ENVIRONMENTAL AND SOCIAL ACCEPTABILITY OF MAJOR INDUSTRIAL PROJECTS: FROM RISK MANAGEMENT TO SHARED PROSPERITY
AIM AND SCOPE

FACTS Reports is an international, peer-reviewed journal, devoted to promoting field-based activities in developing and developed countries and is open access for both readers and authors. Created in 2007, FACTS provides a unique forum for the expression and exchange of ideas in various fields, including economy and development, cities and urban services, health, education, environment, and agriculture.

Articles are subjected to peer review by field practitioners or academics. The main criteria for publication are that the articles describe actions that are both useful and reproducible. Editorials and Commentaries are also published, allowing experts from diverse fields to contribute critical analysis, and encouraging cooperation among authors.

OBJECTIVES

The principal objective of FACTS Reports is to help field practitioners, international organisations, national agencies and policy-makers communicate best practices and lessons learned through the implementation of their programmes. Many field practitioners implement projects in developing countries to address issues related to economics, health, the environment, agriculture, education and development in general. There are many opportunities to learn from the outcomes of these projects.

The journal is a unique international initiative and, moreover, the first of its type in the world. It provides an independent platform for key players in development to share best practices, to express their views and opinions, to share their experiences and to cooperate with other international development actors from around the world.
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“Forests precede civilizations and deserts follow them”¹. Railways, highways, dams, navigable canals: major infrastructure inflicts deep wounds on the natural environment. In the 21st century projects are no longer conceived as they were three decades ago: thanks to environmental standards and the rising power of civil society, the era of forced wholesale landscape modifications is dead. But how to avoid damage, and how to make up for it when it cannot be avoided?

Taking us from India to the Congo, from Belgium to the United States, this issue of FACTS uses concrete cases to give us an overview of the way in which major projects are designed, conducted, accepted or refused. Each of them stands at the crossroads of multiple legitimate, but divergent, interests. This makes it difficult to reach a consensus among all stakeholders. This also makes it important to turn to mediators who can help to find this consensus.

The criteria of technical feasibility, economic viability and preservation of the environment are now supplemented by that of social acceptability, which has become as important as the first three. This brings us to the issue of governance. Although essential, this question is difficult to address because for projects that cross vast territories, there is no preexistent governance structure. Creating one is therefore necessary, although its very newness will make it that much more fragile.

Do we want a sincere and balanced dialogue, or do we seek to impose a fait accompli? Many developers submit projects that are completely tied up in advance and are reluctant to adjust them, except marginally. But the more a project is designed on the sly, the less the decision to implement it will be judged legitimate, and the higher the risk that it will be vigorously challenged. However, because they are big, these projects have a major advantage: they have the support of the governments, who wield enormous power in relation to the other stakeholders, including the power of changing the legislation to make it compatible with the planned infrastructure. Nevertheless, the NGO community can play a crucial role in these projects, forcing them to be altered and promoting their adoption by local populations.

Is it still possible to build heavy infrastructure, and if so, under what conditions? How do we make this necessary evil acceptable? The answer lies first in identifying the value created and second in distributing it fairly. Faced with the confrontation of opposing views, the secret of making major projects accepted lies in a shared creation of value. Although this is never easy, it is nevertheless possible.

In 2004, WWF summed up its position on dams as follows: “Dams are both a blessing and a curse.” One could say the same of many other infrastructures. At national level, they present many advantages but at local level, they chiefly show disadvantages. There is a clear conflict between two kinds of general interest: the one that emanates from the national level and the one that is local.

How, then, can we facilitate the dialogue between these interests, to prevent both paralyzing public action and having it forced through? The conditions for the success of major projects are well-known: a logic of partnership; bringing in the various stakeholders early on in the process; providing complete information; reducing environmental damage and population displacement; ensuring appropriate compensatory measures, fair compensation, consultations in good faith and not just for show, independent audits, and openness to alternatives; paying attention to vulnerable groups; contractualizing the commitments, etc. The more collaborative the practices, the greater the chance of success for new infrastructure.

¹ François-René de Chateaubriand
A certain idea of globalization has opened the field to de-territorialize our economies, supported by the revolution of new information technologies - those technologies that were supposed to render the very concept of territory obsolete.

But at the same time, in both urban and rural territories, in OECD members as well as emerging countries, relations are, if not downright contentious, at the very least difficult, between companies promoting large industrial projects and neighboring local communities. So-called “high-impact” industries such as mining, oil, dams or large infrastructure, have always experienced these issues and have had to learn to respond to the problem of societal acceptability even before this idea was conceptualized.

But today we are observing a change that is both qualitative and quantitative in nature. The number of projects being challenged locally has increased considerably, and today most industries are confronted with this issue, even when they have a low impact on the territory.

This change is explained by several factors: primacy of the individual over the general interest, which feeds the famous Not In My Back Yard (NIMBY) syndrome; growing rejection of the word of experts when it comes to explaining the environmental and social risks of an industrial project and how to reasonably protect against them; the crucial role of information technologies and communication, now making it possible to talk about sousveillance; etc.

In the face of these developments, a company can respond to these increasingly strong outside pressures that push it, whether it wants to or not, to be incorporated differently in the social fabric of the territories where it operates by taking a defensive approach: by seeking at least to reduce the risks and ensure its social license to operate through dialog, information, and by contributing to local development.

Alternatively, the company can address these issues proactively by deciding that its legitimacy on social issues will be achieved through bringing geography back into decision-making and through its ability to become a sustainable part of the reality of a territory.

“Words say things that we have forgotten about them,” said poet René Char. And it is crucial to remember that, for the Greeks who invented the concept, geography was the root of the art of deciding. So recovering this relationship with the territory and creating a shared wealth will also enable companies to achieve room for maneuver, innovation and sustainability.

This issue of FACTS, entitled Environmental and Social Acceptability of Major Industrial Projects, analyzes these issues. Initially, the aim is to understand the challenges businesses face in making their new projects acceptable, from both an environmental and a societal viewpoint, to the multiple stakeholders confronting them. A second phase is devoted to considering the good practices, based on specific cases, enabling the transition from a risk prevention logic to an active strategy of shared wealth creation. The third and final part aims to understand how to measure the effectiveness of these strategies, by confronting both the announced policies and the actual operating conditions, and by gradually implementing financial assessment methodologies.

This issue thus provides a channel for many of those concerned to speak their minds: those in charge of major projects, association leaders, academic experts, public project owners and public authority managers. This allows us to gather the views of the various actors of the ecosystem on the question of the environmental and social acceptability of major projects.
1. GOOD AND BAD PRACTICES REGARDING ENVIRONMENTAL AND SOCIAL ACCEPTABILITY OF MAJOR PROJECTS
The environmental and social acceptability of major projects is based on a very broad range of parameters: the nature of the project and its impact on the territory; the degree of trust in the institutions of the populations concerned; the ability of the teams to implement the appropriate channels for conciliation; etc.

It is thus necessary to analyze the diversity of situations and issues that businesses are faced with. To this end, this first part is structured around various actual cases: very specific projects, companies seeking to develop a more systematic approach to project management, and, finally, entire sectors of activity.

- Three articles take us through the reality of very specific big projects – both in France and in emerging countries – and allow us to understand the issues involved: Clara Lorinquer’s article on one of the largest infrastructure projects in France, the SEA Tours-Bordeaux high-speed line; an article by Chris Eaton on the partnership between Rio Tinto Alcan and the NGO World University Service of Canada around a mining project in Ghana; and finally, Peter Newborne’s case study on the Ziga dam project in Burkina Faso.

- Outside a specific project, Jean-Marc Fontaine then explains how to systematize these approaches to environmental and social acceptability within an industrial group such as Total.

- Henri Boyé and Michel de Vivo focus not on a specific project or company, but more broadly, on a sector of activity, that is at once widely challenged and necessary: dam building.

- This first part concludes with the views of an NGO: an interview with Xavier Boutin, General Director of the European Institute for Cooperation and Development (IECD), a charity carrying out many local development projects in partnership with businesses.

Beyond the diversity of the context and projects they analyze, these articles bring to the fore several phenomena.

In the first place, the importance that local communities now attach to being consulted and involved in the various projects. The concept of sousveillance was coined a few years ago to designate all the developments that contribute to giving more information to the citizens, allowing them to have greater control over both private and public organizations. This concept refers to the desire of the citizens, traditionally “below” (in reference to the French “sous” in sousveillance), to make use of the new technologies to obtain greater knowledge and redress the asymmetry of information between themselves and the organizations that head the big projects. In the face of these requests, it becomes essential not to merely justify major projects as being “of general interest”.

In addition, the mechanisms these companies implement are based on a procedural definition of the general interest. It is no longer sufficient to be perceived as a legitimate authority, to take a legitimate decision or to carry out a project contributing in principle to the general interest; it is also necessary to resort to procedures that make this decision legitimate.

These procedures vary. They differ in their intensity and the stage in the project at which the local communities are brought in. If we consider the Arnstein ladder, we can distinguish four levels:

- Informing, or communication that can make the decision-making process a little more transparent;
- Consultation, which is asking the local communities, after preparing a project file, whether they approve or not of such a project;
- Deliberation, which represents an additional degree of participation: the projects are developed with the citizens;
- Finally, partnership for co-implementation or co-production, where all stakeholders together work toward the implementation of, and bear responsibility for, a project.
MANAGEMENT OF MEASURES to reduce and compensate for the environmental impact of the LGV Sud Europe Atlantique Tours-Bordeaux high-speed rail line project

Clara Lorinquer
Head of Environment and Quality, Eurovia, and former Environment and Sustainable Development Manager, COSEA

INTRODUCTION

With its goal of linking Paris to Bordeaux in just two hours, the Sud Europe Atlantique Tours-Bordeaux high-speed rail line (or LGV SEA Tours-Bordeaux) is one of the most ambitious rail infrastructure projects undertaken in recent years.

This is a project on a grand scale: the section between Tours and Bordeaux involves no fewer than 302 km of new track, 10 connections to the national rail network over a 40 km stretch, and 500 engineered structures, including 19 viaducts. A total of 68 million m³ of material will be excavated, with 36 million m³ of backfill used to create embankments, 1.1 million tonnes of sleepers and 3 million tonnes of track ballast.

The LGV SEA is also the first rail contract granted by the French network operator Réseau Ferré de France (RFF) to a private operator – VINCI – for a period of 50 years from 30 June 2011. The contract covers the design, construction and operation of the entire line.

The project timetable is complex. The line is expected to become operational in summer 2017, only six years after the official start of the project; a schedule between two and three times more demanding than for previous high-speed lines. Furthermore, the terms entail penalties for late delivery that could challenge the economic and financial balance of the entire project.

Against this background, precise control of the environmental requirements of the project is an essential aspect of its environmental and social acceptability. The project team has put in place a structured and participative approach to take full account of the economic, operational, legal and governance issues involved in environmental and wildlife protection.

KEYWORDS
- RAIL CONCESSION
- ENVIRONMENTAL IMPACT
- BIODIVERSITY
- CONTRACTUAL COMMITMENTS
- GOVERNANCE

The ambitious new Sud Europe Atlantique Tours-Bordeaux high-speed rail line profoundly reshapes the landscapes through which it passes, with consequences for biodiversity and for local residents. Given the multiple challenges (financial, operational, legal and governance) related to the protection of biodiversity, the project team has decided to take responsibility for defining and managing impact reduction and compensation measures. A strategy built on stakeholder accountability, contractual commitments and shared governance has therefore been implemented.
1. THE ENVIRONMENTAL AND SOCIAL ACCEPTABILITY OF THE LGV SEA VERY QUICKLY BECAME A CENTRAL CHALLENGE

Although rail projects usually enjoy a broadly positive image as far as public opinion is concerned, an increasing number of high-speed lines are now the focus for reluctant acceptance or even structured opposition.

1.1. MANY IMPACTS THAT REQUIRE A STRUCTURED APPROACH

The issue of environmental and social acceptability is particularly important given the significant potential effects of this project. In practical terms, the LGV SEA profoundly reshapes the landscapes through which it passes, with consequences for biodiversity and impacts for local residents.

The local acceptability of the LGV SEA is therefore dependent on the way in which all these impacts are managed.

- The landscape and countryside: the LGV SEA line runs through three regions (Aquitaine, Poitou-Charentes and Centre), six departments and 117 local communities. With 200 kilometres of track, Poitou-Charentes is the region most affected by the project; it effectively cuts the departments of Vienne and Charente in two, with around 90 kilometres of track running through each. Over and above the route of the line itself, the creation of new infrastructures — chiefly engineered structures and sidings — changes the landscape significantly.

- Local residents and farmers: some 11,000 landowners are affected by the construction of the high-speed rail line, and the daily lives of local residents are also temporarily disrupted as a direct result of the project (re-routing of roads during the construction project, road traffic issues, etc.). Managing surplus excavated earth requires a process of permanent dialogue with local farmers in order to manage the excess material produced.

- The environment and biodiversity: the LGV SEA affects 14 Natura 2000 sites that are specially protected due to the rarity and/or fragility of the wild species they shelter, and impacts on more than 220 protected species, including the Little Bustard, the region’s official bird currently under threat of extinction, and the European Mink, a semi-aquatic mammal.

1.2. MULTIPLE CHALLENGES TO BE RECONCILED BEFORE SUCCESS CAN BE ACHIEVED

Adoption of the project by all stakeholders is also constrained by the need to comply fully with a set of very specific requirements. From the operational point of view, it is therefore essential to avoid any delay to the in-service commissioning of the line, which would be punished by very substantial penalties.

Environmental and wildlife protection is a major challenge that must be addressed in strict compliance with the schedule of works. For example, the period devoted to the work required to clear rights-of-way (vegetation clearance and topsoil stripping) traditionally begins late winter/early spring, but this also marks the beginning of the breeding season, which generally runs from April to September. For the LGV SEA project, only three seasons of groundworks were possible.

The key challenges posed by environmental and wildlife protection are simultaneously financial, operational, legal and governance-related.

- A financial challenge: the cost of compensatory measures could prove to be very high. For example, the agreed compensatory measure for the Little Bustard was €500 per hectare, per year, with 540 hectares to be covered by this measure for the full route of the line, resulting in a total of €270,000. In addition to this cost, land purchases are necessary for a further 160 hectares of compensatory measures. These amounts do not include the costs involved in finding the land concerned and conducting ecological studies and analyses. For example, in the Department of Charente, the compensatory measures to protect lowland birds involve 287 hectares, 101 of which must be purchased.

- An operational challenge: the implementation of impact reduction and compensatory measures requires the identification of practical solutions in the field, which have significant consequences for construction conditions and the methods used on site, especially in terms of landscaping and civil engineering (impact reduction measures), and for the lives of local residents, especially farmers (compensatory measures). The compensatory measures implemented to protect the Little Bustard require some land normally used for cereal cultivation to be replanted with lucerne, a herbaceous forage crop essential to the bird’s nutrition and nesting. The challenge is then to find farmers prepared to switch from growing cereals to harvesting lucerne. This constraint is further complicated by the obligation imposed on farmers to delay harvest until after the breeding season of the species concerned.

- A legal challenge: environmental and biodiversity protection has been strictly governed by French law for many years. Already enshrined in nature protection legislation dating from 1976, article 230 of the Grenelle 2 law establishes the three inseparable obligations applying to the environmental impacts of major infrastructure projects: “to avoid, reduce and compensate for negative environmental effects”.

VINCI has addressed each of these obligations through the implementation of measures throughout every phase in the design and construction of the LGV SEA.
THE PROJECT ORGANISATION AND STRUCTURES

To ensure the smooth-running of the contract, VINCI has put in place an organisational structure to manage the project for its full term:

- **LISEA**: the contractor managed by VINCI Concessions (28.5%), VINCI SA (5%), CDC Infrastructure (Groupe Caisse des Dépôts et des Consignations), Sojas SAS, AXA IP and AXA II.
- **COSEA**: the design and construction company whose authorised representative is VINCI Construction Terrasement, which is owned equally by Eurovia and VINCI Energies in association with BFC, NGE, TSO, Ineo, SYSTRA, Arcadis and Egis Rail.
- **MESEA**: the maintenance and operations company owned jointly by VINCI Concessions (70%) and SYSTRA.

- **Avoid**: during the design phase, the teams of LISEA and COSEA (respectively the concession holder and the design/construction company – see inset) focused on avoiding the most contentious areas and zones, continuing a task already begun by the rail infrastructure operator RFF when planning the original route of the line.
- **Reduce**: applied chiefly during the construction phase, impact reduction involves – for example – suspending work on the clearance of rights-of-way (tree felling, initial topsoil stripping, etc.) during breeding seasons or maintaining the ecological transparency of the infrastructure by providing wildlife corridors for small animals (above or below the line, whether in conjunction with watercourses or not).
- **Compensate**: the duty to compensate for any residual impact applies to all developments and infrastructures. Each hectare destroyed is therefore the subject of a compensatory measure. For the LGV SEA Tours-Bordeaux project, the compensation ratio varies between 1 and 10. In total, the compensatory measures implemented for wildlife species impacted by the project comprise more than 25,000 hectares. Thanks to pooling – the same physical hectare of compensatory measure is home to more than one species – an envelope of around 3,500 hectares of compensatory measures distributed across four main habitat types (lowland birds, wetland and aquatic areas, mature woodlands and open land) will cover all the compensatory footprint requirements of each species.

- **A governance challenge**: the issue of acceptability does not fall neatly into any precise legal category. Although many existing legislative texts and laws set out strict limits on environmental impact reduction and compensation measures, the issue of governance (the identity of local stakeholders, how they should be included in the process, etc.) is delicate and challenging in as much as no real governance structure yet exists – unlike in other fields, such as employment. More specifically, compensation measures fall outside the project’s official declaration of public interest (Déclaration D’Utilité Publique). So outside the specific legal framework, it is essential to invent ad-hoc organisational and decision-making methods.

2. A STRATEGY BUILT ON STAKEHOLDER ACCOUNTABILITY, CONTRACTUAL COMMITMENTS AND SHARED GOVERNANCE

Given these many challenges, the project team has decided to retain responsibility for defining and managing impact reduction and compensation measures. This is a strategic decision, since this aspect of the project could have been delegated in its entirety to a service provider such as the Caisse des Dépôts subsidiary CDC biodiversité.

Having made the decision to manage the LGV environmental impacts in-house, VINCI has implemented a structure designed not only to involve all stakeholders in the consultation phase, but also and more importantly in the definition and implementation of measures. This structure relies on three cornerstones: (1) accountability, (2) contractual commitment and (3) governance involvement for all stakeholders.

2.1. STAKEHOLDER ACCOUNTABILITY

At the beginning of November 2010, a series of meetings were held with local stakeholders to gain an understanding of their perception of the project and its impacts, their expectations and their concerns.

The principle is as simple as it is essential: meetings with all project stakeholders, from Fishing Federations and Chambers of Agriculture to Nature Conservancy Bodies (Conservatoires des Espèces Naturelles or CEN), Regional Landownership Centres (Centres Régionaux de la Propriété Foncière or CRPF) and nature protection associations. This round of consultation with stakeholders began in Poitou-Charentes with a visit to Poitou-Charentes Nature, and continued in all three of the regions through which the new rail line passes.

This stage was crucial in terms of representation, and made it possible to identify all the project’s environmental stakeholders at local level. But above all else, it identified an opportunity that has proven to be a key factor for the success of the project: sourcing locally all the skills needed to define and implement impact reduction and compensation measures.

The local level stakeholders were identified as:

- environmental associations and experts with the ability to identify potential areas and the measures to be implemented for each protected species affected by the LGV project (e.g. the need for the Little Bustard to have access to lucerne);
- professional federations (fishermen, farmers, etc.) with the ability to define those measures assessed as ‘acceptable’ (e.g. regarding the switch from wheat growing to lucerne), identify land within the areas jointly defined, and support the relevant professionals in implementing these compensatory measures.

Ultimately, the cost of the measures concerned was able to be defined jointly with VINCI teams.
The next step was to draw on these local skills by applying the principle of accountability to involve the stakeholders in the process of defining and implementing impact reduction and compensation measures. After a series of bilateral meetings over a period of two months, a meeting was held in December 2010 to bring together all stakeholders with the project management team to formulate an initial agreement on cooperation methods.

