to the integrity of 70 - 85% of households in Quepuca-Ralco, including the entire settlements (sectors) of Quepuca-Estadio, Palmucho, and Los Avellanos (again). Impacts of preparation for the Ralco dam have already begun to effect the Pehuenche and Foundation operations. In addition, there is a high probability of a resettlement "spill-over" effect in which refugees from the threatened resettlement of residents from Ralco-Lepoy may move into the Foundation communities. An improperly executed resettlement within or adjacent to a Foundation community will impoverish a segment of the Pehuenche population and substantially increase demands on already overtaxed Foundation resources. The Pehuen Foundation was not designed, nor is it sufficiently funded, nor is it prepared to mitigate resettlement. Had this been the intention, the IFC would have required Pangué to submit a resettlement plan. The effect of this upstream impact on the Foundation communities has yet to be investigated as called for in the Agreement. The Ralco EA is presently under a 120 day review and its impact on the

Foundation should be investigated and comments made by Pangue and/or the IFC to CONAMA.¹

21. By the end of 1996, we can expect massive unemployment in Callaqui and Quepuca-Ralco due to the end of construction. Internal factionalism, present before the Project, has been exacerbated to the point where one community has politically split. Alcoholism has substantially increased in the community closest to the Project. Best efforts are yet to be made for electrification.
22. It would be technically challenging for the Foundation to reach the IFC objectives even if it was adequately funded, properly staffed, properly programmed, under a comprehensive community development and strategic plan, incorporated the Pehuenche as fully informed participants into all Foundation activities, linked to on-going Bank indigenous peoples programs, was monitoring impacts to be mitigated, and with access to best practice and indigenous development knowledge. Unfortunately, none of the above conditions pertained. - And the chance for success would be improved if the Foundation had close cooperative relationships with the public sector - which it does not. The Foundation's work is further complicated by its persistent conflict of interest between meeting its IFC objectives and representing the interest of its owner, ENDESA.
23. The participatory evaluation discovered that the Pehuenche and the Agreement's objectives may not be that far apart. Once informed of the Foundation's long term objectives and given an opportunity to discuss their perceived needs, the Pehuenche expressed program preferences which are distinct from the Foundation's present priorities and closer to the Agreement's objectives. In initial votes, they preferred major works such as electrification and potable water (41%), employment generation and training (36%) and the group discount program (22%). There was strong agreement that investment of Foundation funds was a serious matter and that all sectors and their leaders should be given an opportunity to engage in long term planning in a culturally appropriate manner. Some suggested suspension of expenditures and saving the money until they had completed their extensive, consensual deliberations. The Pehuenche have a great deal of interest in opening up a thorough dialogue and planning process to consider how they would like to prioritize the use of Foundation resources.
24. Fortunately, the financial innovation which originally set the Pehuen Foundation in motion may offer the solution to what must appear to be the imminent failure of this component of the Pangue Project. The mechanism provides the resources to fuel a mid-stream adjustment in the direction of the Foundation to align it with the goals shared by Pangue and the IFC at the beginning of this Project. Assuming the rea-

¹ As of 5 May 1996 neither the IFC, ENDESA, nor Pangue had informed the independent evaluator that the Pehuen Foundation was intended to be the central agent for mitigation of the Ralco-Lepoy and Quepuca-Ralco resettlement. The evaluator learned of this major decision from external sources on 6 May 1996, only hours before turning in this report. Evaluation of the Foundation as a resettlement mechanism was not in the interim evaluation terms of reference.

ignment is done quickly and efficiently, there is still considerable potential that the Pehuen Foundation can achieve its progenitors' expectations.

25. The independent evaluator recommends that the IFC recognize Pangué's efforts to provide substantial material assistance to some Pehuenche throughout the construction phase of the Project, including its innovative program which channeled windfall worker's profits into productive investments. Concurrently, the Company should initiate a second phase of the Pehuen Foundation activities, align its statutes and programs to the Agreement, and prepare a detailed work plan. Alternatively, the Company might form a new foundation, more closely aligned to the Agreement's objectives, and agree to transfer sufficient assets to it, and permit the existing Pehuen Foundation to continue with its present charter and program. This would permit the Company Foundation and the Pehuenche Foundation to work side by side to meet common objectives. In the either case, some material guarantee should be made to assure the IFC and the Pehuenche that changes will be instituted.
26. The interim evaluation recommends the IFC and Pangué take a proactive strategy and institute a ten point action plan to begin Phase II of the Pehuen Foundation. Specifically,
 - 1) realign the Foundation statutes and organization to those of the Agreement;
 - 2) reorganize the Foundation's policies, internal affairs, and operations and bring them into compliance with the Agreement and to conform with generally accepted standards, especially those pertaining to resolution of conflicts of interest, to increased informed participation, and to promote of pluralism and diversity;
 - 3) embed Indigenous development expertise into the Foundation by incorporation of persons with recognized in Indigenous development expertise, regularizing communications between the Foundation and other organizations working on Indigenous development, and recognizing the Pehuenche language of as one of the two official languages of the Foundation;
 - 4) initiate an emergency mitigation action plan to a) halt the high rate of deforestation without causing harm to the communities, b) regularize and secure the land tenure situation of the Quepuca-Ralco population threatened with a Pangué-related resettlement; c) complete an upstream impact study to mitigate the adverse effects of the Ralco dam on the Foundation's ability to operate and complete its objectives; and d) mitigate the multiple socio-economic and environmental impacts of the Project road.
 - 5) prepare and implement a participatory, strategic sustainable development plan which places high priority on natural resource management controlled by the Pehuenche which emphasizes participatory, social forestry;
 - 6) institutionalize full and informed participatory development, including involvement of Pehuenche representatives - with voice and vote - in all Foundation decisions. The IFC and Pangué should no longer plan the future of the Foundation without Pehuenche representatives present;

- 7) establish a monitoring component which includes the training and employment of Pehuenche;
 - 8) increase IFC supervision and provision of technical assistance, including training workshops for present and potential Pehuenche leaders;
 - 9) Dissemination of the participatory interim evaluation findings to the Pehuenche in a culturally appropriate format;
 - 10) Pangue should cancel the outstanding debt owed by the Foundation to Pangue for the 1995-96 costs of including Ralco-Lepoy in the program.
27. The IFC and the International Bank of Reconstruction and Development (IBRD) sociological group share the responsibility with the Company to assure the Pehuen Foundation is realigned on its proper course. The IFC under-supervised this Project and did not received the necessary support by the sociological staff of the IBRD, who suggested this experiment in the first place. To realign this social experiment with its objectives, both the IFC and the IBRD should cooperate on a plan of action to work with the Foundation to complete the terms of the Agreement. IFC support should include seeking internal grants for an indigenous peoples' training program in social forestry and other forms of natural resource management, health, community development, leadership, and socio-cultural preservation. The Pehuenche should be placed in regular contact with other indigenous peoples who have successfully overcome comparable development issues.
28. There is no question that the IFC, ENDESA, and the Company are accelerating the pace of socio-cultural transformation in what once was an isolated corner of Chile. The economic and cultural future of the Pehuenche now depends on their political will and technical abilities of the three parties, and the public sector, to respect and work with the Pehuenche to correct the distortions identified in this evaluation and not create new ones. The challenge is whether this small, poverty stricken band of Pehuenche Indians will share in the Project benefits or subsidize Chilean hydropower development at the cost of their economy, resources and culture. Thus far, the data indicates they are subsidizing the Project.

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People, Projects and Policy

1. Consistent with its standards setting function, the World Bank Group continuously crafts new policies and institutions to assure that social development has an equal footing with successful economic and political development. As international donor lending shifts to the private sector, the International Finance Corporation seeks new ways to encourage private companies to avoid, or, if unavoidable, mitigate the localized, counter-development impacts of infrastructure projects. The IFC's indigenous policy is particularly concerned that small, marginal groups of indigenous peoples are informed participants and beneficiaries rather than victims of development. This interim evaluation examines a Chilean company's efforts to build an innovative non-profit Foundation which will proactively, and with an emphasis on local participation, help alleviate extreme poverty on three indigenous reservations adjacent to a new IFC financed, hydroelectric dam.

The Pangue Project

2. Pangue S.A. is building a 450MW hydropower project on the scenic *Bio Bio* river. The Pangue dam stands 113 m high with a gross head of 103 m. It will hold a relatively small, 175 million m³ reservoir covering 500 ha. Total average annual generation of Pangue is calculated at 2,156 GWh with a 55% plant factor. The Project is owned by ENDESA, Chile's foremost electrical generating company through a newly created subsidiary, Pangue S.A. Under the Agreement, the IFC holds 2.5% equity in the company. ENDESA holds the rest. The same person chairs the ENDESA and Pangue boards. Apart from the Project, Pangue has no other holdings. IFC is financing 120 of the 465 million dollar Project costs.
3. Nationally, the Project has strong environmental benefits, reducing its dependence on thermal alternatives and providing environmentally clean energy. If the substantial mitigation programs were implemented properly, the IFC concluded that Pangue would be the least cost alternative on both a financial and environmental basis, and would have complied with the relevant World Bank environmental and social-economic guidelines.
4. The IFC classified the Pangue Project as a category "A", reflecting strong national and international concerns about the possible environmental impacts on the Bio Bio ecosystem and the local indigenous peoples, the Pehuenche. Pangue responded that the anticipated impact did not include resettlement of indigenous people, which would have required the IFC to request a resettlement plan. Pangue identified only eight non-Indian families located within the basin of the reservoir who were to be directly affected. IFC and Pangue ignored a 1992 study by MIDEPLAN, the government planning agency, indicating that Pehuenche living on contested land on the north shore of the future reservoir might be threatened with forced resettlement. In 1991, the anticipated impacts were limited to the indigenous communities adjacent to the Project site: Callaqui, Pitril and Quepuca-Ralco.

5. To facilitate the implementation of the Project, in 1990 the government and ENDESA paved a road which runs eastwards from the Pan American highway into the heretofore very isolated upper Alto Bio Bio escarpment. In 1991, the anthropological consultant from the Environmental Assessment (EA) team found that the Project posed a threat to Pehuenche culture, which in his judgment was already in decline as a result of an "inevitable" process of the blending of culture. The Environmental Assessment (EA) judged the Project to be a positive impact which would facilitate the sale of Pehuenche forest and agricultural products and improve their depressed economic conditions. Other anticipated impacts included the employment of 240 to 340 Pehuenche, increased training of the under-qualified labor force, and poverty abatement. Potential negative impacts predictions focused on the loss of culture.
6. The initial encouragement for a foundation came from a World Bank social anthropologist. He envisioned a non-profit foundation to provide long term mitigation of anticipated social and environmental impacts on the Pehuenche. The EA followed this lead and recommended the creation of a Foundation to study and preserve the culture and develop programs for socioeconomic support and training, and the hiring of local employees to support activities involving long term watershed and reservoir management. Its organization and guidelines were to be structured by the interested parties and especially the Pehuenche community. The Foundation would have programs of socio-economic support, respond to Pehuenche concerns for semiskilled work training programs to enhance their long term income potential, training in non-traditional agriculture (rabbit-breeding, fish-farming, collection of native seeds, etc.), and training in construction techniques (including that of native wooden homes). To protect the community from the influence of the influx of an estimated 1800 workers, the EA called for, and Pangue agreed, to institute a variety of measures (long work shifts, home leave, on-site housing and recreation for contracted workers and so on). The EA did not provide a budget estimate or work plan for the proposed Foundation.
7. The IFC Board approved the investment shortly before Christmas of 1992 (12/17/92) and the Investment Agreement was signed on 22 October of the following year. The Pehuen Foundation represents one tenth of one percent of the total estimated Project costs.

The Pehuenche

8. The Pehuen Foundation was designed and injected into Pehuenche culture without informed participation, without an analysis of anticipated impacts of the Project on the Pehuenche cultural ecology, subsistence economy, and socio-political organization. To understand the importance of these issues, a brief overview of Pehuenche culture is useful.
9. The Pehuenche are marginalized, indigent descendants of the mounted warriors who held back the Spanish conquest for over two hundred years. Ethnohistorians estimate that the tribe held 54 million hectares in the last century, including

abundant lands in lower altitudes near the Laja. By 1929, territorial expansion by non-Indians (*colonos*) and military defeat reduced the Pehuenche to seven reservations (*reducciones*), where today the Pehuenche state: "We are cornered." Popular mythology within Chilean society incorrectly claims that the Pehuenche are not a distinct ethnic group and that they are remnants of an "Argentine invasion." Linguistic research contradicts such notions, suggesting that the Pehuenche are part of an ancient Chilean indigenous group which was minimally influenced by a pre-Columbian westerly invasion into the Mapuche heartland long before the Spanish conquest. Human geneticists have identified the Pehuenche as a gene pool comparable to genetic isolates in Papua New Guinea and the Dogrib Indians of Canada.

10. The Pehuenche are a single ethnic group holding a shared, distinct identity. They are related to other Mapuche speakers in Chile, but there are notable strong dialectic differences. Pehuenche draw a sharp distinction between themselves and white people (*huinca*), and the dominant society does likewise. Within their midst, especially in Pitril live poor non-Indians (*colonos*), many of whom share the Pehuenche world view and, occasionally intermarry. Until recently, conflict between Pehuenche and *colonos* was minimal.
11. Today, the Pehuenche gather forest products, cut timber, and herd their cattle, sheep and goats on 30,000 hectares of temperate forests on the steep escarpments encircling the snowcapped Callaqui volcano. They struggle for economic survival under harsh climatic and economic conditions, maintaining a close attachment to ancestral territories and nature. Their economy and culture rests upon unrestricted access to renewable natural resources: piñon, pastures, wood for building and fuel, medicinal plants found in ecological micro-niches, etc. Little food is purchased. Their land use requirement for basic subsistence extend beyond the boundary lines laid across their territory by the dominant society and includes parts of a recently created national park. Access is becoming more restricted. Households employ a mix of survival strategies including gathering of forest products, transhumance, weaving, and some migrant labor. Most families participate in all these sectors, but specialization occurs.
12. Taking advantage of summer pastures, Pehuenche collect piñon nuts (*Araucaria* pine nuts) which are their primary source of nourishment. They also feed the nuts to their animals and occasionally market them. Piñon nuts are not only the community's source of nourishment and a staple in their diet, it and its fruits are an important sacred element of their culture. In a culture noted world-wide for its cosmologic sophistication, the piñon tree is placed at the center of their most sacred ceremonial circles. Their name, Pehuenche, means "people of the piñon."
13. After forestry, animal husbandry plays an important role in Pehuenche subsistence, even though it does not represent a substantial part of the net community product. In the summer, Pehuenche families and their animals migrate to the high Andean cordillera, between their winter camps on the mountainous slopes surrounding the Callaqui volcano (*invernadas*) and summer highland pastures

(*veranadas*). This annual transhumance is marked by an elaborate ceremony, the *Nguillatun*, in which the Pehuenche believe they maintain the order of the Universe. Each community has access to summer pastures. The soils are in poor condition and cannot support intensive grazing, yet people in Callaqui, Pitril and Quepuca-Ralco have family or individually owned herds. In 1991, the three communities had about 1400 sheep, 1600 goats, 950 cattle and 170 horses. They practice limited, subsistence horticulture, planting wheat and potato in the spring and summer. Outside traders and woodcutters often take advantage of Pehuenche marginality and isolation, further impoverishing them. Non-Indian traders pay Pehuenche only half the prevailing regional prices for their livestock and timber.

14. The public sector places a low priority on services to the Municipality of Santa Barbara, which in turn places even lower priority on Alto Bio Bio. Pehuenche housing is critical to protecting them from the harsh environment. Until this century, Pehuenche lived in teepees. As they became more sedentary, the Pehuenche imitated *colono* oak log houses (*canoas*) but the scarcity of old growth timber was limiting their repair by 1991. Pehuenche housing was substandard by Chilean standards. A government survey detected a 23% housing shortage and a 74% deficit in beds.
15. The health services in Alto Bio Bio were also substandard, even within this region of Chile. The infant mortality (74.28/1000) was twice the district and three times the national rate (23.6). Dental problems are acute, especially among those under 30. Few teenagers have a full set of teeth and tooth aches are frequent and unattended. Common afflictions include Bronchial, skin disease, especially scabies, heart disease, and malnutrition.
16. Subsidies and charity play an important part in Pehuenche economics. In Callaqui, Pitril and Quepuca-Ralco, 29 percent of the people receive government subsidies and many of the rest are eligible but do not have sufficient understanding of the bureaucratic process to request support. Teachers distribute charitable donations by sorting bundles of clothing and packages of food into small stacks for home distribution. The distributions have increased since the road was paved. One consequence is a great diversity of Pehuenche dress and foot gear, reflecting their luck at "gathering" charitable donations more than cultural preferences. To the untrained eye of the casual visitor, the change in clothing gives the misimpression that the Pehuenche are losing their "indianness" and that they are becoming acculturated.
17. Pehuenche culture, political leadership and economy is poorly understood by the dominant society. On the eve of the Project, the Pehuenche were powerless people, with no institutional mechanism through which they could express their claims, except through their traditional chiefs. Twenty years ago, they remember, many of their leaders executed without a trial following the fall of President Allende. Except when threatened by external force, the Pehuenche do not have an elaborate internal political organization. Pehuenche political organization is democratic, based on a consensual chief (*lonko-headman*) who has limited

guidance and ceremonial authority. Succession is ill-defined and transitions are gradual, as one headman's support waxes, that of another wanes. The size of a chief's group varies, depending on his acceptance as a leader by others and his ability to maintain effective communication over a large area. The chiefs played a critical role in community resources redistribution. Since 1945, Pitril has had 7 lonkos and Quepuca-Ralco 10, with the last one holding the title for over 15 years. Thus, at any one point in time, the socio-political organization of Alto Bio Bio is in constant flux, but not necessarily conflictive. Such was the situation in 1989-90 when the Pangué dam became a reality. The definition of a community is also dynamic: Quepuca-Ralco peacefully separated from Ralco-Lepoy in 1954 and still maintains close ties, including respect for Ralco-Lepoy's *lonko* as that of a senior *lonko*.

18. Non-Indians can readily make mistakes by calling the lonkos "authorities" and assign them powers which is not recognized by their peers. In attempts to deal with a loose, band level organization as if it were an autocratic organization, non-Indians sought out and often designated a single, internal "authority" to speak for the group. Respected Pehuenche leaders, in contrast, see themselves as representatives, not as autocratic authorities. Until land was converted from communal to private property on the eve of the Project, the lonko played an important regulatory role in the community, granting new couples usufruct access to communal land and restoring harmony threatened by inter-personal disputes. Their positions are physically and economically punishing. Occasionally, other Pehuenche cooperate to cover expenses, but normally the costs of the office are borne by the holder. The key community asset is not a central place, like a community center, but social relationships between people, their symbols and language and unrestricted access to forest land. These assets are not easily comprehended by non-Indians. A few years before the Foundation entered the region, a key community asset was liquidated by external government fiat: communal land was privatized.
19. The expression "Pehuenche community" refers to social relationships formed within the geographical boundaries of a reservation and not a central place. Pehuenche live in dispersed households without commercial, administrative or religious centers. Outside institutions, the school and clinics, have formed government and private service centers but the Pehuenche do not view them as their own sociological or political centers. Spatial importance is attached to ceremonial areas and secular "sectors." Sectors are kinship based areas of dispersed households located within their winter settlement areas. Callaqui has two (Alto and Bajo), Pitril has three (Alto, Bajo and Los Perales) and Quepuca-Ralco five (Los Avellanos, Malla, La Esquema, Palmucho, and Quepuca-Estadio). It is common for sectors to have leaders or spokespersons. There were seven for the ten sectors in the three communities. During long, cold winters, social interaction is more intense within sectors. In sum, Pehuenche are highly individualistic and lack the institutional capacity to exercise demands.

20. Kinship organization is political organization. Each community claims rights to summer pastures and piñon forest high in the escarpment. Internally, communities are formed of numerous lineages ranging in size from two to twenty households. While minimal lineages are localized, several larger lineages cross reservation boundaries. Within each community, individuals can trace kinship ties to Pehuenche families in other parts of the Alto Bio Bio. They frequent each other's *Nguillatun*.
21. The dispersal of authority and highly individualistic nature of the Pehuenche is tightly interlocked with the ecological and economic base of their culture. Individual families and small lineages gather piñon as family units, not as a community.
22. Three of the seven Pehuenche reservations are served by the Foundation: Callaqui, Pitril and Quepuca-Ralco. In 1991, 1126 people were roughly equally distributed between the communities (Callaqui 402, Pitril 313 and Quepuca-Ralco 411). Their population growth rate is declining, but surpasses that of rural Chile.
23. Within Chilean society, Pehuenche are socially marginalized. During the evaluation, I heard them referred to as drunkards, lazy, worthless and filthy as well as being non-Chilean immigrants from Argentina. Other Chilean non-Indians, especially those in the Catholic Church express great concern for their welfare, a concern which has increased as evangelical sects have been successfully converting Indian souls. The Pehuenche are aware of the racist attitudes toward them by the dominant society. Most adults are bilingual, yet they avoid speaking their language, *Chedungun*, in the presence of outsiders. It is unclear whether this is a sign of resistance or the result of low self-esteem.

The Foundation

24. The Pehuen Foundation is a direct product of an IFC agreement with Pangué S.A. (the Company) designed to assure the Company complies with all applicable World Bank policies and environmental guidelines during both the construction and operation phases of the Pangué dam. Both parties are bound by a legal agreement (the Agreement) which takes precedence over any other statutes. Before examining the operations and impact of the Foundation, it is useful to examine the objectives and intentions of this Agreement.
25. Pangué agreed to use its best efforts to cause the Foundation to carry out its objectives and plans and not to take or permit to be taken any action that would lead to any amendment, including changes in the statutes, which are detrimental to the original objectives of the Foundation. IFC agreed to work with Pangué during all phases of development of the Foundation, providing wide-ranging guidance on matters such as drafting the By-laws and determining the amount of annual contribution from Pangué to the Foundation. Staffed by a former Pangué worker and a local school teacher, and under the supervision of the Pangué field site director, the Foundation was in operation months before Board Presentation

(12/17/92) and was granted its legal status (6/93) before the Agreement was signed (10/22/93).

26. The Foundation's purpose is to enable the Pehuenche communities of Callaqui, Pitril and Quepuca-Ralco to directly share in Project benefits. The Agreement sets five objectives. The Foundation is i) to be a vehicle for sustainable development which will provide long-term benefits to the Pehuenche, ii) help alleviate the state of extreme poverty in the three communities by promoting socio-economic development, iii) preserve and reinforce their cultural identity, iv) mitigate the potential post-boom impacts following the construction activities and v) to investigate and make its best effort to arrange for the supply of electrical power to the communities. These five objectives are consistent with the IFC's indigenous peoples, social development, and environmental policies.
27. Pangue also agreed to follow a participatory development strategy, a request which was consistent with IFC and World Bank indigenous environmental guidelines (OD 4.20) and best practices then underway within the Bank Group. The Foundation is to formally foster active participation by the communities in identifying their own needs, formulating and prioritizing projects and implementing projects and programs. Through the Foundation, Pangue agreed to maintain ongoing consultations with the local community on matters related to Project impacts.
28. Further assurance that best practices would be followed was made in the provision that someone of recognized prestige and experience in the field of social development of indigenous people be nominated as a member of the Foundation's Board of Directors. IFC retained supervision rights over the Foundation in that their nominee may attend, with unrestricted permission to speak, at all meetings of the Advisory Council of the Foundation. Finally, Pangue agreed not to take any action, either upstream or downstream of the Project which would adversely affect its ability to carry out the Foundation objectives.
29. Apart from the Foundation, Pangue also initiated a broad spectrum of best practices actions designed to control the impact of construction on the local communities, including using a work cycle whereby the workers were to be encouraged to leave the construction site on their days off, installation of fences and ownership signs along the Callaqui village road.
30. The IFC is aware that impacts can continue over the lifetime of a Project. Social and environmental mitigation becomes technically complex for well-built infrastructure which extends the mitigation horizon decades into the future. In a major innovation within the Bank Groups environmental programs, Pangue and the IFC designed a financial arrangement to support an institutional solution to this problem.
31. Pangue agreed to provide the Foundation up to and including 2001, the greater of (i) an annual amount equal to 0.30% of the Company's net income and (ii) the equivalent of 5,780 Unidades de Fomento. After the year 2001, the Company will provide the Foundation with an annual amount equal to 0.30% of the Com-

pany's net income. Thus far, the company has not registered profits and the formula works out to about 130,000 US dollars per year. The size of the payment was negotiated between IFC and Pangué, without knowledge or consultation with the Pehuenche and without any technical study of the costs of meeting the objectives.

32. The Foundation is a non-profit institution with its own legal identity and corporate body. By the Agreement, its Board of Directors should be comprised of seven members, three persons appointed by the Pangué Board of Directors, one elected member from each of the Callaqui, Pitril, and Quepuca-Ralco communities and another person appointed by the General Manager of Pangué. The balance of power on the Board was the subject of intense negotiation before presentation to the IFC Board. To assure that the Foundation was linked to external expertise on indigenous development, IFC insisted and Pangué agreed that one appointee should be someone of recognized prestige and experience in the field of social development of indigenous people.
33. The founding statutes, approved by IFC, protect Pangué from the possibility of minority control or aberrant actions by an appointed representative, including one of their own. The Executive Director has an 8th vote on the board, given Pangué a 5 to 3 margin if votes should follow community/company lines. In final count, however, the Pangué representatives hold majority control over Foundation actions and direction. Should a Pehuenche representative not attend, he or she can be replaced by a Pangué designee to the Board until such time as the person returns. The statutes also provide that a simple majority vote can remove any member from the Board who is an "impediment", call special sessions, form a quorum, and dissolve the Foundation. In the latter case, the Foundation assets transfer to a Catholic charitable foundation, the Fundación de Beneficiencia Hogar de Cristo, not to the communities.
34. Apart from the Board, the Foundation also created a membership (*socio*) category within its structure. Members have the right to a membership card and the right to elect their community's representative to the Foundation Board every two years. Members have no other corporate rights or obligations. Pehuenche report using the cards to identify themselves when applying for employment on site. The evaluator was also shown cards by Pehuenche seeking employment. Membership is not necessary to obtain Foundation benefits. The responsibilities and benefits of being a member are not understood by the members.
35. Protecting Pehuenche culture begins with protecting their access to and sustained use of the Alto Bio Bio natural resources. Pangué, its owners, the IFC and the Pehuenche share a common concern to substantially improve the forest and agricultural resources of the three communities as well as assist in maintaining water quality in the Pangué reservoir. To assure the watershed is managed for the benefit of its occupants and the investment is protected, Pangué agreed to emphasize forestry management of the area that surrounds the new reservoir. Specific measures included developing an enduring, formal agreement with the Chilean Corporación Nacional Forestal (CONAF) which included controls on log-

ging and clear cutting, an afforestation program, soil conservation, and education. The Pehuen Foundation was to assist the communities of Callaqui, Pitril, and Quepuca-Ralco to re-establish their badly-depleted forest resources and deal with the soil erosion and overgrazing.

