Coupling SIA and CSR in Unconventional Oil and Gas

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INTRODUCTION

The Sustainable Livelihoods Framework (SLF)[2] has been used as a tool for poverty reduction programs since the late 1990s by international agencies for planning and assessing development interventions. A SLF approach helps identify a population's current livelihood strategies and objectives. In the context of vulnerability to climate change or major development, for example, the influence of policies and processes and access to assets and benefits can be assessed with the SLF (Christoplos, Farrington, & Kidd, 2001; DFID, 1999). Given its flexibility, it can also capture the multidimensional impact of sustainable development or social investment programs on vulnerable stakeholders' livelihoods, whether rural- or urban-based.

Advantages aside, the SLF has not seen wide use in the extractive sector, whether as part of a Social Impact Assessment (SIA), a Corporate Social Responsibility (CSR) program or even as a standalone project. One criticism has been that it overstates the notion of 'self-help' while underemphasizing the complexity of livelihoods and important macroeconomic and political issues (O'Laughlin, 2004; Toner, 2002; Toufique, 2001). It also has been criticized for its overt focus on five major assets or 'capitals', and its consequent neglect of other assets such as culture, attachment (e.g., to place) and politics (Bebbington, 1999; Stirrat, 2004). Since it was originally designed for rural or agrarian contexts, factors such as natural resources and seasonality may also be less relevant when considering urban livelihood strategies.

In 2011, an environmental consultancy team completed a SIA as part of an Environmental, Social and Health Impact Assessment (ESHIA), and applied a SLF for a CSR program on behalf of a major energy firm wanting to develop an exploratory shale gas drilling in Lublin Province, Poland.[3] After briefly describing the SLF model, its application is illustrated through this case example.

THE SLF MODEL

A SLF typically consists of three primary components, as shown in Figure 1: the Vulnerability Context, Livelihood Assets, and Transforming Structures and Processes (DFID, 1999). The first component provides information on the external environment in which people and communities exist. People's and community livelihoods are fundamentally affected by critical issues over which they have limited or no control (e.g., market trends, climate change), and information on these can be identified and analyzed. Trends provide information regarding broad issues of concern to community members or fundamental community traits that influence people's livelihoods. Shocks provide information on events that alter trends, destroy livelihood assets and/or fundamentally alter community traits. Seasonality identifies shifts in opportunities due to natural or biophysical changes.

The second component, Livelihood Assets, provides information on people's and community strengths (i.e., assets or endowments). People and communities require diverse assets to allow them to achieve positive livelihood outcomes, and a community's asset status or changes in a community's asset status can be illustrated. Increasing access, ownership or rights to the use of these assets, in theory, should improve sustainable livelihoods. While they may not necessarily fit where an outsider would place them, generally speaking, the five assets described below form the core of the SLF:

1. Human Assets: the skills and knowledge inherent in the community and the ability of the community to provide its members access to other skills, knowledge and essential services that

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[2] The Sustainable Livelihoods Approach (SLA) is another term commonly used for the SLF.
[3] For reasons of confidentiality, the company name and specific locations are left unidentified in this paper.

are fundamental in maintaining quality of life or standard of living (e.g., education, training, health care). They help enable the conversion of other asset types into livelihoods.

2. Social Assets: the social and community activities in which people participate and the resources that they draw upon in pursuit of their livelihood objectives (e.g., recreation teams, community events). These activities and resources create networks within the community and among communities, increase connectivity and cohesion, and generate trusting relationships and community pride. They also allow people to better cope with shocks, provide an informal safety net and may compensate for a lack of other types of capital within the community.
3. Physical Assets: the basic infrastructure needed to support livelihoods and the tools or equipment that people use to function more productively (e.g., roads, water, sewage). Increased access to such infrastructure improves human health and quality of life. Poor quality infrastructure can preclude education, access to health services, and income generation.
4. Natural Assets: includes the natural resource stocks from which livelihoods are derived. There is potentially a wide range in such resources, from intangible public goods (e.g., air quality and biodiversity) to resources that are used directly by people (e.g., water, trees, land, wildlife).
5. Financial Assets: includes the monetary or financial resources that people use to achieve their livelihood objectives. It includes the availability of cash or equivalents to individuals and the community as a whole, gained from private or public sector sources, and the availability of financial services that allow individuals to manage their finances.