2.2. THE PRINCIPLE OF CONTRACTUAL AGREEMENT

The next stage was to prepare a framework within which the compensatory measures would be operationally implemented. For this purpose, a general wildlife innovation agreement was signed by all stakeholders in June 2011, after six months of negotiation. This agreement sets out the major compensation measures, maps their locations, and allocates individual roles (ecological analysis, site identification, etc.).

In Poitou-Charentes, the management plans were developed with input from all stakeholders (VINCI, CREN Poitou-Charentes, the Poitou-Charentes Chambers of Agriculture, the nature protection associations represented by Poitou-Charentes Nature and CRPF Poitou-Charentes) focusing on three methodologies.

(1) For the acquisition of non-agricultural land: the nature protection associations represented by Poitou-Charentes Nature and CRPF Poitou-Charentes consult on the woodland clearance and – in conjunction with CREN Poitou-Charentes – evaluate and propose the management measures to be implemented.

(2) For the acquisition of agricultural land: the associations represented by Poitou-Charentes Nature – in partnership with CREN Poitou-Charentes – assess and propose the management methods to be implemented, accompanied by systematic consultation with the Chambers of Agriculture.

(3) For contractual agreements: the Chambers of Agriculture assess and propose management measures in partnership with the associations represented by Poitou-Charentes Nature.

At the same time, bilateral agreements were signed with each stakeholder concerned in order to define reciprocal missions between them and their counterparts.

“For this purpose, a general wildlife innovation agreement was signed by all stakeholders in June 2011, after six months of negotiation. This agreement sets out the major compensation measures, maps their locations, and allocates individual roles (ecological analysis, site identification, etc.).”
Definition, management and monitoring of compensatory measures

This strategy has proven effective thanks to the combination of at least four factors:

- **Discussions held at a very early stage** (see timeline): the various meetings and discussions held with stakeholders made it possible to arrive at an agreed method for environmental impact management before work commenced on site.

- **A shared contractual arrangement**: the drafting of the agreement and its approval by all stakeholders helped to build a climate of trust further assisted by the decision of VINCI to avoid competition between stakeholders. The partners were then able to put the agreement into practice and adapt it to reflect on-site realities.

- **A partnership-based relationship**: the agreement united the stakeholders in a true partnership agreement, rather than a supplier relationship, the effect of which was to enable joint definition of compensatory measures and complete freedom of expression. As a result, the compensatory measures submitted to government departments were rapidly approved because they had been defined on the basis of consensus.

- **Procedural transparency**: to ensure the best-possible definition and operational implementation of impact reduction measures, the environmental protection organisations were also tasked with supporting on-site work teams in defining and implementing appropriate measures. The LGV SEA project was the first to be completely open to all stakeholders, who were able to see for themselves the potential consequences of the route, those habitats most at risk, etc.

The work carried out jointly by VINCI and the local stakeholders ultimately resulted in the emergence of a win-win model. On the one hand, the Group’s teams were able to deliver more effective project management and compensatory measures. On the other, the environmental experts have often highlighted the fact that they have discovered new opportunities and working methods as a result of working closely with a private-sector operator for the first time.

**Timeline of the definition and signature of initial environmental impact reduction and compensation measures**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2010</td>
<td>Stakeholder meetings</td>
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<tr>
<td></td>
<td>Meeting with the project management team and all stakeholders</td>
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<tr>
<td>2011</td>
<td>Signature of the LGV SEA concession contract</td>
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<tr>
<td></td>
<td>Definition of the General Agreement for Wildlife Conservation</td>
</tr>
<tr>
<td>2012</td>
<td>Signature of the General Agreement</td>
</tr>
<tr>
<td></td>
<td>Signature of bilateral agreements with each stakeholder</td>
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<tr>
<td></td>
<td>Start of on-site work and provision of support for on-site teams’ implementation of impact reduction measures</td>
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<td></td>
<td>First wave of the land search as part of compensatory measures for the Little Bustard</td>
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<td></td>
<td>Signature of the initial compensation measures</td>
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2.3. SHARED GOVERNANCE

Three governance bodies (see inset) were set up to guide and monitor the measures implemented; all three were created from scratch in each region, with members drawn from the project team and stakeholder signatories to the agreement. The Management Strategy Committee (Comité Stratégie de Pilotage or CPS) chaired by LISEA develops and proposes the compensatory measure implementation policy, while the Working Groups and On-site Support Groups respectively provide support and follow-up for the compensation measures implemented in the four habitat types (lowland birds, wetland and aquatic areas, mature woodlands and calcicolous grasslands) and impact reduction measures in the on-site construction phase. The Local Monitoring Operational Committee (Commission Opérationnelle de Suivi Local or COS) ensures compensatory measures (land finding strategy, progress tracking, etc.).

Governance bodies

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<th>Management Strategy Committee</th>
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<tr>
<td>• Ensures the alignment and compatibility between regulatory obligations and the missions of scientific and non-profit stakeholders</td>
<td>• Puts forward initiatives to develop the natural heritage in the context of compensatory and supporting measures</td>
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<td>• Assesses the proposals made by scientific and non-profit partners</td>
<td>• Contributes to the design of compensatory measures</td>
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<td>• Checks the implementation of measures and decides on follow-up action in the event of non-compliance</td>
<td>• Validates the standard agreements entered into with farmers</td>
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<td>• Validates the communication strategy</td>
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<th>Working Groups and On-site Support Groups</th>
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<tr>
<td>• Prepare the specification for compensation measures (working groups) and construction phase impact reduction measures (on-site support groups)</td>
<td>• Proposes studies to the CPS and identifies the most suitable specialists</td>
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<tr>
<td>• Provides scientific qualification of site suitability and levers for action</td>
<td>• Four working groups: (1) lowland birds, (2) wetland and aquatic areas, (3) mature woodlands and (4) calcicolous grasslands</td>
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<tr>
<th>Monitoring Operational Committee</th>
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<tr>
<td>• Identifies the partners</td>
<td>• Implements compensatory measures</td>
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<td>• Monitors on-site and ensures compliance with recommendations</td>
<td>• Provides feedback that contributes to increasing knowledge of biodiversity</td>
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<tr>
<td>• Assesses the results of studies for the CPS</td>
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<tr>
<td>• Provides qualitative monitoring of compensatory measures over time</td>
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3. KEY FACTORS FOR SUCCESS

Four years after the signature of the general agreement and bilateral agreements, the strategy developed for the LGV SEA project in conjunction with its non-profit partners has enabled the consensual and effective introduction of environmental impact reduction and compensation measures. That effectiveness is well illustrated by the fact that no appeal has yet been lodged regarding the environmental and/or biodiversity aspects of the project.

A number of key factors for success have clearly emerged:

• **Partnership**: the assertion and recognition of stakeholders as partners, rather than simply suppliers, has ensured the development of a climate of trust and mutual respect for each other’s positions.

• **The leadership role played by VINCI**: throughout the process of defining and implementing compensatory measures, the Group has played its role as leader to enable the clear definition of the status and legitimacy of each stakeholder.

• **Transparency**: the opening up of the project to all stakeholders further strengthened the trust and transparency required to reach agreement.

• **Consensus**: the decision-making processes engaged in with non-profit partners meant that no voting took place; consensus was required for all the solutions and compensatory measures defined. The definition of consensual solutions meant that the measures submitted to central government departments respected the wishes and interests of all local stakeholders.

Strategic coordination of some cross-disciplinary topics is delegated to partners in the non-profit sector. For example, the task of evaluating compensatory measure effectiveness has been delegated to the French bird protection league (Ligue pour la Protection des Oiseaux or LPO) – a national-scale organisation – in order to guarantee the independence of results.

These governance methods have enabled stakeholders to be involved not only in defining and implementing compensatory measures, but also in supervising and monitoring them.
BUILDING SOCIAL LICENSE TO OPERATE through community engagement: the WUSC-Rio Tinto Alcan partnership in Ghana

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INTRODUCTION
International companies working in developing country contexts must navigate complex social and economic landscapes to ensure effective and sustainable operations. Crucially, working effectively in developing countries requires positive, mutually respectful relationships between companies and community members – relationships that recognize the important role that international investment can play in regional and local economic growth, and that communities play in providing needed human resources and infrastructure.

Good community relations also are at the crux of efforts to secure and sustain a social license to operate for international companies. These relations can be enhanced through Corporate Social Responsibility (CSR) programs, when carried out in close collaboration with local communities. Community-driven CSR programs can provide an effective and more sustainable avenue for companies to contribute to the wider socio-economic development of people in areas in which they operate – ensuring that their presence in the country leaves a positive impact for future generations.

Companies can enhance the effectiveness of their CSR and community relations programs by partnering with non-governmental organizations (NGOs) that have the needed sector, local governance and community development expertise. As a Canadian international development non-profit with more than seven decades of such experience in more than 50 countries – including Ghana – World University Service of Canada (WUSC) has placed innovative, cross-sector partnerships at the centre of its development work. From 2006 to 2014, we formed one such partnership with Rio Tinto Alcan to strengthen its local CSR program in Ghana, and to ensure more sustainable development outcomes for WUSC’s target beneficiaries.

Keywords
- Mining Sector
- Multi-Stakeholder Partnership
- Community Engagement
- NGO
- Social License to Operate
1. THE GENESIS OF THE PARTNERSHIP: RIO TINTO ALCAN’S COMMITMENT TO LOCAL DEVELOPMENT

Headquartered in Montréal, Québec, Canada, Rio Tinto Alcan (RTA) is the bauxite and aluminium subsidiary of the Rio Tinto group. In 1974, Rio Tinto began its extraction activities in Ghana by forming the Ghana Bauxite Company Ltd (GBC) as a joint venture with the Ghanaian government. In this context, GBC started to operate a mine in Awaso, located in the Western district of Bibiani-Anhwiaso-Bekwai (BAB), a rural area with a population of 134,000.

As a mining company operating in developing countries, ensuring local acceptability has always been an important objective for RTA. Local buy-in from nearby communities was a particularly high priority at the time of WUSC’s initial engagement with RTA in Ghana, as RTA had recently experienced strong opposition to a mining operation in the Indian region of Orissa. Civil society mobilisation in both India and Canada against their Orissa operations had resulted in RTA abandoning its mining project in that region.

As a result of the events in Orissa, RTA resolved to revitalize its CSR efforts, most notably through the hiring of a new Sustainable Development Director who had an established career in the NGO sector. A subsequent internal review of RTA’s CSR strategy found that it primarily focused on short-term results that were largely unsustainable. Many of its projects revolved around one-off hard infrastructure investments that responded to specific community demands, but did little to encourage local ownership and had few follow-up plans.

In 2006, in line with a renewed vision for CSR that focused more on long-term impacts and sustainability, RTA launched a three-year Social Sustainability Initiative in the BAB district of Ghana that aimed to address several key barriers to health and education as identified by local communities. This work was designed within the larger framework of the BAB district’s strategy for contributing to the Millennium Development Goals (MDGs).

In 2007, to support this initiative, RTA reached out to WUSC to partner with the local District Assembly (BABDA), and implement a two-year pilot education project at the Kanaso Public School, near RTA’s operating site. To foster a strong partnership between RTA and WUSC, both organizations conducted reciprocal in-depth due diligence processes, which identified common principles and goals for future collaboration. This resulted in a formal partnership in 2008, and work in BAB district that succeeded in enhancing the local educational environment and the quality of teaching within the school.

This success, coupled with RTA’s new approach to CSR, led to a longer-term partnership between WUSC and RTA, enabling further collaboration for community development in BAB district. In 2010, WUSC and RTA signed a formal agreement to launch a new, scaled-up initiative, the Bibiani Anhwiaso Bekwai District Development (BABDD) project, which aimed to improve education, employment and governance outcomes in 12 BAB district communities.

In this initiative, each partner had a demonstrated role and clear added-value. While RTA had the financial resources to implement this large-scale project, it had limited in-house capacity to ensure effective collaboration with local communities. WUSC had recognised expertise in education, employment and community development programming, and had been working with Ghanaian communities since 1996. Through the RTA-WUSC partnership, WUSC was able to leverage RTA resources to increase development outcomes in the region, while RTA was able to ensure improved local acceptability through community-driven CSR.

This article will analyse the partnership’s outcomes, key challenges and success factors, in order to contribute toward the knowledge base for cross-sector initiatives between mining companies, NGOs, governments and local communities.

1. The Canadian mining company, Alcan, merged with Rio Tinto in 2007, becoming Rio Tinto Alcan/RTA. For simplification purposes, this article will primarily use the acronym “RTA,” indistinctive of the period to which it is being referred.

2. For more information: http://www.un.org/millenniumgoals/
outcomes in the region, while RTA was able to ensure improved local acceptability through community-driven CSR.

Surprisingly, this initiative was not threatened when RTA sold its 80% share of GBC to the Chinese company, Bosai Minerals Group, and ended all operations in Ghana in 2011. Immediate local acceptability was no longer the main motivation behind RTA’s commitment to fund the BABDD initiative. Rather, this initiative helped RTA to ensure a long term legacy in Ghana. As an RTA official put it, “We wanted to demonstrate the model of a multi-stakeholder approach in West Africa, to show other West African countries what can be done... We also work in Cameroon and Guinea so the idea was that this project would showcase our commitment to leave operations in a responsible way.”

2. KEY SUCCESS FACTORS OF THE PROJECT

WUSC was the key implementing partner of the BABDD initiative, which operated from January 2011 to March 2014. There were four main objectives of the initiative and the WUSC-RTA-BABDA partnership:

- **Enhanced governance and service delivery**: Strengthening the District Assembly and the local committees in responsiveness, accountability and transparency.
- **Strengthened quality of services**: Improving educational quality, access to clean water, and hygiene practices.
- **Economic growth and employment for youth**: Training young people in locally-relevant trades to improve income and employability.
- **Gender equality**: Ensuring equal participation of women and men in decision-making committees and in all training activities, as well as equitable access to resources and services.

RTA contributed $300,000 CAD to the BABDD initiative, which WUSC and RTA used to secure an additional $500,000 CAD from the Canadian International Development Agency (CIDA). Including WUSC’s in-kind contribution (dedicated staff and volunteers), the total budget for the project amounted to $960,000 CAD. CIDA’s contribution was part of a broader government-led initiative to encourage responsible and innovative CSR practices among the growing Canadian extractive sector working in developing countries.

Three key factors explain the success of the project: strong community engagement and local empowerment; the mobilization of multiple stakeholders and the alignment of their respective objectives; and the contribution of an external and expert development NGO.

2.1 STRONG COMMUNITY ENGAGEMENT AND LOCAL EMPOWERMENT

The overall philosophy that guided the project was the belief that community engagement and empowerment were foundational to sustainable development outcomes. In practice, this meant that broad objectives were established by WUSC, RTA and CIDA, while strategies on how to achieve these objectives were developed with and by local committees and District Assembly (DA) representatives. This grassroots strategy, which made local populations actively involved in the project’s design and implementation, as opposed to recipients of exclusively top-down decisions, was crucial to achieving project outcomes. Capacity building of local partners, training, and technical assistance were the key tools WUSC used to empower community leaders.

Objectives related to governance and service delivery were pursued though the training of DA officers, improving coordination, and capacity-building. The quality of services were improved by training responsible government officials and by creating active local committees comprised of community members to manage water access, sanitation, and education initiatives. Finally, men, women and young people were encouraged to participate in the project, and awareness of gender equality issues was raised through gender training that targeted both community members and officials, and through dialogue on local gender issues and gender-sensitive policies. Overall, 102 community-led initiatives related to governance, community management, education, water sanitation and employment were conducted over the duration of the WUSC-RTA partnership.

3 In Roberge (2013): “L’historique du partenariat RTA-ELMC-ADCI”, p. 6

4 Although the Canadian International Development Agency is now known as Global Affairs Canada (GAC), it will mostly be referred to in this article as CIDA.
2.2 MOBILISATION OF MULTIPLE STAKEHOLDERS AND ALIGNMENT OF THEIR OBJECTIVES

The BABDD initiative was made possible thanks to innovative collaboration between different stakeholders. This type of close, collaborative partnership between the private, public and non-profit sectors happens infrequently given their very diverse, sometimes conflicting business models, objectives and organizational culture.

RTA’s inclusive approach to collaboration was critical to the success of this partnership. RTA’s approach stemmed from an underlying belief that leaving a positive legacy in the country would require substantial local ownership to ensure a lasting impact. RTA had already ended its operations in Ghana by the time the project began, which resulted in little presence of its officials in the region during the project’s implementation. However, RTA remained in constant contact with WUSC staff in Ghana and Canada throughout the project’s implementation.

One of the project’s main objectives was to enhance the governance and service delivery provided by public authorities, requiring strong collaboration with these key actors. WUSC and RTA, as a result, ensured the alignment of project objectives with the local authorities’ development framework (BABDA Medium Term Development Plan for 2006-2009 and 2010-2013). This alignment with public policy objectives allowed synergies and efficiency that had not occurred in RTA’s previous community activities, when RTA’s CSR strategy consisted of one-off infrastructural projects. Prior projects were not typically integrated into local plans, and therefore not supported by public money or community involvement, jeopardizing their future sustainability. For instance, if a newly built school was not part of the local development strategy, public authorities were unlikely to provide funds for teachers or furniture.

Additionally, collaboration with CIDA was implemented within the Canadian government’s new CSR framework, adopted in 2009 (see opposite box). This policy document aimed, inter alia, at developing local governments’ capability to manage their local resources more effectively. CIDA tested this objective by supporting five pilot partnerships between NGOs and mining companies that strongly depended upon local government inclusion and leadership.

2.3 THE PROJECT’S ACCELERATOR: THE CONTRIBUTION OF AN EXTERNAL EXPERT INTERNATIONAL DEVELOPMENT NGO

WUSC’s collaborative approach, its development expertise and international reputation made a significant contribution to the success of the project. As my member of the WUSC Ghana team explains: “We were the key implementers so a lot of the day-to-day decision-making or judgment fell to us. We shared ideas and incorporated ideas from the other partners too, so that what we implemented reflected what they wanted to achieve as well. We were facilitators. We reached out to different stakeholders and brought it back and then synthesised and then shared it back”5.

For example, with the support of WUSC, the District Assembly encouraged RTA to enlarge the project from the five communities around Awaso mine to the entire catchment zone, which included twelve communities in total. By broadening the scope, RTA and WUSC added an additional 23,700 beneficiaries to the initiative.
In broadening the scope and development outcomes of this initiative, WUSC was able to leverage CIDA funding only available for CSR projects that were co-led with an NGO. From RTA’s perspective, WUSC’s credibility as an international development partner was critical to securing this additional funding.

Established NGOs, such as WUSC, often have the trust of local communities and officials, built through years of long-term collaboration, advancing local development priorities. Partnering with WUSC helped RTA to signal to community members that it was committed to the effective and locally relevant implementation of this project.

WUSC was the key liaison between the project’s stakeholders, supporting regular communication to ensure ongoing inclusivity of perspectives. Although RTA and WUSC had gone through a detailed process of due-diligence before engaging with each other, and CIDA had undergone nearly one year of in-depth analysis before agreeing to co-fund the project, the three organisations came from such diverse backgrounds that frequent communication and mutual learning was crucial throughout the entire project – much of this was facilitated by WUSC.

3. OUTCOMES AND IMPACTS OF THE PROJECT

3.1 SOCIO-ECONOMIC IMPACTS

Although some concerns for the sustainability of the project were raised, overall, the impact of the BABDD initiative was assessed as positive by an internal WUSC-RTA evaluation.

To address the project’s governance objectives, Community Action Plans were elaborated and implemented in the twelve targeted communities, with local community members. Workshops were organised to train local officials and District Assembly managers in community engagement.

The quality of services was enhanced through training and technical assistance for community members. Water sanitation committees, for instance, facilitated the construction of 112 new water points. Education committees worked to enhance education outcomes through the development of planning documents, the creation of student clubs, teacher training, and improved coordination through school boards.

Economic development objectives were addressed through training 325 young people in four potentially profitable agricultural activities previously identified by a market survey (poultry, piggery, bee-keeping and cocoa nursery). However, since these training sessions were held in the last six months of the project, their revenue-generating impacts could not be quantified.