36. In 1992, Pangue selected the first President of the Foundation, Francisco Covarrubias, to design its methodology. His energy and enthusiasm captured the Company's imagination. He had no previous experience working with indigenous peoples and little knowledge of rural development. His Foundation operational design is based on his extensive background with urban poverty programs and development of the official government poverty indicator system. It is a reaction to a simple, paternalistic charity model (*asistencialismo*) which was falling into disfavor in 1991-92. In place of charity, the designer initiated multiple fields of action in training, productive activities, housing, health, education and material assistance to both the family and the community.
37. Both internationally and nationally, the Pangue Project has been the objective of vitriolic debate and, the close association of the Pehuen Foundation with the Company has brought the Foundation's design, purpose and performance into the fray. In one case, this has led to the creation of a second Pehuenche development foundation operating in the same region. The scoping and design phase of this interim evaluation did not include, within its terms of reference, the need for judging the validity of the claims and counterclaims. Rather, it has summarized the public and agency comments on the Foundation within the analytical framework being used by the interim evaluation (Table 1). The interim evaluation has attempted to subject many of these issues to fair and impartial evaluation, focusing on the Pehuen Foundation's ability to meet the objectives established by the IFC and Pangue Agreement.
38. A major caveat must be made before proceeding with the interim evaluation. Early in 1995, Pangue began to deliver Foundation services to Ralco-Lepoy. Pangue claims the decision to expand Foundation services into Ralco-Lepoy is independent of their expectation that they might be selected by their owner, ENDESA, to build the Ralco dam and resettle a substantial part of this Pehuenche community. Pangue loaned funds to the Foundation equal to slightly less than the Foundation's annual appropriation to cover the Ralco-Lepoy costs. The loan is to be repaid by Foundation with a donation to the Pangue after the government approves the Foundation's revised statutes. The Agreement calls for approval of such revisions by the IFC which has not taken place. The evaluator's terms of reference for the interim evaluation did not include Ralco-Lepoy which was not part of the Foundation statutes. Thus, for 1995, almost half the Foundation activities are not evaluated. There has been an impact of the expansion of Foundation activities which merits discussion later in this report.

Table 1. Summary of Public and Agency Comments on the Pehuen Foundation, November 1995.

Objectives	Supportive	Critical
<p><u>A. Poverty reduction.</u> Improvement of the socio-economic conditions of the Pehuenche communities of Callaqui, Pitril, and Quepuca Ralco in a sustainable manner</p>	<ul style="list-style-type: none"> • The Foundation's actions and innovative methodology has led to a reduction in poverty and substantial improvements in the Pehuenche standard of living. • The Pehuenche are finding employment with Pangue and its subcontractors commensurate with their limited skills. 	<ul style="list-style-type: none"> • Foundation is not responding to the most important needs of the Pehuenche, including maintenance of their culture and lands • Foundation approach to development is not focused on long range development, rather it is "paternalistic" and focused upon short-term assistance and not developing the productive capacity of the people. • Few Pehuenche have obtained employment at the Pangue project, and even fewer have been trained.
<p><u>B. Cultural identity.</u> Promote and reinforce Pehuenche culture</p>	<ul style="list-style-type: none"> • Traditional Pehuenche authorities (<i>lonko</i>) are active members of the Board of Directors, their participation assures that foundation benefits are channeled in a culturally appropriate manner. • Foundation projects are initiated and selected by the Pehuenche people. • Foundation is reinforcing ethnic identity by supporting traditional ceremonies which are a key element in Pehuenche culture and increasing the material conditions of the people so they will not migrate. 	<ul style="list-style-type: none"> • Foundation and its interim evaluation by the IFC will reinforce building of more dams on the Bio Bio, leading to irreversible destruction of Pehuenche culture. • Foundation is not owned by the Pehuenche and excludes segments of Mapuche-Pehuenche culture in the settlements apart from the Callaqui, Pitril and Quepuca-Ralco
<p><u>C. Sustainable development.</u> 1. Foundation sustainability</p>	<ul style="list-style-type: none"> • The Foundation's development knowledge and actions, including the skills of its non-Pehuenche members and staff, permit Pehuenche to access public subsidies heretofore unavailable to them • The Board is active and includes equal representation 	<ul style="list-style-type: none"> • Foundation is under Pangue's control and, therefore, has a conflict of interest with the Pehuenche people. • The Pehuenche members of the Board do not represent the whole community and do not reflect traditional values in the community. • Pangue is channeling "crumbs" to the Pehuenche

Foundation sustainability, continued.	<p>tation from the three communities and Pangué S.A.</p> <ul style="list-style-type: none"> • Pehuen Foundation is providing a working model for collaboration with other NGOs and the government. 	<p>peoples (0.3 % of the profits) through the Pehuen Foundation compared to other arrangements (cf. Canada James Bay agreements)</p> <ul style="list-style-type: none"> • Foundation is selling goods for a profit, not a non-profit foundation • Foundation is too autonomous and is not coordinating its development plans with the public sector, leading to inefficiencies and unwarranted competition. • Foundation's close association with the Pangué, which is in turn involved in highly negative publicity, makes other organizations (public and NGO) hesitant to cooperate because of its image as being Pangué S.A.
<p>*C. Sustainable development.</p> <p>2. Resource development of the communities</p>	<ul style="list-style-type: none"> • Foundation is providing scholarships to Pehuenche children, building community infrastructure, and planting trees. • The Pehuen Foundation method has increased the organizational capacity of the communities. 	<ul style="list-style-type: none"> • Foundation is reluctant to train Pehuenche in skilled occupations. • Pehuenche exchanging valuable long term forest resources, at less than market value, to obtain matching funds for Foundation projects.
<p>*D. Impact management. Mitigate the potential post-boom impacts following construction activities of the Pangué hydroelectric project</p>	<ul style="list-style-type: none"> • Pehuen Foundation has substantially prevented impoverishment of people located near the largest infrastructure development in the history of the region, even taking into account the increased income from the construction project itself. • Foundation is providing an avenue for productive investment of "windfall earnings" from work on the construction project, in contrast to possible social disruptive spending (e.g. drinking). 	<ul style="list-style-type: none"> • Pehuenche are selling their forests and animals (productive capacity) to obtain matching funds for Foundation projects, thereby undermining the sustainability of the local economy • Traditional lands are being lost and Pehuenche living without secure title on lands adjacent to the new reservoir are in danger of eviction by land developers.

*Objectives which are part of the legal Agreement but not incorporated in the Pehuen Foundation statutes.

Foundation Program

39. Between 1992 and 1995, the Foundation received 534,635 US\$, of which 95 percent came from Pangue (Table 2). The Foundation also obtained non-audited, administrative support from Pangue including use and maintenance of its headquarters, honorarium and transportation of its Santiago-based, Board President, and the salaries of two of its four employees (Executive Director and an assistant). Of its audited income, 65 percent was directly spent in program activities (357,130 US\$). Reserves were low and fluctuated. Audited administrative costs were high: averaging 52 cents for each dollar spent on programs.

Table 2. Foundation Finances 1992-1995*.

Revenues US\$	1992	1993	1994	1995	1992-95	%
Pangue Contribution	83,540	127,075	156,945	167,075	534,635	0.95
Other contributions	9,445	2,500	95	3,950	15,990	0.03
Interest	-	-	8,100	11,250	19,350	0.03
Total	92,985	129,575	157,040	182,275	561,875	1.00
<hr/>						
Expenditures US\$	-	-	-	-	-	-
Direct program costs	62,768	76,920	95,610	121,833	357,130	0.65
Administration (audited)**	24,633	39,155	60,573	64,525	188,885	0.35
Total	87,400	116,075	156,183	186,358	546,015	1.00
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Ratio Administrative to Direct Program Cost	1:2.5	1:2.	1:1.6	1:2	1:2	
Reserves	5,585	13,500	858	(4,083)	15,860	
Individual family costs for purchases through the Foundation (not part of Foundation funds)	9,223	17,295	28,718	27,580	82,815	
<hr/>						
*These figures do not match the Foundation's audited report due to subsequent adjustments and an error in which the community member's co-payment for the discounted purchases was listed as a donation to the Foundation. Liabilities and assets associated with Foundation activities in Ralco-Lepoy are not listed in this statement.						
** Pangue made non-audited contributions to the Foundation. Ratio of administrative to direct costs is probably in the range of .70 to 1.						

40. The Foundation priorities are identified by expenditures on its six program components.² Discount group purchases (called "*proyectos*" and also "family projects" by the Foundation) use 66 percent and a variety of community projects

² The Foundation identifies three work areas: actions which they call "*proyectos*" (family and community), studies, and agreements.

(excluding roads) use another 16.8 percent. The remainder has been used for diagnostic studies, training, road construction, and leveraging to capture government subsidies and private donations (Table 3).

Table 3. Foundation direct investments 1992-1995 US\$.

	1992	1993	1994	1995	1992-1995	%
Discount Group Purchases	24,263	44,525	68,235	98,730	235,753	66.0
Community initiatives	17,025	25,475	12,585	4,880	59,965	16.8
Studies	0	2,195	14,385	9,930	26,510	7.4
Training	11,350	4,725	0	0	16,075	4.5
Roads	10,130	0	355	2,708	13,193	3.7
Leverage	0	0	0	5,585	5,585	1.6
Total	62,768	76,920	95,560	123,828	357,080	100.0

Discount group purchases: "Proyectos"

41. Investment in Foundation programs is guided by five "fundamental principles." First, families identify and select their own "*proyectos*" according to their own necessity, thereby respecting their cultural identity. The community participates in decision making as "*proyectos*" are presented to the Board of Directors through their representative who, along with the other Board members, prioritizes them. All "*proyectos*" must have counterpart funding, either in cash or in-kind, which signifies a commitment of the family to the objective of the project. The "*proyectos*" are multisectoral, meaning that they may cover a wide variety of socio-cultural aspects of the community. The "*proyectos*" are intended to be long term, since they are linked to the life span of the dam.
42. The Foundation views "*proyectos*" as its central poverty reduction strategy. Consistent with its own statutory objectives, which are not those of the Agreement, the program provide material assistance in the areas of housing, health, education, and income improvement. To be a sustainable poverty reduction strategy, the material assistance must be distributed equitably and in such a way that its beneficiaries are able to overcome their need for a continued flow of additional material assistance in the future. Unless an equity-test, and an escape-from-dependency test can be passed, the provisioning of material assistance is simply a welfare system. Even if it is used for productive inputs, gains must be shown in the ability of the people to escape from their dependency on the welfare payments. Otherwise, this is the antithesis of sustainable development.
43. The "*proyectos*" are formulated with the active participation of the community. An initiative begins when someone from Callaqui, Pitril and Quepuca Ralco tells a Pehuen Foundation Board representative that they wish to initiate a "*proyecto*." The initiator, called the "*proyectoro*," recruits other community members interested in obtaining a material item and collects a co-payment to match Founda-

tion counterpart funding. Since 1995, people may also pay with vouchers (*va/es*) earned by working on community projects. In quarterly meetings with each community, the Foundation President also directly solicits initiatives.

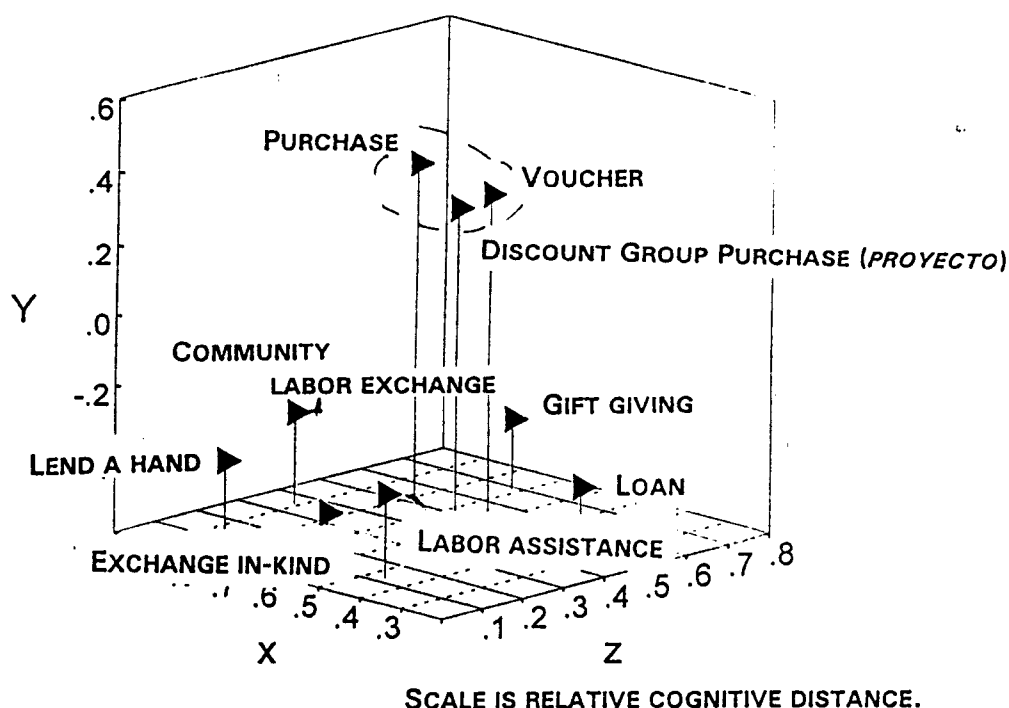
44. The Pehuenche Board representative brings his community's proposals to the Board's monthly meeting. Each year, the treasurer divides the funds available into equal monthly installments and then further divides the shares roughly into equal parts for each of the communities. Thus, the budget of how much can be approved is set beforehand. Within this constraint, the request is freely discussed. Pehuenche representatives actively discuss and set DGP priorities, although the Foundation President's enthusiasm leads to occasional Pehuenche acquiescence to his suggestions. Pangué representatives limited their participation to providing technical assistance when asked. They make a conscious attempt to avoid interfering in the internal affairs of the DGP program. If funds are available, the Board approves co-financing the initiative. At times, the Pehuenche representatives of the Board may also initiate an idea for a "*proyecto*" themselves, gain Board approval and take it back to their community.
45. The non-Indian staff implements the "*proyecto*." They seek the best purchase price, collect the unpaid counterpart money, deliver and distribute the merchandise to a central location within the community, and keep track of the financial records. Examples of "*proyectos*" include beds, set of sheets, small animals, dishes, wheel barrows, horses, potato seeds, shoes, backpacks, and so on. The Foundation has completed over 300 "*proyectos*" in 4 years.
46. The Pehuen approach does not include technical assistance, evaluation, or monitoring. Nor does it require a staff who understand development, they need only make the purchases, deliver the material assistance, and maintain financial records. Since the financing is sustainable as long as the Pangué dam is present, the approach holds that this is sustainable development.
47. The program designer also envisioned that this approach protected the culture. If Pehuenche left their communities and sought external employment in order to get resources for purchasing wants, then their migration, per se, undermined the continuity of their culture. The Foundation approach short-circuits the problem by subsidizing the purchase of the wants, thereby reducing the probability of migration and protecting the culture. To be effective, the approach must reach all segments of the community and the Pehuenche wants and needs must be matched by the capacity of the Foundation.
48. This unorthodox approach to social and economic development was developed without assistance from the IFC or the World Bank sociologists. A development project purposively concentrates resources on selected priorities to accelerate economic growth and social development. Projects involve an expectation that further development moves will be set in motion. For example, training of people in semi-skilled occupations increases the likelihood of an increase in income.
49. While individual purchasing decisions might involve some notion of long-term planning and desires of the individual, this does not necessarily mean that the

community interest is being taken into account. The decision of the Foundation to purchase livestock is an example. Purchases were made without considering its impact on the carrying capacity of the limited commons. If individual purchases lead to overgrazing, then a Foundation "*proyecto*" may endanger sustainable development. Appraisal is necessary before an investment is made. The essence of project planning consists of evaluating the long term impacts of individual decisions.

50. During the first phase of the interim evaluation, Chilean government agencies and non-governmental organizations expressed their discomfort with the Pehuen Foundation's idiosyncratic use of the term "*proyecto*." Official organizations working in the Alto Bio Bio with a considerably larger budget consider a half dozen projects a year to be a full load. Comparison of their projects to Foundation "*proyectos*" is, they argue, like comparing apples and oranges. To cite one regional head, "the Foundation has prostituted the meaning of the word 'project!'" While some consider it an indicative of the Foundation's lack of development experience, or as simple business transactions, others claim the *proyectos* are a form of gift-giving. As recipients of a gift, the Pehuenche will be pacified and less likely to criticize Pangué and its owner, ENDESA. The Foundation sees the "*proyectos*" as the capstone to its program and as a cooperative endeavor between it and the community, and not as a commercial exchange. The expression most often used within the Board is that they work - "arm and arm" with the communities.
51. Before continuing with further analysis of the Foundation "*proyecto*" component, it is important to understand how the Pehuenche themselves view the "*proyectos*" and their associated element, the vouchers ("*vales*"). A test was developed in the Pehuenche language, *Chedungun*, to find an answer (see Annex 1, Methodology). The Pehuenche field evaluation team prepared a list of seven Pehuenche concepts related to exchanging goods and lending assistance. The language is rich in such concepts, and the ones selected included loans (*aren*), labor assistance (*inkawun*), gift giving (*elueen*), community labor exchange (*mingako*), lending a helping hand (*kellugun*), exchange in-kind (*trafkinto*), and buying/selling (*ngullakan*). To this list was added the newly introduced actions of projects ("*proyectos*") and vouchers ("*vales*"). A computer generated 96 distinct questionnaires, each with 24 triads formed from the nine concepts. The questionnaires were administered to a random sample of 96 households by Pehuenche assistants and the evaluator. For each triad, the interviewee was asked to select the "most different." Based on this information, the proximity of concepts could be determined (Figure 1). The two new Foundation concepts ("*proyectos and vales*") fell, as might be expected, proximate to one another and distant from a cluster of seven *Chedungun* concepts, with one exception: buying/selling.
52. The cognitive proximity test reveals that Pehuenche view the Foundation's principle initiatives, "*proyectos*" and "*vales*," to be more similar to commercial transactions (*ngullakan*) than to cooperative ventures or gifts. Evidence from the

focus groups buttress this finding. A common expression supporting the Foundation heard during the focus groups was that "I believe the Foundation is of benefit to the community because things can be purchased very cheap through the Foundation." When referring to participation in Foundation programs, people frequently commented that "those that have money, are able to buy from the Foundation, those that don't, cannot buy."

Figure 1. Pohuencho views of Foundation "*proyectos*" and "*vales*": Cognitive Proximity Test Results.



53. Based on this evidence, and coupled with a desire not to become entangled in idiosyncratic terminology, the evaluator will henceforth refer to the Foundation "*proyectos*" as discount group purchases (DGP). This decision should not be interpreted as a criticism of the program component. Since 1992, this component has become increasingly important, rising from 32 to 82 percent of the annual direct expenditures on the communities (Figure 2). Discount group purchases dominate the staff, Board and community time. In the four years, community members completed 5111 transactions with the Foundation. The staff handled

over 50,000 items ranging from rolls of barbed wire to pairs of children's boots. The Foundation spent over 235K US\$ and the community members spent over 82K US\$ in disposable income to pay for their share of the purchases (Table 3). Most Foundation funds along with the matching contributions of the Pehuenche participants were spent on household improvements (58.4%) and a significant proportion was used for productive endeavors (33.9%). Less emphasis was placed on educational support (5.2%) and cultural activities (.6%).

Figure 2 Foundation Program Priorities: expenditures, 1992-95

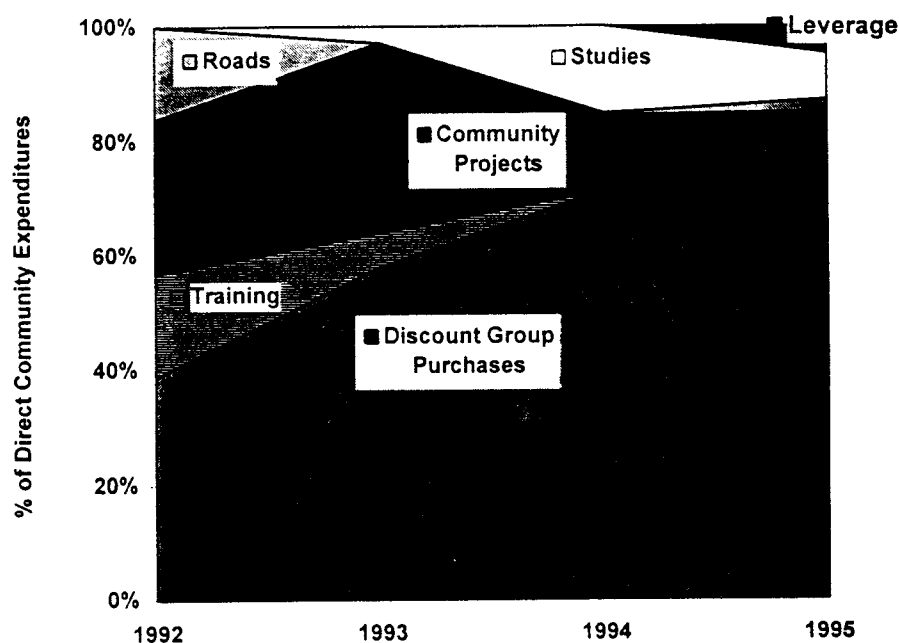


Table 4. Expenditures in the Discount Group Purchase Program, 1992-1995 US\$

	Family costs	Foundation costs	Total	Family cost %	Foundation costs %
Home improvement	59,073	127,411	186,484	66.6	58.4
Productive inputs	23,621	73,911	97,532	26.6	33.9
Educational	3,236	11,274	14,510	3.6	5.2
Cultural	925	1,364	2,289	1.0	0.6
Unclassified	1,873	4,267	6,139	2.1	2.0
	88,728	218,226	306,953	100	100.0

* The total family and foundation costs on this table do not match those of Table 2. This table is based on a summation of all DGP records provided the evaluator by the Foundation. Table 2 is based on a summary statement provided by the Treasurer. The differences reflect poor bookkeeping by the Foundation staff.

54. In housing, people took advantage of the DGP to make small, yet notable improvements to their destitute condition. Their home improvement funds were spent on 4,741 tin sheets, 489 mattresses, 903 blankets, 735 kg of nails, 214 sets of dishes, 114 gas and 17 wooden stoves, hundreds of feet of flooring lumber, and so on (Table 5). Results from a photographic theme analysis (see methodology) reveal that the population lacked basic material items. A common household may own only a half-dozen inexpensive tea cups, a tea pot, and few pots and pans. Women expressed desires of having a small wooden table on which to entertain guests. Plastic sheets, sometimes scavenged from the Project, are tacked on plank walls to reduce the cold wind. As a result of Foundation efforts, wood and gas burning stoves are replacing open fireplaces, reducing the health hazards from exposure to smoke.

Table 5. Priorities of DGP Home Improvement Purchases. 1992-1995 US\$.

Item	Family costs	Foundation costs	Total	Family costs %	Foundation costs %
Tin sheets	15,593	27,005	42,598	26.4	21.2
Beds and bedding	11,041	23,120	34,161	18.7	18.1
Gas stove	7,123	15,286	22,409	12.1	12.0
Finished lumber(flooring, siding, etc.)	5,815	14,255	20,070	9.8	11.2
Kitchen	5,583	14,118	19,701	9.5	11.1
Dishes, tea pots, thermos, pans	4,886	7,818	12,704	8.3	6.1
Interior wall board insulation	1,451	6,952	8,403	2.5	5.5
Simple furniture (tables, chairs, etc.)	2,490	4,462	6,952	4.2	3.5
Dish basin	1,319	3,656	4,975	2.2	2.9
Wood stove	716	3,180	3,896	1.2	2.5
Plastic tubing	733	2,347	3,080	1.2	1.8
Parafin stove	850	1,882	2,732	1.4	1.5
Lamps (non-electric)	700	1,619	2,319	1.2	1.3
Nails	195	623	818	0.3	0.5
Doors	118	513	630	0.2	0.4
Spikets	206	334	540	0.3	0.3
Cement	186	238	424	0.3	0.2
Paint	69	2	71	0.1	0.0
	59,073	127,411	186,484	100.0	100.0

55. The preferences for productive goods also reflect the rudimentary needs of a poor rural household as well as the destitute condition of the communities (Table 6). Seeds for pastures and basic subsistence crops and animal feed accounted for a third of the demand. For those who were able to participate, the DGP program increased access to basic agricultural tools. The Pehuenche spent a fifth of the Foundation funds and 30 percent of their funds on purchases which increase productivity and lighten the physical burdens of rural life: for horses, bikes, wheel barrows, chain saws, sewing machines, grind mills, carpenter's tools, and chain saws. Together, families and the Foundation made major livestock purchases - 178 improved breeds of sheep and 8 horses. The most frequently pur-

chased item was barbed wire and chicken wire for fencing. Until recently, scrub brush was used to control animal movements and protect crops. Wire fencing proves a more effective, long term alternative, especially given an increasing scarcity of timber. These preferences are also indicative of the desperate economic condition of the people who directed their request based on the best information which they had at hand. This information was that the Foundation would disappear at the end of the construction in 1997 (see para. 235). It is logical that they would try to get as much as possible as quickly as they could.

Table 6. Priorities of DGP Productive Input Purchases, 1992-1995 US\$

Item	Family costs	Foundation costs	Total	Family costs %	Foundation costs %
Fencing wire	6,566	21,372	27,938	27.8	28.9
Seeds (garden, potato, wheat, pa	4,816	18,158	22,974	20.4	24.6
Animal feed	1,782	8,278	10,060	7.5	11.2
Axe	297	253	550	1.3	0.3
Bikes	1,200	1,688	2,888	5.1	2.3
Carpentry tools	31	35	66	0.1	0.0
Chainsaw	500	3,032	3,532	2.1	4.1
Hand grinder	628	950	1,578	2.7	1.3
Horses	825	2,725	3,550	3.5	3.7
Sewing machine	1,381	3,584	4,965	5.8	4.8
Sheep	1,983	7,392	9,375	8.4	10.0
Wax (kg)	63	95	158	0.3	0.1
Whell borrow	2,334	4,632	6,966	9.9	6.3
Wool	1,216	1,717	2,933	5.1	2.3
	23,621	73,911	97,532	100.0	100.0

56. Compared to the educational demands of the community, discounted purchasing for education was marginal. The Foundation considers the widespread requests for 303 pairs of children's boots as an educational project. The poverty is so severe that children apparently are unable to get to school because they lack adequate footgear to withstand the bitter wet and cold winter. In four years, the Foundation provided 2616 US\$ for 31 scholarships, matching parental contributions (1391 US\$) to send students to study outside of their communities. In the focus groups and interviews, the evaluators heard strong complaints that the Foundation had not responded to community demand for more scholarships.
57. After four years of trial and error and almost a quarter million dollars, the DGP program is encountering increasing problems as a poverty alleviation mechanism. The DGP method assumes that the poor have access to disposable income for matching Foundation contributions. Group discussions were peppered with complaints from people who claimed they could not afford to take advantage of the program because they lack matching funds. To test the validity of their claim, the evaluation team administered a Marginality Pile Sort Test in each community (see Annex 1 on methodology). Community members ranked

households from those more fortunate to those less fortunate. For each community, the marginality rankings were cross tabulated with the benefits the household received from the Foundation. The evaluation discovered that in all three communities, families whom their fellow community members considered better off obtained two to three times more benefits than the less fortunate.

