

RESETTLEMENT OF AFFECTED COMMUNITIES IN THE LEYTE GEOTHERMAL PROJECT AND STRATEGIES FOR CO-EXISTENCE BETWEEN THE COMMUNITY AND PROJECT DEVELOPER

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ABSTRACT

The Leyte Geothermal Project in the Philippines was obligated to resettle a modest number of households from 1994-1997 due to the construction of project facilities and potential health hazards from emissions. The paper discusses the: a) impacts of resettlement to the community, b) measures installed by the proponent to minimize the adverse effects and c) strategies adopted to achieve co-existence with the community. Problem areas are identified, types of successful interventions are analyzed and factors for sustenance of the resettlement program are recommended. The paper can serve as a working reference for other project developers who may experience a similar concern in the future.

1. INTRODUCTION

In several instances worldwide, poverty as a result of resettlement has been identified as a major impact of energy projects. Thus, equal attention to infrastructure, institutions, and human resources are requisites to a project's sustainable development. The 640-MWe Leyte Geothermal Project in the Philippines was obligated to resettle 106 households dislocated by the construction of the project's 200-hectare facilities. The decision to resettle households was in line with the goal of the developer, PNOC Energy Development (PNOC-EDC) and its financing institution, World Bank, for a sustainable and socially responsible project management. The resettlement measure has the following objectives: a) to facilitate implementation of the geothermal project by minimizing access problems, b) to protect residents from potential health hazards of plant emissions, c) to assist affected families in regaining at least, their previous standard of living, and d) to facilitate the formation of community organization that shall promote unity, cooperation, self-reliance and productivity among relocated residents and their host community (PNOC-EDC, 1993).

2. METHODS

The Philippine government is still in the process of developing its resettlement guidelines to date (HUDC, 1997). Hence, PNOC-EDC adopted the international resettlement standards. As a matter of company policy, project structures are designed to minimize resettlement. If dislocation is unavoidable, the replacement of all lost structures, lost amenities and lost livelihoods to recompense the affected community become paramount responsibilities of the company. These are also the minimum requirements of the project's financing institution (World Bank, 1990).

To implement the resettlement policy, the following resettlement program for Leyte was offered to the dislocated households and their host community: a) replacement of average 10 sq.m. house with 25 sq.m. core shelter; b) cash compensation for crops and improvements based on Agriculture Assessor's Office or market rates; c) replacement of lost amenities such as chapel, health center, and improvement of basketball court shared with the host community; d) provision of additional services such as electrical connections, water system, and toilets; and e) interim priority employment in the geothermal project and long-term alternative livelihoods. The informed consent of the resettlement program by the affected community was also secured by the developer. Resettlers were given three options: a) to transfer to the resettlement site chosen by the community, b) to live outside the resettlement site but within the geothermal reservation, and c) to settle outside the reservation. Households were given the freedom to choose the package and freedom to change their minds a year before the period for their transfer. The resettlement process was monitored upon the completion of the resettlement site in 1995 with the following objectives: a) to assess the extent the targets are met, b) to determine the constraints in implementation as basis for immediate interventions, and c) to serve as basis for policy enhancement by the company. Monitoring serves as a warning system for the agency, a channel to make needs known and an avenue for reacting to the execution of the plan. Hence, PNOC-EDC and World Bank agreed to commission a third party group from the academe, the Visayas State College of Agriculture (VISCA) in Leyte for an objective evaluation of the situation.

The formative evaluation method was adopted which is a learning and action management tool for monitoring and improving activities in progress (VISCA, 1995). About 80%-90% of the resettlers were interviewed with structured questionnaires yearly from 1995 to 1999. The developer took over the activity by 1998. The parameters were analyzed using frequencies and percentages. Numbers do not say all, hence, these were complemented by key informant interviews of people directly involved in the planning and the implementation of the program, focused group consultations with the beneficiaries and third party observations during field visits. The results were discussed with the project developer for validation and action. Assemblies with the resettlers were held. A major validation meeting was held in June 1999 to discuss the five-year monitoring data as basis for further planning as part of the participatory approach in the resettlement program.

3. RESULTS

3.1 Profile of Resettlers

A total of 127 households were estimated to make up the resettlement community consisting of 119 households whose

lots were needed for the physical facilities and those who would be potentially affected by emissions from the power plant. The affected community was transferred to Lim-ao village with 8 households serving as host community. Out of these 127 households, about 21 were avoided during construction resulting in 106 household resettlers. Out of 106, only 51 households opted to transfer to the resettlement community and the rest opted to get compensation and occupied their lots in other parts of the reservation or went back to their original provinces out of Leyte.