The project’s cross-cutting gender equality objectives were ambitious but not fully realized. For the objective of 50% female participation in committees and professional trainings, the result was 40% female participants in committees and 35% female participants in professional training. However, gender-sensitivity training promoted discussion of gender equality issues amongst District Assemblies, contributing to the capacity of DAs to integrate gender issues into their programming.

3.2 IMPACTS ON RTA AND OTHER MINING COMPANIES

RTA’s contribution to the project not only resulted in benefits to the local community, but also to RTA itself. These benefits are various:

- **Optimization of operations and HR issues at local level:** Even though RTA left the area a few months after the project started, this type of community development work can help companies to improve their operations locally (lowering absenteeism, facilitating local recruitment, etc.).

- **Relations with local and regional authorities:** Should RTA have continued operations in the area, the BABDD initiative would have undoubtedly enhanced RTA’s relations with local authorities. As RTA had and still has mining activities in West Africa (Cameroon and Guinea), this successful experience in Ghana could enhance its regional social license to operate in neighbouring countries with similar socio-economic issues.

- **Reputation at corporate level:** RTA’s support for this project in Ghana demonstrates its admirable commitment to leave a positive legacy in its areas of operation, improving its standing as a responsible corporate citizen. An additional reputational benefit arises from RTA’s partnership with a respected NGO.
4. THE CHALLENGES OF NGO-COMPANY PARTNERSHIPS IN THE MINING SECTOR

4.1 THE SUSTAINABILITY ISSUE

As with many other community relations projects, one of the key challenges of the BABDD initiative was its sustainability. The initiative was three years in duration, which did not leave much time to promote long-term sustainable change, built on the capacity of local government and communities.

The limited duration of the project was mainly the result of a lack of commitment of the new mine operator, the Chinese firm Bosai. In the original design of the project, WUSC would ideally have continued its relationship with Bosai after RTA left the area. In spite of WUSC having repeatedly opened up discussions in an attempt to engage the new mine owners, Bosai was unwilling to invest further in local development activities due to its precarious financial situation. The company is currently operating at a loss. Although RTA, as a multinational corporation had the resources to support such an ambitious CSR project, Bosai is much smaller and may not have the required vision, capacities and resources in place.

4.2 THE REPUTATIONAL AND COMMUNICATION ISSUE

One of the key challenges facing the WUSC/RTA partnership was the issue of managing reputational risk. WUSC and RTA collectively learned many important lessons from this project. All stakeholders underestimated the degree of Canadian public interest and scrutiny the BABDD project would receive. WUSC, RTA and CIDA were all criticized in the Canadian media for their involvement in this project. This criticism formed part of a broader debate in Canada on CIDA’s support to initiatives that involve private sector companies, particularly in the Canadian extractive sector. Some Canadian NGOs stated that they would never collaborate with any company; others that they would collaborate, but without accepting any private sector funding. Still others, such as WUSC, seek to collaborate with companies and will accept financial support, following a thorough due-diligence process, for initiatives that contribute to the improvement of CSR practices and broaden the development impact of private sector investments.

With the high level of interest this and the other CIDA – funded pilot projects generated, WUSC staff were suddenly exposed to media pressure for which they had not sufficiently been prepared. In response, WUSC engaged its members, board and staff to communicate details about the initiative, to promote an open and constructive debate, and to build a common understanding of our work in this area. WUSC also prepared joint op-eds in newspapers with the Chief Executive Officers of Plan and World Vision to articulate a shared point of view on these issues, raise awareness about the positive impact of private sector financing for development, and respond to criticisms expressed in the media.

CONCLUSION

This article has drawn attention to the benefits and challenges of a multi-stakeholder partnership between an NGO, a mining company, a governmental development agency, and a local municipal government. The case study of the WUSC-RTA-CIDA partnership with BABDA and local communities in Ghana.

Overall, the project has been positive, both regarding the interests of each stakeholder and the outcomes of the project with respect to its development objectives. Moreover, the collaboration enabled each partner to build internal knowledge and processes regarding cross-sector collaboration. Indeed, the most important outcome of the BABDD initiative is perhaps this creation of a model for cross-sector, multi-stakeholder partnerships that can be broadly replicated for positive development outcomes in communities worldwide.

6 Interview by the Canadian newspaper “The Star”: http://www.thestar.com/news/world/2014/02/05/ghana_canadian_aid_project_goes_off_the_rails.html

INTRODUCTION

Political leaders tend to focus on the short term, with electoral mandates discouraging long-term thinking. When ministers or heads of state propose major infrastructure developments, it is the job of civil servants and independent experts to push for assessment of the long-term implications of those projects, including climate risks. Water and water management lie at the forefront of climate change and adaptation to climate change. The design of urban water projects and irrigation schemes, as well as hydropower dams, needs to take account of changing rainfall patterns that risk increasing vulnerability to drought, especially in arid and semi-arid lands.

The case study discussed in this paper considers efforts by the authorities in Burkina Faso to ensure water supplies for the capital city, Ouagadougou. Ouagadougou is located in the centre of the national territory, in a semi-arid zone with an average annual rainfall of just 600-900 mm a year. Burkina is experiencing climate variability, including shorter and more unpredictable rainy seasons.

From 1985 to 2000, the population of Ouagadougou doubled, putting intense pressure on water services. There were more and more frequent service interruptions, with major problems in the provision of water for the residents in the new peri-urban areas, including slums, which had grown up around the city centre. In 1998-2000, the Ziga dam was built on the Nakambé River, 50 kilometres away from the city. The water management authorities in Burkina Faso are, at present, succeeding in responding to the ‘bulk’ water demand of the capital city, Ouagadougou – located in the semi-arid central region of Burkina – through a major ‘supply-side’ infrastructure project, the Ziga dam and Ziga-Ouagadougou pipelines. This article questions, however, the long-term viability of the current approach. Ouagadougou’s status as economic and administrative capital gives it great power to plan for and mobilise investment for its own water supplies, at the expense of water for rural development.

In the context of climatic changes and forecasts of substantial continued growth of the city’s population, the author argues for development of an urban-rural water strategy with a different allocation model to support a pathway to future prosperity in this semi-arid economy.
Ouagadougou to the north-east, with a water main (one metre in diameter) from there to the capital. The project was supported by the World Bank and other external donor sources, which also provided two phases of investment (2001-2007 and 2009-2015) to enable the urban water company, l’Office national de l’eau et de l’assainissement (ONEA), to extend the distribution networks and water services within the city, including partial extension into poor peri-urban areas. The Ziga dam is also in a semi-arid area. Its water is reserved for the use of Ouagadougou as well as a few other towns, not for rural communities. Their drinking/domestic water comes from boreholes and they are prohibited from using the reservoir for irrigation, for fear of contamination with polluting chemicals. Local leaders complain that they have not been sufficiently compensated for the loss of fertile land (8,500 persons in 17 villages were displaced by the reservoir) and not supported with alternative revenue-generating opportunities. Thriving rural communities need water for productive use; where their access is limited, they will tend to migrate to the cities/towns, thereby increasing urban water demand.

1. THE URBAN-RURAL WATER INTERFACE

The question arises as to what constitutes appropriate urban-rural water allocation in the semi-arid conditions of central Burkina with its increasingly variable rainfall and how that allocation may be assessed and negotiated at the ‘urban-rural water interface’ (l’arbitrage urbain-rural in French).

The workshop organised by the ‘Pathways to Resilience in Semi-Arid Economies’ project (‘PRISE’ project 1 or ‘PRESA’ in French) – an applied research project that aims to catalyse inclusive climate-resilient development in semi-arid lands – and held in Ouagadougou on November 12th, 2015, brought together 40 persons representing government, donors and civil society (NGOs and academia) as well as a group of 20 local actors from the area around the Ziga dam to discuss this issue. The researchers of the University of Ouagadougou II (led by Dr. Claude Wetta) and the Overseas Development Institute-OEI (Peter Newborne) invited the participants to look beyond the short and medium term to consider what policy options could be available to identify ‘pathways to resilience’ in this Burkina example of a semi-arid economy, according to the goal of PRISE. PRISE’s vision of climate-resilient development is one of inclusive development that both eliminates poverty and maximises people’s capacity to adapt to climate change. This requires a ‘change in mechanisms of economic growth and social development, including institutional and regulatory frameworks, markets and bases of human and natural capital’.

2. WATER TRANSFERS

The principle that water for drinking and domestic use takes precedence over other water uses is commonly enshrined in national laws and policies. Urban areas with substantial residential populations accordingly expect to receive a priority water allocation. As cities have grown in contexts of increasing pressure on water resources, case studies have begun to emerge of water transfers and ‘reallocations’ from rural to urban areas. Cities commonly include, however, a range of different types of water user – commercial and industrial as well as residential – and the issue arises as to the status of city water entitlements vis-à-vis the water rights of rural communities. In arid and semi-arid zones, this is a particularly important question.

Where these water transfers 2 require new or altered infrastructure, the related question arises as to what (single) purpose or (multiple) purposes the infrastructure will be built for in each case – domestic/urban water supply, energy, irrigation, livestock or other uses – and for whose benefit. Will water be conveyed long distances to urban centres by major works of civil and mechanical engineering, or will new urban areas be planned and constructed near rivers or lakes, as natural features of the environment?

The proposition considered in this paper is that, in semi-arid zones which face climate variability with the likelihood of increasing pressure on water resources, decisions on water management will increasingly require long-term strategies for allocation of water resources between urban and rural areas. Among economists, there is a tendency to argue for a systematic reallocation of water from rural to urban uses, on the basis that ‘water is too often devoted to economically inefficient, “low return” (agricultural) uses and that transfers to more efficient, “high-return” (urban) uses would increase total economic welfare (Molle and Berkoff, 2009). Others challenge that view (Ibid.). Accordingly, there needs to be analysis and debate as to the appropriate urban–rural water balance in the national economy and society.

The Ouagadougou-Ziga case in Burkina Faso is an example of a water transfer. Ouagadougou draws 70% of its water (GoB, 2013) from the Ziga reservoir. The Nakambé, shared with neighbouring Ghana (known there as the ‘White Volta’), is one of the four principal rivers of Burkina 3. On the Nakambé in Burkina, the Ziga and Bagré dams comprise the major existing built infrastructure.

Both the urban population of Ouagadougou and the urban and rural populations in the area near Ziga require water for drinking and domestic, as well as productive, uses. Under Burkina law, drinking water use is highest in the hierarchy – the first listed in Article 1 of the 2001 Water Policy Management Act (GoB, 2001). The 1998 National Water Policy adds that the first objective is to “satisfy sustainably, in quantity and quality, the water needs of a growing population and an economy in development” (GoB, 1998). As regards other uses, Article 1 of the 2001 Act continues that the goal of water management is to “satisfy or reconcile the demands of agriculture, livestock, fishing

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1. To find out more: http://prise.odi.org/
2. Some water transfers or ‘reallocations’ are temporary, during dry periods. Others are permanent, including those made following formal administrative decisions of government to appropriate and divert water sources, with or without compensation.
3. Along with the Mouhoun (or ‘Black Volta’, also flowing into Ghana), the Comoé and the Niger tributaries.
and aquaculture, extraction of minerals, industry, energy production, transport, tourism, leisure and all other legally-exercised human activities’ as well as ‘water quality’ and ‘protection of aquatic ecosystems’ (GoB, 2001). The government, through the ministry responsible for ‘integration’ of water resources (Article 13) – the Ministry of Agriculture and Water Resources (MAHRH) – is responsible for overseeing how these different demands are to be satisfied as far as possible, to the extent they are complementary, or how they are to be reconciled, where competing. In Burkina, ‘integrated’ water resources management or ‘IWRM’ (gestion intégrée des ressources en eau or ‘GIRE’ in French) is the ‘foundation’ of national water policy (GoB, 2003).

3. CLIMATE

There are three climatic zones in Burkina: the arid Sahel in the North, with typically average annual rainfall of less than 600 mm; the semi-arid ‘Sudano-Sahelian’ zone in the centre, with average annual rainfall of 600-900 mm; and the dry sub-humid ‘Sudanese’ climatic zone in the South, with average annual rainfall of 900 mm (Wetta et al., 2015). Burkina has two seasons: a long dry season and a short rainy season. In the semi-arid central zone, the rainy season is about five months, typically from May/June to September/October. In the arid Sahel in the North, the rainy season is typically shorter – four months at most. In the southern zone, the rainy season lasts nearly 6 months (Wetta et al., 2015).

The past three decades have seen signs of increasing variability in rainfall distribution, temporal and spatial, manifested by shorter and more unpredictable rainy seasons (Wetta et al., 2015; FEWSNET, 2012). This has serious implications for agriculture in Burkina, which is mainly rain-fed. According to the Strategy for Accelerated Growth and Development (SCADD) 2011-2015 (GoB, 2011), Burkina was expected to move from, at the beginning of the 2000s, ‘a situation of moderate water stress in a normal year and moderate/high stress in a very dry year’ to a ‘permanent situation of high water stress in 2010-2015’ with ‘water demand reaching 69.7% of utilisable volume in a normal year and 141.9% in a very dry year’.

‘Pollution (domestic, agricultural, urban) exacerbates the water deficit’ (Ibid.).

It is uncertain whether these trends are exacerbated by climate change attributed directly or indirectly to human activity or whether they are a feature of natural climate variability. According to the AGRHYMET Regional Centre, the continuing drought in the western part of the Sahel (Senegal and western Mali) contrasts with the situation in the eastern zone (Chad, eastern Niger), which is experiencing a return to wetter conditions (AGRHYMET, n.d.). As to which situation prevails in the central zone where Burkina is located, the sources are inconclusive. Some climate projections forecast higher, and some lower, rainfall. The sources are, however, in agreement as to increasing climate variability affecting Burkina in shorter and more unpredictable rainy seasons.

The topography of Burkina is notable for the generally flat relief with only a few elevated areas – which means there are few available sites for deep water storage.

4. POPULATION

The population of Burkina has tripled in the past five decades, from 4,317,770 inhabitants in 1960 to 14,017,262 in 2006, with growing rates of increase – from 2.8% per year in 1991 to 3.13% in 1996 and 3.42% in 2006 according to the National Demographic and Statistics Institute (INSD, 2011). At the rate of 3.1% increase per year, the country is forecast to have a population of 18,450,494 in 2015 (Ibid.). The urban population growth at above 5% per year is higher than overall population growth at of 3% per year (urban and rural) (figures from the 2006 census – INSD, 2008).

As for migration, whereas in 1985 only 21.7% of the population of Burkina at that time reported to the census survey that they had migrated, in 1993 this figure was up to 30.7% (Wetta et al., 2015). The principal motivation of migrants is the search for a better standard of living (Ibid.).

Despite the increase in the urban population, the population overall is still predominantly rural (70%) with the majority of Burkinabé – 80.9% – reported to be working in ‘agriculture, hunting and forestry’ (INSD, 2011). The SCADD (GoB, 2011) identifies as a priority the promotion of economic growth in urban centres, stating there is ‘under-urbanisation’ in Burkina (GoB, 2011).
other words, the SCADD looks for stable economic growth in both the urban and rural economy without expressly favouring either. The SCADD further observes that the agricultural sector is ‘vulnerable to external shocks’ including ‘climatic uncertainties’ (GoB, 2011). This is an important consideration for policy-makers, although vulnerability in the primary sector is mirrored by vulnerability in other parts of the economy. Burkina has, the SCADD notes, been affected by external events such as oil price fluctuations and the financial crisis post-2008.

5. OUAGADOUGOU

In the 1960s, following independence, Ouagadougou was the administrative capital of Burkina, with Bobo-Dioulasso considered the economic capital of the country. Subsequently, Bobo-Dioulasso’s economic advantage vis-à-vis the capital declined as a result of government policy favouring Ouagadougou, especially during the 1980s and 1990s. Ouagadougou became the economic as well as the administrative capital. Its geographical position in the centre of the country certainly has some advantages, as compared with Bobo-Dioulasso in the South-West (though with no ready access to water – see below).

Following on from the growth of Ouagadougou in the 1980s and 1990s, the city’s population stood at 1,915,102 in 2012 (INSD website). The experience of the 10 years from 1996 to 2006 was that more than half of urban population growth occurred in Ouagadougou/the Centre region (53.1%), alongside 14.2% in Bobo-Dioulasso (GoB, 2008).

The population of Ouagadougou is still increasing at a fast rate. The UN cites population growth rates for Ouagadougou at 5.97% for the period 2015-2020, 4.95% for 2020-2025 and 4.25% for 2025-2030 (UN Population Division, 2014). At these rates, the population of Ouagadougou is forecast to be 2.83 million by 2020, 3.78 million by 2025 and 4.66 million by 2030. Assuming population growth continued thereafter – at rather lower rates to reflect a continuing downward curve in the degree of increase, at, say, 3.5% from 2030 to 2040 and 3.0% from 2040 to 2050 – the population of Ouagadougou would be 6.57 million in 2040 and 8.83 million by 2050. A 2011 study suggests the population levels of Ouagadougou (and Burkina) could be even higher (Guengant, 2011). In other words, from a 2010 baseline, the population of Ouagadougou is forecast to double by 2030 and then, potentially, to double again by 2050.

6. ZIGA

At the time of construction of the Ziga dam, it was noted that the sufficiency of the ‘bulk’ water supply to Ouagadougou in the medium term would need to be monitored. A decade later, in 2013, the city hosted nearly 2 million residents and in 2014, water shortages in Ouagadougou caused intermittent cuts to supply, pointing to the risk of a possible return to the chronic water shortages of the 1990s.

By way of response, a second phase of the Ziga project is under way (2015-2016). The intention is to lay a second mains pipe (1.2 m in diameter), parallel to the existing pipe, doubling the volume of water ONEA can convey from Ziga to Ouagadougou. That is expected to meet the capital’s water needs in the medium term. The crest of the Ziga dam will not have to be raised as part of Ziga Phase 2 since the Ziga Phase 1 main requires a water storage capacity in the reservoir of just 40 million m$^3$ out of a substantially greater total volume (200 million m$^3$ when full, 184.7 million m$^3$ of useful volume/active storage).

What, however, of the long term? As noted above, the population of Ouagadougou continues to grow at a fast rate. This raises the question of from where the capital will draw its supply once the capacity of the Ziga reservoir has been exceeded – some time beyond 2030. Also, the issue arises of to what point the growth of Ouagadougou into an ever-and-ever larger city is sustainable. Ouagadougou is not situated beside a major river, in contrast with the second-largest city of Burkina, Bobo-Dioulasso, in the South-West, a more humid part of the country. This question is considered in ‘Ouagadougou to 2025, and beyond’, below.

7. BAGRÉ

While the designated purpose of the Ziga dam is supply of drinking water, the primary role of the Bagré dam, located near the border with Ghana, 220 km south-east of Ouagadougou (in the sub-humid climatic zone), is to supply electricity. The Bagré reservoir was first flooded in 1992. Levels of electricity access in Burkina are low, at 13.1% nationally in 2012, with a reported access rate in urban areas of 47% compared with just 1% in rural areas (SE4ALL, 2013) – a very

5 Despite a period since 2000 of growth in Bobo-Dioulasso.
low rate, even by Sub-Saharan African standards. In 2013, 42% of electricity in Burkina was imported, from the Côte d’Ivoire, Ghana and Togo. The operator of the Bagré dam is the National Electricity Company (SONABEL). SONABEL’s records as to the volume of river flows into the Bagré reservoir 7 (recorded monthly, in two six-monthly periods) show that the Nakambé River at/above Bagré is not perennial. In the dry season from October/November to March/April, there are no (or low) river flows into the lake. In the Bagré region, there are just six months of rain and river flows 8.

Generation of electricity is not the sole purpose of Bagré. The lake is also used for irrigation, with a maximum potential of 30,000 ha. The 2010 baseline report on Bagré, nevertheless, comments that, ‘When it is considered that 85% of the volume of water in the Bagré reservoir is allocated to electricity generation, the principal activity of Bagré is seen to be production of hydro-electricity. That is the reason why operation of Bagré was handed over to SONABEL’ (ICI, 2010).