58. The DGP program is amplifying pre-existing marginality differences by skewing benefits in favor of the less marginal households and those located more proximate to the representative. The DGP program demands considerable, personal energy and time from the Pehuenche Board representative. Pangue expects them to encourage people to become group discount organizers. On the ground, this means the representative walk or ride for hours to reach sectors distant from their homes. The quarterly community meetings held with the Foundation President only reinforced this problem, since the meetings are held in the home sector of the Pehuenche representative.
59. Marked inequities are emerging between kinsmen and geopolitical sectors within communities. In Pitril and Quepuca-Ralco, families living in the Pehuenche representative's sector had significantly greater access to Foundation benefits (Table 7), often obtaining 3 to 4 times greater benefits. In Callaqui, where geographical distances are relatively insignificant and sectors do not show a significant difference in wealth, there was no significant difference in the distribution of benefits between sectors. A small but vocal group, primarily in Callaqui Bajo, felt that cooperation with the Foundation represented tacit support of Pangue and refused to cooperate. Overall, these issues proved much less important than other exclusionary factors.

Table 7. Distribution of foundation benefits between reservation sectors.
(ratio of the means in italics)

Reservation	1992	1993	1994	1995
Callaqui	<u>Alto</u> = Bajo No significant difference	<u>Alto</u> = Bajo No significant difference	<u>Alto</u> = Bajo No significant difference	<u>Alto</u> = Bajo No significant difference
Pitril	<u>Alto</u> > Bajo 3.9:1	<u>Alto</u> > Bajo 3.7:1	<u>Alto</u> > Bajo 4.5:1	<u>Alto</u> > Bajo 2.2:1
Quepuca-Ralco	<u>Palmucho</u> > Malla > Quepuca Estadio > Avellano 7.9:2:1.3:1	<u>Palmucho</u> > Malla > Quepuca Estadio > Avellano 4:2.3:1.8:1	<u>Palmucho</u> > Malla > Quepuca Estadio > Avellano 4:2.6:1.5:1	<u>Palmucho</u> > Malla > Avellano > Quepuca Estadio 4.7:3.6:2.7:1

Note: The sectors where the Foundation representatives live are underlined. Callaqui Bajo was represented on the Board starting in 1994.

60. Other problems are increasingly pestering the DGP program. It was assumed that the Foundation DGP has sufficient resources to meet community needs. By 1995, the demand for purchases was exceeding available funds, forcing the Board representative to refuse requests of some, while accepting others. Confusion is developing from people who had collected their contributions, anticipating a purchase, but then are refused. A "retail vendors syndrome" is emerging. Pehuenche are not always aware of the market value of purchased items and are claiming the Foundation staff is "doing business" with Pehuenche money. Others complain about the inferior quality of items. Other participants cannot find their promised counterpart funds, leaving the merchandise in storage, sometimes for months. By late 1995, this problem has concatenated into a minor warehousing problem.
61. The opportunity cost of the DGP program on the Board and the community has been high. The staff spends approximately 80 percent of their time administering this program, which prevents them from gaining a wider perspective on their job and learning about development. Staff considered the mechanics of purchasing and delivery as the least satisfactory aspects of their jobs. Their displeasure appears to have sometimes been shown to the Pehuenche, as a half dozen complaints made to the evaluator about the very rude conduct toward the Pehuenche by a staff member, including raising his voice and walking away from the people.
62. Fixing these problems is taking more and more Board time, as it has become increasingly concerned about possible inequities in distribution. Pehuenche representatives on the Board are bored with the long Board meetings and discussions of what they feel are relatively insignificant issues. In 1995, the Board started a voucher system (*vales*) to correct the inequity problem. People can earn credit toward group purchases by working in a community project. *Vales* are set at 33% below the minimum wage to avoid disrupting the highly marginal, local labor market (one day's work = 5 US\$). This has also discouraged participation, since a voucher can only be spent on Foundation organized purchases and indigent Pehuenche cannot afford to forego their subsistence activities. The poorest, those for whom the voucher program was designed, are living hand to mouth. Working for a voucher gains credit with the Foundation, but does not feed the family. Problems also arose in determining what was a community project. Pangué encouraged road building, which has resulted in 99% of the vouchers going to men.
63. The program is popular with those who have access to its benefits. Who would dare object to a 30-70 % discount on goods which are essential to the survival of a family living below the poverty line? Nonetheless, it fails both the equity and escape-from-dependency tests. Between 1992 and 1995, twenty percent of the beneficiaries received over half the Foundation's funds, excluding the majority of the Pehuenche destitute. And the demand for goods has increased rather than declined. Part of the increased demand is linked to other factors

outside the Foundation's control. The Foundation, for example, has taken on a role formerly occupied by INDAP, the government agricultural agency, by providing input price support for seed and fertilizer. The government loans. The Foundation gives.

64. Shortly, the interim evaluation will review evidence on the systemic impact of the DGP on poverty. Based solely on the programs inability to distribute its benefits equitably and the wealth differences it generates as a result of providing many things to a few, the program's operation would make it seem an unlikely poverty reduction program.

Community projects

65. Designing an effective community development component, within Pehuenche context, challenges the most innovative of indigenous development expertise and knowledge of the local community. The Foundation had neither. The Foundation has spent 60 thousand dollars on community initiatives, or about 16.8 percent of its direct investment. Recent years have seen a steady, dramatic decrease in community projects, declining from 27 to only 4 percent of overall program.
66. Without a strategic plan for reaching its objectives, the Foundation has dispersed its resources in a variety of directions (Table 8). Health services included improvements and repairs on the health posts (3000 US\$) and their dental offices (3546 US\$), and unsuccessful alcoholism prevention program (2825 US\$). Cultural projects included cultural awareness trips for children led by the Foundation staff (4000 US\$), tobacco, food and instruments for the *Nguillatun* (2900 US\$) and the building of a cultural museum inside the Foundation headquarters (1250 US\$). Gifts included purchases for Christmas gifts for children (5633 US\$) and bundles of used clothing (750 US\$). Over half the expenditures to support community education were spent on library books for the schools (4000 US\$), with the remainder used to purchase video equipment for the Foundation, and an electric generator for a school. A small cooperative program led to the building of a small community structure in Quepuca-Ralco and Pitril (4200 US\$) which the Foundation uses as a warehouse. Most notably was a lack of investment in possible productive enterprises for the community, with a single project to purchase and resell used clothing costing 113 dollars.

Table 8. Community initiatives 1992-1995.

	US\$	%
Health	21,288	35.5
Reforestation	9,938	16.6
Cultural	8,093	13.5
Educational	6,983	11.6
Gifts	6,383	10.6
Infrastructure	4,785	8.0
Recreational	2,323	3.9
Micro-enterprises	113	0.2
Miscellaneous	63	0.1
	59,965	100.00

67. These funds are being spent on purchases without any community development plan. Most of the initiatives for community projects came from the Board, the staff, or local professionals who approached the Board. Pehuenche Board members are asked for their tacit approval, but tend to view these decisions as external to their roles. They have no idea what planning is. This is evident from the fact that the representatives do not return to their communities for a discussion over whether or not the initiative should be funded.
68. The most promising returns have occurred when the Foundation is providing supplemental funding to an existing strategic initiative. For example, the Health Ministry and the Municipality began upgrading regional health services in 1990, increasing the health service staff in Ralco and initiating biweekly rounds of a 4 person health team to the seven Pehuenche communities, including those associated with the Foundation. Within this program, the disrepair of the health posts in Quepuca-Ralco and Callaqui proved an obstacle for official sector funding and the Foundation provided critical supplemental funding for their repair. Likewise, an enterprising dentist who was unable to obtain official funding to complete his strategic dental care objectives gained board support for supplemental funding to equip the posts with dental chair and minimal equipment. The impact of the dental equipment is not yet measurable since the clinic is not yet in operation. However, if the clinic becomes operative and with adequate personnel, given the dental health needs, it could potentially be of great benefit for the communities.
69. In sum, without a clear understanding or analysis of community dynamics, the Foundation has not yet began to build a community development program.

Diagnostic studies

70. The Foundation was launched without the benefit of a baseline analysis of Pehuenche culture. The baseline data consisted of government household surveys designed for administering welfare distribution (subsidies). Expertise on Pehuenche culture lies overseas or with Chilean scholars who Pangue judged too critical of the proposed Project to conduct an objective study. The EA subcontracted work from a Chilean folklorist, who had no previous field experience among the Pehuenche, little substantive background in the requisite areas of infrastructure impacts on indigenous populations, theories of ethnic change, or cultural ecology. The consultant concluded that Pehuenche were wrapped in an "inevitable" process of the blending of culture and most were already converted from Indians into poor rural peasants just as those to be found throughout Chile. This conclusion quickly lent itself to the misimpression, by Pangue, that an ethnic group's future is inevitably destined to extinction. Pehuenche did not actively participate in this critical assessment about their future or the research which led to this conclusion.
71. To gain a perspective on their target population, in 1993 the Foundation contracted a Santiago consulting firm, the Center for Study for the Psychosocial Development and Stimulation (CEDEP) to conduct an extensive socio-psychological survey of the three communities. The reason the Foundation felt that the Pehuenche needed psycho-social attention is inexplicable. Some CEDEP survey team asked questions which the Pehuenche considered culturally inappropriate. The CEDEP survey followed, rather than preceded the design of the Foundation's central methodology. Supervised by the Foundation President, it collected information similar to that collected by MIDEPLAN. The survey provided baseline information for the educational diagnostics and the application for housing subsidies. Although the survey has sufficient information to permit targeting of particular subgroups within the communities with specific needs, the CEDEP survey information has not proved very useful for the Foundation staff. The results were not organized for administrative uses and the staff is untrained in how to use diagnostic data. The survey has been primarily used to make lists of community members and provide comparative data to show the success of the DGP program in the 1994 Foundation's Annual Report.
72. In 1994 the Pangue Board members arranged for a team of three social anthropologists, a rural education expert, a psychology student, and a staff member of the Foundation to complete an educational diagnostic of the three Foundation communities and of Ralco and Ralco-Lepoy. The study was conducted by extensive interviews with the school directors, examination of secondary documents, interviews with select group of 19 parents in Callaqui, Pitril and Quepuca-Ralco who still had children in the 6th and 8th grades.
73. The studies found that the Alto Bio Bio schools have comparable deficiencies to other rural Chilean schools. First, the system is not integrated into regional and local needs. Second, teachers in the basic school have not integrated their program to permit a fluid transition between basic school and early secondary education (7-8 grade). Third, the quality of education is very low: the curriculum,

text and training materials are inadequate, scarce, and, when available, not articulated with the Pehuenche needs. The study claimed the teachers do not know *Chedungun* and lack opportunity for continuing education. Fourth, uneducated parents, without a proper educational environment in the home, remove their children from the schools because they need their labor on the farm, leading to a high dropout rate. The children are slow learners and only Callaqui has pre-elementary school. After the 8th-basic year, there are no opportunities for children to study in the region. Parents do not participate in the school system. The study focuses primarily upon the professors, noting their lack of self-esteem and self-critical attitude and overly focused on infrastructure problems. The infrastructure is poor.

74. The selection process for diagnostic studies did not involve competitive bidding. The contractors were selected from the President of the Foundation's professional network. While competent in their own areas of expertise, they were inexperienced with indigenous development. Mapuche professional organizations were not approached or given an opportunity by the contractors to become involved. Neither study has presented their results to the community and the Pehuenche representatives to the Board need further assistance and training in order to understand and make use of the information.

Training

75. Pangué reported in 1992 that the Pehuenche community was very concerned about education and training. An ambitious training program was shared with the IFC before Board presentation, but never materialized. The Agreement envisioned training in semiskilled occupations which would enhance the peoples long term income potential and mitigate the post-boom unemployment. The EA and Agreement envisioned training programs in semiskilled occupations as well as non-traditional agriculture (rabbit-breeding, fish-farming, collection of native plants, etc.) and training in housing construction techniques. The Foundation statutes set an objective to provide training programs centered around production techniques and pursuits characteristic of the Pehuenche culture which will result in greater access to job opportunities (cf. para. 174).

Leveraging

76. The Foundation's most promising component, measured in terms of cost to benefits, is just emerging and was not part of the original design. This component built on the Foundation President's awareness of Chilean urban poverty programs. Community members lack the institutional capacity, knowledge, resources and energy to apply for federal programs for which they are technically entitled. The Foundation President and his close associates' special expertise about federal programs is permitting them to solicit the external funds by leveraging a few dollars of Foundation funds for purposes of capturing substantial returns in federal subsidies. Foundation advisors chart courses

through the morass of federal paperwork and laws, using Foundation funds to leverage the capturing of other moneys. Foundation staff explain the benefits to the community member and, on occasions, personally assist the applicant.

77. In housing, Foundation leveraging is on the verge of capturing benefits exceeding Pangué's annual contribution to the Foundation. Most Pehuenche are eligible for federal housing subsidies, but by 1993, only a third of the Pehuenche had received them and another seventeen percent were on a waiting list. The application process was costly, laborious for isolated people with poor communication skills, and blocked by land tenure complications. Using their diagnostic studies, the Foundation contracted a private firm to guide the Pehuenche applicants into a little known program which had no previous applicants from the Alto Bio Bio. The Foundation leveraged one unit of a Pehuenche family's funds and 2 units of Foundation funds to capture 136 units of federal subsidy (roughly 1700 dollars), 7 units of Pangué funds, and 50 units from a Catholic charitable foundation specializing in housing for the poor. As a result, 74 families in Pitril and Callaqui will be obtaining 2,460 \$US houses with only 58 \$US of Foundation money and a family's 29 US\$ contribution. This amount exceeds Pangué's present annual contribution to the Foundation.
78. In the fall of 1995, a second leverage program was under development to capture funds from private sector charitable contributions building on some of the recommendations of the educational diagnostic. The Pehuenche Board members have been marginally informed as to the details of the leveraging actions. They have not, in turn, conveyed a very succinct view of the component back to the community.

Assessment of the Foundation's Impacts

79. In the first months of this interim evaluation, the evaluator prepared an analytical framework for assessing the Foundation's impacts which was reviewed by the IFC, Pangué, the Foundation and extensive consultations with the public and private sector during the scoping and design phase of this evaluation (Annex 1 Methodology). Pehuenche representatives to the Foundation were informed, they listened and welcomed the evaluation. Its five dimensions focus on poverty reduction, cultural identity, sustainable development, impact management, and electrification. Sustainable development was further subdivided into sustaining the Foundation as an organization and sustaining the long term development of Pehuenche resources (human, community and family infrastructure, renewable natural resources, and community organizational capacity).
80. This is an interim evaluation of an evolving organization which has only been operating for 4 years, and has an expected life span equal to that of the dam. At this point, the evaluation is searching for incremental changes and trends, not dramatic transformations. Some program components, such as leveraging are just getting off the ground. Others, such as the discount group purchases

have been in operation long enough to warrant full evaluation. Detecting incremental changes is complicated by the relative size of the Foundation, which is only one of multiple development forces in the Alto Bio Bio.

Alleviation of poverty

81. The Foundation represents the largest single private sector contributor to the Pehuenche of the Alto Bio Bio, but its regional importance should not be exaggerated. It is exceedingly difficult to determine the exact amount invested by the public sector and other non-governmental organizations in Callaqui, Pitril and Quepuca-Ralco. The Foundation's budget is approximately eight percent of that spent by the public sector for Alto Bio Bio. On a per capita basis, the Foundation's budget is about 29 percent of the public sector investment in Callaqui, Pitril and Quepuca-Ralco. Compared by sectors, the Foundation's relative importance was highest in education and training, reflecting their initial 16,000 dollar training program in 1992 and 1993 which has since ceased (Table 11). The Foundation provided approximately one third the public sector funding for productive activities and housing, one-fifth of health costs and a small fraction of road improvements.

Table 11. Annual external investments in Callaqui, Pitril and Quepuca-Ralco (estimated) US\$ *

Sector	DGP	Foundation**	Total	Public investment***	Ratio
		Community initiatives		Public Sector	
Housing	40,550	2,094	42,644	133,700	3.1:1
Education and training	3,811	8,647	12,458	32,300	2.6:1
Health	-	4,670	4,670	27,000	5.8:1
Productive	24,017	3,727	27,744	83,500	3.0:1
Cultural	506	3,417	3,923	?	n/a
Roads	-	3,298	3,298	134,700	40.9:1
Total****	68,884	25,853	94,738	411,200	4.3:1

*Excluded from this approximation are the contributions of other non-governmental organizations working in the region.

** Foundation contribution's based on direct program costs and 52 percent overhead.

*** Public sector's contribution is adjusted to a per capita expenditure for Callaqui, Pitril and Quepuca-Ralco. based on the amount spent by the public sector for all of Alto Bio Bio.

**** All sectors are not represented.

82. Data such as that found in Table 11 often opens polemics about relative importance of private and public sector contributions and their social responsibility. Such discussions are counterproductive. The significance of these expenditures should be measured in terms of their combined impact on the objective of alleviating poverty.

83. The Ministry of Planning and Municipalities (MIDEPLAN) closely monitors the poverty status of Chilean households using a poverty point system known as CASII. CASII is a weighted index based on housing, occupation, income, education, and the possession of certain material goods. In the Municipality of Santa Barbara, CASII interviewers track and update a database on all families in the Alto Bio Bio population. CASII is primarily a diagnostic instrument used to distribute state subsidies, pensions and housing support. It is also used as a poverty indicator even though MIDEPLAN warns that numerous studies have shown that the index does not give a view of the actual conditions in which poor people live. Notwithstanding this warning, the public perception is that changes in the CASII index signals underlying improvements in the socio-economic structure.
84. The 1994 Foundation Annual Report announced that an improvement in the socio-economic conditions of Callaqui, Pitril and Quepuca-Ralco had occurred between 1992 and 1993. A comparison of the CEDEP survey diagnostic to government CASII records indicated the population was no longer among the poorest 2.4 percent of the nation. It had risen to 4 percent in a little over a year.
85. Methodological concerns surfaced regarding the applicability of CASII poverty index to measure the Foundation impacts. The designer of the discount group program and President of the Foundation is a nationally recognized expert on the CASII method. Some were concerned that the DGP program is focusing on purchasing items which are specific indicators used in the construction of the CASII index. No one argued that the President was acting duplicitously, only that he may have so reified the index components that he forgot MIDEPLAN's caveat. The Foundation counters that the Pehuenche, not the Foundation, invest their windfall incomes in housing improvements which are subsidized by the Foundation.
86. The 1995 data provide another snap shot of the poverty index. It may be used to compare the status of Pehuenche communities associated with the Foundation to those which are not and to compare the Pehuenche with the non-Pehuenche community in their midst, Ralco (Tables 12 and 13). The three communities affiliated with the Foundation are less poor than the four Pehuenche communities without Foundation benefits but the difference is very small (11.4 CASII points). In proper perspective, all seven Pehuenche communities, including those affiliated with the Foundation remain extremely poor.
87. In the Foundation communities, only 1% of the households in the Foundation area have managed to slip over the national poverty line (NPL). Close examination of the data reveals that the primary reasons for the improvement was a change in per-capita income (as a result of the Project), improvement in the roofing and flooring material of the houses (as a result of the Foundation), and improvement in access to water and sanitation (as a result of public programs). This small increase is consistent with differential distribution of program benefit. A third remain in even worse condition: they are indigent.

Table 12. Marginality of Foundation region measured by poverty indicators, 1995.

CAS II Poverty Points	Households %				
	< 400	401-450	451-500	501-550	551 +
Region VIII	3.87	25.97	41.88	23.36	4.91
Province of Alto Bio Bio	8.97	28.80	33.94	21.43	6.87
Municipality of Santa Barbara	11.20	47.07	32.44	8.55	0.74
Foundation region	11.35	37.73	42.49	6.96	1.47

Source: Municipality of Santa Barbara, 1995

88. The evidence also shows that Callaqui, Pitril and Quepuca-Ralco are more internally stratified than they were before the initiation of the Project and the Foundation programs. The CASII data matches perspectives heard in the community, that some people are relatively poorer than they were before the Foundation and Project. By 1995, the bottom 34 percent were just as poor as they were before. A statistical profile of the destitute segment indicates that they are the same people who received little or no benefits from the DGP program or Project related employment.
89. The Pehuenche communities remain marginal, within the Alto Bio Bio, compared to the non-Indian community of Ralco (which ranked 82.1 points higher than the combined average of Callaqui, Pitril and Quepuca-Ralco). In 1995, 34 percent of the Callaqui, Pitril and Quepuca-Ralco households fall below the indigent line and 99 percent are below the poverty line, in the adjacent, non-Indian community of Ralco only 8 and 80 percent fall below these respective lines.

Table 13. Changes in Poverty Indicators in Callaqui, Pitril and Quepuca-Ralco 1991-1995.

	1991-92	1993	1994-95
Mean	438.5	466.0	449.9
SD	34.9	39.4	43.2
Minimum	354	381	358
Maximum	554	613	670
% Below national indigent line (440)	51	25	34
% Below national poverty line (570)	100	99	99

90. A review of Municipal educational and health statistics revealed no discernible trends or improvements since 1992 which could be linked to Foundation programs or expenditures. In housing and income improvements were evident.

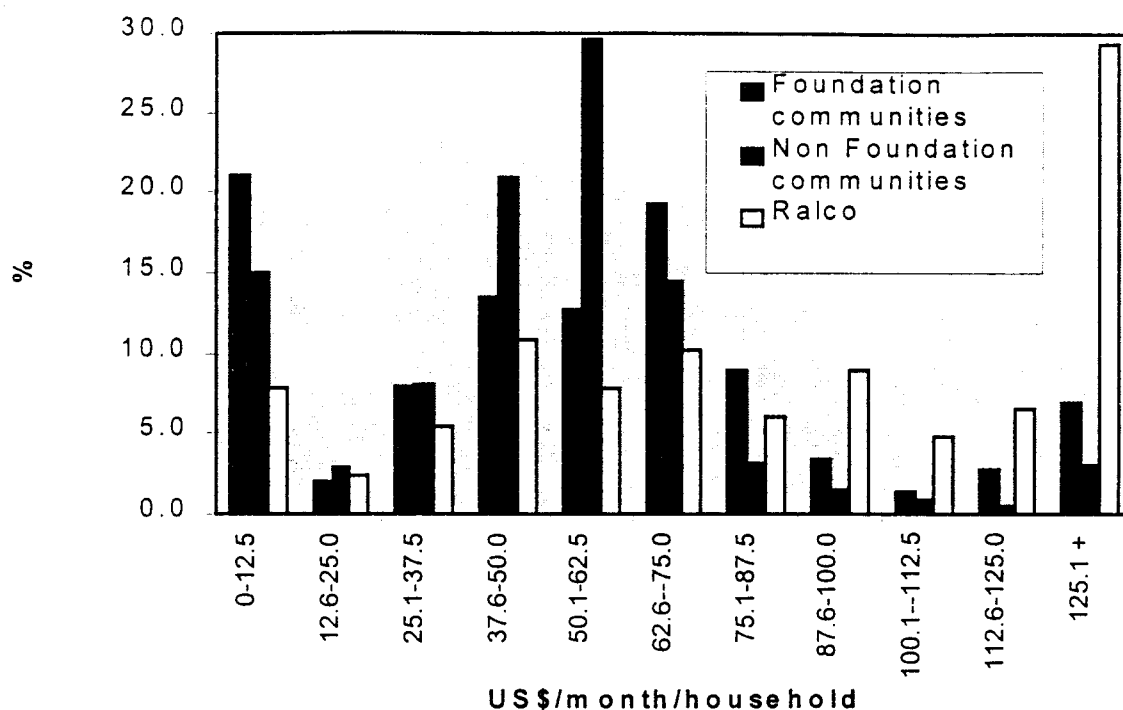
91. By 1994-1995, the poverty indicator is slipping backwards, with the average dropping 17 points and the percentage below the indigent line increasing 9 points. The standard-deviation widens. With Project construction shutdown in 1997, the net gains will slip again, although certain infrastructure improvements will remain. True, they have access to more material goods, but the region and the Pehuenche have not improved their long term income generating capacity which would sustain a trend.
92. Reviewing this data in Chile, both the public and private sector argued who is responsible for poverty alleviation, or to put it correctly, why do the Pehuenche communities remain so poor despite the Foundation and public sector's actions? Arguments over the relative importance of one sector or the other are immaterial. It is evident that their independent actions are only capable of nibbling at the edges of extreme poverty in Callaqui, Pitril and Quepuca-Ralco. The Foundation's funding, set at about a third of that of the public sector expenditure in the three communities cannot be expected, as it is presently constituted and operating, to make any substantive change in poverty over the long haul. As it presently operates, the Foundation and government are having very little impact on poverty alleviation in the Alto Bio Bio, which is a compelling argument for closer cooperation to get the maximum impact per peso.
93. An example of under-financing can be seen in health care. Since 1992, the Foundation has contributed about 17 percent of the government's per capita in the provisioning of health costs for Callaqui, Pitril and Quepuca-Ralco. The Health Ministry and Municipality spend approximately 125,000 US\$ per year for 6173 people in the Alto Bio Bio area (20.18 US\$/capita) and the Foundation's programs contributed 4,670 US\$ per year for the 1200 people in Callaqui, Pitril and Quepuca-Ralco or 3.86 US\$ per person. The combined support of the government and the Foundation is insufficient to meet the basic health care needs of the population. In this situation, the Foundation assisted in the repair and equipping of two dilapidated rural health posts, especially the dental offices in Quepuca-Ralco to a level at which they still would be considered marginal by Chilean urban standards. In 1996, the municipality has cut the Alto Bio Bio health care budget and began a reduction in force.
94. Apart from the Foundation's benefits, the Pangué Project itself has injected approximately 575,000 dollars in wages into Callaqui, Pitril and Quepuca-Ralco economy over the last four years. The impact on income distribution is evident (Figure 3). Assuming that the distribution of incomes within all the Pehuenche communities was roughly the same before the Project, about twenty percent of the adults in the communities associated with the Foundation have seen an increase in income. For most members, their income distribution remains more similar to that of the other four Pehuenche communities who are not in the Foundation than either are to Ralco (Figure 3 and Table 14).

Table 14. Monthly income differences in the Alto Bio Bio : Foundation, Non-Foundation Communities and Ralco households 1995 in US\$

	Mean	S.D.	Cases
Communities within the Foundation	61.95	50.02	284
Communities not in the Foundation	57.44	54.67	591
Ralco	106.18	80.42	166

Source: Municipio de Santa Barbara

Figure 3. Income distribution in the Alto Bio Bio, 1995.



95. Upon completion of construction in 1997, the Foundation communities can be expected to slip back into an income distribution comparable to that of their brothers living outside the Foundation's sphere of influence.
96. Other impacts are not evident in the distribution of income. Most local hires have been from Callaqui and Quepuca-Ralco and held unskilled jobs. Women hold 11 percent of the positions, but show a disproportionate share of semi-skilled jobs compared to men (approx. 40 vs.22 percent).
97. While the Project has increased their income, the Foundation discount program has increased the purchasing power of some and channeled some of the wind-fall profits made at the construction site into household improvements and productive investments. A random sample of 59 households examined the

source of funds used for the Pehuenche co-payment for 269 purchases (Table 15). Project related income provided only 20 percent of the cash used for discount purchases. This suggests that income from Pangué employment was being used for subsistence, not discounted purchases. Women provided an almost equally important contribution through their knitting and weaving as did government subsidies, livestock sales, and outside wages.