The resettler population has a gender distribution of 61% males and 39% females with the fathers averaging 51 years and the mothers averaging 47 years of age. Each household averages 7 members with an average sibling age of 16 years. About 79 % of the fathers and 69% of the mothers attained elementary to secondary education. About 82% of the fathers or heads of families engaged in slash and burn farming and 18% were carpenters or from other trades. Majority of the mothers were housekeepers. The resettlers occupy a public forest located within a government geothermal reservation where residents have no legal claims. Households amenities were limited with 93% of resettlers using kerosene for lighting, 66% using springs as water supply, and no one had toilet facility. About 96% of the houses were made from semi-permanent materials. In summary, the resettlers had moderate household size, belonging to middle age group, of modest educational background, with the majority belonging to the work force who are mostly farmers of low economic status.

3.2 Status of Resettlers and Social Programs

Table 1 presents the status of the resettlement and social programs from 1994 to June 1999. The resettlers were transferred as soon as the resettlement infrastructures were completed. The mobilization of company assistance was in pace with the schedule of project construction. Most of the resettlers were dislocated from their farms so that priority employment with the company and its contractors were provided upon transfer. Employment was highest in September 1995 up to 1996 at the height of steamfield development and during power plant construction. Entry of resettlers to the existing farming associations in the host community (Lim-ao Farmers Association or LIFA, Tongonan-Kananga Farmers Association or TOKAFA and Tongonan Farmers Association or TOFA) started in September 1997 in preparation for the reduction in the company's manpower due to the completion of the geothermal project by December 1998. Due to their participation in the farming associations, their capital build-up funds or CBU started to accumulate. The CBU represents 10% of the group's salaries which is saved in the bank to serve as seed money for expansion of livelihood

Table 2 presents the socio-economic conditions of the resettlers. Data indicate major shifts in the mode of livelihood from farming to direct employment and other trades. Farming activities dropped by 50% while employment increased by almost 100% from 1993-1996 at the height of construction. Farming index increased again after completion of the first plant in 1997. This was also the time when the developer started introducing the alternative livelihood options from the existing farmers associations. Income and wealth closely increased with the employment opportunities. Wealth increase was a result of acquisition of assets and the expansion of homes. When employment dropped after plant commissioning

in 1997, the resettlers again shifted to other livelihoods whose index rose from 6% to 55%, leveling off to 45%. Because of alternative incomes, there was resumption of asset acquisition starting December 1998.

There was a noticeable direct relationship between the resettlers' assessment of their quality of life and their employment in the project and alternative livelihood sources available with time. There was a drop in favorable perception upon their termination from the company in December 1998. The economic condition from January 1997 to December 1998 was aggravated by the countrywide El Nino problem and the Asian economic crisis resulting in difficult times for the resettlers. These factors were reflected in their low approval of the developer for a time. Recovery of the country from these economic troubles started in 1999. This and other factors such as the signing of the Certificate of House Transfer, the intervention dialogues and the fielding of interviewers who are more knowledgeable of the company programs to answer queries helped increase the favorable perception of the resettlers by June 1999 up to the present.

Because of the general decline of favorable perception, the company conducted a consultation in June 1999 to more closely analyze with the resettlers, the statistics gathered from 1995-1999. The resettlers were made to realize the improvements in their lives and analyze their real problems. Some resettlers approved of the project because of the comfortable house and complete services. On the other hand, those who did not perceive improvement in their lives were looking for permanent jobs in the project but have limited skills. Through the validation dialogue, the resettlers learned to accept that they could not be all employed in the project and that they need to make the best out of the alternative livelihoods available to meet their needs. One major finding in the validation was that their experience in the company affected their livelihood preference for non-farming options. The dialogue also made settlers recognize that they need to take charge of their lives and to help in the solution of their problems. A joint action plan was agreed upon with the resettlers.

3.3 Empowerment of Resettlers

The transition from company support to self-management is the focus of the developer's effort from 1998 to the present. Part of the resettlers' empowerment is the formation of their own organizations. In November 1996, the company facilitated the formation of the Lima-ao Homeowners Association which is tasked to maintain their houses and to manage their communal services. By September 1998, a livelihood group named Lim-ao Integrated Farmers Empowerment or LIFE was formed apart from the existing farmer associations resettlers have worked for in the interim during power plant construction.