8. WATER USES: COMPETING, AND COMPLEMENTARY

A negative impact of the Ziga dam has been to reduce and limit irrigated agriculture in the area. The conclusion of an April 2013 workshop in Ziniaré near Ziga organised at the instigation of the central government authorities was that use of the Ziga reservoir for irrigation, including the small irrigation (market gardening) of the type local communities installed beside the lake (i.e. after construction of the dam), is ‘totally incompatible’ with the lake’s drinking water purpose (GoB, 2013). The ban does not apply to downstream of the Ziga dam, where there are opportunities for irrigation, for example for a group of around 200 women who are benefiting from irrigation of an area of around 8 ha located some 800 m downstream, alongside two other groups. The water they are drawing comes out of the river channel below the dam, which means it is not competing (at least not directly, depending on spills/releases of water from the Ziga dam) with the water extracted from the reservoir for the treatment plant and conveyance to Ouagadougou. In the Ziga area more widely, a 2011 census recorded 4,089 irrigation plots covering a total of 341,48 ha downstream of the Ziga dam through gravity-fed irrigation mostly, with a few motor pumps in 9% of cases (Traoré, 2013). All such activities upstream of the dam, on both sides of the lake, are banned.

There is considerable local resentment at this ban, a feeling of injustice that the villages adjoining the Ziga lake are not able to carry out productive agricultural activities because according to local leaders, the government had not honoured its commitment to support local people in alternative irrigation projects. The small dams promised by ONEA had, according to key informants, not been built, or at least not well built; one dam had been constructed, but the earthwork has collapsed. Local people felt compensation for construction of the Ziga dam had not been adequate and the government was not engaging with local stakeholders in a spirit of ‘give and take’. It is especially young people of the communities who are frustrated they cannot make a better living by producing and selling vegetables and other products of irrigation. Many young community members have already emigrated and, among those remaining, there is a grumbling discontent. A local leader commented, ‘development cannot happen in a context of conflict, without social peace. As long as we do not receive support/assistance in recognition of the consequences of the dam, there is a problem that needs to be resolved.’

The people consulted in the Ziga area acknowledged the need for drinking water to be supplied to Ouagadougou. That said, among local people, there was no awareness of the reality that only part (albeit the majority, 85% 10) of the water conveyed in the main from Ziga to Ouagadougou is destined for drinking and domestic use. The principal commercial/industrial use of water in the city is by tanneries and breweries, as well as in building/construction.

It was striking that during the key informant interviews conducted by this research study, local people consistently expressed their perception that the timing of the rainy season (onset and duration) was becoming more variable. ‘There is insufficient rain for solely rain-fed agriculture,’ said a local leader.

In contrast with the ban on irrigation upstream, one clear benefit of the Ziga dam has been the opportunity to fish on the Ziga Lake. The researchers met one fisher group, born and brought up in the local area. These fishermen have in the past migrated to exercise their trade, for example to the Kompienga dam (in the far South-East of Burkina) and to Bagré. Construction of the Ziga dam, however, gave them the opportunity to work as fishermen in their own locality.

The irrigation downstream and the fishing on the lake are uses that are currently compatible and complementary with the use of the Ziga reservoir for drinking water. Competition for access to the water in the reservoir is currently about water quality not quantity – the water in the reservoir could at present, and it seems in the medium term, serve the demands of both Ouagadougou and local water users, subject to seasonal variations in flows.

6 SONABEL (100% state-owned) is responsible for generation, transmission and distribution (i.e. the electricity sector in Burkina is not ‘unbundled’).
7 Including the flow into Bagré Lake of several tributaries of the Nakambé.
8 Source: key informant interview; the Mouhoun River is, in contrast, permanent, as is the Comalé.
9 No figures were available to this preliminary study relating to the funds invested in the Ziga area.
10 Source: ONEA 2013 company review, as supplied by key informant.
The policy of integrated water resources management adopted in Burkina is supposed to provide for ‘consensual and participatory management of water resources between a range of stakeholders at different levels with divergent interests and a variety of perspectives’ (GoB, 2003). The political economy of water allocation between town and country, as revealed in the Ouagadougou-Ziga case, is, however, far from ‘consensual and participatory’, at least currently. The authorities are effectively asserting Ouagadougou’s water claims as right, without presenting a reasoned case. Stakeholders from the Ziga area, including members of local communities, were invited to attend the April 2013 workshop, but they were not invited to take part in decision-making. As one local representative said, ‘The authorities do not consult; they tell us what they have already decided.’

It is not clear how far, in practice, climate aspects are being taken into account in water and related decision-making in Burkina. The actions set out in the National Action Plan for Climate Change read like a long ‘wish’ list. Many of the recommended steps are doubtless desirable, but the question arises of how far these actions are incorporated into the plans of sector ministries with government or donor funding available for their implementation (also, the current status of the National Action Plan, which was in draft form in April 2014 (GoB, 2014)).

**“THE POLITICAL ECONOMY OF WATER ALLOCATION BETWEEN TOWN AND COUNTRY, AS REVEALED IN THE OUAGADOUGOU-ZIGA CASE, IS, HOWEVER, FAR FROM ‘CONSENSUAL AND PARTICIPATORY’, AT LEAST CURRENTLY.”**

9. OUAGADOUGOU TO 2025, AND BEYOND

As for future use of the Ziga reservoir, this will depend largely on the future of Ouagadougou and its water demand. The Ministry of Housing and Urban Planning published in 2008 its strategic development plan for Greater Ouagadougou to 2025 – the Schéma Directeur d’Aménagement du Grand Ouaga, Horizon 2025 (SDAGO) (GoB, 2008). On the plan, a new designated area of future urban development constitutes between a quarter and one-third of the size of the current city, in territorial terms. In population terms, given the ministry’s plan to adopt a denser model of residential housing, this expansion is likely to result in — and be designed to accommodate — a growth in Ouagadougou’s population of approximately one-third; that is, an increase from 1.9 million in 2012 to 2.5 million by 2025. This is substantially lower than the forecast population figure for 2025 cited above, of 3.78 million. A question arises, therefore, as to where the extra million and more city residents forecast at that time will be accommodated, and in what conditions; and to what extent the government’s efforts to manage urban growth in Ouagadougou will, or will not, be adequate to meet the actual increase in numbers.

The 2008 National Housing and Urban Development Policy notes that the 2006 Law on Urban Planning and Construction is just the ‘beginning of the legal framework’ (GoB, 2008). Strengthened urban planning rules and capacities are needed, it says, to tackle the ‘major challenge’ posed by real estate speculation, which ‘is common’ (Ibid.). Without ‘evolution of regulation on urban land management’, including ‘clarification of the means by which access to land is obtained’, the speculation is likely, contrary to the best efforts of the authorities, to continue and development will be uncontrolled (GoB, 2008). As noted above, the prospect is of a doubling of the size of Ouagadougou’s population from 2015 to 2030 (to 4.66 million), and a further potential doubling between 2030 and 2050 (to 8.83 million). Such a fast rate of city growth suggests there will be more unplanned peri-urban areas and more slums lacking basic services, including water. While urban development plans, such as those set out by the ministry in this case, will seek to enhance the economic dynamic of the city, high inflows of migrants to the capital could give rise to the possibility of negative economic (and social) effects.

The 2008 urban development policy also notes the need for housing and land use planning to improve in other parts of Burkina, in both rural areas and in/around ‘small towns’, of which there are 36 (GoB, 2008) and the medium-sized towns, of which there are 11 beyond the two ‘metropolitan’ centres of

11 Typically – note the authors of the policy – customary land on the new edge of town becomes the target for purchase in the real estate market.
Ouagadougou and Bobo-Dioulasso (GoB, 2008). The authors of this national policy state: ‘If this [urbanisation] process is not managed so as to achieve more of a regional balance, there could be very negative consequences in terms of the physical organisation of space and social equity’ (emphasis added).

In Burkina’s second- and fourth-largest cities, Bobo-Dioulasso and Dédougou, water demand and consumption are rising and ONEA is investing in improvements in water services. In both cities, ONEA is using a combination of its own resources and donor funds (including from the World Bank) to improve water supply. In Bobo-Dioulasso, the aim is to drill three new boreholes (into sedimentary rocks) and build three new water towers to store 4,000 m$^3$ in total. In Dédougou, similarly, there will be new boreholes to retrieve groundwater from the sedimentary geology, with new water towers. These investments should go at least some way towards a regional balance.

**What will be the water demand of an expanded Ouagadougou?** Based on the prospect of a doubling of Ouagadougou’s population in the medium term, to 2030, and a further potential doubling of the city’s population in the long term, to 2050, water demand would be likely to exceed the maximum capacity of the Ziga reservoir (according to the average useful volume/active storage of 184.7 million m$^3$) at some time to be determined between the 2030 and 2050 time horizons. The level of unaccounted-for water in Ouagadougou (i.e. water for which ONEA did not receive payment, because of either physical leaks or failures in invoicing or bill collection) was noted by the World Bank in 2009 to be at 18% of production, which, the World Bank comments, made ONEA’s record one of the best performances in Sub-Saharan Africa.

Government officials referred to future growth of water demand in Ouagadougou and mentioned the possibility of a further infrastructure project to supplement the capital’s supply. Post-2030 it is ‘in the minds’ (dans les esprits) of the authorities that Bagré could be the next source (or at least a further source) of water supply to Ouagadougou. As noted above, currently, the Bagré dam has two purposes: hydropower and irrigation – not water supply.

This is likely, however, to involve choices between different and sometimes competing priorities, i.e. a trade-off. The SONABEL records show a great variation in the levels of the Bagré reservoir year by year. The level of filling of the reservoir overall has been greater in the past 10 years than in the previous decade, although with, recently, considerable variation. The fluctuations in flows/levels have become more pronounced. For example, in 2011, the reservoir was only partly filled, and 2013 was a dry year also. In 2013, SONABEL stopped hydropower production for a period of two months. Faced with electricity demand, SONABEL had to administer a programme of power-rationing (load-shedding), for example in Ouagadougou – by ‘rotation’ eight hours per day, by zone. 2006 was also a dry year. In six out of the past 10 years, in contrast, the reservoir filled to capacity and SONABEL had to spill water at Bagré.

In other words, the experience at Bagré corresponds with the national picture of increasing variability in precipitation. The indications are, in other words, that it cannot be assumed at any given time (at least during dry periods) that Bagré will be able to serve Ouagadougou with both hydroelectric power and water supply in sufficient quantity at the same time. In dry periods, extraction from the Bagré reservoir for drinking water would reduce the amount of water stored for hydropower generation. The Burkinabé authorities will need to anticipate and analyse the potential trade-offs and set out infrastructure options by way of response.

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12 There was no mention during the key informant interviews of a Ziga Phase 3.

13 The Bagré reservoir empties yearly – there is not an accumulation of water between years.

14 How far, if at all, will construction of a Bagré Aval dam change this?

15 Further research could usefully examine time series data on river flows and reservoir levels.

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_The scenario of a very water-thirsty ‘mega-Ouagadougou’ is avoidable if appropriate action is taken by government and other actors._
CONCLUSION

Decisions on water allocation and infrastructure lie at the heart of development planning in semi-arid lands. On paper, the laws and policies of Burkina Faso accord equal entitlement to drinking water for the residents of cities and the residents of small towns and villages. In practice, Ouagadougou's status as economic and administrative capital gives it much greater power to plan for and mobilise investment for its own water supplies. The Ziga project (in two phases) has been designed to secure bulk water supply for Ouagadougou until 2030. At some time after that date, as discussed in this paper, the capacity of the Ziga reservoir to supply the capital will be exceeded.

The existing national development strategy identifies both urban and rural areas as priorities in the promotion of economic growth, without expressly favouring either. The growing pressure on water resources in Burkina requires, however, taking account of competing water uses. Political leaders need to look ahead to the long term to see where trade-offs are likely to arise and they need to set out decision-making processes to assess options and make choices.

As discussed at the November 12th workshop held by the PRISE project, the scenario of a ‘mega-Ouagadougou’ with a population of 8 million is avoidable if appropriate action is taken by government and other actors. The participants produced some preliminary ideas of what those measures could be, for example: regional investment funds to boost development of Bobo-Dioulasso and other urban centres, including in the relatively more humid southern zone, for a better regional balance; more support to rural irrigation projects including out-of-season irrigation (l'a culture de contre-saison); and design of multiple use water infrastructure where possible.

According to the climate information available, the pressure on water resources in the Nakambé River in central and south Burkina is likely to grow with increasing rainfall variability. More access to water storage for irrigation will be essential for maintaining and increasing agricultural production. By not, currently, making water adequately available to local people in the Ziga area, the authorities are unwittingly fuelling rural-to-urban migration, including to the capital.

PRISE PUBLICATIONS

- Twitter handle: @PRISEclimate (https://twitter.com/priseclimate)

REFERENCES


SEAALL (2013), Sustainable Energy for All, http://www.se4all.org/tracking-progress


INSIGHTS GAINED FROM TOTAL’S SOCIETAL STRATEGY: from local acceptability to shared value

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Since 2000 Total has been developing local acceptability procedures in its subsidiaries and at its sites that comprise four main components: dialogue with local stakeholders, controlling the impacts of industrial activities, optimizing the contribution to the sustainable social and economic development of communities and territories where the Group operates and being recognized as a prime mover regarding access to energy. Now well established (with dedicated human resources, tools and methodologies), this societal strategy is facing several challenges that need to be met if the Group is to continue to achieve operational excellence and longevity.

INTRODUCTION
The environmental and social acceptability of major projects is not a new issue, but over the last fifteen years the approach has become more structured.

The adoption, from 2003 onwards, of new guidelines for the identification, evaluation and management of environmental and social risks by the financial and banking sector (the Equator Principles, a set of standards established by the International Finance Corporation, a subsidiary of the World Bank) was a major step in establishing local acceptability as a core criterion.

Since then, the legitimate and ever-increasing expectations of civil society with regard to the private sector have made the societal approach even more relevant for large corporations.

Total has been working since 2000 on the development of its own local acceptability approach in its subsidiaries and at its sites, working in parallel with international initiatives such as the UN Global Pact. In line with the orientations defined in 2011, Total’s approach aims to:

- Achieve a better grasp of the complexity of the contexts and situations in which Total operates and the attendant risks, as well as the corresponding opportunities;
- Consolidate its license to operate by taking stakeholder expectations into account;
- Create value that is shared by all.

The policy implemented by Total comprises three main characteristics:

- A strategic vision: Total’s societal policy currently focuses primarily on reinforcing dialogue with stakeholders, managing the impacts of its operations, and creating local value in the areas where it operates;

With operations in more than 130 countries, Total is a leading international oil and gas company. In addition to producing, refining and distributing petrochemicals, Total is also a world-class natural gas operator and ranks second in the world for solar energy with SunPower. The company works closely with its stakeholders to ensure that its operations consistently deliver economic, social and environmental benefits.

KEYWORDS
- DIALOGUE WITH STAKEHOLDERS
- IMPACT MANAGEMENT
- CREATION OF SHARED VALUE
- ACCESS TO ENERGY
1. A FOUR-TIERED STRATEGIC VISION
Total has developed a societal that applies both at corporate level and at site level, and consists of four main components:
• Dialogue with local stakeholders;
• Controlling the impacts of our industrial activities;
• Optimizing our contribution to the sustainable social and economic development of the communities and territories where the Group operates;
• Being recognized as a prime mover regarding access to energy.

1.1. DIALOGUE WITH STAKEHOLDERS
In order to gain a solid understanding of the local context and build a relationship of trust and constructive dialogue with local actors, Total has developed a structured approach divided into multiple stages, including “key” stages such as the identification and mapping of stakeholders and/or the organization of public consultations.

1.2. CONTROLLING THE IMPACTS OF OUR ACTIVITIES
The societal impacts of industrial activities are increasingly coming under the same scrutiny as environmental impacts. The management of societal impacts is gradually becoming more structured, with
1) impact assessments comprising both environmental and social strands (Environmental and Social Impact Assessments or ESIsAs), and 2) the introduction of societal action plans with the aim of reducing, or in some cases compensating, these impacts (compensation plans, complaint handling procedures, etc.).

1.3. OPTIMIZING OUR CONTRIBUTION TO LOCAL SOCIOECONOMIC DEVELOPMENT
Total’s approach is ultimately based on implementing societal actions with the aim of making a greater contribution to local development. In more concrete terms, optimizing our contribution means both reinforcing what we call “local content” (local recruitment, local sourcing of goods and services, supporting local small businesses) and implementing development projects with long-term sustainability goals.

To this end, 450 million dollars are dedicated to developing local projects, 150 million of which is paid directly to certain governments as an official contribution to local development. The Group has defined several priority fields for its contributions: education – the main field of intervention (one third of all investment), safety (including road safety), support for small businesses and entrepreneurs, and access to energy.

1.4. BEING RECOGNIZED AS A PRIME MOVER REGARDING ACCESS TO ENERGY
The Group’s approach in this area, which goes to the heart of its core business, is based on gas-to-power projects for local populations: decentralized solar solutions and, in particular, a social business project selling solar lamps (as well as telephone chargers, fans, etc.). These high-quality solar lamps are sold via two channels: 1) the Total service station network, and 2) through small-scale local entrepreneurs, or alternatively through NGOs, in order to reach the “last mile”, the most geographically isolated and/or most disadvantaged populations. The resulting profits are reinvested in the project, enabling it to grow, expand, spread, diversify, and inspire new solutions. These Awango by Total lamps can now be found in thirty countries, compared to just three in 2011. In 2015, the project crossed the milestone of 5 million people impacted (through the sale of 1 million lamps). Now the target is to reach 25 million people in Africa by 2020.
2. A METHODOLOGY WITH DEDICATED TOOLS

To lay down the main lines of its approach, Total has in recent years developed a methodology based on tools ranging from stakeholder mapping to public consultations and complaint handling procedures, to support for local economic initiatives. While the SRM+ tool is useful for organizing the stakeholder consultation process, the Small Business Initiative tool is designed to support economic projects launched by local firms.

2.1. SRM+: AN AID FOR STAKEHOLDER CONSULTATION

The SRM+ (Stakeholder Relationship Management) tool, developed in partnership with the consulting firm Altermondo, provides a snapshot of the state of relations with stakeholders, and makes it easier to understand their expectations and analyze the Group’s exposure, as well as the risks and opportunities. SRM+ offers three main advantages:

- **Operational in action**: a SRM+ diagnostic is conducted over one week, culminating in the definition of an action plan based on the common interests of stakeholders;
- **Correlation of internal and external views**: comparing the internal view of the societal issues and the history of stakeholder relations against the results of the external stakeholder consultations;
- **Ease of replication**: more than 160 SRM+ diagnostics have now been performed, covering about 60% of the sites assessed as being among the greatest risks for Total.

The example of the SRM+ diagnostic conducted on the Ichthys LNG project—the fruit of a joint venture between INPEX (the operator) and Total, and the second largest project in Australian history—contains several lessons about the rollout of the tool. At the request of INPEX, Total agreed to make its SRM+ tool available. Thirty-five groups, consisting of external stakeholders, from Western Australia, the Northern Territory and the Australian Capital Territory, were consulted during a two-week mission conducted in 2011 with teams made up of staff from INPEX, Total and the consulting firm Altermondo. The societal context of the project was complex: while the governments of the Northern Territory, speaking for the aboriginal populations, were favorable to the project from the outset, the State of Western Australia was more reticent about the nature of the industrial operations authorized in the Kimberley region. The SRM+ consultation confirmed the project’s integration into the Territories concerned, clarified the stakeholders’ expectations and, above all, initiated a dialogue for the duration of the operations and not just for the purposes of the SRM+ diagnostic.
The lessons to be learned from the application of this method—after several years’ practice on every continent and in every socioeconomic context—include:

- **The importance of winning management buy-in:** beforehand, the top management team may be wary about organizing an SRM+ diagnostic, fearing it might “open a Pandora’s box”, but these misgivings are often shown to be unfounded, in as much as the methodology serves, above all, to improve relations with the stakeholders;

- **Frequent consultations to establish a bond of trust:** when information and communication is in short supply, myths proliferate, among the stakeholders and even within the company. Stakeholders may tend to over-represent the risks, while the company may be led to believe that the whole of civil society is hostile to it;

- **Consultations open to a wide range of questions:** stakeholder consultation should not take place only when the company needs it to, nor should it only have to discuss points relating to the project;

- **Simple, accurate information to dispel fears:** project-related information should be presented in a way that is adapted to the stakeholders, putting clarity and simplicity first in order to avoid misunderstandings and allay any lingering concerns;

- **Adjusting the strategy to the emergence of trends and models common to different groups of stakeholders:** certain correlations between stakeholder groups may bring to the fore common themes and topics that the company needs to address;

- **The integration of constructive stakeholder ideas into the action plans:** valuable suggestions can emerge from stakeholder consultations, contributing to the improvement of the project, or to the relationship with the company.