Table 15. Source of disposable income used for Foundation purchases.

Source of Income	% of funds
Income from Project related employment	20
Weaving	18
Government subsidies	17
Livestock	16
Wages (non-Project)	14
Wood cutting	9
Cash on hand	3
Honey	2
Renting of summer pastures	1
Foundation vouchers	<1
	100
N=59 households who made 269 purchases and spent 7674 US\$	

98. After four years and over a quarter of a million dollars of direct Foundation program benefits and over 575,000 dollars in Project related wages earned by residents of Callaqui and Quepuca-Ralco and another 1.6M dollars in government spending, the CASII suggests no substantial trend in poverty alleviation in Callaqui, Pitril and Quepuca-Ralco. Either the funding is insufficient for the task or the expenditures were on ineffective programs. As far as the Foundation is concerned it appears to be both.

Preserving and reinforcing Pehuenche identity

99. Preserving and reinforcing cultural identity demands a sophisticated understanding and analysis of the target culture. Most importantly, it demands close collaboration, informed participation, and mutual trust with the members of the culture. It is through them that the culture is transmitted from generation to generation. Program actions must follow careful deliberation and discussion with the community, adopting culturally appropriate methods of discourse. Well intended, but misguided decisions may not only fail to reinforce identity, they may harm the culture or undermine its resource base.

100. Knowledge on how to reinforce identity is readily accessible. It may be found through contact with indigenous development specialists, contact with other indigenous groups throughout the world, professional forums of specialists in this area, especially in the Society for Applied Anthropology, and through World Bank programs which actively support the development of such knowledge and capacity building of indigenous peoples in Latin America.

**Box 1. Were medical exams traded for signatures
in support of the
Company?**

In October 1992, controversy was raging between Pangué and its critics over whether or not the Pehuenche supported or opposed the Pangué Project. The investment was going before the IFC Board in weeks. Pehuenche had elected a "Casique Mayor" 7 months earlier and demands were being sent IFC stating their opposition to the Project. Pangué's on-site presence was limited to 4 people, including a Pangué employee who was recruiting members for the Foundation. The Foundation initiated a tuberculosis screening of all seven communities in the Alto Bio Bio in cooperation with government agencies. The Foundation staff faced a complex logistic task requiring transport of over a thousand people from their communities to Ralco. Two weeks before the exam, Pangué asked the staff to accompany a notary to collect signatures in favor of the Project. During these meetings, Pehuenche recall the Foundation announcing the TB exam. Almost no one knew what "TB" meant. Some signed the petition believing they were exchanging their support for the dam for a medical exam even though the signature sheets say nothing of the sort. However, many people could not read, increasing misunderstandings. Whether they actually traded signatures in support of the Pangué dam for a general medical examination is less important than the fact they think they did. Three years later, a Pehuenche woman clutching her chronically weakened arm explained what she thought happened. The Foundation "herded us into trucks like little sheep, undressed us from the waist up. I showed them my arm and I haven't seen the results yet. " Due to no fault of the Foundation, the TB results came late, the 5 positive cases out of 1000 were immediately referred.

101. In the absence of expertise, the Foundation intended, but has not yet developed, a cultural program which would provide training and assist the Pehuenche in production techniques and pursuits characteristic of their culture. On the training front, nothing has happened. In the domain of material assistance in production techniques, the Foundation claims the DGP reinforces Pehuenche culture by i) channeling the distribution of material assistance through three Pehuenche representatives to the Foundation, including assisting them in their *Nguillatun*, ii) making cultural appropriate gifts to Pehuenche leaders, iii) and, according to the Executive Director, intentionally not imposing the Foundation staff's own beliefs on the people. Over the next four years, concrete actions which the Foundation claims are reinforcing Pehuenche cul-

ture include contracting a Pehuenche school monitor (325 US\$), purchasing food and tobacco for the *Nguillatun* (1141 US\$), building a small museum inside the Foundation building (1250 US\$), and cultural horizon trips in which the Foundation staff take Pehuenche children to visit *huinca* cultural sites (2125 US\$). One of these trips almost backfired, when *huinca* children made fun of the Pehuenche children inside a public building. The Foundation staff defended their wards and gained greater understanding of the ethnic differences within Chile.

102. The Foundation's development is seriously handicapped by the Company's self-imposed cultural and intellectual isolation (see Box 1). Evidence for cultural isolation is overwhelming. The Foundation has not contracted qualified indigenous peoples either as staff or consultants, rather, the Company has carefully selected well meaning, but culturally untrained, inexperienced in indigenous and rural development, and Spanish-speaking only non-Mapuche staff. The staff has no knowledge of the World Bank Group activities or publications on poverty alleviation, indigenous or rural development. During the participatory evaluation, they became aware of this knowledge and expressed a strong desire to learn about development and Pehuenche culture. They were quick to note, however, that their pressing duties of purchasing and delivering goods for the DGP program left them little time. Nor is the staff being trained in indigenous development. The Foundation's offices did not have any books or reprints on development of indigenous peoples, rural development, or natural resource management, including the free publications by the World Bank sociological group. It subscribes to none of the scores of newsletters on development. The non-Pehuenche Board members, Executive Director, and staff has made no effort to learn Chedungun, save the local school teacher who had learned a few phrases before he joined the Foundation staff. The Pehuenche consider their language the core of their culture.
103. Isolation is strongly exacerbated by the Company's failure to comply with the Agreement that Pangué recruit someone of recognized prestige and experience in the field of social development of indigenous people to be at all times on the Board of Directors.
104. The Foundation statutes did not establish a place for an IFC nominee to participate on the Foundation Advisory Board, as called for in the Agreement. As a result, the IFC was unaware that the Advisory Board has met only once in four years (in 1995). The isolation syndrome reoccurs. The social scientist on the Advisory Board is an archaeologist, who readily admits she is not qualified in indigenous development. Present members of the Advisory Board have suggested that the Foundation President place members who have expertise on the Board, including an anthropologist who has published 3 articles on Pehuenche social structure. He was passed over as a potential critic of the Company. As it stands, the Advisory Board is improperly constituted, without a Chair, ineffective, non-functional, and lacks professional indigenous development expertise.

105. Underlying their cultural isolation is a weakly articulated, superficial view of cultural change which is little more than a Chilean *huinca* "folk" model of Pehuenche identity. The staff and non-Pehuenche Board members hold that Pehuenche culture is maintained by "pillars": the native *Chedungun* language, religious expression through the *Nguillatun* ceremony, respect for the traditional leader or *lonko*, their mythology, their food and their clothing. The validity of this model has not been subjected to the critical test of Pehuenche public opinion and careful deliberation.
106. Overtly missing from this "folk model" of the Pehuenche culture is the vital importance of access to land, its renewable natural resources, and family and social networks to Pehuenche cultural survival. Their name itself, Pehuenche - people of the piñon - indicates they are a temperate forest culture. Also missing is the importance of Pehuenche approach to religion, not simply the *Nguillatun* ceremony. It focus on Pehuenches maintaining the order of the Universe. This strongly suggests that actions which alter this order might create, to quote one Pehuenche elder, a "very very delicate situation." The starting point for the preservation and reinforcement of Pehuenche culture is an awareness that their future, as a peoples, and the future of the ecosystem are tightly interwoven. This linkage of the ecosystem and indigenous peoples is a fundamental part of indigenous development and the IFC environmental policies on Indigenous peoples. There is no awareness of this even being an issue within the Foundation.
107. The roots of this cultural myopia and professional isolation seem to originate with Pangue which hires the Foundation staff, without the advise or consent of the Pehuenche representatives on the Board. Numerous Pehuenche feel that they could, with training, do the job of the staff. Qualified Mapuche speakers, anthropologists, and development specialists were passed over in favor of hiring a previous Pangue employee, a relative of a Pangue subcontractor and a businessman who has strong "spiritual qualities." They are hard working, well intentioned, educated people. Some, such as the new Executive Director, have considerable skills which might be used for the benefit of the Foundation. Nonetheless, the staff are unqualified and untrained for their positions. They realize this and more and more Pehuenche are beginning to realize it too. new
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108. Once hired, there is no evaluation of their job performance which involves the beneficiaries. Job performance of individuals was not the focus of the interim evaluation, but many Pehuenche argued it should have been, since they have no mechanism to express their dissatisfaction with staff or request corrective actions.
109. Pangue has a full time, staff anthropologist who attended many of the early Board meetings but his role is clearly that of a Company, not a Foundation, employee. He had written no reports on the Pehuenche. Throughout the interim evaluation, his principle duties involved arranging for the resettlement of the Pehuenche in Ralco-Lepoy and he was never seen at the Foundation.

110. The Foundation is further isolated by its selection of consultants who performed the educational and survey diagnostics all of whom have been preapproved by Pangué and none of whom showed expertise in Pehuenche culture or indigenous development. Their cultural illiteracy is evident in their work and work product. None had trained or hired Pehuenche field research assistants, feeling that the people lacked academic preparation. Instead, *huinca* students from the city were trained to interview Pehuenche. This, in itself, illustrates minimal contact with the focus of international indigenous research and development which is tapping the vast potential of non-formally educated adults for working in their own culture.
111. The cultural museum, attached inside the Foundation building, contains interesting artifacts of Pehuenche material culture. The Foundation feel this is a cultural program. Improperly located outside the Pehuenche communities, the Pehuenche people do not come to this museum. Few, especially women, are aware it exists. Visitors to the Foundation, including University students with their Professors, visit the museum and discuss Pehuenche culture and the Foundation with the staff, but living Pehuenche are neither trained nor employed as cultural interpreters, as is common among indigenous groups in other parts of the world. The most common word heard in one of these visits was "them" as opposed to "us." Thus, it is a cultural program only in the sense that *huincas* may learn about Pehuenche culture and has little to do with promoting or reinforcing Pehuenche culture among the Pehuenche themselves.
112. Unaware of alternative models and programs, the staff and Board feel they have close contact, collaboration and informed participation of the Pehuenche. Interactions between the Foundation *huincas* and the Pehuenche is tightly circumscribed - focusing primarily on the discount purchase program. The Foundation see this program as cooperative venture. As shown earlier, the Pehuenche see it as a commercial transaction not associated with the more socially meaningful and obligated interaction they share with one another through loans, cooperative labor exchange, and so on (C. J. Garcia).
113. Perhaps the most overt sign of isolation is the lack of a sign on the Foundation building. Unmarked, the Foundation lies on the main road, miles from Callaqui, Pitril and Quepuca-Ralco and adjacent to the contractors encampment. Most Pehuenche women had seldom, if ever, entered the Foundation grounds. Many of the interviewees did not know where it is. Occasionally Pehuenche men come to the Foundation grounds and stay outside the building, searching for employment with the Project.
114. Cultural illiteracy limits the effectiveness of the Foundation. Pehuenche prefer weekend meetings. The evaluator asked Pehuenche for the best times to meet and, as a result, 8 of the 11 evaluation focus groups were scheduled on Saturday or Sunday. The Foundation is closed on the weekends, cutting off a primary opportunity for staff communication with the communities. Likewise, the Board President always schedules his meetings with the community on a weekday. There is little trust between the staff member and Pehuenche.

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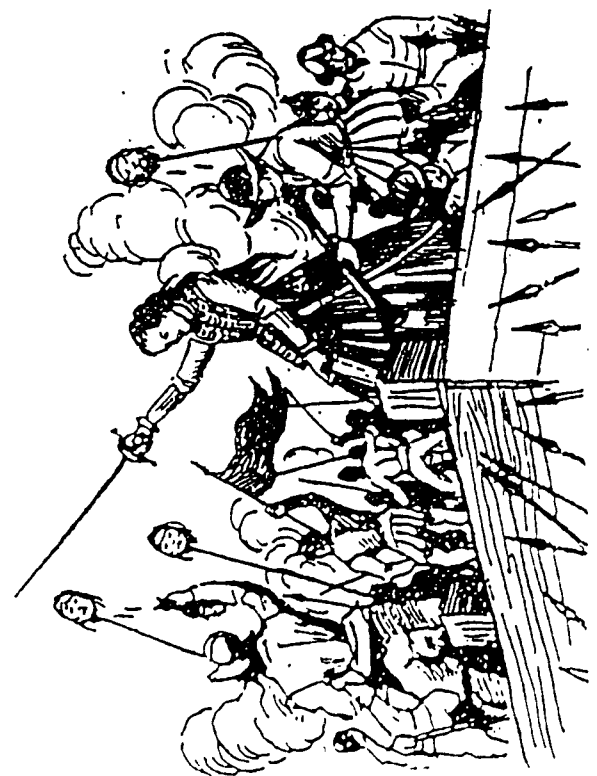
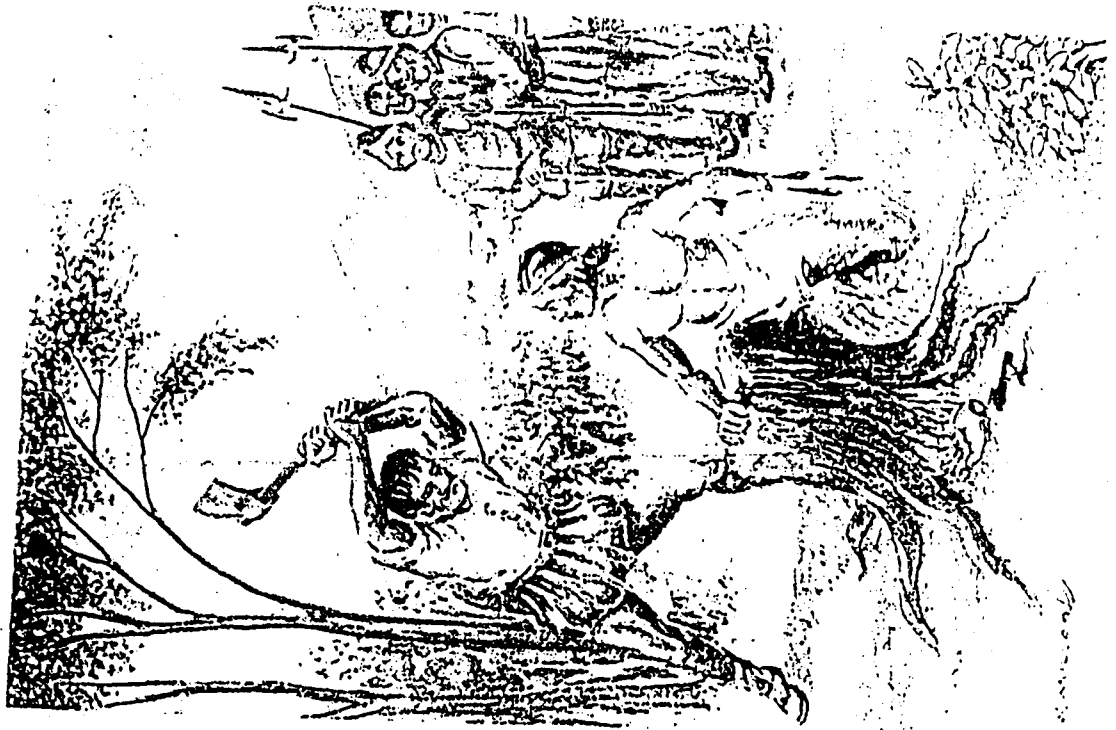
115. The Foundation has adopted the same unimaginative techniques to communicate with the community that are used by the public sector. In doing so, they have inadvertently further complicated Pehuenche lives. Pehuenche leaders are asked to call "their" people together to assembly after assembly not simply by the Foundation, but by a variety of government and private agencies who wish to meet with the Pehuenche. There is no coordination between agencies and the Foundation, forcing Pehuenche to attend meeting after meeting. Attendance is highest when people are scheduled to receive material items.
116. Pehuenche men and women often walk or ride for hours to attend these outdoor meetings, sometimes exposing themselves and their children to biting cold and rain. In an attempt to reduce hardship, the Foundation constructed a center (*sede*) in Pitril and Quepuca-Ralco, but they serve double duty as DGP warehouses. CONADI is preparing to build a comparable meeting building next to the Foundation center in Pitril, indicating that these are considered service centers of the Foundation, not a community owned place where the people might meet.
117. Once at a meeting, Pehuenche are pelted with imperatives from *huincas* visitors who tell them how they should improve themselves, adopt this crop, bathe more frequently, send their children to school, and so on. Few visitors take time to listen, further isolating themselves from contact with Pehuenche culture. The Foundation cracks, but does not break this mold. The Foundation staff and President dominate the meetings. In the case of the President, he often speaks in a very loud voice, paces around the group and flails his arms in the air trying to animate people to form discount purchasing groups. Pehuenche consider this as *huinca* behavior and would never communicate intra-culturally in this fashion. At DGP delivery meetings (*entregas*), the Foundation staff dominate the assembly and the Pehuenche Board members and representatives are pushed to the side, only occasionally asked to assist the staff by making a list or some other small task. The pattern is repeated in Board meetings, where the evaluator calculated that the Foundation President dominated 65 percent of the speaking time in a room of 10 people.
118. The result of this cultural isolation and corresponding cross-cultural communication problem is measurable. An inter-cultural communication test was given to 119 people in 8 focus group meetings. A young Pehuenche artist drew five diagrams of different forms of interpersonal communications between two men - one, a non-Indian representing the Foundation (*huinca*), and the other a Pehuenche (Figure 4). In 8 focus group meetings, the pictures were laid on the ground and used to initiate a discussion about the ways people communicate with one another. A Pehuenche field assistant described the test again in Chedungun. Attendees were given twigs and asked to lay a twig on the painting that most closely represented a) how the Foundation is presently communicating with the people and b) how they would like to interact with the Foundation. The votes were tabulated and the results given back to the group and discussed. People were very interested in this test. Given the peo-

ple's unfamiliarity with participatory techniques, the test required between at least an hour to administer, including translations and some long conversations. The same test was administered to the Foundation staff in 20 minutes.

119. The staff felt that, despite cross-cultural communication difficulties in the early years, they are carrying on a dialogue with the Pehuenche (Figure 4, item c). The Pehuenche had a different view. Over half the Pehuenche believe the Foundation lectured the Pehuenche and did not listen, while a quarter felt that the interaction is best described as a dialogue. Sectors of the communities showed strong differences of opinion. Comparison shows that sectors which received proportionately fewer DGP program funds were, in many cases, the areas that felt the Foundation was not listening or lectured to them (a culturally unacceptable form of communication). What cannot be conveyed in numbers is the intensity of the discussion before and after the vote.
120. Pehuenche voted that they desire to be given time to think. "The Pehuenche like to think" was a commonly heard expression. They voted that they prefer a dialogue form of interaction or one in which the Foundation listens to the Pehuenche. Following the vote, Pehuenche asked us why the Foundation President and one staff member continue to "shout at us?" The Pehuenche are entertained by the Foundation meetings and appreciate the gifts and purchases they are able to make, but asked the evaluator - "shouldn't the Pehuenche have a voice?"
121. Social interaction between Pehuenche and the non-Pehuenche staff is minimal. A frequent Pehuenche complaint, especially from the elderly, is that the Foundation staff drive right past people walking to a meeting the staff has called - often leaving them to walk miles to and from meetings. Staff argue that they need time in their truck to conduct private staff business.
122. The Foundation's educational book donation illustrates why cross-cultural communication and full participatory development should guide development rather than allowing a program to be guided primarily by well-meaning, charitable intentions. In 1993, the Foundation selected and donated books to the libraries of the three elementary schools. The 4,000 US\$ donation is 57 percent of the funds used by the Foundation for community-wide educational projects. The books are a sampling of the great books of Western Civilization (Homer, Shakespeare, Cervantes; and Chilean history) written at a level far beyond the capacities of Pehuenche school children. The teachers were stunned that some of the material contained graphic renditions of the dismemberment of Indians at the hands of Chilean *huincas* (Figure 5). In one school, the teachers concealed the book from the students. Upon examination of these materials, Pehuenche parents were aghast. This would not have happened if the cultural program analyzes the specific needs of a peoples based on consultation with the community and indigenous social development experts.

Figure 5. Plates from a book distributed by the Foundation to the Callaqui, Pitril and Quepuca-Ralco libraries.

SUPICIO DE GALVARINO



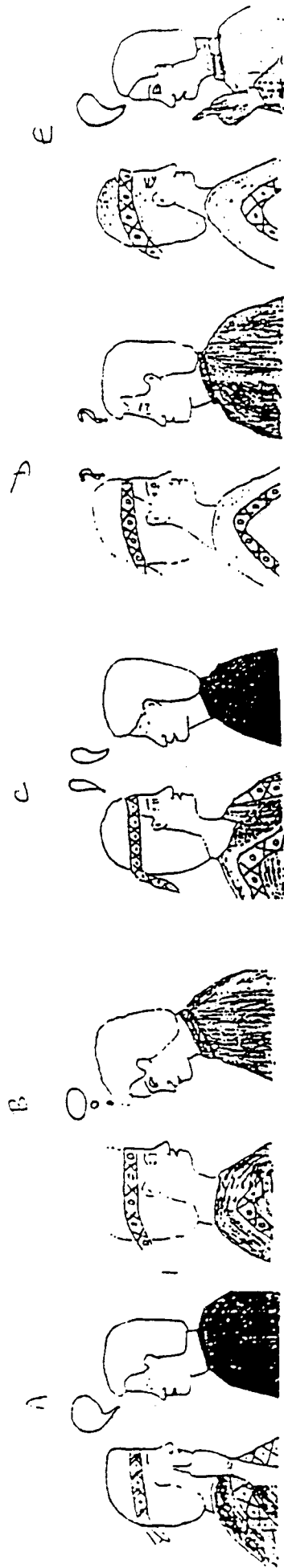


Figure 4. Results of Inter-cultural communications test, Nov-Dec 1995.

Present communication between Pehuenche and Foundation (%)

A. Foundation talks and Pehuenche takes time to think
 B. Pehuenche speaks
 C. Pehuenche and Foundation carry on a dialogue
 D. Pehuenche and Foundation do not understand one another
 E. Foundation lectures Pehuenche

Pitiril Center	17	22	11	6	44
Los Perales	0	0	50	50	0
Pitiril Bajo	7	13	13	13	53
Los Avellanos	10	0	0	0	90
Malla	0	0	50	0	50
Palmucho	0	14	0	0	86
Quepuca-Estadio	0	0	0	0	100
Callaqui Alto	0	0	86	0	14
3 Communities	5	6	25	4	60
N=119					

Desired communication between Pehuenche and Foundation (%)

Pitiril Center	0	0	100	0	0
Los Perales	0	0	100	0	0
Pitiril Bajo	18	82	0	0	0
Los Avellanos	0	0	100	0	0
Malla	0	0	100	0	0
Palmucho	0	50	50	0	0
Quepuca-Estadio	42	0	58	0	0
Callaqui Alto	0	86	14	0	0
3 Communities	0	24	56	0	0

123. The long term impacts of cultural isolation and illiteracy may bring future problems to the Foundation and the people. In the leverage housing program, which has considerable potential, few Pehuenche understand the Foundation's contribution and cleverness. Some complained that they had never seen the floor plans of the house while others resisted the government requirement that if a married child were to be eligible for the subsidy, the parents had to transfer their land to their children. Heretofore, Pehuenche have maintained some level of self-reliance by building their own houses. The subsidized housing is built by outside contractors. Without the incorporation of Pehuenche in the construction of housing, the result of the program could be that Pehuenche gain housing but lose the self-reliance by not knowing how to build and maintain their own houses.
124. The Foundation is influencing Pehuenche culture, but is minimally aware of what it is doing, since there is no strategic plan. The Foundation is channeling resources through a few elected representatives and has significantly transformed traditional Pehuenche political organization in ways the Foundation has not anticipated. Access to the chief's traditional resource, communal land, was waning in 1992 as the result of the privatization of communal land. The Foundation offered the representatives new resources to distribute - jobs with the Project and access to material goods. The impact varied between communities, since the traditional succession of leadership was in a different state within each community in 1992.
125. In Pitiril, the Foundation has strengthened a new leadership, apart from the traditional chief, based on democratic participation. The *lonko's* power to redistribute communal resources was already waning, as communal land was being converted into privately owned plots. When the Foundation approached the *lonko* for a representative, the community nominated three candidates and elected the *lonko's* secretary. After two years, the community held a regularly scheduled election and voted in a new representative.
126. In Callaqui, the Foundation has helped catapult a claimant into a *lonko* position by providing him with resources to distribute. When the Foundation arrived, a dispute was raging between factions over whether or not to accept state imposition of private land tenure. This dispute was exacerbated by conflicts for and against the Pangué Project. The communal land advocates felt Pangué was behind the move for privatization and that communal land tenure was the cornerstone of Pehuenche culture. They anticipated that the loss of communal resources (i.e. gathering, forest, water, and grazing) coupled with the Pangué construction Project, including the road, would irreparably disrupt their culture and social order. On the other side, a pre-Project claimant to leadership was selected first by Pangué and then elected by the community to be the Foundation representative. The majority of the community recognize him as a respected elder who can equitably distribute resources, including access to employment opportunities with the Project. By 1995, he is beginning to be con-

sidered the *lonko* by most of the Callaqui Alto community. Another sector, Callaqui Bajo, rejects him as a Foundation puppet and has formalized itself as a distinct legal entity under the new 1993 indigenous law (*Ley Indigena* No. 19.253 D. Of 5.10.93).

127. In Quepuca-Ralco, the Foundation strengthened the *lonko*'s recognition in one segment of the population and undermined his leadership authority in other segments. Members of the sector of Quepuca-Estadio, who are under pressure to be resettled by ENDESA's work on the Ralco dam see the Foundation as part of a pacification process and the *lonko* as part of the problem. They refuse to recognize him as *lonko* and claim that the Foundation favors those who support Pangué and ENDESA. In another sector of Quepuca-Ralco, resettlement pressures have not caused a rift in the community, but the potential is high (see paragraphs 201 to 216 on resettlement).
128. As demonstrated earlier, the inequitable distribution of Foundation funds has emerged as an issue between segments of the community. To defuse this problem and maintain a flow of benefits in Callaqui, the Foundation has encouraged a representative from one sector to attend all Board meetings, but not as a voting member. Her participation has significantly corrected inequalities in distribution since 1994.
129. The Foundation discount group purchase program is also marginally increasing ethnic tensions between Pehuenche and non-Indians (*colonos*) living in the same communities. The marginality pile sort results indicate that *colonos* are better off than their Pehuenche counterparts living in the same community, primarily because they have significantly greater access to regional employment options, such as working at local ranches (*fundos*), than their Pehuenche neighbors. As a result, *colonos* have more disposable income and made significantly greater purchases from the DGP. Pehuenche discontent led to a program change which required non-Indian community members to pay more than Pehuenche. The problem was more acute in Pitril, which has a larger *colono* population. The evaluators held separate group discussions with the *colonos* who refused to be interviewed by an all-Pehuenche interviewing team.
130. In sum, IFC launched a private hydroelectric company on an innovative social experiment without the benefit of its rich fund of social knowledge. And Pangué chose to isolate itself from international and national contacts which would have brought them in contact with this knowledge-base and expertise. It also chose to isolate itself from the rich cultural knowledge of the Pehuenche themselves. And it chose to redefine the Agreement in such a way that it need not join the cultural question. The Pehuenche leaders on the Board are unaware, until this evaluation, of this body of knowledge. The Foundation has made no progress toward preserving and reinforcing Pehuenche identity at a time when their culture is under serious threat.

