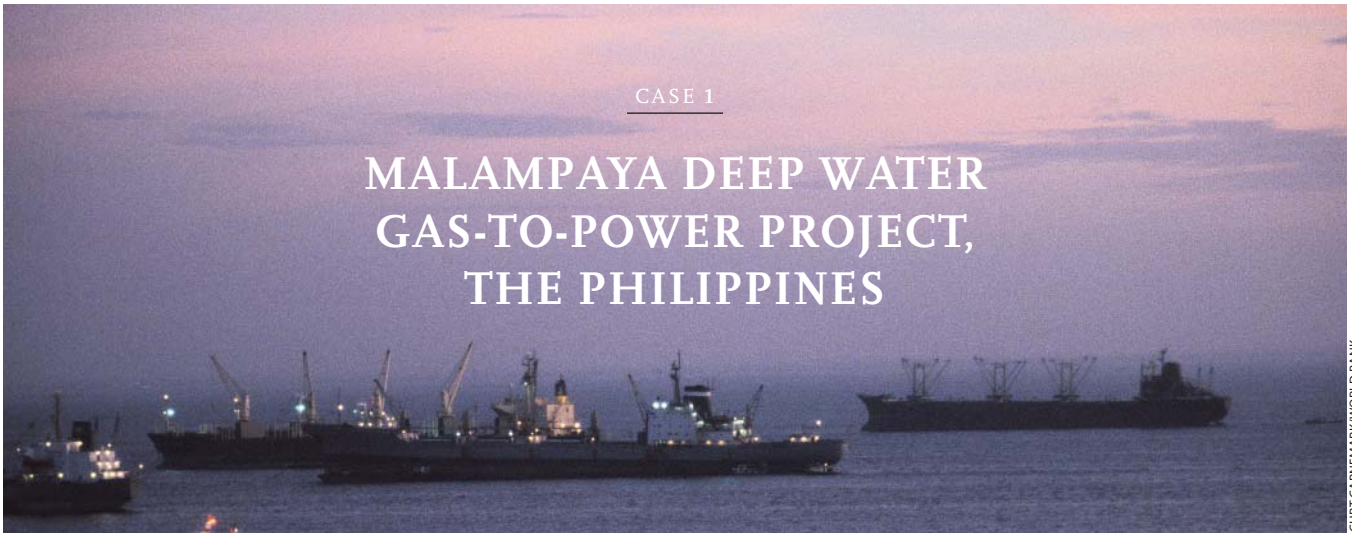


CASE 1

MALAMPAYA DEEP WATER GAS-TO-POWER PROJECT, THE PHILIPPINES



CURT CARNMARK/WORLD BANK

The Malampaya Deep Water Gas-to-Power Project (Malampaya)—a US \$4.5 billion joint venture of the Royal/Dutch Shell subsidiary Shell Philippines Exploration (SPEX), Chevron Texaco, and the Philippine National Oil Company (PNOC)—is the largest industrial investment in the Philippines.⁴² The project extracts natural gas from below the seabed off the coast of Palawan Island and transports it more than 500 kilometers by undersea pipeline to a natural gas refinery plant in Batangas City on Luzon Island.

Malampaya began commercial operations in January 2002. With total reserves of 3 trillion cubic feet, the project is expected to produce 400–450 million cubic feet of gas per day for over 20 years.⁴³ The refined gas from the Malampaya project feeds a separate pipeline project that supplies three gas turbine power plants in Batangas province. These plants are expected to supply Luzon with a total of 2,700 megawatts of electricity—over 30 percent of the Philippines’ total power demand.⁴⁴

SPEX and ChevronTexaco each owns and financed 45 percent of the project, and PNOC owns and financed the remaining 10 percent. The project sponsors expect to earn US \$6.7 billion from Malampaya—US \$3 billion each for SPEX and ChevronTexaco, and US \$0.67 billion for PNOC.⁴⁵ In addition, the Philippine government is expected to earn at least US \$10 billion through a “service contract” that entitles it to 60 percent of net project revenues.⁴⁶