4. DISCUSSION

4.1 Impacts of Resettlement

Resettlement changed the production system of the resettlers from a farming community working on relatively bigger land area to one of a much reduced resource base. Their farming skills were also not applicable to the work available in the

geothermal project. Thus, there was a shift in livelihood from farming to skilled work. Because of their experience with less physically strenuous work, regular pay and higher salary from their employment with the company, resettlers had a difficult time adopting after their termination from the project. The company prepared for them a long-term farming livelihood similar to their original work but they preferred the non-farming options. This was the dominant reason for their negative perceptions despite the increase in wealth index. Physical transfer also altered the community structure and weakened social relationships. They resisted sharing amenities with the host community and they questioned the ability of and were reluctant in joining the host community's farming association which was planned as a complementary source of interim livelihood. The company viewed this as a negative signal as there is a need for harmonious relations between the resettlers and their host community. This is the reason why the company provided a uniform package for both. The company recognized the need of the host population and recognized that the replaced facilities were funded by the village government. Thus, it sited some amenities at the center of the village instead of building them in the resettlement subdivision. There was also the tendency of resettlers to be dependent on the company for all their requirements. To address this concern, PNOC organized the community into an association for the transfer of responsibility over the communal services and the management of resettler population. The resettlement was not without positive impacts. With less land base to work on, the community's other skills were harnessed. Using the compensation and disturbance fees from the company as capital, diversified livelihoods sprouted. These sources of livelihood proved to be more productive as indicated by the incomes recorded. The shift in livelihood also addressed the age problem of the community. The father is the head and provider of a Filipino family. In the case of the resettlement community, the family heads are relatively middle aged and preferred lighter jobs. The Filipino value of staying together also helped as the family was supported by the pooled income of various members. For the developer, its immersion in the rehabilitation of the resettlers increased the awareness on the company and reinforced its role as a good citizen in the community.

4.2 Measures for Co-existence and Sustenance of the Resettlement Program

Accurate Baseline Information

One of the major basis of the relations between the project developer and the resettlement community was the clear understanding of the resettlement responsibility by both developer and the community. Thus, the good baseline information on the affected population, affected properties and amenities and a well understood valuation criteria avoided irritants between the parties.

Program Administration

A key element of the resettlement effort was the efficient program administration which was assisted by a clear set of company policies, a detailed master plan consulted with the resettlers, a distinct resettlement organization that handled plan implementation and a dedicated liaison officer who coordinated with both resettlers and geothermal development groups. The covenants between parties on their responsibilities were documented in a Memo of Agreement to serve as a blueprint that guided program implementation. The developer

through its resettlement organization ensured the enforcement of the agreements. Controls were installed in terms of resettler obligations (e.g. non-sale of house for 10 years, maintenance of infrastructures, etc.). In return, the company needed to be prompt in their delivery of their commitments.

Early Assistance

It was essential that replacement of losses were provided prior to or as the resettlers were being relocated. For cases where the sites were needed and the resettlement site was not ready, houses were moved a few meters away in the interim. Support was also provided during the transfer period in the form of dismantling of old houses, transport of belongings, and priority employment with the company as interim livelihood due to the loss of the resettlers' production capacity. The intent was to attain their previous earning capacity.

Public Participation

It was critical that the resettlers and the host community understood the program for its smooth implementation. In 1993, the developer conducted consultations on the rationale for the transfer, compensation package, optional relocation sites, schedule for transfer, interim and long-term support and other details prior to any activity. The goals were to seek their consent and to solicit suggestions so that the resettlers and hosts have ownership of the company's plan. Various methods were used, such as field visits and walk through of proposed resettlement sites; visual presentation like drawings, flip charts, and photos to explain a point; building a model house; small group meetings and public assemblies.

During the implementation of the resettlement program, "Participatory Action Development" or PAD was adopted. PAD is a method of involving the community in the process that affects them and as problems are encountered (Lammerinck et al., 1999). PAD helped the community gather facts and perceptions, understand their situation, develop common solutions and agree on a mode of collaboration with the developer. The basic premise was the recognition that there is diversity of values and ideas among people but that as a community, they can identify issues that they share and form group-specific solutions (Englis et al., 1997).

Empowerment of Resettler Community

The developer planned for the empowerment of the resettlers in terms of providing them the skills, resources, and authorities for the responsibility that will be transferred to them. The key to the attainment of true empowerment is the installation of a strong community organization that will build the knowledge, leadership and capacity for the management of resettlement resources and operations. The instrument for community organization were trainings on values formation, skills, leadership and management which started early in 1995 or a few years before the planned pull-out of the developer by 1999. Most resettlers however dedicated all their time with their work with the company which hindered the training sessions and their development thus delaying pull-out by the company to year 2000. In November 1996, the company facilitated the formation of the Lim-ao Homeowners Association which is tasked to maintain the resettlement houses and to manage the communal services. By September 1998, a livelihood group named Lim-ao Integrated Farmers Empowerment or LIFE was formed apart from the existing farmer associations they have worked for during plant construction as complementary livelihood. The community

agreed as they saw the benefit of working together to address common needs. They also owned and enforced their rules. After they were formed, all development interventions were coursed by the company through the organizations. True empowerment is when resettlers decide with minimal support and facilitation by the developer For monitoring purposes, a mechanism was set up for the participation of the developer in the organization, if needed.