Sustainable development: the Foundation

Standards of Governance

131. Certain minimum standards of governance and financing should be met to sustain the organizational integrity of any foundation. Pangue is providing the Pehuen Foundation with a modest, but sustainable endowment. A second prerequisite, is trustworthy governance. Major philanthropic organizations working closely with the private sector have established standards for evaluating a foundation's organizational sustainability. This interim evaluation will use the guidelines of the US National Charities Information Bureau which were developed in cooperation with major corporate charitable donors, including the Exxon Corporation, the Equitable Foundation, General Electric Company, the Prudential, and Time Incorporated. The standards relate to board governance, purpose, programs, information, financial support, use of funds, annual reporting, accountability, and budget matters.
132. The Foundation is making progress, but at this interim, it must overcome several major challenges before it meets generally acceptable foundation standards (Table 16).
133. The seven member board is sufficiently large. Board members volunteer for 2 year, renewable fixed terms and attend regularly scheduled, cordial face-to-face meetings at least 11 times a year. Pehuenche Board member attendance is exemplar. Board members do not receive a fee, although the Pehuenche members receive a nominal, 25 dollar allowance per Board meeting. They consider this inadequate, since Foundation affairs consume many days of volunteer time apart from the Board meeting, especially for organizing discount purchases, meeting with consultants, evaluators, visitors and staff. Some of their duties overlap that of the staff, who are paid for their time.
134. The Pehuenche Board members do not understand their fiduciary and legal obligations to the Board - an understandable problem since the concept of "a Board" is alien to them and their culture. Their standards of what is and is not appropriate Board conduct is based on what they have learned from the Pangue representatives on the Board, not through exposure to other Boards in Chile or through formal training designed to increase their capacity to govern. They stress that they consider themselves more as "representatives" of their respective communities to the Board than members of the non-profit Foundation board.
135. Conflict of interest (Standard #1i). The Foundation lacks a conflict of interest policy. The standards hold that in all instances where an organization's business or decisions might result in direct or indirect financial or personal benefit to a member of the board or staff, the decisions must be explicitly reviewed by the board without the member present. Pangue representatives make deci-

sions which may materially benefit their employer or themselves, e.g. a decision to repair a road primarily used by Company vehicles. Moreover, the Pangué board members have never explained the concept of conflict of interest to their Pehuenche colleagues. As a result, they too are exposed to potential conflicts of interest when they make decisions for discount purchases which will materially benefit them. A serious conflict of interest problem which is threatening the ability of the Foundation to reach its principle objectives will be discussed shortly in more detail (cf. paragraphs 225 to 229).

136. Circumscribed governance. The Agreement incorporates the best practices of IFC and its sister institution, the World Bank, by calling upon the Foundation to foster active participation of the indigenous communities in identifying their own needs, formulating and prioritizing projects and implementing projects and programs. Active participation means collaboration, not simply listening and consulting, with the beneficiaries. It means that the indigenous people influence and share control over decisions which are made. Experience has shown that listening and consultation with indigenous peoples is not enough without learning on the part of indigenous peoples. Learning through active participation strengthens an indigenous group's institutional capacity. When this learning is combined with the strengths of the indigenous people's own institutions, development can be sustained.
137. Pangué is quick to claim that Pehuenche actively participate in the Foundation through the discount group purchase program. Individual families can express their preference for items and combine their funds with those of the Foundation to satisfy material wants. In Board meetings, Pehuenche members actively decide the priorities of the discount program with useful advice and minimal interference from the Pangué appointed Board members. The discount program dominates the Pehuenche representative's time and energy. Likewise, the communities equate the Foundation with the discount program.
138. The Agreement, IFC environmental guidelines and the standards in philanthropy (#1a, b, c, d, and i) indicate that participatory standards apply to the entire organization, not to one program within an organization. From this perspective, Pehuenche active participation in Foundation decision-making, outside the discount program, is narrowly circumscribed. The Foundation statutes assure that they only have a minority voice on the Board. Pehuenche Board members receive less information on the Foundation programs and finances than Pangué appointed members. A Pangué Board member maintains the books but does not present a financial report at the monthly meetings, leaving the Pehuenche Board members uninformed. This situation disturbs the Pehuenche representative members who have requested more information on the overall budget, not simply that of the DGP program. They did not, for example, know the salaries of the staff. Nor do Pehuenche members review and approve of the release of the annual reports. The pattern of cultural isolation, identified before, reinforces the circumscribed participation by limiting contact of the *huincas* with Pehuenche ideas.

TABLE 16. The Pehuen Foundation Compliance with Standards in Philanthropy.

AREA	STANDARD	Foundation complies with Standards, expect as noted
1. BOARD GOVERNANCE	Board should be responsible for policy setting, fiscal guidance, and on-going governance, and should regularly review the organization's policies, programs and operations. Board should have a) independent, volunteer membership b) minimum of 5 members, c) an individual attendance policy, d) specific terms of office for its officers and members, e) in-person, face-to-face meetings, evenly spaced at least twice a year, with a majority of the voting members in attendance at each meeting, f) no fees to members for board service, but payments may be made for costs incurred as a result of board participation, g) no more than one paid staff person member (usually the chief staff officer, who shall not chair the board or serve as treasurer), h) policy guidelines to avoid material conflicts of interests involving board or staff i) no material conflicts of interests involving board or staff, and j) a policy promoting pluralism and diversity within the organization's board, staff and constituencies.	<ul style="list-style-type: none"> • 1a,b,c,d,e,j. Active participation of Pehuenche Board members is circumscribed and they do not understand their fiduciary and legal obligations as Board members of a not-for-profit corporation. • The Treasurer makes independent investment management decisions without explanation to the full Board and Board does not receive internal auditing information. • 1h. No policy guidelines for Board and staff on material conflicts of interest • 1j. No policy supporting diversity within the staff
2. PURPOSE	The organization's purpose, approved by the Board, should be formally and specifically stated.	<ul style="list-style-type: none"> • Statutes omit mitigation, sustainable development and preservation and reinforcing cultural identity components of the IFC Agreement. • Pehuenche Board members were unaware of objectives for the Foundation established by the Pangue/IFC Agreement.
3. PROGRAMS	The organization's activities should be consistent with its statement of purpose	<ul style="list-style-type: none"> • Foundation operation in Ralco-Lepoy and other program actions outside the statutory boundaries of the Foundation fall outside the organizations statement of purpose • Purposes of Foundation statutes do not incorporate IFC objectives
4. INFORMATION	Promotion, fund-raising, and public information should describe accurately the organization's identity, purpose, programs and financial needs to potential benefactors and beneficiaries. This information should be available to the public, including the beneficiaries.	<ul style="list-style-type: none"> • Information on Foundation activities are more readily available to non-Pehuenche than Pehuenche themselves.
5. FINANCIAL SUP.	The board is accountable for all authorized activities generating financial sup-	<ul style="list-style-type: none"> • 1b. Need full disclosure of all Pangue

PORT AND RELATED ACTIVITIES	<p>port on the organization's behalf: a) fund-raising practices should encourage voluntary giving and should not be intimidating, b) descriptive and financial information for all substantial income and for all revenue generating activities conducted by the organization should be disclosed upon request, c) basic descriptive and financial information for income derived from authorized commercial activities, involving the organization's name, which are conducted by a for-profit organization, should be available. d) All public promotion of such commercial activity should include this information or indicate that it is available from the organization.</p>	<ul style="list-style-type: none"> contributions to the Foundation. 1d. No statement in public information stating that information will be disclosed upon request.
6. USE OF FUNDS	<p>The organization's use of funds should reflect a consideration of current and future needs and resources in planning for program continuity. The organization should: a) spend at least 60% of annual expenses applied to program b) insure that fund-raising expenses, in relation to fund-raising results, are reasonable over time, c) have net assets available for the following fiscal year should not be more than twice the current year's expenses or the next year's budgets, whichever is higher, d) not be a persistent and/or increasing deficit in the unrestricted fund balance.</p>	<ul style="list-style-type: none"> Future needs and resource planning beyond current fiscal year are not considered in the use of funds. 6c. Net assets available fall under the standard. Long range commitments from Pangue to Foundation are not reflected in audited financial statement.
7. ANNUAL REPORTING	<p>An annual report should be available on request and should include a) an explicit narrative description of the organization's major activities, presented in the same major categories and covering the same fiscal period as the audited financial statements, b) a list of board members, c) audited financial statements or, at a minimum, a comprehensive financial summary that 1) identifies all revenues in significant categories, 2) reports expenses in the same program, management/general, and fund-raising categories as in the audited financial statements, and 3) reports all ending balances.</p>	<ul style="list-style-type: none"> 7a) program and management categories of narrative do not match the audited financial statement
8. ACCOUNTABILITY	<p>An organization should supply on request complete financial statements which a) are prepared in conformity with generally accepted accounting principles, b) fully disclose economic resources and obligations, including transactions with related parties and affiliated organizations, significant events affecting finances and significant categories of income and expense and should also supply, c) a statement of functional allocation of expenses, in addition to such statements required by generally acceptable accounting practices (GAAP) to be included among the financial statements</p>	<ul style="list-style-type: none"> GAAP were not followed when expenditures of the individual families on the DGP were considered revenue to the Foundation. Lacks full disclosures of Pangue contributions.
9. BUDGET	<p>The organization should prepare a detailed annual budget consistent with the major classifications in the audited financial statements, and approved by the board</p>	<ul style="list-style-type: none"> No budget prepared

139. A pattern of circumscription hampers the Board's ability to set policy and give financial guidance. It exacts a high opportunity cost and cripples long range community development. The discount program offers an example. The program is based on the assumption that the desires of the community are the sum of the material needs of its individual members. This model precludes a consideration of community corporate needs and non-material needs. Serious community concerns are not brought to the Foundation. How are they to mitigate the stresses being placed on their families? How can they restore order to the Pehuenche universe? How much of this disorder is related to the Project?
140. The threats to Pehuenche culture and community are discussed outside the Foundation walls. These threats include concerns with the loss of language abilities among the young, access to natural resources, increased development pressure on their land, increased intra-community conflict which is often exacerbated by external agents, inter-community conflict over diminishing resources in the summer pastures (*veranadas*), the threat to the entire group posed by the possible resettlement of those whom they call their "brothers and sisters" living in Quepuca-Ralco and Ralco-Lepoy. The Pehuenche see these as important issues to their culture, but the Foundation has become entrapped in its isolationism and circumscribed participation model. To Pehuenche, the Foundation is a place to satisfy individual material needs and purchase things not cultural preservation and development. Other factors, such as a perceived conflict of interest between the Foundation, as an organization controlled by Pangué and ENDESA, also limit its effectiveness (cf. para. 225 to 229).
141. In November 1995, the evaluator witnessed what, at first, appeared an attempt to bring broader, Pehuenche concerns to the Foundation. An intra-community problem in Pitril was brought by several Pehuenche representatives to the Board. Community order was threatened by a *colono* denying the community access to their traditional ceremonial grounds. She wanted to use it for campers. However, the discussion was placed in the context of the Pehuenche view of the Foundation. They wanted to limit the offending *colono's* access to discounts because she had violated community norms.
142. A second example of the tragic consequences of circumscribing participation is the inability of the Foundation to develop an effective student scholarships program. Since before the EA and continuing into this evaluation, Pehuenche stressed the importance of education and training. In response, the Foundation transformed a community need into an individual one, keeping it within their circumscribed boundaries and assumptions. Getting a scholarship became another discount program, a "*proyecto*," which parents could purchase at a discount, like a wood stove, dishes or boots.
143. As a result, the Foundation inadvertently gave low priority to helping qualified students continue their education. Scholarships represented less than one percent of the Foundation's direct investment in discount group purchases or about 2200 US\$ for 29 students over the last four years. To place this in-

vestment in perspective, it is one third of that spent on community projects such as Christmas gifts and less than the cost approved to send a Mapuche, who is not a member of any of the Pehuenche communities, to take a course in potato technologies in the United States. And it is roughly one-half the amount spent on the previously discussed book donation. The scholarships are not plush, providing about 80 US\$ per year to pay for half the costs of books and clothing of children attending boarding school. Parents cover the other half. Demand for scholarships vastly exceeds supply. As with other discount purchases, some families simply cannot find the matching funds and their children are not receiving scholarships. Moreover, the scholarships do not include funds to permit the boarding school students to communicate or return for visits to their families on weekends and breaks during the school year. Parents and teachers are aware that this is a critical, stressful period for both parent and child, and a primary time when the young need their cultural identity reinforced. The result is an ineffective, under-funded scholarship program which works against the promotion of ethnic identity among young Pehuenche and counter to the maintenance of community and family values.

144. Pluralism and diversity (Standard #1j). Tight adherence to a pluralistic and diversity standard in an organization whose principle mandate is to service indigenous peoples is fundamental. As presently constituted, the Pehuen Foundation is an indigenous development organization controlled and staffed entirely by non-Indigenous peoples. The evaluation has already discussed serious cross-cultural communications problems which undermine program delivery and effectiveness. Pehuenche are acutely aware that they do not have access to the Foundation staff positions and many feel that, with training, they are ready to take on Foundation responsibilities. There is no indication on the part of the Foundation, however, that this is being considered in the near term. Based on his experience with indigenous groups with comparable limited education and training, the evaluator concurs that the Pehuenche aspirations are realistic and obtainable in the immediate future - with IFC assistance and Pangu assistance.
145. Purpose (Standard #2). The Pehuen Foundation's purpose is incongruent with the Investment Agreement. In the Agreement, Pangu committed to i) make the Foundation a vehicle for sustainable development which will provide long-term benefits to the Pehuenche, ii) mitigate the potential post-boom impacts following the construction activities, iii) preserve and reinforce their cultural identity, iv) help alleviate the state of extreme poverty in the three communities by promoting their socio-economic development and, v) the Foundation was to investigate and make its best effort to arrange for the supply of electrical power to the communities, a critical component of sustainable development.
146. The objectives for the Foundation as stated in the IFC/Pangu Investment Agreement do not match the Foundation's statutory objectives. Undetected by supervision, the Company omitted three of its five objectives from the Founda-

tion's statutes: promotion of sustainable development, preserving and reinforcing cultural identity, and mitigation of post-boom impacts following construction activities. Instead, the Foundation set distinct objectives: i) provide training and assistance programs centered around production techniques and pursuits characteristic of the Pehuenche culture, ii) provide material and other types of assistance to the members of the Pehuenche communities of Callaqui, Pitril and Quepuca-Ralco, iii) undertake programs to improve the socioeconomic circumstances in the areas of health, education, and housing, iv) develop training programs that will result in greater access to job opportunities, and v) carry out youth welfare and sports or recreational programs.

147. Program activities (Standard #3). The incongruent purposes create serious problems for program development. The organization's activities should be consistent with its statement of purpose. Within its own statutory framework, the Pehuen Foundation has made some gains. From the Company's perspective the Foundation's programs are consistent with its stated purposes. The Company is proud of the Foundation and its accomplishments, measured by its own self-designed yardstick which is distinct from that of the IFC. Company employees enjoy and have learned greatly from their participation and Company community relations have, without question, improved as a result of the Pehuen Foundation. Pangué Board members have suggested changing its name to the Pangué Foundation. Within the private sector, the Foundation activities have placed a valuable positive image to counterbalance Company's critics. The return on investment on the Pehuen Foundation has been greater than Pangué might have received from a more costly public relations campaign, as is evident from the Company's willingness to underwrite the publication and distribution of the Foundation's informative, annual report.
148. Within the framework of the Agreement, Foundation actions fail to address fundamental initiatives that were expected of the Foundation in order to meet IFC environmental guidelines. Many stakeholders outside the Alto Bio Bio were aware of the Agreement's objectives for the Foundation, including the government and vocal critics of the Project. No one informed the Pehuenche board members and their communities about the IFC/Pangué agreed upon purposes for the Foundation. Most were to learn this four years later, during the participatory evaluation.
149. Public information (Standard #4). The Foundation has made a very strong effort to inform the public of its program and work through multicolored, well prepared annual reports. This information has not, however, been linked to a program of general fund-raising. Its primary purpose is to promote a positive public image for the Company. The Foundation complies with the use of funds standard, with the exception that it does not hold a reserve equal to not more than twice the current year's expenses or the next year's budget. This requirement is less pressing for the Pehuen Foundation, since it has a long range commitment from Pangué. It fails, however, to adequately inform the Pehuenche beneficiaries themselves. For example, the multicolored annual report

produced by Pangué was distributed in Santiago before it was approved or given to the Pehuenche representatives on the Board of Directors. Few Pehuenche had seen the report and no copies were made available for public inspection in the communities.

150. Financial support (Standard #5). Thus far, the Foundation has made little effort to raise funds, but its President lists this as an immediate objective. Best practices shows that full disclosure of the descriptive and financial information for all substantial income and revenue activities significantly increases public and donor confidence in the organization. Pangué's annual reports on the Foundation provide considerable information, especially compared to other Chilean foundations, including the other Indigenous development NGOs working in the Alto Bio Bio. To meet standards, Pangué should disclose its full contributions to the Pehuen Foundation and offer to disclose further information upon request. Both actions may contribute to fund raising.
151. Use of Funds (Standard #6). The Board does consider future needs or plan resource allocations beyond the current fiscal year. In December 1995, the Treasurer had not prepared a 1996 budget nor were there plans to prepare one and submit it for Board review. Moreover, the long range commitments from Pangué to the Foundation are not entered into the audited financial statement, making the Foundation appear undercapitalized.
152. Annual reporting and accountability (Standard #7 and 8). The annual reports of the Foundation are most informative and include narrative descriptions of the Foundation's major activities, a list of board members, audited financial statements. The reporting nears the standard, but the program and management categories should be reported in such a way that they match the audited financial statement. The auditors were also made aware, during the evaluation of the Foundation's incorrect practice of listing Pehuenche payments for discounted purchases as "contributions" to the Pehuen Foundation and hopefully this problem will be corrected.
153. Budget (Standard #9). Given its sustainable revenues which should continue for 50 years, it might be expected that the Foundation has a long range, strategic plan and associated budget. Quite the opposite occurs. The Foundation does not prepare an annual budget and no strategic planning nor any other process of decision-making on the Board which would lead to one. Consequently, all planning is short term, reacting to the demands of the day. The Pangué and Pehuenche Board members, however, have individual long term "dreams" for the Pehuenche and the Foundation - many of which appeared during a Board workshop held by the evaluators.

Sustainable development: human resources

154. A recent World Bank study of rural poverty in Chile found that low human capital is the most powerful factor explaining rural income differences. In a

non-academic way, the Pehuenche stated the same opinion during the EA. With less than 5000 remaining, the development of the full potential of every Pehuenche is the single most important dimension of sustainable development and their cultural survival. Human resource development means providing people with the opportunities and options to improve their livelihood and express their culture in a way they feel is proper. This potential is developed by strengthening the culture, the people's civil rights, their institutions, communities, and families. It begins with discussions among the beneficiaries, often without the *huinca* present, and the emergence of a shared vision of what is possible. Once the dreamer awakens, the people and Foundation can chart paths to reach their futures. The process begins to become "sustaining" when those who are enhancing their capacity feed their knowledge back to the community. It becomes sustainable and institutions begin to build when Foundation activities used for one purpose, such as collecting funds within a community for a DGP, are used for purposes other than purchasing something from the Foundation at a discount.

155. In the past four years, training has been a relatively insignificant part of the Foundation's approach, accounting for only 4 percent of its direct investments. Training projects have been small and focused on Project related skills rather than post-boom opportunities. An extensive training proposal presented by Pangue to IFC during preparation of the investment was shelved. Instead, the Foundation spent 16,000 dollars to train 16 women food handlers, 7 horticultural monitors, 4 surveyor assistants in 1992-93. With the exception of the monitors, all these jobs are Project related. Two food handlers still held positions in 1995. One had advanced to a semi-skilled level. One of the surveyors' assistants remains employed. The return on the investment in training, measured by income brought into the local community in the past four years from these three people is already 200 percent. Notwithstanding this impressive return on investment, the training program ceased to operate in 1993.
156. Project employment did not reach the 240 to 340 jobs for community members which was estimated by the EA. Local hiring patterns favored the non-Indigenous populations in Ralco or Santa Barbara, especially in semi- and skilled categories. Employment varied, averaging about 80 jobs each month and reaching occasional peaks of 120. Most local hires have been from Cal-laqui and Quepuca-Ralco for unskilled jobs. Women hold only ~11 percent of the positions, but show a disproportionate share of semi-skilled jobs compared to men (~40 vs. 22 percent). Although a few Pehuenche are trained, many noted that they are simply unskilled laborers - "*jornaleros*" - in Chilean society which limits their income potential and chances to improve their socio-economic station.
157. Foundation investment in training ceased in 1993. The primary obstacles have been the high costs of training per capita - compared to the priorities set on the DGP, the lack of a participatory diagnostic study to identify potential income producing options, within the Foundation and a misunderstanding of

requests from the young people for training skills which the Board judges to be inappropriate. The non-Pehuenche board members show considerable ambivalence over whether an Indian ceases to be an Indian if he or she finds gainful employment outside of the "traditional" subsistence activities. Over a half-dozen young people asked the Foundation for a discount project to learn how to drive. To the Board, this request seemed an oddity. Only one family owns a truck in all of Callaqui, Pitril and Quepuca-Ralco and, given present incomes, it seems unlikely that truck or car ownership will increase. The Pangué Project has made them even more aware of their marginality, as many unsuccessfully competed for jobs and watched "skilled" people take those jobs. For those who got hired in unskilled jobs, they discovered that even after four years of work, they remained unskilled laborers. In discussions with these young people, men and women, it was evident that they viewed the drivers' license as a way to demonstrate to potential employers that they are semi-skilled vs. unskilled laborers.

158. Another impediment to training actions is a self-imposed cultural misunderstanding. The Foundation President and staff members felt that the Foundation should avoid training Pehuenche in fields which might lead them to migrate into the Chilean labor market and, thereby, lose their cultural identity. Instead, the Foundation President mistakenly contends that horticulture and ecotourism represent the future of the Pehuenche economy. Experience with other indigenous peoples suggests that the critical variable in maintaining ethnic identity is not the source of a person's income, but the relationship of the individual to the group. Hopi Indians, for example, drive pickup trucks, live in houses with modern conveniences, hold doctoral degrees and still maintain their culture, including its ceremonies, language, and modes of interpersonal conduct. Cree Indians in Northern Canada share traditional songs in their native language over video-conferencing links to Australian aborigines. It is not necessary for a Pehuenche to stay locked into traditional Pehuenche economic activities in order to remain Pehuenche. Given the disadvantages of their place within the Chilean economy, this is a formula for sustaining poverty not enhancing their human and cultural potential.
159. Apart from formal job training, another important dimension of human resource development is an increase in the institutional capacity of a people. The Foundation has avoided building Pehuenche institutional capacity. Critics argue that they do not want to see the Pehuenche have a stronger, internal organization out of fear that the Pehuenche might use this capacity to criticize the Company or its owner, ENDESA. They claim, and Pangué agrees, that the Foundation is intentionally trying to maintain the *lonko* structure. The Foundation counters that they are following the IFC mandate to respect, i.e. not interfere with the culture.
160. Along this dimension of social development, small but significant advances have been made. The evaluator anticipated that the DGP methodology could increase interpersonal dynamics among discount purchase leaders

(*projecteros*), even though this was not the intention of the Foundation. A building of capacity would be evident if any of the groups organized for purchasing took on any other activities apart from doing more group purchases. No such evidence was detectable. There has been some increase in organizational skills of the Pehuenche representatives on the Foundation Board. Their active participation on the Board has increased. They are acutely aware of their limitations and made an explicit request, through the evaluator, for more formal training to improve their abilities and make contact with other indigenous groups inside and outside of Chile. The public sector has demonstrated that it is possible to build the institutional capacity of the Pehuenche. Within the same time frame, the government indigenous organization, CONADI, was established and, with significantly fewer resources than the Foundation, laid a foundation for a nascent community organization within the same communities.

161. Given its relatively greater resources and access to the World Bank Group's expertise on institutional capacity-building of indigenous peoples, the Foundation has even more potential for human resource development than the public sector. Certainly, it remains a strong priority among the Pehuenche. In community meetings, training was considered a preferable avenue for investment of Foundation funds than the discount group purchase program (see discussion of Pehuenche Preferences, paragraphs 218-231). As the construction phase of the Project commences many of the unskilled laborers find themselves unemployed, their concerns will increase.

Sustainable development: renewable natural resources

162. The Project put into play the future of Pehuenche natural resources. The EA identified the Project's impact on forestry as a sensitive area. The EA warned that the improved access to Pehuenche lands provided by the newly paved road, built by Pangue and the Government, might improve access and thereby encourage outside speculators and merchants to quickly buy up forest lands and other natural resources. But, it also noted the potential of forestry to improve the people's earning capacity.
163. The Pehuenche are forest peoples. Their culture, subsistence, health, and economy are based on sustained use of the forest as a renewable natural resource system. The forest is literally greater than the trees. The EA, INDAP and CONAF baseline data clearly establish that forestry is the best use of the land. The land is broken, of poor quality and susceptible to erosion, with little in Callaqui, Quepuca-Ralco and Pitril suitable for cultivation (9.0%, 1.7% and .4% respectively). Over three fourths of Pitril and Quepuca-Ralco's land has greater than 30% slope. Indiscriminate attempts to cultivate these slopes could endanger the watershed of the dam. In addition to timber, high valued products can be found, e.g. piñon, honey, and a mushroom sought for export to Japan. INDAP is shifting its agricultural extension program away from horti-

culture and livestock into indigenous forest products with high commercial value.

164. The link between access to the sustained use of the environment and cultural survival is immutable. This linkage is the cornerstone of the IFC indigenous policy. The Pehuenche depend on the forest for food, building materials, fuel, pasture, income, and religious-symbolic support. Access to the forest protects those below the poverty line from becoming indigent and those below the indigent line from starvation. Wood cutting provides the principle source of income for at least thirty percent of the households. Any impact of the Project which further threatens their access to natural resources must be considered extremely serious to their economic and cultural survival.
165. To mitigate potential negative impacts, Pangue was committed to use its best efforts to develop a formal agreement with the Chilean Ministry of Forests (Corporación Nacional Forestal - CONAF) for cooperation for watershed protection and management (cf. para. 35). The intention of this program would have been to substantially improve the forest and agricultural resources of the three communities as well as assist in maintaining water quality in the Pangue reservoir. Elements of the plan were to include controls on logging and clear cutting, afforestation programs, soil conservation and education. CONAF, Pangue, and the Pehuen Foundation were to assist the communities to re-establish their badly-depleted forest resources and deal with the soil erosion problems and the issue of overgrazing. The agreement was made but has not been implemented, with each side feeling the other is responsible. A key factor restraining the development of this agreement has been the conflict of interest discussed earlier in the evaluation. Public officials wish to avoid developing too close an association with a Company foundation which is closely associated with the controversial, sensitive Ralco dam.
166. The Foundation approach to the management and development of natural resources is unarticulated with that of the environmental assessment, CONAF, INDAP, and the realities of the Alto Bio Bio. The Foundation incorrectly considers the primary economic activity of the Pehuenche to be horticultural and its productive support activities program focuses upon improving these abilities. Without diagnostic studies, ignoring the government agricultural and forestry initiatives in the region, and without the expertise of technically qualified people, and without determining Pehuenche thinking on the subject, the Foundation's renewable resource program is limited to providing agricultural input subsidies and livestock through the DGP program. These spending choices represent a transfer from government programs, which charge interest and must be repaid, to the Foundation program, which does not. Presumably this approach will lead to the Pehuenche becoming self-sufficient in food, thereby, reducing their need to migrate to the cities for work. Unfortunately, given the topography, climate and soils, it is hard to see how this approach can succeed. There is no evidence to support the Foundation's proposed option is ecologically and economically viable. To the contrary, after four years, the

evaluator could not find any indication that the Pehuenche had become any more self-sufficient in food. To wit, after one of the focus meetings, the leader of the group asked for food for his people.