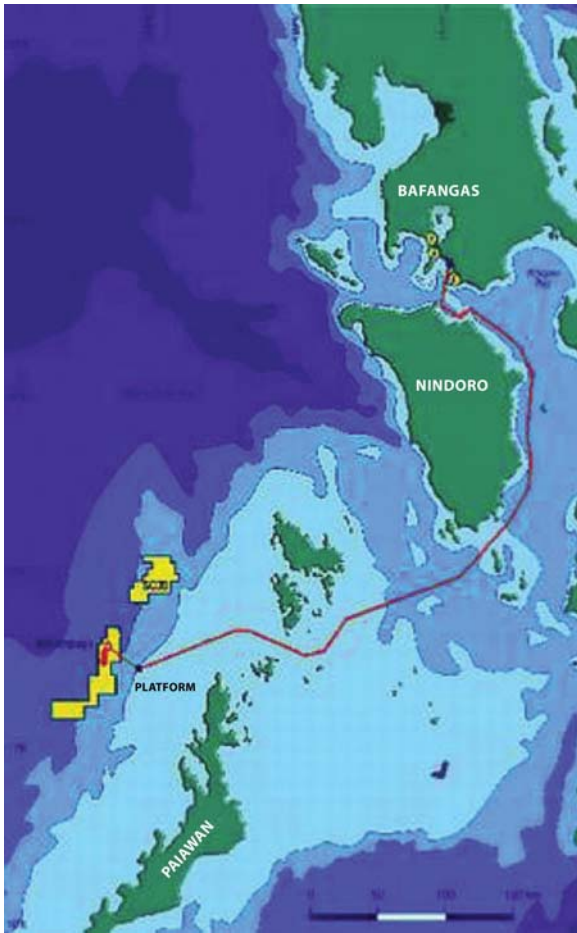
SPEX operates and manages the project on behalf of its partners, and was responsible for bringing the project online. Construction commenced in 1998 and entailed large-scale operations in four different provinces (see

Figure 1). First, it built a concrete gravity structure—the foundation of the offshore platform—in Sitio Agusuhin, Subic Bay, and Zambales. Second, SPEX installed the concrete gravity structure and platform at the offshore extraction site northwest of Palawan province. Third, SPEX laid the 504 kilometers of offshore pipeline under the waters around Palawan and Mindoro Islands.⁴⁷ Fourth, SPEX constructed a natural gas refinery plant to process the extracted gas in Batangas City.

SHELL’S INTEREST IN OBTAINING COMMUNITY CONSENT

According to SPEX, Malampaya was the first project in the Philippines to actively undertake a community consent process as part of its Environmental Impact Study (EIS), even though it was not explicitly required to do so. Shell’s interest in engaging affected communities and obtaining their consent was influenced by several political, legal, and business-related considerations. First, Shell began to develop Malampaya in the mid-1990s, at a time when its record of environmental and social stewardship was being sharply criticized and intensely scrutinized. Activists had been criticizing Shell for its environmental and human rights record in the Delta region of Nigeria, and for its controversial decision to dispose of the Brent Spar oil terminal in the North Sea. Public reaction to Shell’s conduct led to organized campaigns, international protests, and consumer boycotts that damaged the company’s reputation and cost it millions of dollars in revenue.⁴⁸ Chastened by the public backlash, Shell began to develop a set of sustainable development policies and to rethink its approach to community engagement.⁴⁹ The company stated: “[W]e have learned that for some

FIGURE 1 | MAP OF MALAMPAYA PROJECT



Source: SPEX.

decisions, [public] approval is as important as the opinion of experts or the official consent of authorities.”⁵⁰ Shell designated Malampaya to be the first project to incorporate this new approach.

In addition, SPEX was well aware of the adverse affects of community opposition on other projects in the Philippines. In 1983, Shell Philippines had constructed a gas terminal facility in Biñan, Laguna Province, without consulting the local communities. Even after the project had secured environmental approval, local opposition mounted until the mayor of Biñan refused to approve other permits necessary for the continued operation of the facility. As a result, the project experienced lengthy delays and closed down entirely after a year in operation.⁵¹ Similarly, other high-profile clashes between project

sponsors and their host communities in the Philippines, such as the Benguet Antamok Gold Operation (BAGO) pit mine,⁵² the Calaca II Coal Fired Power Plant,⁵³ and the Mount Apo Geothermal Project⁵⁴ led SPEX to recognize the advantages of securing public acceptance.

