Socio-Economic Impact Study as a Tool for Non-Technical Risk Management: Lessons from the Oil Sector in the Falkland Islands

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Introduction

Oil and gas activities raise important socio-economic questions for host governments, local communities and project proponents. If not identified and managed in a timely and effective manner, socio-economic issues - such as labour market effects, population influx and socio-cultural change - can result in significant non-technical risk to projects such as local backlash, delays in project approvals, missed opportunities for delivery of benefits and reduced scope to prevent and/or mitigate and negative impacts.

This paper explores the rationale, process and outcomes of an early-stage socio-economic impact study of a proposed offshore oil development in the Falkland Islands carried out in 2011/2012. Arguing that the management of socio-economic issues is essential to any project's overall risk management approach, the paper discusses the value of socio-economic impact studies as a means to manage such issues and risks. It also discusses key lessons of the Falkland Island study and its relevance to other projects around the world, including the various levels of study that may be suitable at different project stages.

Strategic Socio-Economic Assessment in Theory and Practice

Strategic socio-economic assessment (SSA) can be defined as a non-regulatory, social-science led assessment of major extractive industry projects or government-led policies, plans and programs. SSAs provide value when applied to major projects likely to have a significant effect on local communities, society and natural resources, particularly where there is known political, socio-economic or cultural risk or the extractive industry in the location in question is unknown or in its infancy. SSAs focus on social and economic issues but also consider wider environmental, political, cultural and governance context.

Environmental, Social and Health Impact Assessments (ESHIA) have been the typical mechanism available to address these issues. These processes, however, are often driven by regulatory requirements, have a singular project focus, are done at later stages of the project planning cycle where changes become more challenging to make, and tend not to identify practical risk management protocols. While some ESHIAs for large extractive projects follow best industry practice, traditional impact assessment does not always effectively identify strategic socio-economic issues and risks in a focused and pragmatic manner, or allow for a time horizon to build the relationships and partnerships that are required to manage many social or economic issues or a community's response to change. Similarly, government-led Strategic Environmental Assessments (SEA) tend to focus on baseline conditions and public consultation prior to opening new acreage and are not designed to address socio-economic questions in a strategic and integrated manner. Review of the Falkland Islands Socio-economic Impact Study is therefore potentially instructive.

The Falkland Islands Case Study

History and Background

The Falkland Islands are a geographically remote and sparsely populated archipelago and British Overseas Territory located in the South Atlantic Ocean about 650 km off the South American coast (see Figure 1). They have a complex political, economic and cultural history, which includes the well-known tensions with Argentina over sovereignty.

The prospect of hydrocarbon resources under the seabed surrounding the Falkland Islands has been muted for some time. Geological surveys indicate a vast potential for oil under the waters off the Falkland Islands. Following an inconclusive exploration drilling campaign in the 1990s, oil exploration recommenced in 2005 and culminated with a significant oil discovery by Rockhopper Exploration in 2010 in the Sea Lion prospect. The field lies in 450 m water depth in the North Falkland Basin, about 220 km north of the Islands.

Figure 1: The Falkland Islands - Quick Facts

- A self-governing British independent overseas territory with a population of about 3,200, mostly of British heritage.
- Located in in the South Atlantic Ocean, about 650 km from South America.
- Comprised of 340 islands, with the only town – Stanley – located on East Falkland.
- Key economic drivers are fishing, agriculture and tourism.
- Self-sufficient in all areas other than defence.
- The regulation of petroleum exploration and exploitation is the responsibility of the department for mineral resources of the Falkland Islands government.

The Sea Lion discovery, the first commercial oil discovery in Falkland Island waters, is estimated at about 321 million barrels of oil. Development of the Sea Lion field, via Rockhopper's farm-in partner Premier Oil, is currently in the planning stages, with first oil expected in 2017. Further exploration drilling off the Falkland is slated for 2014.

The implications of an emerging offshore oil industry in such a geographically remote and sparsely populated location are highly significant. The expected revenues and taxes that could stem from oil production could single-handedly transform the Falkland Islands economy; early estimates indicate that the revenues from the Sea Lion development alone could more than double the current GDP of the Falkland Islands, and that revenues to the Falkland Islands Government (FIG) could, depending on the prevailing oil price be in the range of at least £195 million annually. Although the Islands' economy is already in surplus, the main source of income (fisheries) is variable and the other key sectors (agriculture and tourism) cannot sustain the economy on their own. The Sea Lion oil development project therefore has the potential to provide long-term economic sustainability to the Falkland Islands.

Notwithstanding the substantial benefits that oil development promises, the Falkland Islands and the oil industry face a number of challenges in developing these resources. These include limited air links, logistical hurdles with the movement of people and equipment, a small local labour pool, strict immigration policies to control population growth, limited accommodation, an aging port and capacity constraints with infrastructure and utilities. While the oil sector did not face major constraints during exploration, and significant infrastructure improvements have been made in recent years, there are concerns that development will put strains on existing infrastructure, notably roads, aviation, ports, communications social and environmental services, and could create issues with social equity and cultural change.

Oil development also raises important governance issues. Given the small population base and lack of experience with oil development, the Falklands government will need to ensure there is sufficient institutional capacity in place to plan, manage and regulate development and the potential for rapid economic growth this entails. There are challenges regarding the Islands' capacity to absorb the logistical, infrastructure and human capital requirements of an oil industry, including issues associated with rotating transient expatriate workers or a growing population to support the indirect and induced growth that may accompany oil development. There are also concerns about the longer-term economic, social, and cultural impacts of oil development. Given the size and remoteness of the Islands, the need plan ahead for development, production and eventual decommissioning is particularly important.