167. The Foundation has spent four percent of its direct investments on forestry since 1992. It signed a very general agreement with CONAF for technical co-operation in 1993 which has not been implemented in three years. Second, the Foundation set up a one-shot 9600 US\$ program, roughly 17% of their community projects budget, to distribute eucalyptus (non-native species) and pine seedlings. A demonstration plot was also planted by the Foundation. The program had very little technical assistance and only a fraction of the seedlings survive.
168. Even casual observers note the high volume of logging trucks moving out of the communities every day. Neither CONAF, Pangué, its ecological station, nor the Foundation has monitored the rate of deforestation taking place in the watershed since the Project began. In an attempt to gain a quantitative estimate of deforestation, the participatory evaluation team compiled information from CONAF management permits (1988-92) and truck transport permits (1993-1994) which listed Callaqui, Pitril and Quepuca-Ralco as their points of origin. Three models were constructed, based on a low, mid and high forest yields (16, 63 and 158 m³ per hectare). In 1991, the EA estimates that the three communities owned 30350 hectares, of which about 11000 was in early succession, disturbed, or Araucaria forest. Between 1988 and 1994, the three communities lost between 3,700 and 6,850 hectares of forest to logging activities. No reforestation occurred (Figure 5). Most of this cutting appears to have occurred during 1989 and 1994. Since 1991, the rate of deforestation appears to be between 1.3 and 8.5 percent per annum, a seriously high rate for any human ecosystem with no reforestation (Table 17).

Figure 6: Estimated Area Deforested in Callaqui, Pitril, and Quepuca-Ralco from 1988-1994. Three models based on different levels of forest productivity.

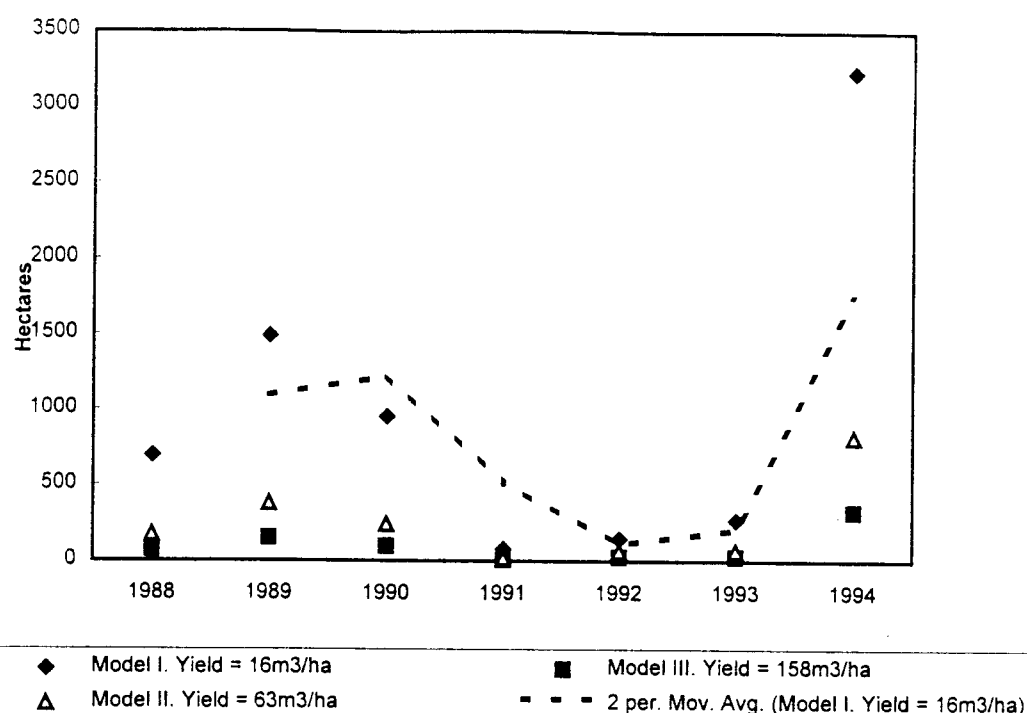


Table 17. Estimate of deforestation and annual rates, 1991-1994.

	Model I (16 m³/ha)		Model II (63m³ /ha)		Model III (158 m³/ha)	
	Ha	Rate % loss per year	Ha	Rate % loss per year	Ha	Rate % loss/year
Callaqui	588	10.8	176	3.2	92	1.7
Pitril	1207	5.4	400	1.8	235	1.1
Quepuca-Ralco	1929	11.9	536	3.3	251	1.5
Total	3724	8.5	1112	2.5	578	1.3

169. The losses to the Pehuenche economy from their inability to capture the value of their forest exceed the benefits provided the communities by the Pehuen

Foundation (Table 17). Using 1994 prices of 26.25 US\$ per cubic meter, the models indicate that between 3 and 18 million dollars of timber has been extracted from Pehuenche lands between 1988 and 1994. Since 1991, using the value of the timber in Concepcion, between 1.9 and 2.8 million dollars was extracted. Very little of the value of this timber reached the people who own the land.

Table 17. Estimate value of timber extracted from Pehuenche communities of Callaqui, Pitril and Quepuca-Ralco, 1988-1994, US\$ x 1000. *

	Model I 16m3	Model II 63m3	Model III 158m3
1988	349	1,374	3,445
1989	748	2,946	7,387
1990	478	1,881	4,717
1991	40	157	394
1992	129	286	718
1993	136	136	136
1994	1,628	1,628	1,628
Total	3,508	8,408	18,426

* Est. Based on 1994 Concepcion price of 26.25 US\$/m³

170. Just as the EA anticipated, 20 or 30 unscrupulous *huinca* middlemen from Santa Barbara and Los Angeles take advantage of the Pehuenche landowners poverty and marginal understanding of the Chilean system. The middlemen offer to complete the paperwork for a management plan for the timber. In exchange, the contractor agrees to harvest the forest and pay the owner a fraction of the timber's value. The subcontractor then brings in his machinery and, quite often, non-local labor and clear cuts the land. He does not replant. Chilean forestry law (*Decreto Ley 701*) holds the owner responsible for reforesting and exacts substantial fines. As a result, scores of Pehuenche owe fines of up to 2,500 US\$ which they are unable to pay and face potential incarceration. CONAF says they do not intend to collect the fines and the threat of the fines is intended to deter deforestation. Obviously, the Pehuenche are not told that CONAF is bluffing. However, the situation leaves many Pehuenche technically fugitives from the law and, as a result, lose their civil rights. The Pehuenche have no legal representation or institutions capable of protecting their interest or improving their negotiating position when dealing with the subcontractors. The Foundation, up to this point, has avoided giving any legal assistance on any issue to the Pehuenche communities.

171. Apart from their loss of civil rights for an already politically marginal peoples, the unmitigated deforestation is beginning to cause other serious impacts on Pehuenche culture and economy. For the first time, a firewood market is emerging, placing a price on a previously abundant and free commodity. Similarly, seventy percent of the DGP productive requests reflect the underlying cultural and economic problem of an eroding natural resource base. Tin roofs

loss of
community
structure

replace scarce oak beams. Barbed wire and chicken wire provide a time and resource savings compared to previous uses of increasingly scarce tree-limbs and scrub fences. Gas and wood cooking stoves make more efficient use of dwindling firewood.

172. There is no greater example of the costs of the isolationist position of the Foundation to the Pehuenche future than in the case of forestry. Throughout the Americas, indigenous peoples have gained considerable experience in managing sustained yield forests. Groups with resources comparable or less endowed than those held by the Pehuenche have achieved respectable incomes and escape poverty by learning to manage their forests.
173. Fortunately, the financial mechanism of the Foundation also permits exploration of alternative futures and mitigation, if the IFC and Foundation move quickly before the forest is completely depleted. The forest products industry offers the potential for a sustainable future for the Pehuenche and a way to escape dependency on welfare and charity. The Pehuenche are familiar with this industry and it falls squarely within the mandate of Pehuenche culture. The World Bank sociological and agricultural specialists have extensive experience in this field and grants are available for successful indigenous foresters from other countries to train groups such as the Pehuenche in all aspects of forestry and business management. Formal education or degree has been shown not to be necessary. The core of this approach is well known in social development. It is based on indigenous people taking control of their own enterprises, training, planning, and learning - not on an external, non-Indian group running a business in which the Indians are employees, sharecroppers or laborers. In this case, the Company and IFC must lead, not follow, the public sector since CONAF is unfamiliar with social forestry development among indigenous peoples.
174. Finally, the forest and fresh clean water may have more potential value than the timber itself, most of which is destined for pulp on the international market. During the evaluation, the new Executive Director began explorations of possible commercial ventures into forest products and fish farming. He lacks contact with indigenous groups who have successfully and profitably adopted this technology to their cultures. Alto Bio Bio long term planning discussions are considering arranging transfer payments from downstream users to the Pehuenche for protecting the watershed. In sum, not only the Pehuenche but also the Foundation has a lot to learn and the potential rewards for both, not to mention the watershed, are substantial.

Mitigating the potential post-boom impacts

175. As a new company, Pangué benefited from the IFC and World Bank Group's experience by taking precautionary measures to avoid many of the social and environmental problems which have haunted other hydroelectric projects. Mitigation was planned on three fronts. First, at the construction site, Pangué is

reducing the potential disruptive impacts on the local populations by requiring subcontractors to use 12 hour work shifts, grant home leave outside the construction area, and provide on-site recreational facilities. The potential social disorder which might have occurred from uncontrolled contact between approximately 1400 workers, most of whom are men, and the three small indigenous communities is being averted. Second, a Public Mediation Office was planned to provide an institutional mechanism for resolving conflicts between the communities and the Project.

176. All parties agreed that the environmental impacts would continue long past the construction phase. The precise nature of all the possible permutations and combinations of problems could not be foreseen. Thus, the Foundation, as the third front of mitigation was to provide a sustainable solution to unforeseen problems by mitigating post-construction phase impacts.
177. The Foundation, as presently constituted, does not provide a framework to mitigate the post-construction phase impacts. The shortcomings of this component are extensive. Nearing the end of the construction phase of the Project, mitigation has not been listed as an objective in the Foundation statutes. The Board has not placed the issue on its agenda. No monitoring is taking place to identify the Project impacts which need to be mitigated. As of 1995, the Pehuenche were not aware of the planned Public Mediation Office. The Pehuenche do not see the Foundation as a designated place to discuss remedies to Project related problems. The need is present. The Foundation staff is rendering assistance by dealing with Pangué related problems on an individual, ad hoc basis, as a favor to the affected party rather than part of their official duties. Along with the Foundation President, the staff was unaware of the Foundation's intended mitigation role.
178. Social and economic impact mitigation follows a fairly consistent pattern: 1) an environmental assessment (EA) identifies likely issues, 2) allocates resources to resolve them, 3) forms institutions necessary to sustain the mitigation and 4) provide reliable monitoring, 5) openly seeks solutions to these problems by working with those affected. When necessary, the mitigation process may also require 6) building or strengthening local institutions to increase their abilities to overcome the problem. Only the first two steps have been taken. The formation of the Pehuen Foundation started the third step, but the rest of the pattern is unfinished.
179. The Pehuenche face a more uncertain future as the construction phase of the Project draws to a close. When they were asked to consider the "best possible future of the Pehuenche communities twenty years from now." One of the most respected leaders responded "the Pehuenche are finished, we will be no more." This may be a puzzling response to someone looking at the events of the last five years.
180. Beneficial impacts have appeared, as expected. During the construction phase, incomes have increased. Government investments helped prevent

health and security problems. The improved road permits the three communities to obtain medical emergency services, although availability is still very limited, especially during the weekends. Some of the Foundation and Pehuenche (through co-payments) actions serendipitously reduced environmental impacts, e.g. wooden stoves mitigated the need for firewood in the face of deforestation. The Foundation's leveraging activities may also decrease the risk of homelessness for many Pehuenche in Callaqui and Pitril and many of the purchases made in the DGP program improved existing housing and enhanced daily life.

181. By the fall of 1995, however, some impacts appear temporary - or boom related. Layoffs were beginning in the Spring of 1996. The permanency of the changes in health care appear doubtful; as the 1997 regional health budget was cut and the government continue to delay upgrading the regional health facility from a "post" to a "clinic," thereby assuring more sustained health care. The winding down of Pangué construction activities appears to have influenced this decision.
182. The respected leader's opinion is based on a more seasoned judgment of the impact of change on his people. In the last seven years, the rate of economic and cultural change for the Pehuenche has accelerated to an unprecedented rate. The paved project road has brought increased pressure on their land and resources. Visiting the area today, it is difficult to imagine that only five years ago it took 5-6 hours to reach Ralco from Los Angeles (a little more than a half-hour's drive), and that it took people living in Pitril and Quepuca-Ralco another 2-6 hours on horseback to reach Ralco. From there, they rode another day to Los Angeles.
183. With easy accessibility, outsiders - hikers, tourists, and hunters have substantially increased weekend excursions into the scenic Alto Bio Bio. Many do not respect or understand Pehuenche private property or their culture. Some enjoy the wilderness by firing rifles next to rural school filled with nuns, children and the evaluator. Like monkeys in a zoo, the Pehuenche are the subject of the curious and their cameras. The increased traffic over the dirt roads in Pitril and Quepuca-Ralco have brought an unexpected health problem: the Alto Bio Bio's poor soils turn to powder-fine, red dust under the frequent passing of wheels, which fills Pehuenche houses and lungs. Mothers and children cough and complain. Motorists who run over Pehuenche animals do not realize that they have decimated the poor man's walking financial reserves - his animal.
184. Increased traffic is leading to a potential food security problem in Quepuca-Ralco. The Pehuenche use a breed of valuable, highly trained, prized dogs ("*perros pastores*") to herd their goats and sheep. Unlike the prized Scottish sheep dogs, the Pehuenche dogs herd the animals all day without human assistance. The dogs represent substantial labor savings and may play a key role in range management. Some of these dogs are fed better meals than humans, reflecting their high economic value. The dogs viciously protect their

herds against all intruders, including Pehuenche who are not the herd's owner. Their herding style is incompatible with increased tourism, road traffic, and fencing. Without the dogs, Quepuca-Ralco Pehuenche food security is threatened. Using humans to herd in this harsh climate is uneconomical and inefficient and, upon further study, it will probably be found to have negative caloric yields. Visitors, especially armed ones, do not appreciate the economic importance of these animals to the survival of a Pehuenche household. Mitigation measure may require highly restricted access of non-Pehuenche and motorized vehicles to the community.

185. Some outsiders want to stay, not just visit. The Project road and reservoir offer a new recreational site for La Concepcion and Los Angeles - which is widely discussed by the government and private sector in the national media. Some of the impacts extend beyond the impact area defined by the Agreement, but are nonetheless present and Project linked. Local land values have jumped, placing more pressure on access to community land. A few potential impacts will be highlighted. Plans are being made for a ski-resort on the side of the Callaqui volcano, one of the communities' main source of piñon nuts used for their subsistence. A national park in which they gather and graze is trying to manage the Pehuenche access. The government is restricting cutting and burning. Claims, both large and small abound. A Santiago attorney is claiming the entire Pehuenche community of Trapa-Trapa. In the unlikely event that he is successful, this would cause massive resettlement. A land claim is serious and can have immediate counter-development consequences. Government agencies have been unable to make improvements to the community's dilapidated health clinic and schools, directly endangering Pehuenche educational opportunities and their health security. And non-Indians have successfully staked claims to individual parcels of land inside lands which the Callaqui community thought it owned. Such claims directly harm the community's social development and complicate the development objectives of the Foundation.
186. By the beginning of 1997, we can expect massive unemployment in Callaqui and Quepuca-Ralco due to the end of construction. Internal factionalism, present before the project, has been amplified. Social disruptive problems have intensified in Callaqui where the rate of alcoholism has substantially increased. This problem is a serious concern for the people as they watch families become, what they call "disordered." In 1991, there was one bar in the region. By 1995, six of the 14 commercial establishments are bars. The problem is present in Pitril and Quepuca-Ralco, but to a lesser extent. The Foundation and its resources have become entangled in the internal factionalism of two communities. In Callaqui, disagreements which preceded the Project have been exacerbated by the Foundation, the Company and its critics to such extent that the community is so deeply divided politically that violence is feared by its leaders. Culturally appropriate ways to avoid the Foundation becoming

more deeply involved in such conflicts have not been used, although they have been suggested by the Pehuenche representatives to the Board.

Involuntary resettlements

187. In addition to deforestation, almost equally significant changes are coming from the threats of involuntary resettlements. Three, possibly four, involuntary resettlements loom on the immediate horizon in the Foundation area. Any one would substantially undermine the Foundation's poverty reduction and mitigation capacity. One is a result of the Pangue dam. Another is the result of the nearby Ralco dam which will force the resettlement of Foundation members living in Quepuca-Ralco. And the third, in the adjacent settlement of Ralco-Lepoy may have a strong spill-over effect on the Foundation. Although the Ralco dam is not IFC sponsored, Pangue - a new company capitalized by ENDESA and the IFC - has invested 40 million dollars in preparation of the Ralco hydroelectric project. The Company has been actively involved in helping develop a situation which may undermine the objectives of one of its other interests, the Foundation. To review them:
188. Los Avellanos sector in Northwestern Quepuca-Ralco. Before Board presentation, Pangue reported to the IFC that no Pehuenche would be resettled as result of the Pangue dam. They reported that only a handful of non-Indian households were to be relocated. Review of the records shows a very serious misunderstanding, which is harming the Pehuenche. Pangue narrowly defined "affected" to mean people who were physically living within the area which will be flooded by the new reservoir, excluding those on or near the shoreline. This definition is too restrictive by IFC resettlement operational directives which do not use the direct/indirect distinction used by Pangue. This might seem a quibbling over terms, but not to the extremely poor Pehuenche families living in a part of Quepuca-Ralco known as Los Avellanos.
189. In September of 1992, before Board presentation, the government planning agency, MIDEPLAN carefully documented and predicted that the increased land values and subsequent land speculation would create a problem at Los Avellanos. Their technical report predicted that private developments would be planned on the north shore of the Pangue reservoir which would drive up the value of land which is cross-claimed by the Pehuenche and a local land speculator. The Pehuenche have occupied this land since before recorded records in the region, but lost a legal battle in the 1940's for title to the land. The speculators did not try to evict them until the parcels became potentially valuable recreational housing development sites. As a result of the Pangue Project, these properties now have considerable value. The speculator has now sold most of the lots along the north shore to *huincas* from Santiago and other parts of Chile, exactly as anticipated by the MIDEPLAN. He is listing now the Pehuenche occupied parcels and has threatened over 12 families with forced eviction. He also placed a restraining order on their spokesman and

highly respected elder, Antolin Curraio, which is limiting his ability to defend his clan. Mr. Curraio happens to be the only Pehuenche who has visited the IFC and a friend of the Kennedy family.

190. The land speculator reported that he does not believe resettlement of Pehuenche to be a problem. During December of 1995, he claimed that he had buyers who were willing to "buy lots, little Indians and all, and then get rid of them." If the land is sold, what is now a localized conflict would become a national one - with IFC and Pangué in the middle and the government claiming that they warned both entities four years ago. The Pehuenche are without competent unbiased legal representation and the probability of resettlement outside the IFC guidelines is very high. This resettlement is a Pangué related resettlement of Pehuenche and demands the immediate attention of IFC specialists experienced in resettlement issues.
191. Quepuca-Estadio. Southeastern Quepuca-Ralco. A second area threatened with resettlement is at the other extreme of Quepuca-Ralco, in a sector recognized by the Pehuenche as Quepuca-Estadio (cf. Para. 19). This area is adjacent to Ralco-Lepoy. This resettlement will involuntarily affect 52 or more families as a result of the construction of the Ralco dam. Although not an IFC project and technically unlinked to Pangué, the Pehuenche and many Chileans see it as related and have documented their claims in many letters to the World Bank and the IFC. Until early 1996, Pangué expected to build the Ralco dam and invested heavily in its preliminary planning and resettlement. In October of 1995, it appeared their investment paid off and ENDESA announced that Pangué would build Ralco. The ENDESA Board changed their mind a few months later. It now appears that ENDESA, which owns over 97 percent of Pangué, will be building Ralco directly or through another subsidiary. Pangué was created solely for the purpose of constructing the Pangué dam. The Pehuenche may not understand the intricacies of the ownership arrangements, but they legitimately view both companies as one and the same. Their perception was reinforced by the expansion of extensive Foundation activities into Ralco-Lepoy (see para. 202-209) .
192. Palmucho impacts: center of Quepuca-Ralco. In 1992, before Board Presentation, the Ralco-Lepoy EA identified the center of Quepuca-Ralco, a sector known as Palmucho, as the site for the construction camp for the Ralco dam. Palmucho is little more than a few dozen scattered homesites in the center of Quepuca-Ralco which is also the location of a small private school and health post. This small settlement cannot possibly withstand the impact of a construction camp of over a thousand people, mostly men. During the planning phase of the dam, which is currently underway, the community is already suffering serious health impacts from heavy dust pollution and traffic. A construction site would destroy this Pehuenche community and cannot be mitigated.

193. Possible fourth resettlement: Los Avellanos. Assuming the families at Los Avellanos can survive the Pangué related threat of resettlement from the land developer, it faces another immediate challenge. Engineering plans indicate houses in the Avellanos area are located at or very near the proposed site for the Ralco machine house.
194. Using the IFC definition of resettlement, not the ENDESA/Pangué definition of those who will have their houses inundated, this data indicates that approximately 70-85 percent of the Foundation community of Quepuca-Ralco will be affected by the Ralco dam. Combined, the populations of Ralco-Lepoy and Quepuca-Ralco account for about one-quarter of the remaining 5000 Pehuenche and two of its seven communities.
195. This information was available in 1992. ENDESA completed the preliminary EA for Ralco dam which included plans to resettle members of the Foundation community of Quepuca-Ralco as well as Ralco-Lepoy six months before presentation of the investment to the IFC Board. The EA refers not simply to the resettlement but to the chilling possibility of the "eradication" of the Pehuenche settlements at Ralco-Lepoy. The EA was prepared by the same contractor who was doing the EA for the Pangué dam. The omission of reference to possible indigenous resettlement in the Pangué EA is a serious technical error. Had this been known, IFC could have programmed the potential impact of a planned resettlement on the Foundation's design and financing.
196. Ralco-Lepoy resettlement and potential spill over effects. IFC and World Bank experience has shown that resettlement can have an impact on adjacent communities, the intensity of which depends on the social structure and culture of the affected groups. Evidence was obtained during the interim evaluation to indicate that the resettlement associated from the Ralco dam may have substantial impacts on the other Pehuenche communities in the region, and, again on the Foundation community of Quepuca-Ralco which is already under serious, unmitigated threats from the Pangué Project. Ralco-Lepoy and Quepuca-Ralco are historically, sociologically, genealogically, and spiritually related communities, having voluntarily chosen to live under different *lonkos* in 1954. The *lonko* of Ralco-Lepoy is viewed as a respected, regional elder by the people and leaders in the communities of Callaqui, Pitril and Quepuca-Ralco.
197. Evidence that Pehuenche social structure will generate a spill-over effect appeared in 1995. ENDESA forcefully expelled five Pehuenche families from El Barco, an area purchased as a potential relocation site for the Ralco-Lepoy and Quepuca-Ralco Pehuenche. The impoverished El Barco families moved to their distant kinsmen in the adjacent community of Ralco-Lepoy. The move and documented movements of peoples between communities indicates that a spill-over effect is to be expected in this cultural group.
198. IFC and World Bank Group best practices have identified at least eight risks of potential impacts of resettlement: loss of health, homelessness, loss of food

security, loss of access to communal resources, landlessness, increased marginality, loss of income, and social disintegration. When indigenous peoples are resettled, there is a high risk of the permanent destruction and impoverishment of a peoples. None of these outcomes are inevitable provided that the proper mitigation actions are taken. Special operations and extensive mitigation has proved necessary. Under no circumstances is the resettlement of an indigenous population a mere construction project or one resolved by the exchange of land for land.

199. An improperly executed resettlement upstream from Pangué materially affects the abilities of the Foundation to meet its statutory obligations under the Agreement. Any combination of the one or more of resettlements, the disruption caused by a construction camp in Quepuca-Ralco, and/or the possible spill-over effect of a Ralco-Lepoy resettlement will increase the pressures on the Foundation and the people's overtaxed resources to further impoverish the communities of Callaqui, Pitril and Quepuca-Ralco. The Pehuen Foundation was not designed to mitigate the impoverishment problems associated with resettlement, nor, does it have the financial resource to deal with even a small resettlement problem, such as that emerging at Los Avellanos. Had this been the case, the IFC resettlement guidelines would have been applicable during loan preparation and the Board would have not been told that there was no indigenous resettlement associated with this Agreement.
200. Faced with multiple impacts, the Pehuenche are without legal representation. The Foundation is not offering legal assistance and if it were, it will have a conflict of interest. The Pehuenche are unfamiliar with the dominant society's institutions and rules. Some are already fugitives from the law because of the deforestation problem. Others are under court injunctions. Individual land disputes pepper the communities of Callaqui, Pitril and Quepuca-Ralco. Formed in late 1993, CONADI lacks the institutional capacity to defend the interests of Pehuenche communities. It has a single lawyer who does not have a staff and has only 150 dollars in gasoline for the entire fiscal year and its regional office is 300 km away. The Pehuenche do not have travel funds to meet with him. CONADI has been ineffective in dealing with small conflicts and is already overwhelmed by the negotiations with ENDESA over the issue of land exchange in Ralco-Lepoy, which is only one corner of the overall resettlement planning problem. The highly vocal national and international public advocates for Indian rights and the environment have not provided legal assistance to the Pehuenche. In a comparable situation in Canada, the Naskapis had independent counsel, apart from the government. This seems warranted.
201. Little wonder, the Pehuenche feel helpless, powerless, threatened and, to use a frequently heard word, "cornered." Claims to territory and resources dominate the creative energies and resources of Pehuenche leaders. One respected elder asked - "how can a person who has never lived from the land, never made offerings to the land, "own" the land or have rights to the water when

we are the people of the land - Mapuche? Mapuche means "people of the land." This is an upstream impact on the Foundation communities and needs to be carefully and completely investigated, as called for in the Agreement. An improperly planned and executed resettlement upstream in Ralco-Lepoy and Quepuca-Ralco is a formula for ethnic conflict and chaos.

Incorporation of Ralco-Lepoy.