Finally, the regulatory requirements of the Philippine government with respect to community participation were evolving as Shell was planning the project. When Shell first approached the Department of Environment and Natural Resources (DENR) to identify the requirements for its EIS in 1995, the Philippine Environmental Impact Assessment law did not mandate community engagement as part of the EIS process.⁵⁵ But shortly thereafter, the law was revised to require public participation. In 1996, DENR issued guidelines that defined public participation as “a transparent, gender sensitive, and community-based process involving the broadest range of stakeholders, commencing at the earliest possible stage of project design and development and continuing until post-assessment monitoring, which aims to ensure social acceptability of a project or undertaking.” The guidelines defined “social acceptability” as “the result of a process mutually agreed upon by the DENR, key stakeholders, and the proponent to ensure that the valid and relevant concerns of stakeholders, including affected communities, are fully considered and/or resolved in the decision-making process.”⁵⁶ In 1996, however, “social acceptability” did not necessarily require community consent; this came later, at least for indigenous peoples, with the passage of the Indigenous Peoples Rights Act of 1997. Box 3 provides the Administrative Order in the Philippines that guides obtainment of community consent necessary for environmental licenses to be issued from the Environment Ministry.

SHELL'S APPROACH TO COMMUNITY RELATIONS

Shell began engaging community stakeholders in 1996, about two years before project construction began. Its outreach efforts were conducted through two Shell entities: (1) SPEX, the chief proponent of the project; and (2) the Pilipinas Shell Foundation, which included the social development arm of Shell Philippines (the Shell Foundation or PSFI)⁵⁷ and the External Affairs (EA) Division of Shell Philippines, the parent company of SPEX.⁵⁸ SPEX was assigned to deal with all the issues related to the environment, including permitting, while the foundation took charge of all social development issues directly and indirectly related to the project. The

BOX 3 | PHILIPPINES MATRIX ON COMMUNITY CONSENT

The process of obtaining community consent and continuing to work with communities is complex and difficult. It is not always easy to measure or assess whether it is working well.

To help ensure that the process is succeeding, in 1996 the Philippine Government issued an administrative order requiring project sponsors to complete a matrix that discusses all community concerns and how they are being addressed by the sponsor. Government approval of this matrix was a prerequisite to obtaining an environmental license from the Environment Ministry.

The matrix identifies six different areas: ecological and environment soundness of the proposed project, effective implementation of the public participation process, resolution of conflicts, promotion of social and intergenerational equity and poverty alleviation, and proposed mitigation measures for adverse impacts and measures for the enhancement of positive impacts on people. For each of these areas, it suggests indicators or other evidence that can measure whether the area has been successfully addressed.

Ecological and Environmental Soundness of the Proposed Project

Examples of proof that this criterion has been met can include:

- Risk Management Plan, if applicable;
- Environmental Management Plan, with the commitment of the proponent to implement the proposed measures;

- municipal, *barangay* (township), or provincial resolution endorsing the project;
- endorsement letters from local nongovernmental organizations (NGOs) and community leaders;
- signed contract between the proponent and project contractor(s), incorporating all of the mitigating and enhancement measures in the terms of reference or scope of work of the contractor(s); and
- list of detailed specifications of raw materials and equipment to be used in the project, from the different suppliers showing that they are the product of environmentally friendly processes and substances.

Effective Implementation of the Public Participation Process

Examples of proof include:

- scoping report that has been signed by all key parties and stakeholders' representatives;
- matrix showing the manner of inclusion of the comments and suggestions of stakeholders in the various aspects of the EIA; and
- stakeholder letters signifying interest to participate in the monitoring of the project and/or implementation of the Environmental Management Plan.

continued next page

foundation also played an ongoing role in managing social development projects in the communities affected by the Malampaya project.⁵⁹

Shell employed four strategies to gain community consent: (1) community outreach and interviews with key opinion leaders and decision makers; (2) information dissemination, education, and communication activities; (3) perception surveys and participatory workshops to introduce the project and validate initial survey results; and (4) participatory involvement in the formulation of environmental management plans.⁶⁰ As required by Philippine law, Shell held town hall meetings to provide a forum for Shell to hear and respond to community concerns, and public hearings were also held to present and discuss the results of the EIS report.⁶¹ Perception

surveys conducted after the public hearings and town hall meetings showed that between 72 and 84 percent of respondents approved of the project.⁶²

COMMUNITY CONCERNS AND SHELL'S RESPONSE TO GAIN CONSENT

Mindoro. At the beginning of the engagements—before town hall meetings and public hearings—many community members opposed the project.⁶³ Opponents were concerned that the installation and operations of the offshore pipeline would have adverse environmental, health and safety, and economic impacts. The strong opposition in Mindoro also stemmed from previous negative experiences with other extractives projects. Protests were held in Mindoro, and commentators on

BOX 3 | CONTINUED

Resolution of Conflicts

Examples of proof include:

- Memorandum of Understanding between the parties to the dispute;
- negotiated agreements on conflicts formalized through a memorandum of agreement between the proponent, the government, and legitimate stakeholders;
- Resettlement and Compensation Plan, if applicable; and
- Social Development Program, if applicable.