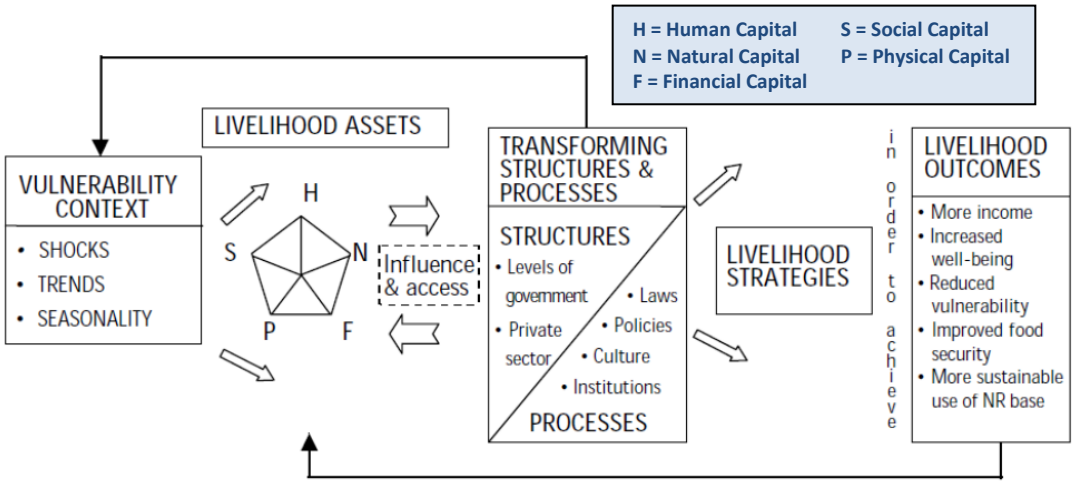

Figure 1. Sustainable Livelihoods Framework (DFID, 1999)

The third SLF component is Transforming Structures and Processes, which includes the institutions, organizations, policies and legislation that shape people and community livelihoods. A positive policy and institutional environment promotes equitable access to various types of capital and markets. The 'structures' are the public and private sector organizations that operate within the community and implement policy, deliver services, operate markets, and provide opportunities that affect livelihoods. In direct contrast, an absence of appropriate structures is often a major constraint to development and sustainability of livelihoods. The 'processes' are the formal policies that are in place, social norms and beliefs, and the informal ways things are done within the community. The SLF distinguishes between livelihood assets on the one hand and transforming structures and processes on the other. Assets are also linked, shaped and informed by these structures and processes.

The SLF helps to develop livelihood strategies and outcomes such as reduced vulnerability. It is worth noting that these outcomes are not a direct responsibility for the extractive industry. Government, other businesses and companies, and communities themselves must share responsibility to develop a plan and actions that will help to ensure sustainable livelihoods and help build healthy communities. Still, if a

'social license to operate' is a desirable goal by energy firms, then practical solutions are needed to help manage people's expectations for jobs and community sustainability.

METHODOLOGY

The company wanted to adjust their CSR program to decide what would best fit the shale gas affected communities and the region overall. A SLF approach was chosen over other methods for several reasons:

- Provides a simple yet systemic way of thinking about complex issues (e.g., rural poverty), and helps to improve understanding of the livelihoods of the rural poor;
- Is adaptable to diverse local conditions;
- Provides a basis for the establishment of thresholds or early warning signs;
- Allows for verification of predictions of socio-economic impacts and the effectiveness of mitigation measures important to the region and potentially affected communities;
- Provides a database for use in future planning and development initiatives;
- Provides a common basis for and the means to deliver further impact management measures (i.e., adaptive management);
- Allows for quick and cost-effective implementation; and
- Is focused on sustainability.

Desirable investment would be linked to identified needs for the local and regional area, such as where significant deficiencies in provision of certain services existed, in addition to meeting corporate policies and commitments. Questions asked in the SLF included the following (adapted from DFID, 1999):

- What is the inventory of physical, natural, human, social and financial resources?
- How are the communities and region changing? (e.g., socio-economic status, demographics).
- Have there been any shocks or stresses in recent years that have affected community viability and growth? If so, what effect have these had?
- How successful are the current social services and other transforming structures? How can they be improved to reflect present and future needs?
- Are community members satisfied with their standard of living, or quality of life? (e.g., employment, housing, community infrastructure, health, recreation, tourism).

