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The Role of Participatory Environmental and Social Monitoring in Preventing Social Conflict

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Abstract

The Peru LNG Project is located in the southern region of Peru and is comprised of a natural gas transportation pipeline system that traverses the Andean mountains to a liquefaction plant and marine terminal located on the Pacific coast. The 408 km pipeline traverses many diverse landscapes and ecosystems from the edge of the tropical rainforests to the high peaks of the Andes and finally down to the arid desert coastline.

As part of its Social Responsibility Program, the project has developed a Participatory Environmental and Social Monitoring Program (PESMP) to promote the active involvement of local stakeholders in the oversight of the performance of the Project. Local monitors have been trained to observe and register possible environmental and social impacts.

Once trained, the monitors are able to understand the Project's complexity and communicate informed opinions. They have become integrated into the Project, with the ability to influence the decision-making process. This has built trust and strengthened relationships between the Company, monitors, and the communities they represent.

The PESMP represents the first participatory monitoring program that has been carried out during the construction phase of a major oil and gas development project in Peru. The initiative has made a significant positive contribution to the social responsibility of the Company and has been well-received by the Project's affected communities. This paper describes the processes and activities undertaken during design and implementation of the PESMP, including the selection and training of the community monitors.

1. Introduction

The Peru LNG liquefied natural gas (LNG) export project includes the construction of a pipeline from the department of Ayacucho to the Pacific coast at Pampa Melchorita, south of Lima. The 408km pipeline traverses the Andes from approximately 2,900 m altitude at Chiquintirca in eastern Ayacucho, passing over the crest of the Andes at approximately 4,900 m, before descending to the Pacific coast to the Pampa Melchorita Natural Gas Liquefaction Plant site. The pipeline transverses through twenty-two districts: nine in Ayacucho, four in Huancavelica, eight in Ica, and one in Lima. Within the pipeline's area of influence are thirty-five rural communities, thirty annexes, twenty six localities, and twelve associations. Many communities in Ayacucho and Huancavelica speak Quechua as their first language and Spanish as their second language.

Figure 1: PERU LNG Pipeline Route

2. Background

The extractive industry faces numerous social and environmental challenges; building trust with local stakeholders is becoming increasing important to manage them effectively. This is due in part to the need to provide more effective communications and greater transparency about the issues of concern to communities, especially if perceived negative impacts outweigh the positive aspects of the project.

Many of the Project affected communities are situated in very remote areas of the Andes up to 5,000 meters above sea level. Their livelihoods depend primarily on subsistence agricultural practices. According to the UNDP, they are considered among the poorest communities in Peru, with the region of Huancavelica having the lowest human poverty index (UNDP, 2006).

As a result of these challenges, Peru LNG decided to augment the social baseline undertaken as part of the Environmental and Social Impact Assessment (ESIA) by conducting more in-depth socio-economic evaluations of the project affected communities. This was done early enough in the project planning phase for the right-of-way (RoW) to be modified at the micro level to avoid or further reduce negative impacts. A review of the data, which included community views about the project, also prompted the project to have a robust community monitoring program during pipeline construction to address inaccurate perceptions about the construction of the pipeline and associated facilities.

3. Objectives of the PESMP

A reputable and nationally respected organization was selected to design and implement the PESMP. Not only did this ensure the design was appropriate to the social setting, it also increased transparency and fostered trust in the program, which was seen as key to the success of the initiative from the outset.

The primary objective of the PESMP is to provide an opportunity for community members to actively participate in the monitoring of the overall environmental and social performance of the project during construction and, in doing so, address perceptions about impacts of pipeline construction. Specific objectives are to:

- integrate community participation into the project assurance processes;
- build trust among the monitors and the communities they represent;
- guarantee that community concerns be effectively addressed;
- ensure communities receive accurate information regarding social and environmental performance;
- provide information and continuous training on monitoring techniques to the participants;
- ensure participants are comfortable with regard to their role and have confidence in their abilities to use monitoring tools and communicate findings objectively to their communities;
- receive feedback from the participants that can be used to improve the social and environmental performance of the project;
- ensure field records are captured in a database that provides engineering and construction staff with accurate information about monitoring outcomes; and,
- provide information to local, regional, national and international stakeholders.