The Project Developer as a Change Agent

The first mission of the developer was to gain the trust of the community for them to be receptive to the company's advice. Trust was difficult to gain. Resettlers had mental barriers as the company was the reason for their dislocation. The developer had to show candor in words and action. Once accepted, the developer proceeded with caution. The company evolved and adapted to the agenda of the community. The developer also balanced expectations with what can be realistically provided. The developer took the role of a facilitator rather than as an authority or an expert, meaning it led the community from behind (Johnson and Camara,1997). The company only provided general guidelines. The details were worked out by the community with the assistance of the developer. Consultation sessions involved information sharing, surfacing of real from perceived needs, analyzing problems, inventorying of past experiences to work out solutions, persuading of ideas, building of consensus, agreement on mode of collaboration and documenting of agreements. Thus, the developer assisted by facilitating decision-making and in strengthening the ownership of said decisions by the community. In the process of facilitation, the developer built alliances with the community.

Integration with the Host Community

Beyond the infrastructures and the installation of a social organization is the need for the integration of the resettlers with their host community for harmonious relationship. The initial negative posture of the resettlement community in the village was eliminated when the company upheld the right of the village to run the amenities donated to the resettlers for the benefit of the greater population. In the first place, those amenities while located in the areas of the resettlers were government facilities. Out of the benefits fund provided by the developer to the host community, a specific portion is allocated to the resettlement community. However under the rules this is administered by the village government. Thus, the resettlers need to relate with the host community.

5. CONCLUSIONS

Overall, the resettlement program met its target of providing access for the developer to meet the commissioning schedule of the Leyte Geothermal Project while protecting the community from the hazards during project construction and from the power plant emissions during its long-term operation. The mechanisms installed by the developer for the sustenance of the resettlement program also served as instruments for co-existence with the resettlement community.

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Table 1. STATUS OF RESETTLEMENT AND SOCIAL PROGRAM¹

<i>Activity/Indicator</i>	<i>Target</i>	<i>Dec. 94</i>	<i>Sept. 95</i>	<i>Feb. 96</i>	<i>Jan. 97</i>	<i>Jun. 98</i>	<i>Dec. 98</i>	<i>Jun. 99</i>
A. Infrastructure								
1. Land Development	2.85 ha	100%	100%	100%	100%	100%	100%	100%
2. Access Road	0.27 km.	100%	100%	100%	100%	100%	100%	100%
3. Core Houses	55 units	15%	100%	100%	100%	100%	100%	100%
4. Toilet/Septic tank	55 units	100%	100%	100%	100%	100%	100%	100%
5. Drainage Canal	1.06 km.	15%	81%	100%	100%	100%	100%	100%
6. Water Supply System	1.27 km.	0%	21%	100%	100%	100%	100%	100%
7. Brgy. Hall/ Clinic	1 unit	0%	0%	100%	100%	100%	100%	100%
8. Basketball Court Enhancement	Lighting	0%	0%	100%	100%	100%	100%	100%
9. Chapel	1 unit	0%	0%	100%	100%	100%	100%	100%
B. Transfer of Resettlers								
1. Signing of MOA	119 HH	104 HH (87%)	105 HH (88%)	106 HH (89%)	107 HH (90%)	106 HH (90%)	106 HH (90%)	106 HH
Option 1 To Relocation Site	52 HH	3 HH (6%)	17 HH (31%)	42 HH (81%)	47 HH (90%)	50 HH (96%)	50 HH (96%)	51 HH (98%) ²
Option 2 Within Geo Reserve	3 HH	0 HH (0%)	2 HH (33%)	2 HH (33%)	5 HH (167%)	3 HH (100%)	3 HH (100%)	2 HH (67%) ²
Option 3 Outside Geo Reserve	42 HH	3 HH (9%)	6 HH (16%)	16HH (38%)	14HH (45%)	38 HH (90%)	38 HH (90%)	39 HH (92%) ²
2. Early Resettlers Quit Claim Households (HH) for Transfer ²	9 HH	-	9 HH (100%)	9 HH (100%)	9 HH (100%)	9 HH (100%)	9 HH (100%)	9 HH (100%)
	106 HH	6 HH (6%)	34 HH (32%)	69 HH (65%)	66 HH (76%)	100 HH (94%)	100 HH (94%)	101 HH (95%)
C. Priority Employment								
Employed in LGPP	35 HH	40 HH (115%)	12 HH (35%)	48 HH (137%)	10 HH (29%)	2 HH (6%)	2 HH (6%)	3 HH (8%)
Employed by Contractors	35 HH	no data	53 HH (151%)	26 HH (74%)	49 HH (140%)	27 HH (77%)	23 HH (66%)	30 HH (86%)
LIFA/TOFA/LIFE ³	18 HH	no data	6 HH (33%)	9 HH (50%)	20 HH (111%)	46 HH (255%)	24 HH (133%)	29 HH (161%)
HH w/ at least 1 Member Employed	88 HH		71 HH (81%)	83 HH (94%)	79 HH (90%)	75 HH (85%)	43 HH (49%)	64 HH (73%)
D. Livelihood Development								
Enlistment to Associations	67 HH	-	21 HH (31%)	22 HH (40%)	18 HH (33%)	35 HH (64%)	46 HH (84%)	46 HH (84%)
Capital Build-Up / Member LIFE	Open	-	P 967.00	P 1,158.00	P 5,421.00	P 2,525.68	-	
LIFA		-				P 314.28	P 1,285.71	P 1,458.33
TOFA		-				P 2,564.87	P 2,706.94	P 3,720.00
TOKAFA		-				P 2,486.49	-	P 4,287.50
		-						P 861.00
On-going Livelihood Projects	Open	-	1 (rattan)	2 (rattan & store)	3 (rattan, slope stabilization & nursery)	6 (rattan, store; farming; forestation; lending; job order)	6 (rattan, store; farming; forestation; lending; job order)	6 (rattan, store; farming; forestation; lending; job order)
Resettlers Directly Benefited	67 HH		10 HH (15%)	10 HH (15%)	21 HH (38%)	46 HH (69%)	24 HH (36%)	29 HH (43%)