Data were gathered through a combination of secondary collection and analysis and primary data collection via structured interviews and discussions with key informants (e.g. local and regional officials, landowners, service organizations). A total of 15 interviews were held, which allowed for ground truthing of secondary data analysis and provided information on needs and priorities as well as potential delivery mechanisms. This information was then used to identify community needs:

- A 'snapshot' analysis was made of the community context, assets and livelihood strategies and outcomes at the provincial level and for each local concession area.
- Current and projected sources of investment and potential partners and analysis of potential delivery partners at provincial and municipality levels.
- The most promising focus areas of intervention for social investment to address community needs were identified and described.
- An initial project list was developed for consideration.

APPLICATION OF THE SLF IN SHALE GAS EXPLORATION

In 2011, Poland was enthusiastically embracing shale gas exploration in the hopes of achieving energy independence from Russian energy supplies; nearly 30% of Poland's territory was targeted for shale gas exploration (Figure 2). However, despite the enormous infusion of capital and promises that production could start as early as 2015, Poland's gas industry is still in the exploratory stage today. Main constraints

include its difficult geology, poorly developed service sector, a lack of adequate infrastructure and an uncertain regulatory and tax environment. As major energy firms continue to exit (e.g., Lowe, 2015), Poland's much-hyped shale gas boom could take several more years to become commercially viable due to "bureaucratic tangles and an unfriendly investment climate" (Financial Times, 2014).[4]

In 2011, southeastern Poland was one of the European Union's poorest regions (Czerwińska, 2009). It suffered from a chronic lack of investment in infrastructure and development of human capital, and was likely to remain overwhelmingly rural in character. Development challenges faced by residents of southeastern Poland likewise affected shale gas players operating in the area; as a result of needed services and infrastructure deficiencies (Johnson & Boersma, 2013), most labour and equipment would have to be imported into the region from elsewhere in Poland or outside of the country.