The development of the PESMP involved, on a voluntary basis, the active participation of stakeholders including not only the project affected communities, but also the local authorities, civil society, governmental offices, and international financial institutions.

4. Implementing the PESMP

The program was implemented in the following phases:

1. program design;
2. program validation;
3. selecting monitors;
4. training monitors; and,
5. field monitoring.

Each of these phases is described below.

Phase 1 - Program Design

The PESMP was designed to last two years to address community concerns and monitoring requirements during construction, reinstatement and the transition to operation of the pipeline. The program was broken down into three geographically based construction spreads so that the monitors could be grouped into teams based on their cultural backgrounds, environmental needs, and issues of concern. Specialists from the implementing organization then developed specific monitoring protocols, which included the social and environmental aspects of the pipeline RoW and associated construction facilities such as camps, pipe yards, and access roads. They also addressed administrative aspects of the Environmental, Social, and Health and Safety Management System such as consultation and disclosure activities, grievance procedures, the project code of conduct, and archaeological pre-clearance program.

Each monitoring protocol identified performance indicators in relation to a wide range of construction activities. The performance indicators were designed to be measurable using standard units. From the toolbox of protocols developed in partnership by the specialist organization and community monitors, the participants have been able to prioritize which sites or facilities to inspect based on the activities taking place in a given environmental system.

A Monitoring Register Information System (MRIS) was developed to organize the field data gathered by the monitors. The MRIS allows for user-friendly data entry and users are able to perform queries, use follow-up tools such as action tracking and provide public access through an interactive Website. The MRIS system also allows data to be incorporated into a Geographical Information System.

Phase 2 - Program Validation

Informative meetings were held within each of the Project affected communities that participate in the program. At these meetings, general information was provided about the proposed design of the program and how it would allow the specific objectives listed above to be achieved. Further meetings were held to provide more details to ensure each community had a clear understanding about the scope of the program, particularly with regards to the benefits and management arrangements. This allowed expectations about the program to be validated.

Phase 3 - Selecting Monitors

The next phase of the program involved selecting monitors to represent each community. This process was undertaken by the individual communities, following criteria set to ensure that the selected monitors have the necessary background for the role. The proposed candidates were therefore:

- fluent in Spanish as well as Quechua;
- educated to at least high school graduation level; with degree level preferred;
- respected by the community at large; and,
- not a local authority.

Women and young members of the communities were encouraged to seek nomination. All communities in the area of influence were to be represented by one or more community monitors, the actual number being commensurate with the amount of community land used by the project. . The monitors were selected at communal assemblies that neither the company or specialist consultants could attend.

Phase 4 - Training Monitors

The training program consisted of a review of the program objectives, the role of the monitors, and the necessary commitment required on the part of the participants to ensure the desired monitoring outcomes. The monitors were further trained about the construction processes, the potential and actual impacts of specific construction activities, the project's social and environmental commitments, the use of the monitoring protocols and equipment including GPS and camera record keeping and taking measurements.

Seventy-seven monitors passed the classroom training and were chosen to commence monitoring. The implementing organization specialists are made available to assist the monitors and provide skills transfer throughout the duration of the program.

Phase 5: Field Monitoring

Prior to full mobilization of the monitors, a pilot monitoring exercise was performed on the RoW to determine if the program strategy was appropriate and effective. Specifically, the pilot project aimed to:

- validate the protocols and test the field equipment;
- evaluate the interview protocols;
- visit actual work fronts; and,
- evaluate the interaction between the monitors, Company, and contractor staff.

Only minor adjustments were made to the program prior to its full implementation.

Monitors spend ten days in the field to inspect work activities and reinstatement works every month. They are accompanied by a member of the implementing organization. The monitors records all findings in coordination with the specialist to ensure their observations are objective, are based on project commitments or actual impacts, and that every finding is supported by the appropriate evidence. All findings are classified as requiring "No Action" or "Action".