Promotion of Social and Intergenerational Equity and Poverty Alleviation

The project should promote social equity and answer the following questions:

- How could the benefits and burdens of the project be distributed among the different groups and classes of people affected?
- How could the project benefits be distributed more effectively among the poorer people in the intended beneficiary population?
- What might be done to lessen the burdens on project victims or benefactors, especially poor people?
- Are gainful employment and alternative sources of livelihood provided, particularly when vast tracts of

agricultural lands and/or fisheries are affected due to project operation?

- Do livelihood programs/projects involve women and other vulnerable groups?

Proposed Mitigation Measures for Adverse Impacts and Measures for the Enhancement of Positive Impacts on People

The project should formulate or develop a mutually agreed-upon compensation scheme for resettled households.

- The project should respect and preserve the aesthetic value and cultural heritage of affected communities.
- Examples of proof include:
 - endorsement letters from the local NGOs and politicians;
 - municipal or *barangay* resolutions endorsing the project;
 - an Environmental Management and Monitoring Plan that includes a Social Development Program, Compensation and Resettlement Plan, and other relevant plans and that is signed by the proponent agreeing to implement and strictly abide by all of the proposed measures.

References

- DENR Department Administrative Order No. 96-37, Philippines Department of Environment and Natural Resources (1996).
Personal interview with Tony La Viña, former member of the Philippines Department of Environment and Natural Resources.

the local radio stations voiced their vehement opposition to the project.⁶⁴ In response, the PSFI group assigned to Mindoro held additional town hall meetings to address public concerns. Shell also conducted an intensive information, education, and communication campaign, including radio advertisements and an information exhibit with educational videos displayed in the city hall.⁶⁵ These efforts succeeded in allaying the environmental and safety concerns of the Mindoro stakeholders. Many of the stakeholders, however, were also concerned that the project would produce no direct benefits, since the pipeline would not directly pass through Mindoro. They therefore requested that Shell provide start-up funding for micro-finance and livelihood loans. Shell agreed to provide Mindoro a grant of about US \$1 million (Php 50 million),

which was distributed through seven Mindoro NGOs that presented project proposals and met PSFI grantee criteria.

Sitio Agusuhin. SPEX wanted to build a massive dry dock in Sitio Agusuhin in which to construct the concrete gravity structure for the platform. However, about 142 families of fisherfolk lived at the proposed site of the dry dock. Although many of these residents had lived there all their lives, the Philippine government considered them to be illegal squatters, since the land on which they lived was part of a U.S. military installation. The government exerted political pressure to expedite their eviction, and required them to abandon their homes with only a few weeks' notice. Predictably, the community reacted negatively to the government's decision to remove them in such a fashion. In the ensuing conflict, both the World

Bank and the local Roman Catholic Church intervened on behalf of the community to ensure that they were treated appropriately.⁶⁶

The Shell Foundation was able to persuade the community to relocate beyond the perimeter of the facility by offering a package of monetary compensation and social programs. Some residents chose to leave the area entirely, while others remained near their former homes in Agusuhin. All of the families that were resettled were compensated according to the local government assessor's valuation of their dwellings. Several members of the community, however, were dissatisfied with the compensation package.⁶⁷ These residents organized protests that threatened to delay the project. In response, the Shell Foundation's community officers entered into negotiations with the aggrieved parties. The residents sought greater compensation for their lands, and preference in Shell's hiring of the 3,000 workers required to construct the gravity structures. In addition, the community was concerned that Sitio Agusuhin would experience a "boom and bust" cycle, as it had when the U.S. Navy left its base in nearby Subic Bay. It therefore viewed the project as an opportunity to build a more durable base of development for their community than a short-term construction project could provide. Toward this end, the community requested that Shell provide support for a high school, medical and dental services, employment and microfinance projects, and assistance in writing up an agreement with the local government for protection from future projects to be undertaken in the area.