### 2.2. SMALL BUSINESS INITIATIVE: FOR A STRONGER CONTRIBUTION TO ECONOMIC DEVELOPMENT

The Small Business Initiative (SBI) approach is the result of an effort to formalize all of Total’s existing small-business support initiatives. Inspired by a desire to assert the place of economic development in societal action plans, SBI also offers a response to one of the main stakeholder concerns by focusing its action on the “missing middle”: the many firms in developing countries which need capital but which are both too large for most micro-credit schemes and too small to have access to conventional sources of finance.

The SBI approach operates on a win-win model, enabling SMEs to obtain easier access to the resources needed for their development (financing, innovation), thanks to Total’s support, and enabling Total either to increase its use of local labor in the industrial sector, or to reinforce its economic footprint beyond its core business. To cite just two examples: the *Jeunes Gérants* (Young Managers) program in Africa works to promote service station employees to the rank of Total station manager, while in Qatar, Total has facilitated the creation of industrial joint ventures between European and Qatari SMEs.

To do so, SBI relies on a four-stage method:

- **The diagnostic:** identifying the risks and opportunities of a small-business support program for the subsidiary;

- **Defining the support strategy:** targeting the most relevant business sectors and proposing coherent mechanisms;

- **Designing the mechanism:** building an action plan in the form of a business plan that brings in the operator and selected partners;

- **Implementation, monitoring and evaluation:** participating in the steering committee and tracking project progress, with the application of a gradual disengagement plan.

“SMALL BUSINESS INITIATIVE ALSO OFFERS A RESPONSE TO ONE OF THE MAIN STAKEHOLDER CONCERNS BY FOCUSING ITS ACTION ON THE ‘MISSING MIDDLE!’”
3. THE CENTRAL ISSUE OF HUMAN RESOURCES

3.1. PUTTING SOCIETAL ACTION ON A PROFESSIONAL FOOTING

In recent years, corporate societal action—recognized by Total as a line of work in its own right—has acquired greater professional status through heightened awareness among management and staff, the training of the teams who go out into the field, more diverse recruitment (sociologists, anthropologists, etc.) and the use of performance indicators to measure the results of actions.

The Societal department’s attachment to the HSEQ function, now called H3SEQ (for Health, Safety, Security, Societal, Environment and Quality) clarifies the interplay between the different fields of action: ultimately, the impacts of Total’s activities in the field almost automatically have a societal aspect, whether it is about on-site road safety, for example, or the socioeconomic consequences of environmental impacts.

3.2. THE NEXT HR CHALLENGES TO BE MET

With the affirmation of the company’s societal function, we are also seeing the emergence of new challenges that call for appropriate responses, building on the lessons of field experience. The current challenges are:

• Ensuring the diversity of teams by combining external profiles (capable of bringing in a specialist viewpoint: sociologists, anthropologists, agronomists, etc.) with internal profiles (“old hands” in the company who can draw on their many years of experience).

• Striking a balance between the recruitment of teams from local communities and teams of foreigners: continuity of dialogue with local communities in the field often relies on Community Liaison Officers (CLOs), whose mission is to establish contacts with local populations and explain the Group’s activities. The CLOs — currently about fifty people — are trusted persons, from the local communities, who act as the primary guarantors of Total’s integration into the local context. However, their position — as members of their communities and, at the same time, as representatives of Total — is not a comfortable one. While continuing to listen to local communities and maintaining day-to-day relations with them, their priority must nonetheless remain the company’s operational requirements, which may mean they have to say “no” to local people. The ensuing tensions sometimes give rise to threats and/or suspicion. The Yemen LNG project, carried out by Total with six other partners, and completed in 2009, involved the construction of a gas pipeline 320 kilometers long through the desert and the plateaux in the south of the country, and an LNG plant on the coast. The site presented complex characteristics — the predominance of tribal systems, limited economic resources, and the absence of real development — making dialogue with the stakeholders a crucial stage. Interactions with the local populations, particularly on land- and employment-related issues, were numerous: up to thirty consultations a day. To ensure that the dialogue proceeded smoothly, teams of liaison agents were recruited from the tribal communities. While their perfect knowledge of the terrain quickly became evident, they were, in fact, too close to the field, and their tribal loyalties very soon aroused suspicion among the wider population: the precise opposite of the desired effect. To handle this issue, teams of Arabic-speaking foreigners were finally put in place to reinforce the existing agents. The foreign teams were seen as more neutral third parties by the tribal populations, and succeeded in raising the quality of the dialogue.

• Ensuring gender parity in societal teams: this involves working “against the trend” in as much as women remain more numerous in this line of work, particularly in coordination roles. Conversely, while the positive role played by female CLOs has been noted, there are still relatively few in number.

4. CHALLENGES TO BE MET AND OPTIONS FOR IMPROVEMENT

In the field, the effective implementation of societal strategy runs into difficulties. We must now work on potential improvement routes in order to ensure the Group’s operational excellence and acceptability.

4.1. AT PROJECT LEVEL

• Optimizing control over contractor and sub-contractor activities: the main difficulty encountered today in implementing the societal approach is the lack of control and influence that Total sometimes has over its contractors and especially its sub-contractors, and indeed its suppliers. Despite the contractual relations that bind them, it is essential to ensure that all parties comply with the clauses and objectives defined by Total (respect for human rights, labor rights, etc.). The contractor shortlisting phases—based on their HSE performance—and the implementation of guidance measures still need to be defined in greater depth.

• Ensuring project sustainability and creating shared value: to go the extra mile in value creation at the local scale, the Group must find ways to invest in sustainable, lasting projects that can become self-sufficient and operate independently of subsidies. Notable examples of such projects are the community banks in Venezuela, developed in partnership with Fundefor, the development of micro-credit schemes in Burma, or the improvement of agricultural practices in Yemen. Other examples of sustainable projects might include “social business” initiatives developed in recent years and which deserve support (such as the Awango by Total project—mentioned above—based around the marketing of solar solutions).
Optimizing project monitoring: if our contribution to local socioeconomic development is to have a real impact, we must start by putting in place better tools for monitoring and controlling the projects that are financed by the Group. The aim is to avoid funding projects of no real benefit to local communities and to steer funding instead towards the areas where the need is most urgent. The societal approach must be given a greater capacity to anticipate the outcomes of a project.

Evaluating outcomes more thoroughly: the evaluation of the results of actions conducted locally—in this case, by Total—is gradually emerging as a distinct strand in thinking about local acceptability. To this end, evaluations by external stakeholders, notably non-governmental organizations, have been used. To take an example, Total E&P Myanmar recently organized a societal performance evaluation at the Yadana gas field. Total E&P Myanmar (TEPM) acts as operator for the Yadana consortium, which is in charge of the Yadana gas field in the Gulf of Mottama. Since 1996 the consortium has run a socioeconomic program aimed at the inhabitants of the local villages. To evaluate the project's societal performance, a partnership was set up between TEPM and the non-profit organization CDA in 2002. Six independent impact assessments were conducted by CDA between 2002 and 2011 to help TEPM adjust its strategy. Thus far, the assessments have concluded that the Yadana socioeconomic project makes a positive contribution to the quality of life of the communities in the region of the pipeline but that it needs to adopt a more sustainable approach in order to avoid creating inequalities within the communities. These assessments, over which Total has no influence, are published and available on the Internet.

4.2. AT THE INTERNAL LEVEL

Consolidating the internal dissemination of practices and messages: the people in charge of operations do not necessarily have the time, or sufficient objectivity, to devote themselves entirely to this approach. Stronger support from societal teams in the field is therefore necessary. This involves stepping up specific training modules on themes such as stakeholder dialogue and the monitoring of local development projects.

Monetizing the cost of societal risk: calculating the cost of inertia in societal action would improve both the management and the impact of our local acceptability strategy, as well as the internal dissemination of key messages. The tools developed to date, however, are still incomplete; the existing work on the cost of societal risk needs to be pursued.

These improvement routes are not only shaping tomorrow’s acceptability priorities, they are fostering a philosophy based on creating shared value for all stakeholders. They will validate the local acceptability approach as part of Total’s global strategy, while at the same time creating more sustainable and measurable value for the stakeholders, and will help develop further thinking in a spirit of respect, continuous dialogue and transparency.
INTRODUCTION

Planet Earth needs more and more water and more and more energy, due to growth in population and consumption, especially in developing countries. CO₂-emitting fossil fuel resources—hydrocarbons such as natural gas, oil and coal—are being consumed at a growing pace, and reserves are inevitably running out, to the detriment of future generations. Post-COP 21, the increased use of renewable energies is a necessity, reinforced by the Paris Agreement. The most economical of all renewable energies is hydroelectricity: it is competitive without costly subsidies, and without posing problems of storage or intermittent supply for electricity network operators. It also offers unique advantages for electricity network operation (frequency and voltage regulation).

Demand for fresh water, drinking water and water for irrigation will also greatly increase, with the projected change in climate. Without water, there can be no life on our planet. Fresh water resources are limited and poorly distributed. There are regions where the water supply is the absolute pre-condition for any improvement in standards of living—which are currently too low—and even for the survival of existing communities, as well as the satisfaction of the ever-increasing demand that results from the rapid growth in their population. Such regions cannot do without the contribution that dam-reservoirs make to the management of water resources. We will have to greatly increase our water resources and build new dams. Water storage infrastructures are seen to be indispensable tools both for sustainable development and for adjusting to climate change. And yet the development of dams is controversial, in both the North and South, due to its potential impacts, and new projects often come up against (sometimes vigorous) opposition. The social acceptability of dams is therefore a question of prime importance, and this paper seeks to outline some answers and lines of enquiry, concerning awareness of environmental and democratic issues, with examples of actions in developing countries.
1. THE DEBATE: THE BENEFITS AND DRAWBACKS OF DAMS

The main utilization of the world’s great dams is for food production, by irrigating land that would otherwise be desert. California and Provence are good examples of how dams can transform a territory. Before: drought and desert. After: highly productive regions. The greater part of global demographic growth is happening in arid regions that need water to produce food, or in regions where rainfall is very irregular (monsoon lands), therefore requiring storage methods such as dams’ reservoirs.

Hydroelectric energy, with a global output of 2,100 TWh, currently represents 20% of total electricity production and about 7% of all the energy consumed in the world. Hydroelectric dams facilitate adjustable electricity production, by storing huge quantities of water in their reservoirs.

Dams hold back river water. By means of turbines, they generate electricity from a renewable source with very few CO₂ emissions. This is hydroelectric energy production—“hydro” to its friends. Unlike wind or solar energy, hydro energy can be stored (in reservoirs) in order to generate electricity when needed, simply by opening the gates. This natural storage of energy is the most competitive form of power storage, making use of PSPSs (Pumped Storage Power Stations), which are crucial for electricity networks and play a key role in integrating other modern renewable energies (solar and wind) that are by nature intermittent.

In addition to producing clean carbon-free energy, dams can also, simultaneously, serve other functions: irrigating cultivated land, supplying communities with drinking water, reducing flood flows, replenishing low-water levels, aiding waterway navigation, using reservoirs for tourism and sports, fish-farming, protecting estuaries against tidal backup, and so on.

From an energy and climate viewpoint, dams are clearly very positive, and perhaps even represent the most advantageous of all renewable energies, provided that geography and hydrology allow for it.

But dams also have downsides: impacts on biodiversity, conflicts of use, risk of breach, and sometimes the displacement of local populations, arousing opposition. And indeed, every dam, hydroelectric or otherwise, blocks watercourses and constitutes an obstacle to the circulation of certain species (fish swimming upstream, notably migratory species such as salmon and eels) and sediments (sand, mud, etc.) which consequently build up and can concentrate pollutants in the reservoir. The absence of new sediments downstream of the dam can cause erosion problems that modify the aquatic environment, undercut riverbanks, or wash away beaches. Dams are therefore a double-sided coin, with a positive side (energy, drinking water, irrigation, flood regulation, river navigation, fight against drought, etc.) and a negative side (ecology, sediments).
2. DAMS AROUND THE WORLD

The map below presents, schematically, the potential hydroelectric power capacity in the various regions of the world. The blue vertical bars represent existing hydro production, and the red bars the economically exploitable capability. It is clear at a glance that North America and Europe have already exploited almost two thirds of their capacity, but that Asia, Latin America, and above all sub-Saharan Africa, still have enormous potential for renewable hydro energy that remains to be developed.

In the USA, major dam programs were built during the New Deal: the Tennessee Valley Authority (TVA), the Columbia River Basin, etc. They played a fundamental role in the development of the country’s interior. Prior to the TVA, the Tennessee valley was still under-developed, with a population marked by high rates of illiteracy and ravaged by malaria. Hydro is the largest source of clean electricity in America, accounting for 51% of all renewable energy production in the USA. However, environmental concerns are growing, and it is becoming very difficult to create new facilities: very little hydroelectricity has been brought on stream in the USA over the last 20 years. Although President Obama announced his intention to relaunch the program, the construction of new hydroelectric dams in the USA is currently limited for several reasons: the best sites are already developed, clashes with protesters over environmental issues are increasing, and restrictive regulation is scaring away investors who might be interested in hydro, as the licensing process becomes ever longer and more difficult. Increases in hydroelectric capacity are therefore limited mainly to reinforcing and improving existing structures.

In Canada, Hydro-Quebec has developed large dams in the North, in James Bay, a highly profitable source of electricity, which is partly exported to neighboring regions and the USA. In China, the country with the world’s fastest growing economy, mounting energy needs are driving an ambitious program: more than 50 major dams were planned in the 12th five-year plan (2011-2015) to achieve the 15% renewable energy target in China—the world’s leading greenhouse gas emitter—by 2020. China has, by far, the largest hydroelectric potential in the world.

Since July 2012, the famous Three Gorges Dam has reached full power at 22,500 MW, the current world record (a capacity equivalent to more than a dozen nuclear reactors or some thirty coal-fired power stations). More than 1.2 million people were resettled, and more than a hundred towns and villages disappeared under the waters of the Yangtze. It is worth remembering that the main motivation for building the dam was not electricity production but rather to combat the violent floods to which the Yangtze was prone, which regularly killed thousands of victims (100,000 dead in 1911, 145,000 dead in 1935, 33,000 dead in 1954) and left hundreds of thousands of homes destroyed and families with nowhere to live.
The new Xiluodu Dam, a 278-meter-high arch dam, has been linked to a 13,860 MW hydroelectric power plant since 2014, making it the second largest hydro dam in China after the Three Gorges Dam (and the third in the world after Itaipu, in Brazil-Paraguay). 180,000 people were displaced.

In Egypt, the great Aswan Dam on the Upper Nile, built by the Soviets in the 1960s without any environmental impact study, has unfortunately had negative consequences, holding back the sediments of the Nile that build up and clog the reservoir, and are sorely missed in their role of providing fertilizing silt for the floodplains of the Nile. Since its construction, however, Egypt has avoided the famines that had afflicted the country regularly for centuries.

In sub-Saharan Africa, where the rate of electrification remains very low despite an explosion in demographic growth, there is an enormous hydroelectric potential to be developed. One need only look at the dams of Manantali (Mali, Senegal, Mauritania), Gafahri in Guinea, “Renaissance” in Ethiopia, on the Upper Nile, Ruzizi 3, the Zamblezi...

The Grand Inga Project is worth particular attention: on the Congo river, downstream from Kinshasa, it will generate almost 40,000 MW of background hydro power throughout the year (almost twice as much as the Three Gorges) thanks to a exceptional site with a “zigzag” shaped head of 80 meters and a huge flow rate in “run-of-river” configuration, with no large backed-up reservoir, thus limiting the environmental impact, and making the cost per kWh produced and delivered extremely competitive. The potential capacity far exceeds the needs of the DRC, but South Africa is interested in the project, which would enable it to reduce its dependency on coal; moreover, part of the vast energy of the Grand Inga Project is to be devoted to an “Energy for Africa” program. There are many other sites that could be developed in Africa, and projects that could be financed within a renovated institutional framework that allows investors to participate in public-private partnerships.

2.1. A RECENT EXAMPLE: THE NAM THEUN DAM

The Nam Theun project, a dam in Laos that supplies power to Thailand, strives to be the model of a successful project: creating local wealth while preserving natural resources, providing access to water, and regulating the course of the river while reducing greenhouse gas emissions. An exemplary program has been put in place to resettle local communities.

The sustainable development of dams (complying with the criteria defined by the World Bank and with the CIGB guidelines) is indispensable for access to energy in developing countries. It resolves problems of drought and river regulation, as well as access to energy, without using fossil fuels, and is a far more regular and reliable renewable energy source than wind. The only requirement is that we define ground rules that are valid in the long term and which preserve the environment, by means of detailed and credible impact studies.

2.2. A FRENCH EXAMPLE OF ACCEPTABILITY ULTIMATELY ACHIEVED: THE TIGNES DAM

France’s highest dam, the 180-meter high Tignes Dam, was for a long time Europe’s highest dam. Situated in the Chevril valley on the Isère river, it is a beautiful, curved arch dam.

But this large-scale project had a very bumpy ride... When it was launched, in 1948, the project came up against strong resistance from the local population. The inhabitants took the case to court, seeking to obtain the annulment of the decrees declaring the dam project to be in the public interest, and contesting the offered amount of compensation for expropriation. The building of the dam and the creation of the reservoir, the artificial Lake Chevril, submerged the village of Tignes and five hamlets. At the time, there were even some attempts to sabotage the construction. The lake eventually engulfed the village, its church, and its cemetery. Four hundred people were displaced when the dam was built, and rehoused in the new modern village of Les Boisses built a few kilometers from the historic Tignes (and which is now a well-known ski resort).

Despite the fierce local opposition at the time, the dam addressed a real national need: after the Second World War, there was no choice but to build new electricity production infrastructure in order to meet the large rise in electricity demand.

70 years on, Tignes is well-integrated into its environment, and a successful example of both social acceptability and regional development.

3. THE DIFFICULTY OF GAINING ACCEPTANCE FOR DAMS TODAY

In France today, would it be possible to build a dam project such as Tignes, engulfing villages and hamlets? It seems unlikely, given the strong emotional and even violent opposition to small-scale dam projects, such as the simple irrigation reservoir at Sivens in the Tarn valley, which regrettably led to violent clashes in October 2014 between anti-dam protesters and the police, and in which an environmental activist was killed.

It would be fair to say that dams embody a contradiction: globally, they have many advantages, but locally — especially for local populations — the advantages are outweighed by drawbacks: flooded land leading to dispossession and discontent, thus requiring assessment and compensation.

More broadly, a structural opposition emerges between the public interest, which is situated at a wider territorial level—perhaps national or even planetary—and local interests, rooted in the areas directly concerned by each dam and reservoir project.

Yet acceptance must be found at every level, global and local. In the past, and particularly in developing countries, there were cases of so-called “white elephant” dam projects that paid no regard whatsoever to local realities. These dams—often associated with mining operations—contributed to some extent to industrial development, thanks to the electricity generated, but were of no benefit to the...
populations affected by their construction. In some cases, local communities were still without electricity 20 years after the dam was built. This local level is now more important than it used to be, with less central government control, and more local power devolved to “civil society”.

In the case of the monumental Three Gorges Dam, more than a third of the total budget is estimated to have been allocated to operations designed to compensate affected populations.

Dams have a critical geographical component: they can only be located in geographically favorable sites, with a strong head of water: a good gradient and an adequate flow of water in the river. Such sites are often inhabited. It is important to bring local populations in on the project, in all of its aspects, not least its cultural and sociological components.

Today, potential hydro sites (typically in mountain valleys) are often a long way from the centers of consumption; the electricity therefore has to be transported over large distances, or even between countries, such as Laos and Thailand for the Nam Theun project. Good cooperation is required between countries, as well as stability to limit the risk taken by investors. Very large-scale projects are the most complex of all. When it comes to acceptability, in certain cases “small is beautiful”.