No Action findings are automatically closed-out by the company. Examples of such observations would include:

Observation: *Waste found along the RoW near to a work crew. It was established that each work crew cleans their area of responsibility at the end of the working day.*

A positive example would be:

Observation: *Some areas of the RoW show improved soil conditions after reinstatement as compared to preconstruction conditions.*

Action item findings are recorded for the company to address. An example would be:

Observation: *Erosion control mitigation measures are not established following clear and grade but planned to be implemented the following day.*

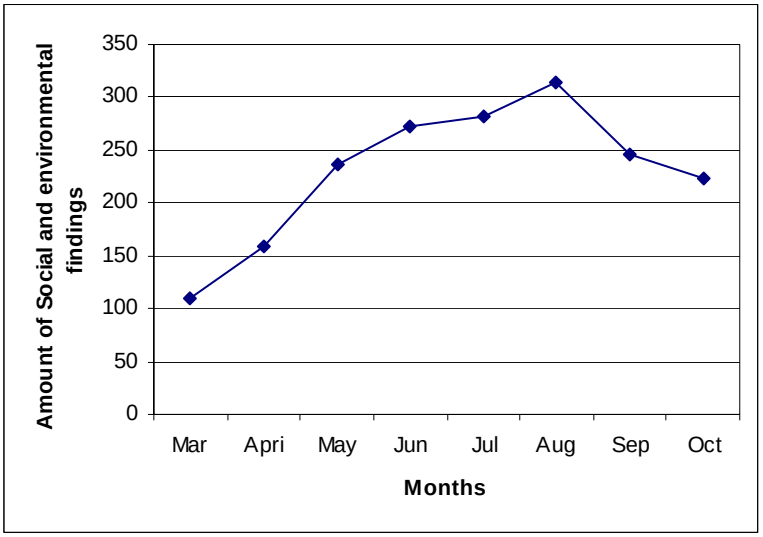
Action: *Site specific erosion controls need to be implemented or devised to close out the action.*

Information about the observations and any associated actions are registered in the MRIS database as a consulting tool, which determines action priorities to a community. In addition, the status of each finding can be tracked to closure. The monitors and specialist hold daily coordination meetings and are in continuous coordination with Project team to define the monthly monitoring plan.

5. Monitoring Results

Figure 3 shows that from June to August 2009 monitoring resulted a higher number of observations being reported, which coincides with the peak of pipeline construction activities. It is also the result of the monitors learning process about construction activities and the sequencing of mitigation measure to reduce impacts to acceptable levels.

Figure 3: Preliminary Trends of the Environmental and Social Findings



To date, over 1,800 observations have been reported (Table 1). Of these, the majority (61%) were classified as No Action. However, six hundred and seventy-six (92%) of these actions were solved by planned construction activities that include social or environmental mitigation

procedures. Only sixty-two (8%) observations required corrective actions to be devised and implemented (Table 2).

Table 1 Observations Reported (March-October 2009)

	Number of findings	Percentage (%)
Total	1,889	100
No action	1,151	61
Action	738	39

Table 2 Observations Requiring Action

	Action needed	Percentage (%)
Total	738	100
Further mitigation measure required	62	8
Solved by ongoing construction activities	676	92

Of the sixty-two actions only 16 items remain open. The number of observations that are automatically resolved by construction procedures are declining while actions recommending refinements to mitigation procedures are gradually becoming more common.

6. Conclusions

The PESMP has achieved many of its objectives and is therefore considered a successful program that could serve as a model for similar projects in South America and beyond. Community participation in the Project assurance processes was achieved through the careful selection of specialist organization to design and validate the program.

The monitors have provided the project with timely and valuable information, helping to guarantee community concerns are effectively addressed. A significant amount of trust has been built between the monitors, specialist, Project, and contractor staff. Monitors ensure their communities receive accurate information regarding the overall social and environmental performance of the project. In doing so, they also address any inaccurate perceptions their community may have about project activities.

Testimonies from the specialist organization and community monitors themselves show that after only six months, the monitors feel confident and are better informed regarding environmental and social management during pipeline construction. In addition, monitors are becoming more efficient communicators with the Project, their own communities and local authorities. This indicates that objectives relating to continuous training and mentoring are being met. This has also contributed to the monitors gaining respect of their community members. The monitors are also communicating with neighboring communities on matters of common interest about the project.

Finally, due to community involvement in the social and environmental aspects of pipeline construction, complaints related to community expectations are decreasing. Local training and active involvement has helped in the interpretation of the construction processes and the implementation of the mitigation measures, thus avoiding subjective misinterpretation. Active community involvement has promoted transparency with local community members acting as witnesses of project performance. Trust with the local community is well grounded. Positive impacts are now viewed as far outweighing the any negative impacts.

References

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