While Shell agreed to most of these requests, it refused to increase the compensation package, insisting that compensation be based on the assessor's valuations. Problems also arose in Shell's implementation of some of its commitments. For example, a microfinance loan program was only set up toward the end of the Agusuhin construction project. The delay in the program's implementation concerned some residents, who believed that Shell did not leave enough time to build sustainable alternative livelihoods after the project. Moreover, SPEX's agreement to hire local workers was complicated by the shortage of residents with the requisite construction skills. The foundation worked to address this problem by training local residents in necessary skills, such as welding and masonry. Most of the women, however, did not undergo training, and were employed in cleaning and clearing activities. In the end, the majority of the residents were employed on a full-time basis.

Ultimately, the Agusuhin community was persuaded that the project could bring economic development to the area, and signed a memorandum of agreement accepting the compensation offer.⁶⁸ Some dissatisfaction over the compensation package persists, as some community members maintain that they did not understand how the assessment valuation was carried out.

Batangas City. In 1999, PSFI facilitated the formation of the alliance of affected *barangays* (townships) in Batangas, which they named TALIM Council—an acronym for the communities of Tabangao, Ambulong, Libjo, San Isidro, and Malitam. The council was formed to enable the different communities to unite in their common concerns and problems with regard to the Malampaya project. The council facilitated meetings of local leaders to discuss common problems and helped to resolve disputes between Shell and affected community members. The council also communicated Shell's response to its constituents.⁶⁹

In Batangas City, ongoing concerns about the negative health and environmental impacts of an existing Shell oil refinery caused some local residents to be skeptical of the Malampaya project. SPEX and PSFI asked the community to focus on issues relating to the Malampaya project, and did not address the issues associated with the other Shell projects in its community engagements. Within these parameters, the communities sought to ensure that there would be priority hiring from among its residents, and that appropriate safety measures were in place.⁷⁰

Almost all of the employment opportunities were available during the construction phase. Once the refinery was brought online, it needed only about eight people at a time for operation. To mitigate this boom-and-bust cycle, PSFI provided residents with training for employment opportunities at other companies located in Batangas City that need to hire staff with certain skills, such as animation and electronics. PSFI also set up a job placement program to help the trainees find work at other companies in need of their new skills.⁷¹

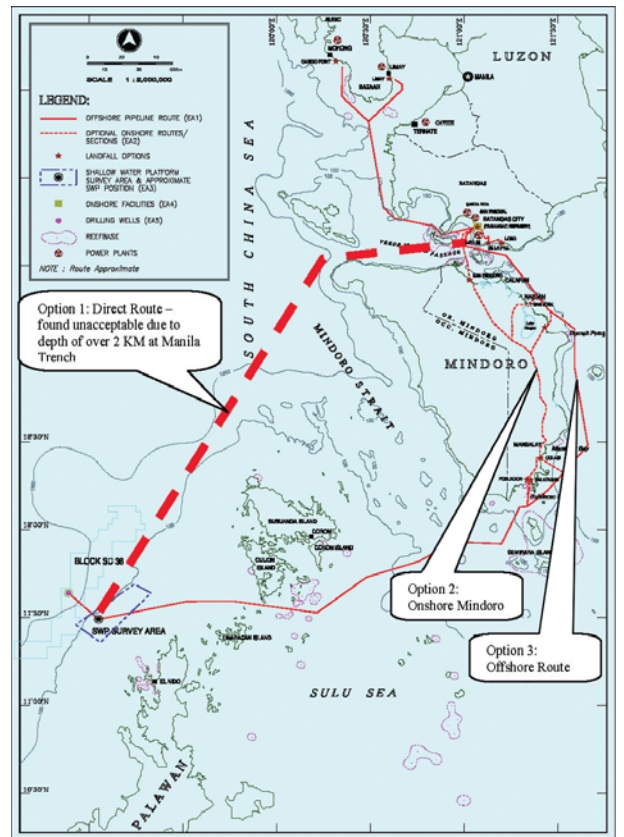
Not all of the affected communities in Batangas City were satisfied with the substantive outcomes of their engagements with Shell. But in general, most of the communities believed that Shell had addressed their most important concerns regarding employment, alternative livelihood, and health and environmental impacts. Recently, however, plant safety has become a concern. Although safety training sessions have been conducted

for the communities, there is continued apprehension with regard to whether this training is adequate. Some communities have requested more training, along with additional security to watch over the complex and pipelines. According to the communities interviewed in Batangas City, these requests are still pending Shell's response and action. Local community leaders, while generally satisfied with their relationship with SPEX and PSFI on the Malampaya project, still express their view that Shell needs to be more transparent and accessible.⁷²