202. The de facto, but not de jure, incorporation of Ralco-Lepoy in 1995 into the Foundation is jeopardizing the Foundation's future. Pangué agreed not to take or permit to be taken any action that would lead to any amendment that is detrimental to the original objectives of the Foundation as set forth in its statutes nor take any action either upstream or downstream of the Project facilities that would adversely affect its ability to carry out the Environmental Guidelines. The proposed amendment to the Foundation statutes to incorporate Ralco-Lepoy (Lepoy), currently under review by the Chilean authorities, materially alters the objectives of the Foundation and the investment Agreement with the IFC.
203. For over a year, Ralco-Lepoy has been the recipient of Foundation benefits. The special sensitivity of Ralco-Lepoy, as compared to the other four communities not affiliated with the Foundation should be apparent. In 1995, without authorization of IFC and on a direct request from the Pangué Board of Directors, the Pangué members of the Foundation Board called an extraordinary meeting to consider a request from Ralco-Lepoy that it be incorporated into the Foundation. With an invited Notary in attendance, the Board voted to modify the Foundation statutes to include Ralco-Lepoy. The Pehuenche board members and representatives from Ralco-Lepoy were not told of the detailed financial arrangements which is not unusual, since financial reports are not given at Board meetings.
204. The request for a change in statutes was submitted to the Chilean government for approval in early 1995. The IFC has not approved the statutory changes and Pangué has not withdrawn them from the legal process which will lead to their approval.
205. Not waiting for official approval, the Foundation began operations in Ralco-Lepoy early in 1995. The costs underwritten by a loan from Pangué to the Foundation for 4750 UF (~137,000 US\$), an amount based upon the per capita rate used for Callaqui, Pitril and Quepuca-Ralco. This doubles the Foundation's budget and increases its indebtedness. Two additional staff members were hired, one as the Executive Director with his salary paid for by external Pangué funds. A second truck has been leased. The DGP program was successfully launched. The effectiveness or details of this program, which represents at least half of the staff's time, was not part of this evaluation's terms of reference.

206. The Pehuenche view of this incorporation is moot. The members (*socios*) of the Foundation in Callaqui, Pitril and Quepuca-Ralco have not been informed of all the dimensions to this decision in a manner which would permit discussions in the Pehuenche way. But even if they were informed and disagreed, it would make no difference assuming the Foundation representatives voted as a block. The Pangué employed or subcontracted members of the board hold a 5 to 3 majority vote on the Board which, thus far, has not been used.
207. Critics believe that the decision was motivated by a desire to use the Foundation to pacify the Ralco-Lepoy population and prepare it to accept involuntary resettlement. The Ralco-Lepoy's population is even more indigent than those in Callaqui, Pitril and Quepuca-Ralco and in desperate need of any material assistance. In support of their argument, the critics note that the Pangué representatives to the Pehuen Foundation Board turned down a request from the community of Trapa-Trapa to join the Foundation. Trapa-Trapa lies on a tributary of the Bio Bio river, downstream from the Pangué dam in an area which Pangué called "outside their area of interest."
208. If the Ralco dam is not constructed and sufficient funds were available to match the increased population and expanded logistic costs, the incorporation of Ralco-Lepoy or any other Pehuenche community for that matter, would not alter the original purpose of the Foundation. If Ralco is constructed and Pehuenche in Ralco-Lepoy or Quepuca-Ralco are resettled or substantially affected without a properly planned and executed resettlement and mitigation plan, the already under funded and improperly staffed Foundation would be totally unprepared to cope with the multiple impoverishment impacts known to accompany such a resettlement.
209. Apart from the substantial risk of getting the Foundation entangled in a substantial resettlement mitigation problem, the proposed statutory change substantially endangers the Foundation's future. Pangué provide no financial support for Ralco-Lepoy beyond 1997. At that point, the Foundation will face a painful triage. It must either divert funds intended for Pehuenche beneficiaries in Callaqui, Pitril and Quepuca-Ralco (Quepuca) to support Ralco-Lepoy or withdraw benefits from people they view as their brothers and sisters. Pangué's verbal promise to the evaluator that it will provide support for Ralco-Lepoy beyond 1997 has not been incorporated in the proposed statutory changes.

Foundation Conflicts of Interest.

210. The Foundation is unable to mitigate resettlement issues with ENDESA, since it has a conflict of interest. Pangué controls the Foundation and Pangué is owned by ENDESA. This internal conflict limits the Foundation from forcefully completing its mandate to effectively deal with mitigating many pressing issues facing the Pehuenche community. Just as an attorney cannot effectively defend a client if he has a conflict of interest, so the Foundation cannot deal

with issues in which its Board members have conflicts of interest. There are ways to resolve this issue, but first the Company needs to recognize it as a problem.

211. The Pehuenche representatives and the Foundation find it difficult to maintain the sharp distinction which the IFC draws between Foundation, the Company and ENDESA. The Foundation President was witnessed defending Pangué's resettlement planning for over an hour in a Foundation meeting in Ralco-Lepoy in November of 1995. He did not reveal his personal conflict of interest and informed the Pehuenche that he is an owner of the company which is planning their resettlement. The conflict of interest extends to other members of the Board who work for or do business with Pangué and are simultaneously participating in the negotiations for resettling Pehuenche living in Ralco-Lepoy and in parts of Quepuca-Ralco.
212. From the Pehuenche perspective, it is very hard to untangle who is Foundation and who is Pangué and who is ENDESA. They watch people working for all three of these entities drive into their communities together. They conduct back to back meetings in the community. Some members wear two hats - coaxing them into leaving their lands and encouraging them to become involved with the Foundation. The Foundation President told the assembly in Ralco-Lepoy the truth, "we are very close friends." He does not see this as a conflict of interest, feeling that working on the "inside" he can do more to help the Pehuenche than working on the "outside." The conflict of interest is structural, not a personnel matter. The intermix of Foundation and Company's business stretches back to 1992 (Box 1).
213. The problem is not new and has been successfully resolved hundreds of times by other corporations. Corporate philanthropy does not require control. Many corporations are willing, occasionally, to have their hand "bitten" by those they feed and accept it as an indication of the success of the institution building accomplished by their largess and evidence, to their critics, of their trustworthiness as a corporation. A quick review of the charities and NGO's supported by the Fortune 500 companies reveals corporations support groups and causes which might be diametrically opposed to some of their investments. In brief, the Foundation has a design flaw in its organization which merits in-depth discussion and resolution.
214. The Foundation's conflict of interest is well understood throughout the region and is leading to internal factionalism within the communities between those associated with the Foundation and those who are not. Associated, in this sense, does not simply mean purchasing discounted goods, it means making a moral commitment to Pangué. In the Quepuca-Estadio sector of Quepuca-Ralco, for example, the problem of conflict of interest is so severe that the evaluator was asked not to conduct a focus group and only after long negotiations, was he granted access. The resulting session proved one of the most informative and warm in the study.

Arrangements for the supply of electrical power

215. Electric power is the first stepping stone to sustainable development, playing a catalytic role in improving the quality of housing, health and income generation. In 1991, the Pehuenche did not have electricity. Pangué, which does not distribute power, made a commitment in the 1993 Agreement to have the Foundation investigate and make its best efforts to arrange for the supply of electrical power to the three communities.
216. The Pehuenche are acutely aware of the association between electricity and development. In Callaqui, families without electricity or potable water live within a few hundred yards of Ralco, with 72 percent of its houses with services. Children spend the nights in darkness, studying next to a single small oil burning wick-lamp, while their non-Indian classmates do not. In focus group meetings and individual discussions, Pehuenche stated that they do not understand why they must remain without service in the shadow of a new power plant which sends electricity to *huincas* in Santiago. Someone asked, "Isn't there a little of the river's energy left for us?" In a focus group, two Pehuenche woman envisioned that electrification would permit her family to study during the long winter nights, stay warm without firewood, iron and weave after dark, and reduce farm and forest labor.
217. Pangué best efforts, thus far, have been to purchase a generator for the school in Quepuca-Ralco and a request for a quote (now expired) on the cost of providing service to one sector of Callaqui (about 180,000 US\$). The Foundation has also financed the lighting of the school football field in the non-Foundation community of Ralco. Apart from these small endeavors, entering its fifth year of operation, Pangué has yet to place an electrification project for the three communities on the Board's agenda. Pehuenche Board representatives are uninformed of the IFC and Pangué Agreement on this issue. The District mayor and the Provincial Governor brought this issue to the attention of the evaluator and stated their willingness to share the cost of rural electrification with Pangué, including permitting long term financing. Pangué stated its intention to enter into discussions in 1996.

Pehuenche Perspectives

218. The Pehuenche have not been informed of IFC and Pangué decisions and issues which have a substantial bearing on their future. Regardless of the reason for this situation, the people lack basic information which hampers the Foundation's ability to meet the Agreement objectives and contradicts the IFC Operational Directive on Indigenous Peoples (OD 4.20, 1991) which mandates informed participation, not simply participation. Informed participation reduces needless conflict, mistrust, and misunderstanding between the intended beneficiaries, the Company and the IFC. Without it, the community and the Foundation cannot work together to define and develop efficient and effective strategic plans for reaching Pehuenche cultural and economic objectives.

219. Being uninformed decreases the likelihood that Pehuenche will form any long term mutually supportive relationship with the Foundation. Pehuenche tend to view the Foundation program benefits as short-term, discount purchases being arranged by Pangué, through its Foundation. Some state that they feel it was a direct result of their support for the dam in 1992 (see sidebar page 40). Early in the evaluation, the evaluators detected an initial hesitancy among people in the focus group to offer constructive criticism of the Foundation and Pangué. Some state they fear that if they criticized the Foundation or Pangué, which they see as one and the same, they will not only lose Foundation benefits but also job opportunities. No evidence indicates that Foundation benefits had ever been denied to critics of the Company, yet the perception persists.
220. Being uninformed, the Pehuenche are not able to clearly consider the place of the Foundation in their future. Beneficiaries are unaware that the Foundation's program will continue beyond the Project's construction phase, scheduled to end in 1997. They were uninformed of the Foundation's objectives, financing, and the IFC/Pangué Agreement. They were unaware of its intended operation as a Project impact mitigation mechanism or vehicle for sustainable development. Rather, the Foundation programs are considered windfall, short-term opportunities for purchasing material necessities from the Company.
221. The Pehuenche are aware that keeping informed about any Pehuenche-wide event is complicated by poverty and geography. Communications between the three communities and their nine sectors is inefficient. In the winter, rain and cold limit travel. In the summer, many Pehuenche move to highland, summer pastures, limiting outside communications. There are no phones or postal service. The handful of two way radios are for official government use by the health and police services. All households which can afford a battery radio listen daily to a Los Angeles radio station for announcements from Pehuenche outside the community to their relatives. On a few occasions, the Foundation staff has successfully used this as a link to the community - but primarily to call together people rather than as a place to hold discussions. Pehuenche stressed that attending assemblies is time consuming and difficult for the ill, elderly, single mothers, and numerous disabled persons.
222. Pangué, the IFC, and the Pehuenche share many long term dreams. The Pangué representatives feel that, in the long term, Pehuenche will be able to manage the Foundation beyond their presently circumscribed roles within the DGP, but they are incapable of taking on more management and operational positions in the Foundation in the near future. Non-Indian Pangué Board representatives point out the Pehuenche lack of formal schooling. They feel that once Pehuenche have become educated, they will be capable of taking on more sophisticated roles within the Foundation. Given their perspective and awareness that the Foundation is in the region for the long haul, it is understandable why no Pehuenche are being trained for leadership or staff roles nor are there any plans to begin such training and replace *huinca* staff with Pe-

huenche in the near future. Having worked closely with a Pehuenche team throughout this evaluation, the evaluator is certain that the Foundation staff has underestimated the potential of these people. They have yet to assume a proactive teaching role befitting a modern social development program. Properly trained and assisted and starting right now, the Pehuenche can take command of the Foundation programs in the near future.

223. The Pehuenche representatives and leadership recognize that they lack "formal" education, but feel capable of managing their own affairs and learning the details of managing the Foundation. Their preferences show a thirst for more sophisticated knowledge of Foundation operations, an awareness that their participation in Foundation is circumscribed, and a desire to take on knowledge about and control of Foundation affairs (Table 18). Thus, the differences are basically ones of matching two very distinct planning horizons and pacing program actions accordingly.
224. To determine the people's planning horizons for the Foundation, the evaluation team informed the participants of the Foundation objectives and then used five instruments to detect preferences: discussions in community focus groups, individual interviews, a photographic theme analysis, a resource allocation priority test, and votes to indicate the people planning horizon (see Annex 1, Methodology).

Table 18. Preferences for Foundation action listed by Pehuenche Board representatives.

Program direction	<ul style="list-style-type: none"> • more control over decisions to give Foundation resources to outside agencies and individuals (consultants) • increased contact with other indigenous development groups, including Mapuches in Chile • need for discussion of how to increase the outreach of the Foundation to the poorest people in their communities • need for "time to think (plan) in the Pehuenche way" about the investment of Foundation money
Finances	<ul style="list-style-type: none"> • greater knowledge of the Foundation's finances
Foundation organization	<ul style="list-style-type: none"> • Pehuenche staff on the Foundation • increased indigenous training to increase their administrative capacity, including how to do their own studies and use the Foundation computers and work around the Foundation office.
Daily Foundation activities	<ul style="list-style-type: none"> • increased courtesy rides from the staff to Pehuenche - perhaps by getting a truck rather than the current cars • payment for the time they spent on the Foundation, not simply attending meetings
Representation	<ul style="list-style-type: none"> • increased participation of other Pehuenche on the Board

225. Once informed of Pangué and IFC's shared objectives for the Pehuen Foundation and Pangué's long term financial commitment, the Pehuenche groups showed a clear concern for strategic planning and a long term planning horizon (Table 19). The evaluation team offered them the options of using the Foun-

dation funds for short, medium and long term investments. In focus groups, comparisons were made between discount purchases for things which give immediate rewards but do not last (dishes) and long term investments which continued to return benefits (scholarships, electricity, potable water). All three communities strongly preferred longer term investments. This is a stunning demonstration of the will of the Pehuenche, a third of whom are in extreme poverty.

226. A comparable pattern emerged from the Resource Allocation Priority Tests (RAPT). They were asked to allocate this imaginary money between maintaining the status quo of DGP "proyectos", generating employment and training, and investment in long term works. The test was given to a random sample of 60 households and also given to 183 people who met with the evaluation team at community meetings held in Callaqui, Pitril and Quepuca-Ralco.

Table 19. Pehuenche votes on their preference for allocation of Foundation funds.
(%)

	<i>Short term</i>	<i>Medium term</i>	<i>Long term</i>	N =
Pitiril	0.0	31.4	68.6	35
Quepuca-Ralco	3.0	22.4	74.6	67
Callaqui	7.8	32.8	59.4	64
3 Communities	4.2	28.3	67.5	166

227. In this test, a person was given 5 marbles and told that each represented 10 million pesos (roughly the annual expenditure of the Foundation on all three communities). The odd number of marbles forces prioritization. In this case, confidential voting occurred by having people allocate their marbles into an apron with three pockets. The count was made by a committee of community members who announced to the group following the meeting (see Annex 1). The use of individual and group testing helped identify whether Pehuenche decision making is skewed by their working in a community fashion ("peer pressure effects").
228. The RAPT test reveals that Pehuenche hold strong program preferences which are distinct from the Foundation's present priorities. If permitted to become involved in the allocation decisions of the foundation, the Pehuenche would probably invest their funds in a manner distinct from that of the Board. Although they like the discounted purchase program, they assign it a low priority, allocating slightly less than a quarter of their funds to this option (Table 20). Preferences are strong for major works which bring long-term benefits such as potable water and electrification). Efforts to train Pehuenche had almost equal importance. Inter-community differences are present. These preferences should not be considered as definitive Pehuenche program desires, but

rather an indication that the people have development priorities distinct from those currently implemented by the Foundation.

229. All participants in these tests and the lengthy discussions which preceded and followed them are very serious about the investment of Foundation funds intended for their benefit. They wish wide spread discussion, as befits their cultural view of participation. Some suggest suspension of expenditures and saving the money until they had completed their extensive, consensual deliberations. During focus groups, people stress that they like to take time, think and discuss among themselves what they would like to do. The Pehuenche have a great deal of interest in opening up a thorough dialogue and planning process to consider how they would like to prioritize the use of Foundation resources.

Table 20. Resource Allocation Priority Tests: Pehuenche votes on their preference for allocation of Foundation funds (%) .

	Type of vote*	Maintain status quo	Generate employment and Training	Major works with long term benefits	N =
Pitri	Group	20.0	45.6	34.4	70
	Individual	15.7	42.9	41.4	14
Queñica-Ralco	Group	22.5	37.5	40.0	35
	Individual	22.5	28.3	49.2	24
Callaqui	Group	24.6	23.9	51.6	50
	Individual	33.3	28.6	38.1	22
3 Communities	Group	22.2	36.4	41.4	18
	Individual	24.7	31.9	43.4	60

* The N refers to the number of individuals voting, not the number of groups.

230. Once Pehuenche were informed of the long term objectives of the Foundation, their preferences shifted to more long term, sustainable plans in sharp contrast to their preferences shown by individual purchase decisions in the group discount program. This difference - between individual uninformed preferences and informed, group preferences is a measurable indication of Pehuenche culture - a shared group expectation greater than that of the individual. It is this cultural dimension, tapped through informed participation, which is both the objective and the instrument for sustainable development envisioned by the IFC in the Agreement. Nonetheless, this information should not be used to redirect the program and avoid informed participation. The evaluation only revealed the serious need for open, continuous and meaningful discussions about the Foundation with the community - which can only improve as the Pehuenche become informed and

participate in the decisions of the Foundation which might affect their economy and cultural survival.

231. The data show that once the people are aware that the Foundation programs are not gifts from the Company but part of an Agreement which calls for them to share in project benefits, they prefer to plan for their own mid to long range development. In brief, *informed participants plan differently and act more rationally than uninformed participants*. This and many more lessons are embedded in the IFC environmental guidelines on indigenous peoples and, if followed, will lead to Project success.

Recommended Actions

Like people, foundations have life cycles. During its formative years, the Pehuen Foundation encountered formidable challenges, not the least of which was the extreme poverty of the people. The Pehuen experience confirms that no matter how popular it may be with the people and no matter how self-gratifying giving a gift might be to the gift-giver, satisfying the material needs of a people is not sustainable socio-economic development. Poverty persists. Nor does providing material assistance mitigate post boom impacts of construction activities. The dangers remain.

The Pehuen experience has also shown that the highest returns come from small investments in training and, assuming the housing subsidies are obtained, from leveraging the limited Foundation funds. Similarly, the participatory evaluation has shown that, consistent with the experience embodied in the IFC guidelines, informed people plan and act more rationally than uninformed people. One can expect informed participation to yield results consistent with the shared objectives of the Agreement. Building on this knowledge base, the Pehuen Foundation is preparing to enter Phase II of its life cycle.

Fortunately, the financial innovation which originally set the Foundation in motion can fuel a mid-stream adjustment. Promptly corrected, strengthened, and assisted by the IFC and Pangue, the Pehuen Foundation will become a vehicle for sustainable development, as originally envisioned. The first step in reinstituting the priorities set by the Agreement is to choose a strategic option.

Strategic options

1. Option A. A Proactive Position. The IFC, together with the Company, might announce the accomplishments of Phase I and state that the unanticipated findings of the participatory, interim evaluation have led them to make mid-stream adjustments to realign the Foundation with their jointly agreed upon objectives. To reach this goal, they should agree to a ten point plan of action (see below).
2. Option B. A Sibling Foundation Position. Pleased with the Pehuen Foundation's ability to meet the Company's own objectives, Pangue might keep it operating under its present statutes and focus. To meet its IFC obligations, IFC would grant

Pangue permission to form and capitalize a new, sibling foundation whose organization would be aligned with the Agreement objectives and the ten point plan of action below. Representatives from each of the ten sections of Callaqui, Pitril and Quepuca-Ralco would play an active role in the design and formation of this new entity. Pangue would agree to transfer, without obligation, the full resources originally earmarked for the Pehuen Foundation to the new foundation. They would also agree to prepare a technical estimate of the costs needed to reach the Agreement's objectives and arrange for its payment. Option B would permit the Pehuen Foundation and the new Foundation to work arm in arm to matters of common interest. Some material guarantees would be necessary to assure the IFC and the Pehuenche that changes will be instituted.

The bottom line of Options A or B would be compliance with the IFC environmental guidelines to assure that the Pehuenche communities are beneficiaries of the Project.

3. Option C: Withdrawal. ENDESA might repay the loan and legally release Pangue from its environmental obligations to the IFC, including the Pehuen Foundation. The Foundation statutes permit it to turn over its assets to a Catholic charity and it has no obligations or agreement with the Pehuenche communities. Use of this option would be highly controversial, if not a nightmare, for ENDESA, Pangue, and the IFC. The international financial markets and public might not look favorably on a company which used IFC financing and support to capitalize its Project, contracted to comply with its Environmental Guidelines, then reneged on its environmental mitigation commitments to the IFC and left the financial institution to deal with the brunt of public criticism. The bottom line of this option would be that the Pehuenche Indians, part of the lower 4 percent of the Chilean poor, subsidized the second largest company in Chile.

Ten Point Action Plan

1. Realign Foundation statutes and organization to those of the Agreement. Pehuenche Board representatives and other recognized Pehuenche leaders and respected elders from each and every sector of the three communities should be fully informed, active participants in any revision of the Foundation's statutory amendments. Pangue should comply with its agreement to make a best effort for electrification, including working out financing options with the public sector and bringing its IFC commitment to the Foundation Board.
2. Reorganize the Foundation's policies, internal affairs, and operations and bring them into compliance with the Agreement and to conform with the generally acceptable standards for foundations (cf. Table 16). Special attention should be given to policies and practices to resolve conflicts of interest, to increase informed participation, and to promote pluralism and diversity. Successful completion of this step will yield increased cooperation with the public sector and NGO's

who admire the Foundation's innovative financial approach, but distrust its motivations. It will also assist the Foundation in fund raising. Pangue should cancel the outstanding debt owed by the Foundation to Pangue for the 1995-96 costs of including Ralco-Lepoy in the program.

3. Embed Indigenous development expertise into the Foundation. Specific steps include
 - a) incorporation of a person, or preferably persons, with recognized expertise in *social development* indigenous development on the Foundation Board (per the Agreement); and placement of people with indigenous development expertise on the Foundation's Board of Advisors, its staff, and as consultants. The Pehuenche representatives to the Foundation and sector leaders should interview all candidates and their decision on the acceptable candidate should be respected. During the first three years of Phase II, the IFC should assist the Foundation in preparing terms of reference for these positions.
 - b) regularize communications between the Foundation and organizations working in Indigenous development within and outside of Chile.
 - c) recognize *Chedungun* as one of the two official languages for all Foundation business and discussions.
4. Initiate an emergency mitigation action plan. Emergency action is necessary because Pangue has delayed initiating its mitigation obligations for four years and is into the last few months of its construction phase. Continued delay will result in the construction being completed without meeting the Environmental Guidelines. The plan should have three components.
 - a) It should include immediate local actions to halt the high rate of deforestation without causing economic harm to the communities. The IFC and Pangue should assist the Foundation to complete a professional social forestry study to determine the extent of damage to the Pehuenche forest since 1989 and to develop plans for its sustainability by the Pehuenche and for the benefit of the Pehuenche in the future. CONAF should participate. The study team should be led by a social anthropologist familiar with cultural ecology and forestry, and include a social forester familiar with indigenous development, a development economist, and a Pehuenche representative. Its work should be fully participatory, involving the Pehuenche communities in the assessment and planning of corrective actions for sustainable management and commercialization of Pehuenche natural resources by the Pehuenche and for the Pehuenche. The Foundation staff should provide logistic support for the assessment.
 - b) Pangue should regularize and secure the land tenure situation of the Quepuca-Ralco sector of Los Avellanos to avoid their forced resettlement.
 - c) Pangue should complete an upstream impact study to mitigate the adverse effects of the Ralco dam on the Foundation's ability to operate and com-

plete its objectives. Because of their conflict of interest, this study should be done by an independent consultant selected by the IFC. The study should also estimate the long term, financial impacts of deforestation of the watershed on the investment and down stream users and evaluate the option of transfer payments from the public and private sectors to the Pehuenche to maintain the watershed. The results of this study should include a plan which will become part of the Ralco environmental mitigation program.

- d) The emergency plan should include actions to mitigate the multiple social and economic impacts of the Project road. It should include consideration of the option presented by the Pehuenche to limit non-Pehuenche access to their lands.

The costs of the emergency action plan should be charged to the Project, not taken from the funds earmarked for the beneficiaries.

5. Prepare and implement a participatory, strategic sustainable development plan to guide Phase II. The plan should place highest priority on natural resource management controlled by the Pehuenche with an emphasis on participatory, social forestry and remedial actions to address the losses from deforestation. Its objective should be to provide the local Pehuenche with a sustainable livelihood, rather than maintaining highest short-term commercial yields. Until the plan is prepared, the Pehuenche should be given the option, decided by secret ballot of all adults over age 14, of holding all or part of their benefits in a reserve account for future use.

Preparation of the Plan should be overseen by the indigenous development expert and reviewed by a properly constituted Foundation Advisory Board which elects its own chair and includes 3 internationally recognized experts on indigenous socio-economic development. Pehuenche time spent on this project should be economically compensated in a culturally appropriate manner, as the participants desire. Women and the most indigent Pehuenche should be integrally involved in the planning process.

A key element of the strategic plan should be culturally and economically appropriate actions to stop deforestation and begin Pehuenche social forestry. IFC should encourage the Pehuenche to prepare a proposal for a private sector, indigenous development request to the IFC for a commercial venture for sustained harvesting and watershed management by the Pehuenche. The small scale of such a loan should not discourage the IFC and will help it gain experience in private sector induced, Indigenous development.

The costs of preparation for the strategic development plan should be charged to the Project and not be taken from the Foundation's entitlement to Pangué's net profits.

6. Institutionalize full and informed participatory development, including involvement of Pehuenche representatives - with voice and vote - in all Foundation decisions.

The IFC and Pangué should no longer plan the future of the Foundation without Pehuenche representatives present. Such actions undermine the credibility of the Company and the IFC, break the spirit of informed participation, and may be interpreted as a violation of the human rights of these people.

Pehuenche participation should be undertaken in a culturally appropriate manner, as defined by the Pehuenche. Examples include the use of Radio Angelina broadcasts, meetings in the 10 sectors of the communities at a time which the Pehuenche consider most convenient (e. g. weekends) and allotting sufficient time and logistic support for group discussions. People should be given sufficient time to hold discussions and build consensus among themselves, in the Pehuenche fashion, before decisions are made. Special provisions, including but not limited to offering transportation, should be made to help the numerous handicapped people, elderly and single mothers to participate in group discussions. The Foundation should incorporate, as one of its central tactical objectives, facilitating but not controlling intra-cultural communication. Further Foundation meetings should be open to the leaders of all sectors, as has been suggested by the Pehuenche representatives.