At the global level, non-governmental organizations (NGOs) opposed dams in the 1990s, demanding the abandonment of funding for large dam projects, sparking controversy. The World Bank, previously one of the main backers of dam projects in the third world, had halted almost all funding during the 1990s, preferring to focus on telecommunications. In May 1998, in response to the controversy over large dams, it set up—jointly with the International Union for the Conservation of Nature—the “World Commission on Dams” (WCD), which published its report in November 2000. The report was given a lukewarm reception.

While there was general agreement on the five core values and the seven strategic priorities set out by the WCD, the dam experts representing ICOLD expressed strong reservations about the policy principles and guidelines proposed in the report. The anti-dam NGOs, by contrast, welcomed the WCD report with joy and treated it as gospel, and beyond dispute. Time has delivered its verdict: according to professor John Briscoe 1 from the Harvard School of Engineering, “… [the WCD] was over since it published its final report. At that time, none of the large dam-building nations supported it and nobody used it since then to build a dam.”

Given these facts, and the growing influence of emerging countries at the World Bank, the latter revised its stance on dams. This radical change took the form of a New Water Sector Strategy, adopted in 2003. At the same time, the Bank’s departments were working on guidelines for better addressing the environmental and social impact of large dams. These enabled the financing of hydro projects in developing countries to resume.

Recently, Rachel Kyte, speaking as the World Bank’s Vice President and Special Envoy for Climate Change at the Global Water Forum, went so far as to assert that “as we move toward green growth, large-scale water infrastructure has an essential role to play”. And the World Bank has begun to fund feasibility studies on large dams again, on the condition that its environment guidelines are followed.

Dam builders therefore had to expand their criteria for assessing projects. In addition to the three classic criteria of technical, economic and financial feasibility, dam projects must now meet a fourth, very demanding, criterion: that of their acceptance by the public and by elected representatives. This criterion has become as important as the safety criterion.

Beyond the environmental question in the strictest sense, there is a social aspect, one that touches on a broader meaning of the word “environment”: people, their land, their habitat, their economies and traditions. The impact of dams and reservoirs on this environment is inevitable and undeniable; land is flooded, people are resettled, the continuity of aquatic life along a river is interrupted, and the water flow is modified and often reduced by catchments. Thus, dam engineers find themselves confronted with the basic problems inherent in transforming the natural world into a human environment. In our never-ending quest to provide a growing number of people with a better life, the need to develop natural resources, including water, means that the natural environment cannot be preserved completely unchanged. But great care must be taken to protect the environment from all avoidable harm or interference. We must cooperate conscientiously with nature’s inherent fragility as well as its dynamism without ever overtaxing its powers of regeneration, and its ability to adapt to a new but ecologically equivalent equilibrium. And we must ensure that the people directly affected by a dam project are better off than before.

Today, the process of building a dam is very different from what it was in the 1960s, when the engineer was in sole command. The economist and the financier took their place on the project team during the 1970s and 80s. More recently, since the first UN Environment Conference (Stockholm, 1972), the enormous increase in human knowledge, particularly in the field of environmental science, means that a whole

1 Shortly before his death in November 2014, John Briscoe was awarded the Stockholm Water Prize for his work in support of development.
A team of specialists is needed to access and utilize that knowledge for any water resource development project. This multidisciplinary approach is better able to encompass the full complexity of this type of project.

The larger the project, the greater the effects on the natural and social environment, and the wider the scope of the multidisciplinary studies that will be needed. Large-scale dams require integrated planning for an entire river basin before any construction projects are implemented. Where river basins are part of more than one country, such planning presupposes international cooperation.

Involuntary resettlement must be handled with special care, managerial skill and political sensitivity based on comprehensive social research, and sound planning for implementation. The associated costs must be included in the comparative economic analyses of alternative projects, but should be managed independently to make sure that the affected population will be properly compensated. For the communities involved, resettlement must result in a clear improvement of their living standards, because the people directly affected by a project should always be the first to benefit, instead of suffering for the benefit of others.

Special care must be taken for vulnerable ethnic groups. Hence, the organization of the overall decision-making process, incorporating the technical design as a sub-process, should involve all relevant interest groups from the initial stages of project design, even if the existing legislation does not (yet) demand it.

Such concerted action requires continuous, comprehensive and objective information on the project to be provided to governmental authorities, the media, local action committees and NGOs, and—above all—to the people directly or indirectly affected, and their representatives. In this transfer of information from planners to public, dam engineers must contribute, through their professional expertise, to a clear understanding and dispassionate discussion based on facts, and not on emotive ideas about the positive and negative aspects of a project and its possible alternatives. Dam promoters must act as mediators and educators in order to win acceptance.

Kurobe Dam, in Japan, is designed mainly to combat flooding (photo: ICOLD-CIGB)

CONCLUSION

Are dams a benefit, a valuable water and renewable energy resource? Or a necessary evil?

There is a growing awareness among certain NGOs specializing in development that well designed, well-built dams can be effective instruments of sustainable development.

Conversely, in “democratic” countries, it is becoming increasingly difficult to implement large-scale projects (power lines, high-speed rail lines, dams... even wind projects). These meet with strong opposition, even giving rise to defense committees.

So many questions, for which there is no single answer — and no one-size-fits-all model. When it comes to the demand for energy in the field, multiple factors — technical, financial, institutional and psychological — come into play. Social acceptability is imperative. We must remain concrete and pragmatic: a multitude of micro-decisions is involved. Although the sheer multiplicity of actors can make partnerships complicated, it is important that these are developed, thus combining and integrating the know-how and value of the contributors — public sector, private sector and market forces — and setting up local companies to run and maintain the installations and market their services over the long term.

We believe that to be effective in meeting the huge energy, environment and sustainable development challenges that lie ahead, the cooperation of all of the actors will be needed for a long time to come, in particular that of the users and communities concerned, through a continuous effort of learning and education. The answer surely lies in successful implementations in the field, close to local populations, in a way that is innovative, sustainable and reproducible, creating a virtuous circle of progress.
SUPPORTING THE ENTREPRENEURIAL FABRIC: leveraging big companies’ social acceptability and sustainable impact on local development

In view of the challenges developing countries are facing, big companies are setting up new models that seek to benefit both themselves and local populations. Often conducted in partnership with NGOs, these projects involve training young people and providing support for SMEs, and enable big companies to undertake actions that have a lasting impact on a country’s development.

In this interview, Xavier Boutin highlights the means to implement successful programs adapted to the local context by talking about the different projects carried out by the IECD in partnership with major companies. He also reveals the elements necessary for the success and sustainability of projects to train young people and support the local entrepreneurial fabric.

IECD (European Institute for Cooperation and Development) is a development assistance agency created in 1988 at the initiative of entrepreneurs and academics. IECD promotes the human and economic development of the countries where it operates and seeks to build supportive environments where everyone has the opportunity to develop their talents through education and vocational training. IECD also works to support small enterprises and promote access to health and education for vulnerable people. The organization conducts 45 development projects in 14 countries with more than 50,000 beneficiaries. Xavier Boutin is co-founder and general director of IECD.

KEY WORDS
- NGO / BUSINESS PARTNERSHIPS
- LOCAL CONTENT
- TRAINING
- SUPPORT FOR LOCAL ENTERPRISES
David Ménascé: While emerging countries are confronted with a strong increase in unemployment rates and SMEs find it difficult to access the services required to launch or consolidate their activities, big companies are developing win-win models, frequently with the support of NGOs, focusing on training, access to funding and innovation. What do you think of these models and to what extent do they enhance the social acceptability of large companies?

Xavier Boutin: Big businesses contribute to local development insofar as they help develop the entrepreneurial fabric and require a skilled workforce, which they employ either directly or indirectly, when they contract work out to other businesses that use this skilled labor. These businesses in fact need to be able to count on a workforce which, in addition to having theoretical knowledge of the activity, has been able to put that knowledge into practice, in particular through internships or work/study training programs, in large firms or in partner businesses.

The example of Schneider Electric is interesting because the group works in the areas of civil, industrial and electrical engineering, which have a high potential for improvement of industrial efficiency. This type of business also has sub-contractors, who buy the equipment, distribute or use it in various sectors (building, industry, elevators, etc.). We have tested vocational training models with Schneider Electric in Lebanon, Morocco, Egypt and Nigeria. In Morocco, especially in partnership with Schneider Electric and Nexans, one of the components of the program consisted in creating a training center for apprentices in Mkanssa, a suburb of Casablanca. It is one of the first learning centers in Morocco for the electricity trades, set up in a building supplied by the Moroccan authorities and run by civil society. We offer young school dropouts basic training in the electricity trades, as well as proficiency courses in French and IT. The courses also promote the acquisition of “life skills” (teamwork, communication, respect for others, punctuality, empathy, etc.). The course lasts one year, during which trainees alternate between four weeks in a business and one week at the training center. These young people, who are trained in particular in the use of Schneider Electric hardware, do their work/study experience in businesses that use similar equipment. Once they have graduated, they can join the workforce of that business, which is sometimes a subcontractor or distributor of Schneider Electric.

This model, which has proven its worth, strengthens the top to bottom entrepreneurial integration in a given sector or trade, thanks to the contribution of a professional workforce, qualified and aware of energy performance issues, and to the establishment of manufacturing plants or chains that use innovative and modern technologies. For Schneider Electric there are multiple benefits, including enhancing its local acceptability. First of all, it is the most direct way of promoting its technology and know-how. There is also a visible impact on its image and the public’s knowledge of its business. In addition, across the four countries where the program is currently implemented, the insertion of over 800 young people per year into hundreds of industrial transformation, building or maintenance companies, represents a unique opportunity to penetrate the world of Moroccan SMEs. Added to this is the issue of electrical standards: the manufacturer that manages to assert its standard and influence local regulations will enjoy a significant advantage on the market.

D.M.: Would you say that the development of business/NGO partnerships focused on supporting the entrepreneurial fabric, whether or not it is of local content, is recent?

X.B.: IECD was initiated by Total in this approach, which I find innovative. A workshop was conducted through the “Business Development” program on the Bakassi Peninsula in Cameroon. In this production area, which crystallizes the issues of acceptability, the company cannot employ a lot of local manpower and populations may accordingly feel they do not benefit from the activity. Given that these very small businesses do not have the capacity to become suppliers, the Group decided to focus on strengthening the entrepreneurial fabric in the broader sense.
The Bakassi Peninsula experience led us to work with Total in the Port Harcourt region in Nigeria, which faces a similar problem. We sought to go beyond the conventional approach – often based on the distribution of electricity or the renovation of roads and buildings – and train entrepreneurs and allow them to benefit from the company’s know-how in the fields of management and performance. For that purpose, we adapted our Cameroon program by supporting a center in Nigeria called Small Medium Enterprise Development Network (SMEDN). The program was intended to allow these companies to improve their performance as regards administrative and financial flows management, via a six-week general training course followed by individual assistance for the business for six months, including an assessment of the impact on the business in terms of profit, profitability and job creation. The entrepreneurs who followed the course acquired a far greater degree of mastery of the business tools than can be achieved through labor-intensive programs where teaching relies on simplified and schematic kits.

These programs have a very high impact on access to jobs and reducing unemployment. On the one hand, consolidating small businesses by rationalizing costs, improving organization and implementing a more adequate market positioning may lead them to grow and create new jobs; on the other hand, simultaneously offering young people technical and managerial training is likely to improve their employability.

D.M.: How big are the companies that IECD supports? Is it only SMEs?

X.B.: Local SMEs are indeed our core target. Generally speaking, the targets of our programs are small and very small enterprises, whose turnover varies between 2-3 and 10-15 million CFA francs per year, to give an example on the African continent. We look for entrepreneurs who have a business project. Some of them discover through our program that they head a true small business, which to grow requires a vision and ambition. Through our training and support, entrepreneurs can take a more objective look at their activity and understand what they can implement in terms of organization, performance, expenditure management, etc.

The program involves several stages during which the enterprises will grow. In the entrepreneurs’ club, which brings together the beneficiaries of past courses, IECD supports certain businesses, which move from a logic of survival to logic of a construction.

Under the program to support very small businesses (VSBs) in Ho Chi Minh City (Vietnam), cheese manufacturer Bel asked us to assist street vendors on bikes selling fruits and vegetables, so that they could sell The Laughing Cow products. The challenge for the company was to enable these women vendors to distribute a Bel product to a very large number of people with low purchasing power, and having an impact on nutrition (The Laughing Cow is often in used sandwiches instead of mayonnaise or margarine).

We had to develop an extremely simplified support program, aimed at improving their activity’s performance so that they could, in particular, achieve a greater cash flow. As regards acceptability, the aim was to make them understand the benefits of the Bel product, not just for their customers but also for their commercial activity. In this case, this very simple training was intended to promote the image of the product and the company to the vendors, but also help them grow their activity. These saleswomen do not carry stocks because they have little ready cash and do not always understand how their cash flow works nor how to optimize it. This means that they don’t know how much money their activity earns them, if any. But they must be able to determine the gross margin in order to pay for overhead costs, pay themselves or even reap a profit. In this kind of training, it would be possible to introduce the concept of savings, especially for the women, who manage the family and domestic expenses.

This project incorporates the entire socio-economic fabric of the neighborhoods. Approaching the subject through the Bel product makes the training appealing for the street vendors, creating a direct link between the product that they are invited to sell and the training course. The Bel Access approach is very attractive because it involves several factors: in addition to strengthening the vendors’ capacity and ensuring a better redistribution in the value chain, the fact that saleswomen are deeply embedded in the social fabric makes it possible to achieve a nutritional impact on the populations, particularly children. The Bel Access product therefore has an integral role to play, and increases the motivation of this very specific “micro” public, the street vendors, with whom we do not usually work because they are very difficult to reach out to.

In the VSB support framework program that IECD promotes and provides in 10 countries, it is the small entrepreneurs, exercising varied trades, who take the initiative to take part in the training courses. By contrast, for the street vendors, the program must be adapted to match their profile and concerns and be taken to them. This is rather complex because these women work all the time, are mobile, and it is difficult to convince them to follow a training course; this is not the case for an entrepreneur,
who is better able to manage his time and orders. Added to this is the issue of literacy and numeracy, which are absolutely essential to run a small business.

**D.M.: What are the main benefits for IECD of operating within this kind of partnership with big companies?**

**X.B.:** There are multiple benefits. To return to the partnership with Bel, it has allowed us to move into a new geographical area – Ho Chi Minh City in this case. We already worked in Vietnam, but not in providing support for very small enterprises; and we would have undoubtedly been more reluctant had this not been the case, given the costs and the professional deployment required when first starting to operate in a country. This project was an opportunity that allowed us to gain experience in Vietnam and has truly given us a boost, professionally and to morale.

The program is now very broad, and we have extended it to other populations, in particular through a partnership with the oil company Perenco, whose way of operating was different to Bel since the company wanted to set up a CSR/philanthropic-type program through its subsidiary, carrying out local development actions that were not directly related to the company’s activities. Perenco sought to showcase its involvement in the country’s development, beyond the royalties or fees paid to the public authorities for its activity. Its expectations were centered on obtaining recognition, both social and institutional from the Vietnamese authorities.

**D.M.: In addition to these training programs targeting local entrepreneurs, does IECD develop other types of partnerships with businesses?**

**X.B.:** Yes, we have also started developing “social businesses”. For instance, we are working in Cameroon and Côte d’Ivoire with Compagnie Fruitière. IECD created an agrifood technology laboratory on a venue provided (and previously equipped) by the company, open to small producers who need to increase the value of their products (e.g. transforming pineapples into juice). The site operates today through subsidies from IECD but aims to become profitable within two to three years by charging a fee. The goal is thus to establish a “business incubator” that both helps process farm produce and also supports the activities of these small enterprises. Although Compagnie Fruitière does not directly benefit from this laboratory – it does not process the company’s products – it derives many benefits from this strategy: the laboratory is a place to brainstorm operational ideas, has a direct impact on local economic development and employment, and enhances the company’s local acceptability and societal impact.

**D.M.: In the light of your experience and the many projects that you have conducted with big businesses, what do you think are the key factors to ensure the success of these partnerships?**

**X.B.:** Mutual understanding is essential. In most cases, the problem is conveying the vision of the head office to the subsidiaries, which will be the key players in implementing the projects, through their privileged position in the developing countries. The subsidiary’s understanding of the project is crucial to avoid sticking points in adapting the project and implementing it in the country. It requires a good relationship between the head office and the subsidiary around this shared project. Any change in the composition of the subsidiary’s management may disrupt the quality of the partnership.

To address this, we try to involve the subsidiary in the project as much as possible by using steering committees, to ensure that the subsidiary as a whole, including its management, is involved in the project’s implementation and understands what it stands to gain, in particular by communicating with the local authorities and thus interacting with the institutional, regulatory and political environment. This communication is essential for the businesses, whose ability to penetrate the market will depend on their future actors, the employees and the small businesses.

In addition, any disparity between the views of the subsidiary and the vision of the head office quickly becomes apparent, with the latter often setting very ambitious goals in terms of the number of beneficiaries. As far as the initial vocational and technical training of young people, is concerned, it is important to focus on quality if you want to end up with quantity. Thus, for the program to have a sustainable impact on young people and businesses, training must be organized in such a way as to be intensive rather than extensive. The young people must be familiar with their activity’s environment and the scientific, technical and technological aspects of the products it uses. It is also necessary for the training to address both academic and human factors that better prepare them to enter the world of business and adapt to life’s changing circumstances. At IECD, we always strive to ensure they achieve a sustainable work situation, and I think it is important to share this goal with the businesses.

This means that, for the partnership to be successful, constant dialog is necessary not just with the subsidiary but also with the head office, to explain that overly ambitious goals in terms of communication and CSR can be detrimental to a project’s success.

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**“FOR THE PARTNERSHIP TO BE SUCCESSFUL, CONSTANT DIALOG IS NECESSARY, NOT JUST WITH THE SUBSIDIARY BUT ALSO WITH THE HEAD OFFICE, TO EXPLAIN THAT OVERLY AMBITIOUS GOALS IN TERMS OF COMMUNICATION AND CSR CAN BE DETRIMENTAL TO A PROJECT’S SUCCESS.”**
2. CREATING THE CONDITIONS FOR SUCCESS
This second part analyzes the conditions for success and focusses on three key challenges.

Understanding the change in risk perception
Firstly it is necessary to analyze the changes in the public’s perception of risk, in order to better understand the way in which perceptions of industrial projects are formed. This is the focus of the article by Alain Mergier and Grégoire Biasini.

Measuring the overall costs
Steps must also be taken to measure the overall social and environmental costs more precisely. Organizations will only be capable of making a sustainable commitment if there are specific tools available to monitor their social and environmental risks. This is the approach, explained by Johan Clere, that Veolia has developed and which allows them to calculate the full costs related to poor management of water resources on an industrial project.

Incorporating the role of public authorities and the definition of the general interest
Participatory democracy, changing means of communication, a policy of transparency: these are all factors explaining the growing interest of citizens and civil society organizations in large projects. Above all, these new trends reaffirm the primacy of the individual. Indeed, the goal is that every voice should be heard. But this is paradoxical: citizens are invited to participate and take an interest in the debate, but they are also asked to be disinterested, i.e. to not put their individual interests first. If they do, they are accused of succumbing to the NIMBY (Not In My Back Yard) syndrome. The rise in civil participation has to a large extent grown out of technology - the proliferation of mobile devices (telephones and mobile internet) has vastly extended the reach of social networks. These new approaches to project management are not without their critics; indeed, the risk is that they reinforce a culture of “me, I” (Regis Debray), in which the general interest takes a back seat to individual demands.

How, then, to draw the line between the general interest and special interests? This is addressed in the interview with Melchior Wathelet, former Belgian Minister of the Environment, Energy and Mobility, who discusses the evolution of the concept of general interest and how to reconcile the interests at stake.

Forming alliances and partnerships with NGOs and residents’ groups to ensure better project acceptability
Partnerships between NGOs and businesses have multiplied in recent years. These alliances have a dual effect. Firstly, they reinforce the businesses’ legitimacy and social acceptability. Philosopher Ulrich Beck explained that civil society has a power that is completely foreign to conventional politics: it is a power that comes neither from the State nor the market, but is a power of legitimation¹.