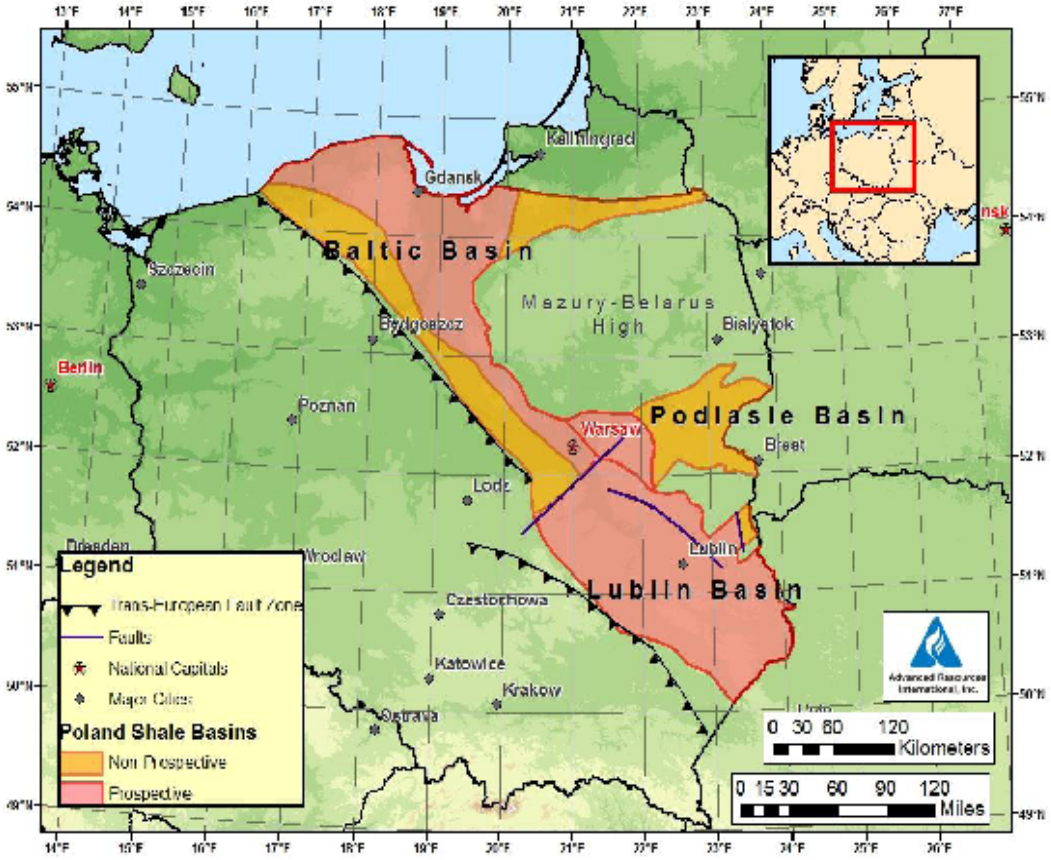

Figure 2. Onshore Shale Gas Basins of Poland (US EIA, 2011)

The SLF centred on Lublin Province where the shale gas concession was located (i.e., Lublin Basin). The province is named after its largest city and regional capital, Lublin. With a provincial population of approximately 2.16 million (2014), most residents live in rural areas, spread among over 4,000 small towns and villages (Statistical Office in Lublin, 2014).

Addressing the first SLF dimension, the Vulnerability Context, hopes were high in 2011 for positive economic change. Cash infusion through targeted European Union (EU) funds, national development programs and new investments including the shale gas investment appeared to be improving the region's economic development prospects. It was also hoped that a new airport in Lublin (later opened in

[4] Falling oil prices in 2014-15 have led to the exodus of energy firms operating in Poland such as Chevron (Lowe, 2015).

December 2012) would considerably increase the attractiveness of the region to investors. A report comparing 11 Polish cities, however, stated that the City of Lublin was developing more slowly than most other cities from 2006-10 (PwC, 2011), suggesting that serious structural problems continued to hamper market-driven economic growth, even with the increased access to financial capital.

As for its physical assets, the SIA results indicated that critical factors of institutional and governance capacity for social investment and community development were limited in Lublin Province. Although many municipalities, or *gminas*, were particularly strong in social and cultural resources, they were experiencing some areas of high public need. Infrastructure was insufficient to meet demand in areas such as public transport, waste management, water treatment and sewerage. On the human asset side, trained people were lacking for the efficient provision of social services, and severe underemployment and unemployment continued to hinder development. In short, transforming structures were often deficient in resources or altogether absent.

On the other hand, the SIA found that communities in the concession area had an abundance of natural and cultural resources, and a high degree of social capital. However, this area was also deficient in some important types of social assets (e.g., needed skills and education for high tech or industrial admin positions), physical assets (e.g., hotels and restaurants, retail shops, modernized schools), and financial assets (e.g., infrastructure/industrial investment, municipal tax base, access to credit). The results also indicated that local communities had been experiencing rural decline for many years, and many locals did not work in the immediate area of the gminas. The population base was aging, few children were going to school and the community was shifting from a primarily agricultural to a commuter one for work and study. The scarcity of local services forced many to drive significant distances for health and social services, entertainment and shopping for major purchases.

Nonetheless, expectations for jobs and business opportunities were highly touted by local authorities and individuals living close to proposed shale gas operations as the way to slow rural decline. The gas exploratory activity had potential to positively affect more than just the specific firms directly involved in the industry (e.g., oil field service companies, contractors, area surveyors, fuel suppliers, truckers). Furthermore, employee and contractor spending would also provide local indirect benefits (e.g., local retailers, hotels and restaurants servicing workers staying in the gminas).

DISCUSSION

While the concession region showed deficiencies and vulnerabilities in all five assets, the most critical deficiency found in the SLF study was human assets: i.e., education and skills. Interviewees felt that the local area and region could increase possible economic benefits of the burgeoning natural gas industry and encourage youth to stay. While farming was likely to continue in the years ahead, social investment could help those who wish to continue these activities by facilitating access to other options for revenues, especially local youth and young adults. Assuming the shale gas industry were successful, more jobs and revenues could reach local residents. Some locals could be trained and hired, and others could cater to those wanting to purchase or rent homes in the region, or looking for local services. The SLF determined that improving access to quality education and training to support gas sector development, provide on-the-job opportunities for youth and increase prospects for hiring of local labour would help secure the firm's social license to operate.