1 Measured in households (HH)

2 Five (5) changed mind

3 Livelihood associations

Table 2. Socio-economic Conditions of Affected Households

Socio-economic Indicators	1993	Sept. '95	Feb. '96	Jan. '97	June '98	Dec. '98	June '99
A. Livelihood Source							
HH Engaged in Farming	77%	64%	21%	56%	53%	42%	42%
HH with Employed Member	38%	73%	82%	70%	67%	58%	77%
HH Engaged in Business	6%	26%	22%	22%	8%	8%	8%
HH with Other Income Sources	5%	13%	9%	21%	55%	54%	45%
TOTAL: ¹	126%	176%	134%	169%	183%	162%	172%
B. Income and Wealth							
Ave. Annual Income	P 15,982	P 43,911	P 44,004	P 50,736	P 44,007	P 34,262	P 20,652
Ave. Per Capita Income	P 2,854	P 7,841	P 7,857	P 9,060	P 3,778	P 6,051	P 3,224
Ave. Value of Assets	no data	P 33,709	P 33,709	P191,061	P 35,530	P 93,400	P 115,139
C. House and Amenities							
Ave. Floor Area of House (sq.m.)	19.02	19.81	21.25	21.34	31.34	31.86	31.86
Percent Semi Permanent Materials	8.5%	30%	50%	52%	52%	66%	66%
Ave. Value of House	P 21,551	P 59,200	P 62,703	P 64,035	P 64,035	P 73,905	P 73,905
HH with Toilet Facility (%)	30%	43%	59%	62%	71%	74%	74 %
HH with Electricity (%)	0%	6%	32%	52%	61%	72%	72 %
HH with Pipe Water	0%	11%	35%	52%	56%	66 %	66 %
HH with TV set (%)	0%	25%	25%	44%	46%	46 %	52 %
HH with Stereo/Karaoke	0%	3%	3%	35%	36%	30 %	34 %
HH with Refrigerator (%)	0%	3%	3%	20%	24%	26 %	28 %
HH with Motor Vehicle (%)	0%	1%	1%	1%	1%	3 %	2 %
HH with Oven	-	-	-	-	-	-	1 %
D. Perception of PNOC-EDC Programs							
Awareness of Programs	no data	92%	99%	100%	100%	100%	100%
Approval of PNOC-EDC	no data	60%	73%	77%	38%	35 %	75%
E. Respondents Own Assessment of Quality of Life							
Life has improved or quality was maintained	no data	no data	77%	62%	83%	61%	64%
Life has not improved	no data	no data	24%	38%	17%	39%	36%

¹ More than one member with livelihood