7. Establish a monitoring component which includes the training and employment of Pehuenche; Thus far, the Pehuen Foundation component of the Pangué Project has not been monitored. The participatory interim evaluation demonstrated that, with training, Pehuenche will soon be ready to assist professional social scientists in monitoring the Foundation's progress toward reaching its objectives. A monitoring team, independent of the Foundation and the Company, should be established and trained under guidance of a professional applied anthropologist. The team will regularly report to the Foundation Board and IFC on Phase II achievements and problems as well as the status of Pehuenche environment and culture.
8. Increase IFC supervision and provision of technical assistance. The IFC supervised this Project and did not receive the necessary support by the sociological staff of the IBRD, who suggested this experiment in the first place. They both mistakenly assumed that a new power company with no previous experience in socioeconomic development, Indigenous affairs, or impact mitigation could initiate an innovative sociological experiment without assistance. The IFC did not recognize the elementary status of the Chilean legal framework concerning Indigenous issues and the rudimentary institutional capacity of those responsible for upholding Indigenous law within Chile (Indigenous Law only passed in 1993). It also failed to appreciate the lack of institutional capacity of the borrower and the beneficiaries. Nor did it negotiate a successful arrangement to resolve the conflicts of interest which are embedded in the Foundation and the Company. The Foundation was established by and evolved within the context of the Company and its owner's on-going upstream activities which impact the same Indigenous group who are the intended beneficiaries of the Pangué Project (see postscript note below).

To realign this social experiment with its objectives, the IFC should increase its supervision and technical assistance and tap the expertise found in the IBRD. Given the serious deforestation problem, it is imperative that the IFC seek internal grants to work with the IBRD on its successful indigenous peoples' training program in social forestry and other forms of natural resource management, health, community development, leadership, and socio-cultural preservation. The IFC should provide technical assistance, facilitate Pehuenche visits to successful indigenous initiatives in Latin America and the US Southwest, and should provide training opportunities through on-going programs in the World Bank Group (esp. LATEN). And IFC and IBRD should work together to assure that the Pehuenche are placed in regular contact with other indigenous peoples who have successfully overcome comparable development issues.

9. Dissemination of the participatory interim evaluation findings. Adherence to IFC Indigenous peoples guidelines begins with informed participation by sharing the findings of this interim, participatory evaluation with the Pehuenche. The Foundation Board and the people invested considerable time and energy in assisting in preparing this work and asked to be informed of its results. They should be informed in a timely, culturally appropriate manner. A culturally appropriate manner would be a series of radio broadcasts in *Chedungun* and Spanish made by all the sector leaders and the distribution of cassette tapes of this broadcast. Pehuenche representatives to the Foundation and the evaluator would coordinate these broadcasts.

Important Update

Hours before the final draft of this report was to be transmitted to the IFC, the consultant learned that the environmental impact assessment (EA) for the Ralco dam has been released for public comment. As of 5 May 1996 neither the IFC, ENDESA, nor Pangué had informed the independent evaluator that the Pehuen Foundation was intended to be the central agent for mitigation of the Ralco-Lepoy and Quepuca-Ralco resettlement. The evaluator learned of this major decision from external sources on 6 May 1996. Evaluation of the Foundation as a resettlement mechanism was not in the interim evaluation terms of reference. Whether or not the Pehuen Foundation can mitigate resettlement impoverishment, given its present status and condition, is evident. It cannot. Timely receipt of the IFC information on the Pehuen Foundation contained in this report before the environmental assessment commentary period is finished is critical to the Pehuenche, ENDESA, the Chilean government, NGOs and others responding to the EA.

Theo Downing Monday, May 06, 1996.

Annex 1. Evaluation Methodology

Scoping and Design

1. The evaluation was conducted in two phases. In the scoping and fieldwork design phase, the evaluator, Theodore E. Downing, reviewed relevant background information and documentation on the Foundation at the IFC offices in Washington, D.C. Documents and correspondence after 15 October were not made available to the evaluator. Based on this information, a draft analytical framework was prepared for evaluating the Foundation based on areas of analysis associated with each of its four statutory and/or legal agreement objectives (Table A1.1). Following an IFC and Pangué review of the draft framework, extensive consultations began in Chile with stakeholders who had been identified by Pangué, the IFC, or discovered in the document review (17 Sept - 5 October 1995). The evaluator also made a brief site visit to the Alto Bio Bio and attended a Foundation board meeting and an assembly in Callaqui.
2. At the time of the review of the analytical framework, the stakeholders were informed about the intended scope of the interim evaluation to avoid any misunderstanding that this was a "special review." Many made methodological suggestions and all exposed the evaluator to the diversity of public perceptions about the Foundation. The framework was reviewed and modified following discussions with over 61 stakeholders in the public sector, NGOs, environmental groups, academics, consultants, the Foundation Board and staff located in Santiago, Concepción, Temuco, Alto Bio Bio and the United States and leaders from Callaqui, Pitril and Quepuca-Ralco. In some cases, stakeholders proposed specific indicators or measures be examined to determine Foundation progress.
3. There was broad based support for the Foundation and IFC's general objectives and all consulted unanimously agreed that the proposed analytical framework for evaluating the Foundation was acceptable and comprehensive. A few stakeholders dismissed the interim evaluation as too narrowly constituted, feeling that the evaluator should focus on the "underlying motives of Pangué and its Foundation as an instrument of penetration of Endesa and its subsidiaries into the Alto BioBio." Since this was not a statutory or an Agreement objective, the evaluator explained that this issue fell outside the terms of reference.
4. In many consultations, a hypothetical example of the full development of a methodology for an area of analysis was provided in each consultation. Stakeholders were given blank forms and given an opportunity to provide methodological suggestions. Given the technical nature of this request, they were permitted to complete the forms after the meeting and FAX them back to Santiago by October 2. On 2 October, a secretary in Santiago made follow-up calls, encouraged replies, extended the deadline another three days. The stakeholders were also requested to suggest methodology approaches appropriate to Pehuenche culture and identify perceived strengths and weaknesses of the Foun-

dation which might be examined. Only a handful responded. Both the field methodology and framework were approved by the IFC on 11 October 1995. The Foundation President, and Pangue S.A. also accepted it as a comprehensive approach to the evaluation.

5. During this phase, the evaluator added a volunteer indigenous affairs specialist, Carmen Garcia-Downing from the World Health Organization Collaborative Center at the University of Arizona, a Zapotec Indian from Southern Mexico with extensive experience in working with rural indigenous peoples. She also participated in the field evaluation phase.

Field methodologies

6. The field challenge was to develop a simple, participatory evaluation combining conventional evaluation techniques and participatory methodologies which will be capable of detecting short-term changes in socio-economic and cultural status. The initial field site survey revealed that the Foundation and other government agencies were having difficulty communicating with the Pehuenche. Although many younger Pehuenche are bilingual, some of those over thirty have only marginal command of Spanish and the CEDEP survey revealed that Chedungun is spoken in 61 percent of the households, and, in 23 percent, it was the only language. The evaluator also discovered that the people had never been actively involved in an investigation of themselves, even as collaborative field assistants. Ethnographers, environmentalists, critics of the hydroelectric projects, government agencies, and academics had consistently treated the Pehuenche as objects of study rather than active participants.
7. To mitigate the logistic and cross-cultural communication difficulties and increase the accuracy of the work, the evaluator used a multiple method evaluation approach, mixing a battery of participatory and conventional evaluation techniques and advanced ethnographic methods (Table A1.2).
8. Logistically, a basic problem was where to meet in order to maintain the independence of the review. The Pehuenche communities lack a central, community meeting place. The Foundation had recently built small Foundation headquarters buildings in Pitril and Quepuca-Ralco, but meeting there might have compromised the independence of the evaluation. During the scoping phase, the Pehuenche Board representatives cautioned the evaluator that walking to the government service centers in each



Field group meeting tent

community was an imposition. The evaluator witnessed this problem first hand in Callaqui, when a *lonko* assembled over forty residents for a meeting in a freezing rain. On advice of the Foundation Pehuenche representatives and as a courtesy to the Pehuenche, the evaluator held most of the 11 focus groups in a large tent placed at sites designated by the Pehuenche leaders and representatives to the Foundation. The tent proved a useful methodological innovation and Pehuenche sectors requested they be permitted to use it for small meetings. At the end of the field session, it was donated to the Foundation with explicit instructions that it is for the exclusive use of Pehuenche sector meetings, upon their request.

9. Only three or four Pehuenche in the Alto Bio Bio were known to have a high school education. To conduct a participatory survey within the time constraints, the independent evaluator and the indigenous affairs specialist hired and trained a 6 person, Pehuenche evaluation team (two from each community, 3 men and 3 women). A seventh Pehuenche research assistant from Trapa-Trapa joined the team in midstream and completed specialized assignments. The team was trained at a rudimentary level to interview, administer questionnaires, assist in participatory voting, translate, record focus groups, and conduct specialized tests. The team demonstrated considerable initiative and provided high quality, reliable data and the community took pride in their participation.
10. The advantages of using the local Pehuenche team far exceeded its drawbacks and the delays it caused. Initially, they were uncertain whether or not they could perform the work, but their confidence rapidly increased to such an extent that they requested more formal training so they might form an evaluation team. All were highly motivated and energetic and their horsemanship skills proved most useful as the random sampling seemed to always select the most remote households. The reliability and accuracy of the data was substantially increased. They had extensive knowledge of their communities, were trusted by their own peoples, had personally participated in Foundation programs, and understood Chedungun. The disadvantages were minor and mostly related to the minimal education and inexperience with machines. The training period delayed completion of the evaluation, all data had to be carefully reviewed. Their data entry capabilities were just beginning to show promise at the end of the field session. Most significantly, each community meeting brought positive feedback for the team from the community since this was the first time that Pehuenche had conducted research on their own community.
11. Over a seven week period, the team completed 11 focus groups, ranging in size from 5 to 24 people with an average of 15 people per meeting. Meetings were held in different sectors of the community to permit higher attendance and minimize the imposition caused by the evaluation. The gender ratio was 60:40 ratio of males to females. A separate meeting was held with non-Indian inhabitants of Pitril, at their request. The indigenous affairs specialist held an all female focus group of 22 women in Callaqui Alto. Women only meetings are valuable, but unusual in Callaqui, and, within hours, some Callaqui males tried to discredit the focus group, but were unable to make reference to any specifics.

12. Pehuenche research assistants were trained to administer resource allocation priority test to a random sample of 60 households (Callaqui 22, Pitril 14, and Quepuca-Ralco 24). The entire Pehuenche research evaluation team administered a community resource allocation priority test in each community at the close of the field session in which 183 people participated (Callaqui 57, Pitril 71, and Quepuca-Ralco, 55). This permitted the evaluator to determine if Pehuenche voted differently in groups than as individuals.
13. The Foundation staff graciously received the evaluation team and granted it full access to Foundation records. The new Executive Director was extremely helpful, but unaware of many aspects of the program. The Foundation has no on-going monitoring function and the diagnostic surveys were not being used, apart from providing an incomplete list of family numbers and names. On request, the Executive Director and staff culled their files and organized their first complete list of all community members who had obtained benefits from 1992-95. It is hoped that this list should provide the Executive Director within invaluable information for monitoring the DGP and resolving conflicts in the field. The list was finished on the last week of the field session. The result was a 6 week delay while the Foundation office records, CEDEP survey records, and the evaluation team survey data were collated.

Participatory tests

12. A battery of participatory instruments, some proprietary to Downing and Associates, were used (Table A1.3). They include:
13. Photographic theme analysis. A random selection of families from the focus group participants were given disposable 35mm cameras. The investigators taught the randomly selected person or another member of the family on how to use the simple camera. The new photographers were asked to take photographs of 1) things of family or community importance, 2) family, 3) favorite purchases from the Foundation and 4) dream projects (i.e. personal or community works) that they would like to see carried out. The cameras were later collected for film development. Once the pictures were developed, the Pehuenche evaluation assistants went over each photograph with the photographer and tape recorded the meaning the photographer wanted to convey in the picture.
14. Marginality Pile Sort Test (MPST). The marginality pile sort test provides an indicator of the relative wealth of households within a community. In each community, Pehuenche field assistants were trained to administer a marginality pile sort test. A random selection of 36 households was drawn (Callaqui 14, Quepuca-Ralco 10, Pitril 12). A set of cards were made, each listing the name of a head of household. The Pehuenche research assistant read each name to the respondent, asking them to place the card in one of three piles according to their relative wealth within the community. Once completed, the assistant coded the ranking on the reverse side of the card. For each household, their average rank was calculated. Since people were unfamiliar with the economic station of people in other communities, the MPST had to be community specific. Inter-

respondent consistency tests were used to identify statistical divergence. The ranks were then entered into the master data base created for the population which included the value of all contributions obtained from the Foundation from 1992-95, CEDEP data, and additional information scored for each household by the Pehuenche research team (e.g. migration, source of income for the family, and so on).

15. Discount Group Purchasing Program (DGPP) participation, sources of family financing for each project and saliency test. A random sample of 41 individuals for the three communities (with the exception of two households in Callaqui Bajo) were interviewed. Pehuenche research assistants, working in 2 person teams, asked interviewees to name all group purchases that they made from the Foundation (called "*proyectos*"). People were also asked which projects they liked most, least, whether or not they had organized a purchasing group, and what was their source of financing for the purchases. If they had not participated in the Foundation DGPP, the reasons were requested. The frequency of shared responses and order of response was used to measure saliency of purchases and source of income. Interviews were conducted in Spanish or Chedungun, as desired by the interviewee.
16. Cognitive proximity tests. A test developed by Downing and Associates to determine how people perceive changes in their institutional environment, the evaluator used a cognitive proximity or triad test. Direct interviews determine the elements of a semantic domain (for example, in English, "dog", "wolf", "cat", "horse" are all part of what might be called the domain "mammals"). Within that domain, some elements are closer (more proximate in technical jargon) than others, e.g. in a triad of dog, wolf, cat, most would say that "cat" is least alike the others. Two triad tests were administered, one on the domain of institutions (in Spanish/Chedungun) and the other on "types of material exchange" exclusively administered and answered in *Chedungun* (data used in para. 51-52 and Figure 1).
17. Resource Allocation Priority Test (individual and community versions). This test was designed by Downing and Associates to determine the relative importance of different program options. For this test, a person was given 5 marbles, each representing 10 million pesos (roughly the annual Foundation direct expenditures for the 3 communities). The persons were asked to indicate their preference for allocating this "money" among three alternatives. The alternatives were derived from the focus group discussions and direct interviews. After the priorities were clearly discussed, each respondent distributes his or her secret votes (marbles) into a cloth with three pockets. Explanation in Chedungun was given by one of the Pehuenche assistants throughout the discussion, and while the person stood in line waiting to vote, another Pehuenche research assistant provided additional explanation of the procedure and meaning of the vote to each person. An odd number of marbles is used to force allocation priorities. When the test is administered to individuals, the pocket chart is unnecessary (data used in para. 241-246).

18. Inter-cultural communication test.

A young Pehuenche artist prepared five diagrams of different forms of interpersonal communications between two men - one, a non-Indian representing the Foundation (*huinca*), and the other a Pehuenche (Figure A1.1). In 8 focus group meetings, the pictures were laid on the ground and used to initiate a discussion about the



Voting during the intracultural communications test

ways people communicate with one another. Attendees were given twigs and asked to lay a twig on the painting that most closely represents a) how the Foundation is presently communicating with the people and b) how they would like to interact with the Foundation. The votes were tabulated and the results discussed. Before each vote, a Pehuenche field assistant described the test again in Chedungun. People were very interested in this test. The same test was administered to the Foundation staff.

19. Reanalysis of other survey data. The evaluation took advantage of previous surveys. Systematic census data was available from the Foundation sponsored CEDEP household survey of 1993 from household regular interviews and from surveys by municipal welfare agents. Critical, previously unavailable time series data ("running records") were counted to detect changes in resource utilization. This included a laborious count of over 4000 transportation permits for timber or animals.
20. Conventional evaluation methodologies. Conventional methodologies also included workshops with the Foundation Board and staff. The Provincial Governor organized an intensive review of the Foundation's regional impact. The workshop included participation from all government agencies and an NGO working in the region.
21. A serious methodological and analytical problem emerged during the evaluation as it became apparent that each community had a distinct profile, much of which was a result of differential contact with non-Indians and different access to natural resources. Moreover, factionalism had reached such a level in Callaqui and parts of Quepuca-Ralco that focus groups with different faction members were impossible. Individuals refused to attend meetings if the other faction was present. In one case the evaluator was warned of the potential for physical violence if we combined the factions in a single meeting. This required samples to be drawn for each community rather than all three together, which tripled the work.

Evaluation team

23. Team leader: Theo. E. Downing, Social Development. Carmen Garcia-Downing, Indigenous Affairs Specialist. Pehuenche Evaluation Team: Team Supervisor: Luis Vita Vita, Member: Lucrecia Levi Sandoval, Lucenda Levi Levi, Norma Beltran Manquemilla, Jose Feliciano Purran Manquemilla, Segundo Vita Carasco (videographic assistant). Special assistant, Jacinto Manquepi Vivanco.

24. There is extensive interest in the Pehuen Foundation throughout the public and private sector of Chile. The evaluator is extremely grateful for the time and energy given to provide a complete perspective. While listing their names and affiliations may be the most efficient form of acknowledgment, it certainly does not reflect the quality of the interaction and the depth of my gratitude. The list is incomplete since it does not include the hundreds of community members who walked many hours to meet us and openly expressed their concerns for the Foundation and the role it might play in alleviating them from their suffering.

Pehuen Foundation Participatory Interim Evaluation Team, 1995
 L to R top (C. Garcia, T. Downing, J. Purran, L. Levi, N. Beltran
 L to R lower (L. Vita, S. Vita). Not pictured (J. Manquepi, L. Levi)
 Anonymous Field Dog



Table A1.1 Analytical Framework

Foundation Objectives	Area of analysis
A. <u>Poverty reduction</u> . Improvement of the socio-economic conditions of the Pehuenche communities of Callaqui, Pitril, y Quepuca Ralco in a sustainable manner	Reduction of marginality <ul style="list-style-type: none"> a) housing b) health c) education d) income
B. <u>Cultural identity</u> . Promote and reinforce Pehuenche culture	<ol style="list-style-type: none"> 1. Pehuenche self-identity 2. "Ownership" of the Foundation by the Pehuenches
* C. <u>Sustainable development</u> . Provide a sustainable development which will provide long-term benefits to the Pehuenches	<ol style="list-style-type: none"> 1. Sustainability of the Foundation, as an organization <ul style="list-style-type: none"> a. governance b. management c. fiscal affairs d. program design and development e. external relations 2. Long term development of resources <ul style="list-style-type: none"> a. Pehuenche human resources b. community and family physical infrastructure c. renewable natural resources d. community organizational capacity
* D. <u>Impact management</u> . Mitigate the potential post-boom impacts following construction activities of the Pangué hydroelectric project	Impact risks commonly associated with unmanaged impacts <ul style="list-style-type: none"> a) health risks b) landlessness c) marginalization d) homelessness e) socio-cultural disintegration f) loss of food security g) loss of access to common resources h) loss of income

* IFC and Pangué jointly agreed upon this objective which is not part of the Foundation's statutes

Table A1.2 Major methodological decisions

Unit of study	Entire populations of Callaqui, Pitril and Quepuca-Ralco, including people who are not members (socios) of the Foundation
Cultural considerations	<ol style="list-style-type: none"> 1. Extended period in the community 2. Identified and trained local Pehuenche as research assistants 3. Adaptation of field techniques for illiterate or minimal literate population 4. Use of translators 5. Distinct focus groups: men and women together, women only 6. The energy and time which Pehuenche gave to the focus group and community-wide polling participants was rewarded with raffled tickets for a lottery at the end of the field session. This method was judged culturally appropriate and exciting by the Pehuenche evaluation team. 7. Chedungun-Spanish bilingual to assist in focus groups
Confidentiality and independence	<ol style="list-style-type: none"> 1. Names of interviewees were coded and remain confidential 2. Held interviews inside a tent rather than holding them at the Foundation's local storage room. This was to create an atmosphere of neutrality so as to allow non-members of the Foundation to express themselves <i>Lonkos'</i> suggested strategic meeting points so as to minimize participants travel time to the focus sessions
Field period	<ol style="list-style-type: none"> 1. Oct - December field session (before transhumance to summer pasture begins)

Table A1.3 Evaluation Methodologies

Area of Analysis	<u>Participatory</u>	<u>Conventional</u>	<u>Advanced ethnographic</u>
A. Reduction of marginality	<ol style="list-style-type: none"> Community focus groups Photographic theme analysis Individual, directed interviews Discussion groups with service providers (e.g. health, education, agriculture and livestock extension and municipal officials) 	<ol style="list-style-type: none"> CAS II Poverty indicators Select Running records Selected quantitative indicators in areas of concern, extrapolation from key indicators Further analysis of Pehuen Foundation survey data Direct observation (using guide) Analysis of Pehuenche participation in the DGPP from Foundation files 	<ol style="list-style-type: none"> Marginality Pile Sort Test
B. Cultural identity	<ol style="list-style-type: none"> Community focus groups Individual, directed interviews Group interviews with Pehuenche leaders Photographic theme analysis 	<ol style="list-style-type: none"> Directed observation In-depth interviews Analysis of Foundation purchases 	<ol style="list-style-type: none"> Cognitive proximity tests in Chedungun Intercultural communication test
C1. Sustainability of the Foundation	<ol style="list-style-type: none"> Focus group with Pehuenche Board Members only Reflection group w/Board of Directors Reflection group w/Foundation Staff Group interviews with Pehuenche leaders Workshop hosted by the Provincial Governor 	<ol style="list-style-type: none"> Reanalysis of CEDEP survey Analysis of Pehuen methodology, including delivery mechanisms and outreach Review of Pehuen Foundation reports, minutes, consultant reports Case studies of projects Comparison to NCIB standards 	<ol style="list-style-type: none"> Cognitive proximity test
C2. Sustainable, long term development of resources	<ol style="list-style-type: none"> Community focus groups Reflection group with Pehuenche leaders Group interviews with Pehuenche leaders Reflection groups w/Board of Directors and w/Foundation Staff Discussion groups with service providers (e.g. health, education, agriculture and livestock extension and municipal officials) 	<ol style="list-style-type: none"> Selected quantitative indicators in areas of concern, extrapolation from key indicators Reanalysis of other survey data (running records) 	<ol style="list-style-type: none"> Discount Group Purchasing Program (DGPP) participation, sources of family financing for each project and saliency test Resource allocation priority test Voting with marbles

Table A1.4 continued

C2. Sustainable, long term development of re-sources	1. Community focus groups 2. Voting with marbles 3. Reflection group with Pehuenche leaders 4. Group interviews with Pehuenche leaders 5. Reflection groups w/Board of Directors and w/Foundation Staff 6. Discussion groups with service providers (e.g. health, education, agriculture and livestock extension and municipal officials	7. Selected quantitative indicators in areas of concern, extrapolation from key indicators 8. Running records	Free listing using a snowball sample
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Annex 2: Public and Private Consultations¹

National

1. Bralic, Sonya. Min. de Educacion
2. Etchegaray A., Alberto. Comsion Nacional de Superacion de la Pobreza
3. Garrette, Nury. Vice-Presidenta, Junta Nacional de Jargines Infantiles
4. Guitierrez Valdebenito, Tibor , National Department Head, Dept. de Desarrollo, CONADI (Corporacion Nacional de Desarrollo Indigena) - Direccion Nacional
5. Quintana, Ana. MIDEPLAN
6. Valdez, Ximena , Almirante Barroso 60 , , Comsion Nacional de Superacion de la Pobreza

Province and region

1. Alvarez V., Rodrigo Ivan - Servicio Salud BioBio
2. Brantes, Hirma , Lincoyan. Junta Nacional de Jargines Infantiles, Region XIII.
3. Coronata Segure, Juan C.. Gobernador de Bio Bio , ,
4. Cortez Guterrez, Rosa. Direction Atencion Primaria, Servicio Salud BioBio
5. Duran S., Maria Cristina. Servicio Salud BioBio
6. Hozmazabal V., Eduardo. Servicio Salud BioBio
7. Montecinos, Mauricio. Former Provincial Director, Corporacion Nacional Forestal CONAF
8. Rivera M., Gonzalo. Dept. de Programas de las Personas. Servicio Salud BioBio
9. Urrutia Burn, Marcelo , Dept. de Programs sobre el Ambiente. Servicio Salud BioBio
10. Venegas, Carlos. Asuntos Indigenas , Gobernacion, Provincia BioBio

Local (Communa)

1. Bruno, Hidalgo Riffo (Mayor), Municipalidad de Santa Barbara.
2. Maltrana Torres, Antonio R., INDAP, Santa Barbara office of the Min. de Agricultura
3. Santa Cruz V., Patricio. INDAP, Min. de Agricultura
4. Torres N., Gonzalo , Servicio Salud, Santa Barbara Hospital

Non-Governmental Organizations

Grupo de Accion BioBio

1. Gorreton, Rodrigo
2. Jaron C., Dario
3. Opata, Cristian
4. Orrego S., Juan Pablo
5. Wackwitz, Birgit

Fundacion San Jose de la DEHESA

1. Pinto Miquel, Cristian.

Professional Organizations

1. Inaipil, Luis , Director, Sociedad Mapuche Lonko Kilapan
2. National Charities Information Bureau (Washington, D.C.)

Pehuen Foundation

Board members

¹ In accord with professional code of ethics for anthropological research, an interviewee's name was kept confidential if the person so requested.

1. Covarrubias Fernandez, Francisco. Presidente, Funadacion Pehuen
Pangue S.A.
1. Benavente Zanartu, Gonzalo. Member of the Board of Directors and Head of the Environment, Empresa Electrica Pangue S.A.
2. Maturana Barona, Cristian. Gerente, Empresa Electrica Pangue S.A.
- Pehuenche representatives
1. Llaulen Rapi, Lorenzo , Levi Sandoval, Jose del Carmen.
2. Ormeno Manquemilla, Segundo
- Staff
1. Fresno J., Patricio. Executive Director
2. Lederman, Jorge. Director of Operations
3. Carcemo, Jorge. Community Assistant
4. Rodriguez, Eugenio. Community Assistant

Consultants

1. Curilen, Jose Eduardo. Asociacion de Profesionales Mapuche
2. Danneann, Manuel. Professor. Former consultant for Agrotec Ltda.
3. Edwards G., Marta. Centro de Estudios de Desarrollo y Estimulacion Psicosocial
4. Fuentes, Ivonne.
5. Galaz Rebolledo, Hector. Statcom
6. Huq, Wahida , Field Museum, Chicago, Illinois.
7. Peinan Catrifol, Anselmo. Asociacion de Profesionales y Tecnicos Mapuche.
8. Ramirez, Juan. Educational Consultant to Pehuen Foundation
9. Sequel, Ximena. CEDEP
10. Valenzuela Araneda, Paulina. Statcom
11. Vidal Cruz, Maria Teresa, PLANING

Academics

1. Alwyn, Jose , Former Director of Consejo Nacional de Pueblos Indigenas,
2. Dillahay, Tom. Chair, Dept. of Anthropology, University of Kentucky.
3. Irarrazaval, Ignacio LL.. Estudios y Consultorias Focus Ltda.
4. Stephens, Lynn. Dept. of Anthropology , Pomona College
5. Valenzuela, Rodrigo. Univer. Austral , Fac. de Ciencias Sociales , University of Concepcion, EULA Center
6. Parra, Oscar O. Director
7. Rojas Hernandez., Sociologist
8. Azocar, Gerardo , Univ. de Concepcion, Centro EULA