Training local people for unskilled and semi-skilled positions in exploration activity is common practice in the industry by responsible companies, often framed as a 'local content' program (IPIECA, 2011). Education and training offer can be sound investments for the private and public sector. For example, one "Top 100" company determined that for every dollar invested, there was a return of $3.53 in net training benefits (Gordon, 2006). Still, the rapid and transitory nature of exploratory activities did not favour this approach. Most jobs would be of a short-term (construction) nature, and imported labour would most likely be the scenario for the near future. Given the uncertainties in the shale gas sector, an exit strategy

was recommended to be developed for the exploration phase. The SLF findings directly informed the CSR program for this exploratory work, with several fit-for-purpose benefit enhancement measures.

Local hiring and procurement policies are also an important part of any social investment program. Contractors tend to mainly hire from larger cities, and in the case of the shale gas exploration activities in Poland, most likely Warsaw. In the short term, policies could be implemented requiring all contractors to prioritize local hiring for new jobs. Interested individuals from Lublin Province could be provided with the first opportunity to apply for positions with the project; assuming their qualifications were adequate for a given job description, they would be prioritized in the hiring process. Investing in human capital rather than physical assets made sense in the long-term, especially as a way to address the ongoing rural decline. In the case of commercial discovery, technical training could be provided in Lublin region; for example, an unused building could be retrofitted into a trade school or other training facility. The company could contribute teaching equipment and materials, while the government could provide technical school staff. For any technical training, first preference could go to local and regional workers.

Regrettably, the developer chose not to follow most recommendations of this study. Instead, a 'quick fix' of daycare funding (even though not determined to be a major need) was selected over training and community development initiatives. Perhaps partly related, the developer later pulled out of the country.

CONCLUSION

This paper has demonstrated that SIA and CSR can be integrated by application of the SLF for tough decisions in the extractive sector such as where best to invest social investment resources. The potential usefulness of the SLF as a tool for extractive developers lies in the fact that these industries typically work in remote, rural regions where vulnerable or marginalized people reside. This tool has several distinct advantages worth considering. For example:

1. Relatively easy to apply. Some experience in administering and analyzing surveys and interviews, and a basic understanding of statistical databases, are all that may be needed, ideally supplemented by specialists with a background in sociology or economics.
2. Relatively inexpensive and/or less risky compared to some alternative methods to measure poverty and vulnerability. Some approaches overly focus on data collection over interpretation; in contrast, SLF generally takes a practical approach with a focus on results rather than the means.
3. Can be customized for any type of extractive or non-extractive sector. The framework and application is meant to be flexible, with no right or wrong way to use it.
4. Benefits communities involved in the process, who gain valuable benefit (assets) that better equip them with knowledge and strategies to enhance their well-being.

In this example, the SLF was empirically applied, and some of the data gathered specifically helped to answer questions raised by the framework. This study has shown that the SLF can be an effective means to engage stakeholders in informed dialogue, potentially resulting in increased trust and goodwill. This analysis has also made easier the enhancement of community well-being by developing targeted action plans that address deficiencies in livelihood assets.

As mentioned above, the SLF is not without its challenges. It is also important to balance the internal, or emic, and external, or etic, interpretations of livelihood assets in the SLF. Namely, the social groups in question (emic) have their own localized perspective of what is needed, and those from outside (etic) have their own perspective as observer, and ideally accepting the role as a catalyst to development. Application of the SLF to design a CSR program requires this balance or a developer runs the risk of imposing their own analysis and dedicating resources that may not satisfy local wants and desires. For the SLF to serve as a strategic tool for social investment in the extractive sector, it requires a culture- and policy-sensitive analysis for a given asset base and vulnerability context. Only a sound understanding of the interactions between livelihood assets and transforming structures and processes can lead to a locally contextualized,

meaningful and workable impact assessment tool that measures asset levels using indicators that reflect people's own criteria to judge development interventions.

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