Offshore Pipeline Route. Three options were considered for the offshore pipeline route during the initial stages of the project (see Figure 2). Two options would have routed the pipeline entirely offshore; the third, least-expensive option, would have crossed Mindoro Island.⁷³ At first, the project sponsors preferred the third option for cost reasons. But as a result of initial environmental assessments and informal community interviews, Shell learned that the overland route through Mindoro would traverse and heavily impact some areas of rich biodiversity, and that one of the offshore routes would cross the ancestral waters of the indigenous Tagbanua tribe. Initial interviews with community members raised the environmental and social impacts of the other route options. Shell ultimately rejected these routes in favor of a mainly offshore route that avoided the most significant environmental and social impacts of the other two options, and therefore averted potential community pressure in the affected areas.⁷⁴ This route, however, was three times more expensive than the other two options.⁷⁵

When Things Go Wrong. SPEX accounted for community concerns as they arose by revising its public engagement plan on an ongoing basis. For instance, SPEX initially failed to engage the Pearl Farmers' Association located around the project area in Palawan. Shell was aware of the association, but did not consult its members because Shell believed the farmers to be operating outside the project's zone of impact.⁷⁶ The pearl farmers were upset by Shell's failure to engage them, and their relationship was initially contentious. They expressed their opposition by challenging Shell's EIS results with respect to the anticipated impacts on their pearl farm business during the public hearing. They pointed to possible impacts from noise pollution and the environmental consequences of leakages. In response, Shell revised its engagement strategy and met with the association to explain and resolve the issues its members had raised during the public hearing.

FIGURE 2 | ALTERNATE PIPELINE ROUTES UNDER CONSIDERATION



Source: SPEX.

Similarly, the SPEX team originally failed to inform local fisherfolk that several fish-aggregating devices, locally known as *payaos*, would be destroyed during the laying of the offshore pipeline around Mindoro. As a result, the fisherfolk threatened to impede the pipe-laying activities in the area. Shell then met with the 50 affected fisherfolk and compensated them for the damages that they suffered, which amounted to US \$35,700 (Php 2 million).⁷⁷ No delays occurred due to community opposition.

MAINTAINING COMMUNITY CONSENT DURING IMPLEMENTATION AND OPERATIONS

Shell recognized that the risks of community opposition can also arise after the project has been implemented, and endeavored to maintain and cultivate its relationships with

the affected communities during project operations.⁷⁸ As a condition for receiving environmental clearance from the government for the project, Shell agreed to form multiparty monitoring teams (MMTs) composed of local government representatives, NGOs, community leaders, provincial and community environmental officers, and other stakeholders to monitor the environmental and social impacts of the project during its implementation. In 2000, MMTs for the different provinces were set up.⁷⁹ While the memorandums of agreement for the MMTs did not require Shell to ensure community satisfaction and consent, the MMTs still potentially provide an important means for the public to participate in overseeing implementation and operations, and to raise concerns as they arise.

In addition, the Shell Foundation has played an active role in ensuring ongoing acceptance of the project during operations. PSFI meets with community representatives monthly to provide updates on project operations and impacts, and to allow the community to raise concerns and grievances.⁸⁰ It also operates sustainable development programs in each affected province that provide services requested by the communities—including job training, livelihood workshops, employment link-ups, scholarships, microfinance, health and safety workshops, and conservation activities.⁸¹

This ongoing engagement is markedly different from standard practice in the Philippines, in which relations with the community usually end once the EIS is finalized.⁸² While no major issues have arisen since construction, there is a broad consensus among all community stakeholders on the importance of ongoing relations with the company. The continuous engagement with Shell enables the community to raise concerns—especially regarding health, safety, and environmental impacts. It also provides a mechanism for affected people to seek assistance with basic community needs that their local governments cannot provide, such as clean water, infrastructure, and microfinancing. Moreover, local leaders in Batangas City also report that the process of engagement with SPEX has produced an unanticipated benefit: it has empowered the community by increasing awareness of the potential of community action.⁸³

COSTS AND BENEFITS OF GAINING COMMUNITY CONSENT

The Malampaya project cost about US \$4.5 billion.⁸⁴ Shell estimates that its total costs of engaging the affected

communities and gaining their consent—including staff time, meetings, community compensation, changed plans, and other related expenses—was approximately \$6 million.⁸⁵ Taken together, then, the incremental costs of avoiding and mitigating adverse impacts and securing community consent amounted to a little more than 0.13 percent of total project costs.