Secondly – and most importantly – these new alliances increase the effectiveness of local action by NGOs, while helping businesses reassess the way they view their activity in the territories in which they operate.

It is edifying to show how the new law concerning corporate social responsibility in India – which requires businesses of a certain size to devote 2% of their net profit to social projects – has created a virtuous dynamic. Using the case of Ambuja Cements and other Indian companies, the article by Srikrishna Sridhar Murthy, Sanjeev Rao and Aarti Mohan presents the four key factors for success of such partnership strategies: co-creation, sustainability, local teams and long-term investment. Finally, Franck Renaudin, founder of the NGO Entrepreneurs du Monde, talks about the stakes, the key factors for success and the potential risks associated with these new forms of partnership.

1 Ulrich Beck, Power in the global age, 2005
INTRODUCTION

Public actors (policy-makers or elected representatives), scientists and manufacturers are frequently confronted with resistance from public opinion, in the course of their activities or their attempts to innovate. Examples abound — from nanotechnology to GMOs to fracking, not to mention almost any kind of “reform” — of the difficulty of convincing or reassuring a public that is fearful of many dangers, real or imagined.

In general, public opinion adheres to the precautionary principle, characterized by resistance to innovation and to economic development. Consequently, the social and environmental acceptability of projects — particularly major projects — has diminished. This has resulted in deadlock for a wide range of projects, where the gap between public opinion and that of experts or institutional actors can seemingly not be bridged.

This gap stems in large part from changing attitudes to danger; perceptions of danger have evolved, bringing with them new attitudes and beliefs. By taking account of these changes, we can develop a new analytical framework for understanding deadlock situations and the different perspectives at play, and — in the case of projects involving issues of social or environmental acceptability — new methodological tools for planning ahead and for designing communication strategies.

Nanotechnologies, GMOs, fracking, radioactivity... Modern societies are characterized by both the proliferation of risks and an increasing difficulty in assuaging public opinion. This article analyzes how perceptions of danger have evolved and identifies key questions when it comes to social acceptability of projects.
1. A PROFOUND CHANGE IN ATTITUDES TO DANGER

1.1 DANGER, RISK, THREAT

To understand the diminishing public acceptance of risk, we made the assumption that our relationship to danger has changed, and with it the capacity to cope with or manage uncertainty.

To test this hypothesis, we developed a model that distinguishes between two different approaches to the management of danger.

The first is the historical scientific construction based on risk analysis, i.e. calculating the probabilities and comparing the costs and benefits of any given event. In this framework — which we call the “regime of risk” — risk can be calculated and quantified rationally. Given the probability of an event occurring, and the expected outcomes, one can make a fully “informed” decision. Uncertainty does not disappear, but it is to some extent circumscribed and can be managed rationally.

Our hypothesis is that this risk-based model of danger management, on which science and progress in the west depend, has been brought into question by public opinion. For multiple reasons, trust in this model has been eroded. Consequently, the scientific construction of our relationship to danger is no longer seen as offering security or reassurance, and is no longer sufficient to convince public opinion to “take the risk”. When public opinion loses faith in the fundamentals of this construction, the public is no longer able to adhere to the model, and can no longer adopt a rational position on the questions asked. As a result, the impression of danger is increased.

But danger has not gone away; we must therefore reconstruct our relationship to it. As the regime of risk is no longer operative, public opinion has, de facto, developed a new way of experiencing its relationship to danger, organized around what we have termed a “regime of threat”. Where the regime of risk deals with uncertainty by means of rational calculation, the regime of threat operates through a quite different register, in which the relationship to uncertainty can no longer be rationalized. The threat is not something that is calculated, and it is no longer possible to make an enlightened decision. As a result, risk-based danger management is destabilized by this new approach based on the notion of threat.

The difference between risk and threat is central to our core hypothesis. It is the key to understanding the divergences between institutional actors and experts on the one hand and public opinion on the other. While the risk model enables rational decisions and “risk-taking”, the regime of threat creates an inability to make rational decisions and to manage uncertainty. There is no such thing as “threat-taking”: one can only “live under threat”.

The change in our relationship to danger is summed up in the grammatical difference between risk — which we can take, as agents — and threat, which we can only endure as objects.

This change in public attitudes to danger is at the heart of the declining acceptance of industrial activity and innovation. It goes a long way toward explaining why it is impossible to understand each other: the arguments of the experts continue to be based on the risk model while public perceptions are based on the threat model. The public and the experts are not speaking the same language, and the arguments of the experts are falling on deaf ears.

1.2 THE REASONS FOR THE CHANGE IN ATTITUDES TO DANGER

The reasons for this change in public attitudes to danger are numerous: they are structured around an extraordinarily fierce distrust that has historical, scientific and social causes.

The crisis of trust affects many fields (political, social, economical, etc.), and one of the main ways in which it is manifested concerns the management of danger. When public opinion is marked by distrust (of politicians, experts, forecasting and calculation systems, etc.), and even by suspicion about the underlying motivations of everyone involved, it is hard for the public to buy in to the risk management model advocated by institutional actors and experts.

The depth of distrust about the relationship to danger is clearly an aspect of today’s general climate of distrust, but it also has its own specific construction, with its own dynamics.

1.2.1 The consequences of past crises

The first factor in the questioning of the regime of risk is that of past crises. Events such as the explosion of the reactor at Chernobyl, the contaminated blood scandals, or “mad cow” disease have left deep marks on public opinion. The fact that these crises happened showed that there were shortcomings in our ability to anticipate risks. They created serious doubts about the risk management system and its ability to calculate and prevent danger effectively.

Dramatic events (recurrent or non-recurrent) are generally reinterpreted in the light of what could, or should, have been done to prevent them, but wasn’t. These crises have given root to the idea that the exposure to risk resulted from choices or decisions in which financial objectives took precedence over safety goals. For public opinion, the lasting impression is also that decisions were made without due regard for safety considerations.

These various crises of the 1990s contributed, in their way, to the broader crisis of trust in government, experts, the scientific community, and institutions in general.

“WHERE THE REGIME OF RISK DEALS WITH UNCERTAINTY BY MEANS OF RATIONAL CALCULATION, THE REGIME OF THREAT OPERATES THROUGH A QUITE DIFFERENT REGISTER, IN WHICH THE RELATIONSHIP TO UNCERTAINTY CAN NO LONGER BE RATIONALIZED.”
1.2.2 The emergence of new dangers
The second factor in the emergence of a relationship to danger governed by a logic of threat is the arrival of new dangers. The risk system works perfectly with a single, identifiable event of which the probability can be calculated and which, when it occurs, produces direct, measurable consequences. This, fundamentally, is the mode of calculation and prevention of industrial accidents.

For public opinion, the new risks do not share these attributes: their source is not clearly identified; they are invisible and impalpable; it is possible to be exposed to them passively and completely unawares; the effects they are liable to produce only emerge over the long term, and their consequences are linked to a complex chain of causes and effects which are difficult to distinguish. In the past, the asbestos crisis demonstrated that dramatic consequences can appear and be recognized very late in the day. The diocin crisis has also created an acute sensitivity to these risks, which emerge only slowly and diffusely.

Some of these “new” dangers are seen as having properties that exclude them from the scope of conventional risk analysis: radioactivity, electromagnetic waves, GMOs, nanotechnologies. Given their characteristics, the uncertainty they arouse is matched by their invisibility, making it hard to apply the risk model, and hard for public opinion to subscribe to it. Additionally, the effects ascribed to these new risks coincide with public perceptions of cancer, in the widest sense, crystallizing the associated fears.

1.2.3 The inability to settle scientific controversies
The third factor in the switch from the risk model to the threat model is the new status of scientific controversy. Of course, controversies have always existed and have been instrumental, throughout history, in the forward march of progress. But the condition for a controversy to culminate in progress has always been the ability of recognized authorities to arbitrate, settle and conclude these controversies. Around this conclusion, a consensus could form, making the theory of one of the parties the new basis from which to move forward again.

But controversies can no longer be settled as they were historically. This situation is due to two phenomena. On the one hand, the crisis of trust in authority abolishes the notion of a reference authority and, with it, the ability of the authorities to settle controversies. On the other, the public is troubled by a twofold proliferation: that of scientific studies from a wide range of sources, which makes it difficult for the layman to establish a hierarchy between them, and that of the media, which facilitates access to these studies. The proliferation of traditional and online media makes it possible for anyone with the right tactical approach to reach a wide audience, independently of the institutional authority of the author (paradoxically, even more effectively, precisely because there is no apparent authority). The Internet facilitates the endless proliferation of controversies and the traces that remain will sow further doubt for the future, regardless of any groundswell movement that eventually succeeds, succeed, de facto, in overcoming the controversy.

1.2.4 The functioning of the media
Independently of the media’s role in propagating controversies, the way in which the media operate also contributes to the inability of public opinion to cope with uncertainty. This phenomenon stems from two characteristics of the media’s handling of information, which obey the economics of broadcasting. The first is the importance of revelation, which takes precedence over the actual facts; the second is the well-known media adage that good news is no news. This mode of functioning—driven by viewer, listener or reader numbers—focuses the media spotlight on scares and on alarmist voices.

The actual form of the information produced by the media also tends to exacerbate the alarmist nature of the messages it carries, as the format makes it difficult to express nuance or complexity. Whereas most new risks are highly complex phenomena, their media treatment simplifies them, ultimately focusing only the perception of the potential threats associated with them.

1.3 HOW DOES PUBLIC OPINION ADAPT TO LIVING UNDER THREAT?
There are many reasons why the public has come to distrust the risk-based system on which our relationship to danger was constructed. This is not to say that it is either pleasant or comfortable to have a relationship to danger built on a “grammar of threat”. What are its main rules and characteristics?

The grammar of threat is primarily organized around the idea that it is impossible to prove an absence of danger. Such a proof is scientifically impossible, and this impossibility reinforces the idea that there is indeed a danger. Under this regime, the harder one tries to offer reassurance, the more one provokes doubt, through a paradoxical phenomenon: if it takes so much effort to prove something, then there really must be a problem! The generalization of suspicion has left its mark.

Relay antenna
The second parameter of the grammar of threat is the belief that there is no certain knowledge on which one can depend in the long term. This dynamic of questioning former certainties is nothing other than the dynamic of progress, in which the next step often contradicts or invalidates the previous state of knowledge. For public opinion, marked by the experience of crises that showed just how badly the dangers had been underestimated, this reasoning, when applied to risks, makes reassurance impossible. It echoes a more general distrust of progress, of which the benefits are no longer assessed against the risks—under the standard “regime of risk” model—but where every danger, identified or potential, generates a fear that can grow into hostility toward any given innovation or activity.

The final parameter is the pervasiveness of uncertainty. It was not absent from the regime of risk, but it was at least contained and accepted (or not, as the case may be). In the current climate, uncertainty prevails, and it is becoming impossible to make decisions, as the danger cannot be clearly evaluated.

Although public opinion developed this grammar of threat to construct its relationship to danger, it did so largely despite itself. This situation is neither comfortable nor convenient. It places everyone in a state of total vulnerability: henceforth unable to be the subject of an action based on an accepted evaluation of risk, we see ourselves as the object of a threat from which it is often not possible to protect ourselves. Faced with these invisible, incalculable dangers, the only way out for anyone whose reasoning follows the regime of threat is to apply the precautionary principle. In this case, that means not acting, rather than waiting for potential consequences which may or may not happen but which—it is believed—are dangerous, and if they did come about, would allow no going back.

**1.4 FROM RISK TO THREAT: A PARADIGM SHIFT?**

The transition from the regime of risk to the regime of threat is not a one-way street. It is neither universal nor irreversible. It is not as if we had the regime of risk on one side, which continues to be applied and explained only by institutional actors and experts, and the regime of threat on the other, to which public opinion had defected en masse. The two regimes coexist, in permanently unstable equilibrium, and their respective proportion varies depending on the subject.

**1.4.1 Echoes of other systems of perception**

The representations of our relationship to danger echo other systems of perception that further reinforce and amplify the danger. The observed hostility to innovation or industrial activities resonates with other perceived fields of vulnerability and insecurity.

Two different but complementary registers of public perception also weigh in favor of a relationship to danger structured by the grammar of threat.

The first such register stems from the difficulties governments have in protecting their populations: for public opinion, these difficulties are linked to the hegemony of the world of speculative finance in a globalized economy, depriving the State of its traditional powers and its protective capability.

This domination of financial logic — already observed as a factor in steering public perceptions towards the regime of threat, through a whole series of formative crises — is the second register. It nurtures the idea that risk prevention will always be trumped by the pursuit of financial interests. For public opinion, this situation can logically lead institutional actors and experts to behave irresponsibly from the point of view of risk prevention.

**1.4.2 Rules of coexistence between risk and threat**

The regime of threat generates anxiety, but it also generates an inability to act. If it were to spread to every issue that comes into the public eye as regards the acceptability of activities or innovations, it would cause numerous difficulties. Such difficulties do exist in many areas, but not every topic is exclusively interpreted using the grammar of threat: for every subject (GMOs, medications, vaccines, fracking, alcohol, tobacco, cellphones, etc.), the grammars of threat and of risk coexist: it is only when the grammar of threat wins out that rejection — materialized by falling back on the precautionary principle — predominates. When the grammar of risk takes precedence, acceptability is no longer a core concern.

The first factor that “brings us back” to the regime of risk is our capacity for denial: to be constantly aware that we are under threat, and that we have no way of avoiding danger, is more than we can cope with. Denial allows us to disregard danger, to put it in context, to avoid thinking about it; an attitude that enables us to live without giving in to panic. It operates, for example, in the case of food, where we find assertions like “If you start worrying about what you’re eating, you may as well stop eating altogether.” This attitude allows us to live with danger, not by calculating the probability of the risk, but by relegating it to the backs of our minds.

The second factor, crucial in steering perceptions of danger back towards the regime of risk, lies in the perception of the benefits (utility or pleasure) associated with a given situation or activity. How else can we explain the consumption of tobacco, of which the dangers are absolutely clear and long established? Cellphones are also the subject of debate concerning the health impact of microwaves, but the benefits they offer are such that their use is not significantly limited by perceptions of the risks posed by electromagnetic radiation. The hostility in this area is focused on the relay antennas, which crystalize neighborhood reactions, reactions that overlook the individual and collective benefits of mobile telephony. The same type of reasoning is in evidence with vaccines, where the perceived individual risks outweigh the collective benefits which are, almost by definition, more abstract.

The balance between risk and threat may also depend on cultural attitudes: if we compare Germany and France on the topics of nuclear power and waste incineration, for example, we find the levels of acceptance and hostility reflected as mirror images.
1.4.3 “Public opinion is irrational”

Institutional actors and experts often conclude, when they fail to win the public over, that public opinion is irrational. This assertion does not hold water; public opinion is certainly not irrational, and why would it be? While certain attitudes may appear irrational, this is not because public opinion is “inherently” irrational: when the conditions that underpin that vital trust are not met, public opinion is deprived of the resources for constructing a rational line of conduct.

Under these unfavorable conditions, public opinion has developed a new analytical framework, and its findings are rarely aligned with what the experts would expect. This new grammar of threat, given the discomfort it causes, cannot be understood as voluntary or as a rational hostility to the regime of risk. While it may be instrumentalized by certain actors to develop opposition to a particular activity, public opinion does not have any conscious voluntary intention of adopting this new way of apprehending danger.

Whenever the divergences between experts and public opinion result in an impasse, one must examine both lines of reasoning: if the risk model no longer holds, then we must consider the threat model. Our analytical framework offers a simple explanation for recurrent problems: risk-based reasoning and argument has no sway over public opinion when the latter thinks in terms of threat. If Germans want to be understood by the Chinese, they can always exhort them to learn German, but it might be more efficient for the Germans to learn Chinese. That is currently the alternative facing institutional actors and experts if they want to be understood again by a public that no longer speaks their language.

2. FACTORS FOR CHANGE

Do divergences between institutional actors/experts and public opinion inevitably lead to an impasse? Deadlock is a satisfactory outcome for no-one: government agencies and businesses alike are prevented from acting and moving forward; public opinion is placed in a state of worry and suspicion; and the efforts of the former to persuade the latter often prove counterproductive.

Certain parameters need to be examined and worked on, if we are to have any hope of resolving these divergences. The first element to consider is the attitude of young people to danger. Perhaps it is in the very nature of the young to develop an attitude to danger that differs from the previous generation and to spontaneously take a more positive approach to innovation and progress. Whether this is the case or not, the study suggests that the generation born after the major crises that spawned the climate of doubt—a generation which in many cases never knew the era when perceptions of danger were generally organized by the regime of risk—developed a different attitude to danger-related situations, based on a greater willingness to live with uncertainty and the construction of a viewpoint on every situation that is accepted as being fragile and likely to change. Young people describe the way they assess the danger of a situation in these terms: using all available media levers to get a roundup of different viewpoints; consulting and sharing opinions with peers; and deciding on a position, which may then be tested and challenged by the same process, in response to some new event.

The second element relates to the state of distrustfulness in which public opinion is immersed, and the conditions it now lays down before any institutional or expert voice can be given a hearing. The first condition is a question of posture: the speaker must demonstrate his or her capacity for empathy with the public, an understanding of people’s experiences, viewpoints, and beliefs. Any peremptory posture is doomed to fail from the outset. The second condition flows from the first, and concerns the modes of discussion and argumentation that can be adopted; just as peremptory postures are rejected, so also strongly categorical positions no longer have credibility. When it comes to risk, there are no longer any simple certainties, and it is essential to leave room for doubt: admitting that doubt exists generates credibility and thereafter, potentially, reassurance.

3. INTERIM CONCLUSION

Once bitten, twice shy... that tends to be the public attitude on topics involving questions of danger. Public opinion is wary of experts, institutions, and truths... It will no longer listen to authoritarian posturing or official speechifying. In apprehending danger, it is reluctant to believe in the risk models that were found wanting in the past. It takes refuge instead in a highly uncomfortable regime of threat, in which the pervasiveness of uncertainty prevents it from accepting what it is told by institutional actors and experts.

In the construction of danger, grammars of risk and grammars of threat now exist side by side. Insisting exclusively on the first as though the second did not exist is a recipe for a dialogue of the deaf. It is a dead-end strategy. The road to change travels through the rebuilding of trust: trust can no longer be taken for granted—it has to be developed through a complex relationship founded on respect.
4. PROJECTS IN THE LIGHT OF THIS ANALYTICAL FRAMEWORK

The risk/threat framework can be applied to any type of project: it provides a tool for diagnosing or, better, anticipating how public opinion is likely to crystallize around a project, and the risks involved.

To this end, the framework must be applied in two distinct phases:

• Examining the characteristics of the project and of its environment, in order to analyze the representations likely to be formed by public opinion;

• Identifying the sets of actors, already present or liable to intervene, and (especially) the logic of the media, due to its influence on opinion-shaping mechanisms.

On the basis of these analyses, project holders can put together their communication strategies.

4.1 THE REPRESENTATIONS FORMED BY PUBLIC OPINION

The consequences of applying the danger/threat model weigh heavily on the development of public opinion about a project, particularly as they feed into several phenomena that are directly related (the incalculability of danger) or indirectly implied (the loss of trust in institutions, the suspicion of conflicts of interest). This last sentiment derives particularly from the perceived pervasiveness of financial logic, dictating its rules to the economy and to political institutions, to the detriment of collective concerns (the environment, health, etc.), which are relegated to second place.

As a result, public opinion doubts everything: experts, institutions, past and current truths... In its approach to many topics, it is reluctant to believe in the risk models that were found wanting in the past. In the regime of threat, the pervasiveness of uncertainty prevents it from accepting what it is told by institutional actors and experts.

This chasm of understanding goes to the heart of many disputes. To narrow the gap, we must build new relationships between stakeholders, of a kind that will create the conditions for renewed dialogue and, potentially, renewed trust.

In a project context, it is crucial to anticipate these divergences: this involves analyzing all of the representations that might be associated with a project, and measuring to what extent the arguments in favor of the project may or may not come into conflict with these representations.

4.2 THE INFLUENCE OF THE MEDIA

Several sets of actors, around any project, can be influential in shaping public perceptions, but the media play a determining role.