Recognition of these issues was one of the main reasons why Rockhopper, in consultation with FIG, commissioned Plexus Energy (Plexus) to carry out the Socio-economic Impact Study of the Sea Lion Oil Development Project (the Study). The Study commenced in July 2011 and culminated with a public presentation of the Study results in October 2012.

Socio-Economic Impact Study Overview

Following a scoping phase (August - October 2011), Plexus embarked on the main Study (January - August 2012). The objective was to identify major socio-economic issues, risks and opportunities – from the proponent's perspective – and to provide policy and planning options for mitigating negative impacts and enhancing project benefits. Essential elements of the study approach were its strategic, issues-based and participatory nature.

While competent government and regulatory structures related to oil and gas are emerging, given the infancy of the oil and gas industry in the Falkland Islands there was an understandable shortage of information at the community level about the nature of the industry and oil and gas development, how social and economic issues manifest themselves over the long term and the tools and policies typically used by the industry to

manage risks and optimize opportunities and benefits. A wide spectrum of issues was identified through a comprehensive consultation program with government, the business community and local residents. What emerged was a desire for more information and open discussion about the implications of oil development for the Islands. Twelve key issues crystallized and became the focus of the Study. These issues were:

- Economic Development
- Governance
- Local Content/Non-Oil Industries
- Immigration/In-migration
- Accommodation
- Infrastructure and Logistics
- Port
- Inflation
- Culture and Lifestyle
- Social Equity and Income Distribution
- Environmental Management and Oil Spill Preparedness
- Awareness

For each issue, baseline information was collected. This data was verified and augmented through key informant interviews with government, service providers, business leaders, NGOs and the public throughout the Islands. The study also featured research into comparator locations to identify emerging socio-economic trends and lessons learned from other smaller island geographies with an oil and gas industry. Further, a scenario analysis was undertaken to examine how key socio-economic indicators could be affected if development proceeded and included scenarios beyond the currently conceived Sea Lion development. The Study resulted in a Socio-economic Management Plan with over 60 recommendations to Rockhopper. The results were presented to government and the public in October 2012; copies of the study are available from Rockhopper.

Ultimately, the Study did not identify any unexpected issues. One key lesson was the role the study process itself played in facilitating discussion about the implications of oil. By initiating the Study, Rockhopper created a framework within which focused dialogue could be undertaken - particularly with and within government - around material issues that could, absent timely government action, pose serious risks for the project (e.g. upgrading / expansion of port facilities, investment in accommodation and amending immigration policy) or have negative implications for the Islands. The Study helped to clarify which issues require government action (e.g. response to oil-related economic growth, revenue management, immigration, planning, infrastructure), which lie with the proponent (e.g. HSE management, project hiring strategy, worker/contractor policies, information on business opportunities) and which ones call for joint government-industry action (e.g. capacity building, training, accommodation).

One of the main conclusions is that many of the potential impacts identified are dynamic, affected by many factors and are beyond the sole control of the project proponent. The Study, moreover, allowed the proponent to demonstrate leadership, obtain knowledge about local risks and opportunities, frame discussion about challenging issues and demonstrate that industry alone cannot independently control social and economic outcomes. In this sense, the process of the Study was as or more important than its technical outcomes. The Study, in fact, became a tool for building awareness of the issues associated with a new industry, framing dialogue around responsibilities and management and building local partnerships. It also stimulated FIG to commission its own socio-economic study of the implications of oil development.

Conclusions

Experience from the Falkland Islands and internationally demonstrates that understanding and addressing socio-economic issues early is key to establishing positive relations with stakeholders, managing impacts and building the social license to operate. Independent, early-stage socio-economic impact studies can provide timely identification of key issues. They can give early warning of potentially significant risks that could affect the long-term feasibility of the project. They also help in identifying when issues are beyond the control of a project, how and by whom particular impacts should be addressed and where partnerships are needed.

For local stakeholders, these studies can provide timely project information and facilitate understanding and debate regarding the undertaking. For government, such studies can provide timely information to facilitate infrastructure planning and understanding of project risks and benefits. For companies, the main advantages are the early identification of key issues and risks, the development of mitigation measures and enhancing the social license to operate. Such studies can be particularly valuable in remote or sensitive frontier areas.

Creativity, flexibility and focus are required by the practitioner to design and implement studies to support each project's context and needs. To be effective, studies need to be tailored to the project circumstances. Studies may range from desk-top social risk profiles done early in the concept stage, to strategic socio-economic impact studies done in a public and participatory fashion, to focused analysis of particular issues

identified as key (e.g., labour supply-demand analysis, scenario analysis) when more project details are available. The key when choosing a study type is to be innovative and to design a study that is suited to the risk profile and nature of the project in terms of location, size, and stage in the planning cycle. Waiting until the formal approval stage may result in missed opportunities and delays in terms of the risk identification and building a management process. In many cases, measures of success are the relationships that grow out of the study process, the trust that is established with stakeholders and building understanding of the risks and benefits of the project. This can help to inform social investment as well as wider infrastructure decisions. From this perspective, the study process can often be more beneficial than the technical output itself.