Shell believes that the incremental costs of securing community consent during planning and implementation produced significant quantifiable benefits—particularly insofar as it allowed the company to complete the project ahead of schedule.⁸⁶ The company anticipated in its project planning that it might suffer 10 to 15 days of delay due to community concerns or opposition.⁸⁷ It estimated that each day of delay in laying the pipeline or constructing the concrete gravity structure would cost an additional \$400,000. The pipeline was completed ahead of schedule, and did not undergo any delays due to community concerns or opposition. This allowed the company to avoid US \$4–\$6 million in estimated delay costs. In addition, the absence of conflict in Sitio Agusuhin allowed Shell to complete the concrete gravity structure three months ahead of schedule, which saved the project US \$36 million in construction costs.⁸⁸ Finally, under the agreement with the power plant operators, Shell would have been required to pay US \$1–\$2 million for each day it failed to deliver the promised supply of gas after the agreed-upon start date. By completing the project on time, Shell avoided penalties of at least US \$10–\$30 million, based on the 10–15-day delay estimates.⁸⁹ In aggregate, avoiding these anticipated delays saved the project US \$50–\$72 million, producing a “return on investment” on its community consent efforts of as much as 1,200 percent (see Table 1).

In addition, the project spent about US \$1 million annually between 2002 and 2004 in ongoing community engagement, service provision, and other consent-related activities. During the same period, it earned revenues of US \$685.7 million.⁹⁰ Thus, the costs of maintaining community acceptance have amounted to 0.43 percent of project revenues.

The company’s community consent-related efforts have also yielded a number of benefits that are more difficult to quantify. SPEX’s ability to gain broad community support made its interactions with the Philippine government much easier, as it preempted any sustained political pressure on the government to hold up the project. In addition, SPEX used its success with Malampaya to help

TABLE 1 | COSTS AND BENEFITS OF GAINING COMMUNITY CONSENT

Activities	Costs (millions of US dollars)	Activities	Benefits/ Avoided costs (millions of US dollars)
General Community Engagement/Consultations (including compensation of relocations)	6	Construction ahead of schedule by 3 months	36
		Contractual penalties (avoided)	10–30
		Project delay from laying of pipelines (avoided)	4–6
TOTAL Costs	6	TOTAL Benefits	50–72

convince the Philippine government that it was a suitable sponsor for a related project—the construction of an onshore pipeline from its natural gas refinery in Batangas to two nearby gas-fired power plants. SPEX was able to secure the support of the Philippine government for this project, even before it obtained the \$5 million investment needed for it.⁹¹

Malampaya has also had broader reputational benefits for Royal/Dutch Shell. In response to a number of controversial projects, Shell has made a very public organizational commitment to sustainably manage its operations. Nevertheless, it has frequently been accused of failing to live up to these commitments and of being more interested in public relations than meaningful operational reform. Malampaya has provided Shell with tangible evidence that it can implement good practices with respect to community consent. The Malampaya project was awarded the World Summit Business Award for Sustainable Development Partnerships by the United Nations Environment Programme and the International Chamber of Commerce.⁹² The Malampaya project is now being used as a training case study for other Shell projects worldwide.⁹³

CONCLUSION

The Malampaya project illustrates how a potentially controversial, high-impact infrastructure project can avoid costly community opposition through ongoing efforts to secure and maintain community consent throughout the project cycle. In Malampaya, the costs of gaining community consent proved to be minimal in comparison with total project costs. Even using conservative “base case” estimates of potential delays due to community opposition, the sponsors received benefits that were worth many times these costs. Moreover, the full benefits of SPEX’s efforts to gain consent may be even greater than this comparison would suggest. While it is impossible to quantify the costs associated with community opposition that did not materialize, the experiences of the other case studies suggest that had affected communities felt the need to mobilize in opposition to the project, the financial impacts on the project could have far exceeded these base case estimates.