The workings of the media are a key mechanism in all public opinion phenomena, as the media’s status as the central purveyor of information makes them key actors in shaping opinion.

Two different logics, with cumulative consequences, are at work here: that of the media’s economic requirements, which construct a particular way of handling information, and that of the new era of instant communication.

We have already touched on two ways of handling information, specific to the economic imperatives of broadcasting, which offer fertile ground for the construction of opinion. The first is the importance of revelation, which takes precedence over the actual facts; the second is the well-known media adage that good news is no news. This mode of functioning — driven by viewer, listener or reader numbers — focuses the media spotlight on scares and on alarmist voices, providing a potentially constraining negative prism for the networks of meaning formed by projects and subjects.

The actual form of the information produced by the media also tends to exacerbate the alarmist nature of the messages it carries, as the format makes it difficult to express nuance or complexity. The media processing of information tends towards extreme simplification.

The era of instant media communication relies on technological foundations that enable constant availability of access to any content produced anywhere in the world. Media channels are gradually converging, to merge all uses together on a single terminal, but two different production approaches are still in evidence: that of the media from the conventional sphere, which handle continuous flows of news and information, and that of the decentralized production of content via social media. With the social networks, and through instantaneity, new ways of constructing and sharing information are coming into play: a change of nature that also induces changes in behavior, particularly in the consumption of information.

The development of the instant-media society has many consequences that are yet to be seen. For the institutional sphere, in the broadest sense, this is a source of profound destabilization, particularly as regards the disparities between the requirements of the long term which largely continues to govern the functioning of organizations, and those of the short term, which stem from these new modes of information consumption.

Upstream of any project, preparatory work must be done to avoid the deadlock that results when there is too great a discrepancy between the characteristics of the project as seen by its promoters and the representations that public opinion may have of it. The risk/threat dichotomy offers an analytical framework for situations where explanations focus on a potential danger.

“The risk/threat framework can be applied to any type of project: it provides a tool for diagnosing or, better, anticipating how public opinion is likely to crystallize around a project, and the risks involved.”
TRUE COST OF WATER: monetization of water risks, shared value creation, and local acceptability of extractive projects

Johann Clere
Open Innovation Director, Veolia

Veolia designs and implements solutions for managing water, waste and energy resources, playing a role in sustainable development while giving its clients a competitive edge. The Group works alongside cities and industries, helping them optimize their resource usage, with a view to improving economic, environmental and social efficiency.

Mr Clere is a recognized leader in the water industry, having developed a decision-making tool called “True Cost of Water”, which monetizes risks linked to water. He has more than ten years’ experience in developing shared value initiatives worldwide.

INTRODUCTION

“You don’t manage what you don’t value.” This observation was the starting-point from which Veolia developed a decision-making tool, called True Cost of Water, for monetizing the total cost of water-related issues. This initiative was motivated by the realization that, in most of the sectors of our economies, resource-related risks—such as drought, pollution, scarcity, and conflicts over usage—are increasingly becoming realities.

The extractive sector is one of the sectors most affected by water-related issues not only because of the nature of the business, which is strongly resource-intensive, but also because of the sector’s exposure to particular scrutiny from public authorities and civil society. Given the multiplicity of water-related risks in the extractive sector, whether operational, financial, regulatory or reputational, the way the resource is managed has become an issue of unprecedented importance in the local acceptability of such projects.

In this context, True Cost of Water is a tool that aims not only to reduce water costs and guard against the related risks, but also to identify opportunities for creating shared value by building bridges between the extractive industry and local communities.

Keywords
- EXTRACTIVE SECTOR
- WATER-RELATED RISKS
- MONETIZATION OF WATER COSTS
- CREATION OF SHARED VALUE

Among industrial sectors, water-related risks are undoubtedly most closely associated with the extractive industries. To date, the response by the sector has been limited to funding philanthropic projects and implementing Corporate Social Responsibility. However, Veolia has developed a decision-making tool that monetizes water risks, with a view to not only reducing costs and preventing risks, but also creating new business and social opportunities.
1. THE EXTRACTIVE SECTOR AND THE MANAGEMENT OF WATER RISKS: SOME BACKGROUND

1.1. AN EVER-GROWING NUMBER OF WATER-RELATED RISKS

In a study published in 2014, the British non-profit organization CDP demonstrated that 68% of the top 500 companies worldwide considered water to be a potential risk for their businesses, a figure that reflects a new and genuine awareness in the world of business about the challenges of water management1.

Water-related risks can be divided into four main categories:

• **Operational risks**: mainly related to the scarcity of the resource;
• **Financial risks**: materialized by increasing water prices;
• **Regulatory risks**: with the introduction of ever more stringent standards in terms of water treatment, surplus management, etc.;
• **Reputational risks**: potentially jeopardizing the license to operate in the event of water-related incidents.

Water-related risks have already materialized in certain sectors, leading several companies to put in place strategies and performance indicators in order to minimize risks and optimize management of the resource. Realizing that business as usual is no longer a viable option, the agri-food industry, for example, has in recent years increased its “water stewardship” commitments and policies.

1 From water risk to value creation, CDP Global Water Report, 2014

1.2. THE VERY PARTICULAR EXPOSURE OF THE EXTRACTIVE SECTOR

The extractive sector is undoubtedly among the industrial sectors with the greatest exposure to water-related risks, for four main reasons:

• **Water quantity**: the volumes of water extracted and used during operations;
• **Water quality**, which can be impaired by the sector’s industrial processes;
• **Water usage**, which can cause conflict when the extractive industry moves into an area;
• **The heightened visibility** of the sector, which is subject to special scrutiny by governments, NGOs and local communities.

When these risks materialize, the human and environmental consequences can be dramatic. The recent collapse of a dam holding back polluted water in Brazil, for example, triggered a deadly mudslide in the village of Bento Rodrigues. The mismanagement of these risks can prove very costly for the industry: from the loss of $1 million on a uranium mine in Namibia following two consecutive days of cuts in the water supply, to the loss of the operating license to expand existing projects after cases of water contamination in Chile.

1.3. THE RESPONSE OF THE EXTRACTIVE SECTOR THUS FAR LEAVES SOME ISSUES UNRESOLVED

The extractive sector—aware of the existence of water-related risks and the related issues in terms of local acceptability—has traditionally responded through two channels: 1) by funding philanthropic projects and 2) by implementing Corporate Social Responsibility (CSR) initiatives.

However, these two approaches — which should not be definitively discarded, as they are important as vehicles of acceptability and as ways of optimizing the extractive sector’s contribution to development — suffer from two limitations:

• **An operational limitation**: despite being innovative and positive approaches, the free water redistribution models set up by the extractive sector are sometimes treated with suspicion by local actors, who fear that the water is not treated with the same care as it would be if it were a paid service;
• **A limitation in terms of impact and image**: civil society has, in the past, been quite critical of certain projects undertaken by the extractive sector, often seeing them as too sporadic, or as a form of “greenwashing”.

By observing the implementation modalities of these two types of solution, Veolia arrived at the following conclusion: to be effective, water management programs must begin by monetizing water risks. The True Cost of Water tool, which monetizes all water-related costs — direct and indirect — was therefore conceived as an innovative solution for managing these risks optimally, and even generating new opportunities.

“68% OF THE TOP 500 COMPANIES WORLDWIDE CONSIDER WATER TO BE A POTENTIAL RISK FOR THEIR BUSINESSES.”

1 From water risk to value creation, CDP Global Water Report, 2014
2. VEOLIA’S TRUE COST OF WATER: OBJECTIVES AND METHODOLOGY

2.1. A DECISION MAKING TOOL FOR CALCULATING THE TOTAL COST OF WATER AND PROMOTING VALUE CREATION

When it set out on the task of monetizing the cost of water-related risks, Veolia quickly came to the following realization: while most companies take into account the “direct costs” of water — gaining access to the resource and building the necessary infrastructure — and perhaps some indirect costs included in the CSR or PR budgets, they mostly ignore the costs involved in managing the externalities. Among these costs — which could be described as “hidden” costs — are the costs relating to water shortages or to reductions in the allocation of the resource in conflict zones.

This lack of an overarching approach was one of the reasons behind the creation of True Cost of Water, which aims to monetize both direct costs and externalities in order to optimize decision-making in terms not only of risk management, but also of the creation of new opportunities, and therefore of value.

Ultimately, True Cost of Water meets a threefold objective:

- **Reducing costs**: evaluating savings that can be made in the water chain;
- **Guarding against risks**: assessing, in financial terms, the means available for better managing water-related risks;
- **Creating opportunities**: switching from a logic of risk to a logic of opportunity, enabling value to be created — both business value (e.g. by generating new revenue streams) and social value (e.g. by identifying social issues faced by neighboring communities).

2.2. IN PRACTICE: THE MONETIZATION OF WATER COSTS IN FOUR MOVEMENTS

In practice, the True Cost of Water approach relies on four different levels for monetizing the total cost of water resources:

- **Level 1—Direct costs**: from the purchase of the resource to the construction and management of infrastructures for treating wastewater;
- **Level 2—Indirect costs**: costs built into the P&L of a project, ranging from the payment of potential environmental penalties to the entire PR and CSR budget;
- **Level 3—Risk impact**: when water-related risks materialize, they impact projects in different ways (environmental penalties to be paid, downtime or loss of license to operate. etc.).

Two strategies then need to be adopted:
- Working upstream to minimize the probability of these risks occurring;
- Improving robustness and resilience.

- **Level 4—(Missed) opportunities**: identifying opportunities for creating added value (e.g. selling water to the stakeholders), or shared value, by associating the stakeholders directly.

The True Cost of Water monetization method makes clear the cost, and the financial implications, of not investing in value creation programs.

The True Cost of Water approach offers several advantages:

- **A detailed understanding** of all the costs associated with water management, as well as the costs inherent in inertia (missed opportunities);
- **A financial approach** that quickly identifies the cash-flow impact of implementing a proactive risk management method;
- **A risk-management method made easier and more ambitious** by fostering the creation of value — or even shared value, which does more to enhance the local acceptability of extractive projects.

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**THE FOUR LEVELS OF THE TRUE COST OF WATER APPROACH**

<table>
<thead>
<tr>
<th>True Cost of Water</th>
<th>Monetizing blue risks &amp; externalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 $/m³</td>
<td>4 MISSED OPPORTUNITIES</td>
</tr>
<tr>
<td>14 $/m³</td>
<td>3 RISKS IMPACTS</td>
</tr>
<tr>
<td>3 $/m³</td>
<td>2 INDIRECT COSTS</td>
</tr>
<tr>
<td>5 $/m³</td>
<td>1 DIRECT COSTS</td>
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</tbody>
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Source: Veolia
CRITICALITY OF WATER-RELATED RISKS

1+2+3+4 = True Cost of Water

MODELING OF THE IMPACT OF A PROACTIVE WATER RISK MANAGEMENT APPROACH ON CASH FLOWS FOR A MINING PROJECT

Impacts of proactive water management on cash flow

Cumulative cash flow

Reducing pre-operation time / costs:
- Faster permit delivery
- Sustainable dialogue w/ stakeholders
- Water & environmental compliance

Increasing production:
- Improved asset efficiency
- Higher productivity
- Longer production period
- Zero operations suspension

Better Closure:
- 100% environmental compliance
- Quick closure
- Key partnerships
- Next mine!

Mining project lifespan

Regular business practice and associated risks
Proactive approach: reduce risks & drive resilience

Source: Veolia
3. THE TRUE COST OF WATER ACTION PLAN: FROM VALUE REDISTRIBUTION TO SHARED VALUE CREATION

Ultimately, the True Cost of Water tool aims to move beyond the monetization of water-related risks on extractive projects to the design of comprehensive action plans for managing these risks and reinforcing local acceptability by the same measure. For several years now, Veolia has sought to open up new perspectives for extractive industry players by encouraging them not just to create value and redistribute it at the local scale, but rather to create shared value by seeking to establish and reinforce the links between the extractive industry and local actors.

3.1. 1st GENERATION MODELS: VALUE REDISTRIBUTION

Historically, the solutions Veolia has offered to extractive companies have been based on value redistribution. By monetizing water-related risks and opportunities, they focus on proposing models that enable local actors to reuse (after appropriate treatment) wastewater from extractive sites. These simple reuse solutions may offer free redistribution of the water, or redistribution for payment. While the first approach follows more of an CSR philosophy, the second effectively creates added value.

By way of illustration, Veolia recently proposed a water redistribution model on oil drilling sites in California, a state hard-hit by drought. The aim is to treat the “produced water” generated as a by-product of oil extraction and to sell it to local water authorities. The treated water is then made available to other industrial groups and local farmers. This type of forward thinking by oil industry players reflects a paradigm shift in the extractive sector, finding new perspectives in the management of water resources.

3.2. 2nd GENERATION MODELS: SHARED VALUE CREATION

The ultimate goal of True Cost of Water is to be an integral part of a shared value creation approach, in order to offer new perspectives in water risk management strategy.

The shared value approach can be summarized as all of the policies and practices that help improve economic performance while at the same time addressing social and societal needs, whether directly or indirectly related to extractive operations. To pick up on the example of the local farmers, it is no longer about simply redistributing water to the farmers, but about bringing them in on the approach by responding in a more direct way to the social and societal needs that they may have. It is, in other words, about simultaneously creating business value for the company and social value for the stakeholders.
In Morocco, for example, Veolia has implemented a technology that reuses municipal wastewater for a phosphate exporting mine that was running into difficulties on its site due to water shortages that were affecting its business continuity. The project created both:

- Business value for the mine, by providing water security through investing in work on the wastewater treatment station;
- Social value for communities, by optimizing the local water cycle and reusing the resource.

A similar partnership was also set up in the municipality of Tarragona in Spain, to enable a petrochemical facility to recover wastewater from the municipality while at the same time ensuring a better domestic water supply during the summer.

In South Africa, at a coalmine facing problems of water scarcity, Anglo American also put in place an innovative solution for treating wastewater and producing drinking water. While selling on some of the treated water to the municipality, to mitigate the water shortages afflicting local communities (and covering 12% of daily water needs), Anglo American also offered its water treatment services to a BHP Billiton facility in the area. Thanks to these two levers, 60% of the infrastructure’s operating costs are now covered. This solution, once again, created business value together with social value.

Clearly, by monetizing risks and opportunities, shared value creation is now emerging—alongside philanthropic projects and CSR initiatives—as a new instrument for reinforcing the local acceptability of major extractive projects. The logic of profit and competitiveness that underpins shared value creation is what gives it its strength and its ability to replicate projects on a larger scale.

“VEOLIA HAS SOUGHT TO OPEN UP NEW PERSPECTIVES FOR EXTRACTIVE INDUSTRY PLAYERS BY ENCOURAGING THEM NOT JUST TO CREATE VALUE AND REDISTRIBUTE IT AT THE LOCAL SCALE, BUT RATHER TO CREATE SHARED VALUE BY SEEKING TO ESTABLISH AND REINFORCE THE LINKS BETWEEN THE EXTRACTIVE INDUSTRY AND LOCAL ACTORS.”

In a paper published in the Harvard Business Review in 2011, Michael E. Porter and Mark R. Kramer, Harvard professors and co-founders of FSG, introduced the concept of “creating shared value”. Observing that capitalist economies was going through a crisis of legitimacy, with companies coming under ever-greater criticism for their economic, environmental and social impacts, the two authors underline the importance for companies to adopt a long-term approach. This means taking into account not only medium-term factors like financial performance, but also the social and societal needs that might one day impact their business (degradation of natural resources, well-being of communities, etc.).

Creating Shared Value is consequently defined as a way of generating economic value while producing social value. Three main levers are identified for creating shared value: 1) the renewal of products and services, 2) the redefinition of the value chain and 3) integration into a territorial network (equivalent to a competitiveness cluster).


2 To find out more: https://sharedvalue.org/groups/anglo-american-emalahleni-water-reclamation-plant
Participatory democracy, changing methods of communication, and political transparency are all factors explaining the growing interest among citizens and civil society organizations in the implementation of major projects. In this interview, Melchior Wathelet explains why political representatives and companies have to rethink their notions of participation and consultation in order to achieve a balance between protecting individual interests and defending the public interest.

Trained as a lawyer, Melchior Wathelet is a Belgian politician. Elected in 2003 as member of the Chamber of Representatives, he became Secretary of State in charge of Budget and then Secretary of State in charge of Energy and Mobility. In July 2014, he became Deputy Prime Minister and Minister of the Interior in the Di Rupo I Government. In April 2015, he left politics to take office as the CEO of Xperthis Group S.A. and Xperthis S.A., a company specializing in IT solutions for hospitals.

KEYWORDS

- TRANSPARENCY
- PARTICIPATORY DEMOCRACY
- POLITICAL POWER
- PUBLIC CONSULTATION
David Menascé: We are seeing a steady increase in the media coverage of projects — such as the airport at Notre-Dame-des-Landes in France, or new wind farm projects in the North Sea — some of which are hotly contested. Do you think civil society is doing more to protest major projects, or is it simply that the media are paying more attention to them?

Melchior Wathelet: Indeed, major projects, and infrastructure projects in particular, are coming under increasing media scrutiny. This is mainly due, in my view, to the emergence of the notions of transparency and openness, which are beginning to permeate our societies. Citizens now insist on having their say about major projects, which can no longer be imposed on them by the political authorities and the private sector. There is an underlying trend at work here, which means that these topics hit the headlines more often, and a debate — sometimes a very heated debate — sets in.

Let’s be clear, this is generally a very positive development. It forces policy-makers and businesses to ask themselves the right questions and learn how to build compromises. This demand for transparency also implies greater accountability for all of the players, public or private. And what makes the trend even more legitimate is that this type of project often involves large sums of public money, which is ultimately the taxpayer’s money.

D.M.: Alongside this aspiration for transparency and openness, are there other factors that account for the growing place now occupied by major projects in public debate?

M.W.: I believe there are several factors that might explain this greater social involvement in major projects. Once again, these underlying trends are positive developments that make our democracies stronger.

Firstly, the growth in means of communication, with the development of digital and the Internet, has shifted our societies into a new world of ultra-availability and instantaneous information. The social networks are a prime example: not only can everyone react in real time: every internet-user can now make his or her mark as a new opinion leader. In this respect, the social networks play a double role: they enable citizens to organize new forms of mobilization (online petitions, calling people to get together, spreading key messages, etc.) and at the same time they enable project advocates to sound out public opinion and to pick up on the low-level signals that will shape opinion going forward.

In parallel to that, the concept and practice of participatory democracy, which aims to increase citizen involvement in debate and decision-making, have emerged in recent years as essential complements to representative democracy. Because it fills certain gaps in representative democracy, participatory democracy gives fresh impetus to public debate and reinforces people’s interest in the public sphere.

I say again, these developments are legitimate and desirable. However, the question facing us now is one that goes to the root of political action: should we place limits on these demands for transparency? What is the right balance between individual interests and the public interest? Our societies, after all, are becoming increasingly individualistic: individual interests sometimes win out over the wider public interest. Consensus and unanimity are therefore, by definition, harder to reach.

D.M.: Do you think we have currently gone too far in this demand for transparency and participation?

M.W.: On paper, the promise of a more participatory, more inclusive, society is, as I said, honorable and desirable. Unfortunately, the notion of participation is becoming increasingly overused. On some projects, people talk of participation without the processes actually being in place, as though it were just a “box to be ticked” in order to implement the project. Participation is fine, so long as it comes with the resources and procedures to guarantee its effectiveness and really give citizens a voice.

Finally — and this is a very personal feeling — it seems to me that individuals often have a greater capacity to mobilize against a project than for it. Opponents of a project often employ more mobilization resources than those who are in favor, and who don’t have a sense of having something to demand.

This fits into a much wider context that goes beyond the scope of major projects: the notion of progress is no longer a source of social consensus. It used to be that infrastructure projects, such as roads, were unanimously perceived as forward-looking projects. “Progress” was both accepted and valued by everyone. Nowadays, we increasingly find deep divisions around the notion of progress, which often explains why citizens are split into irreconcilable camps. The “RER” urban rail project in Brussels provides a very concrete example. The idea is not a new one, but the project is making little headway because there is so much opposition and obstruction, and no real consensus about what the future RER should be, about the financial resources available, the opposition of certain local residents to the proposed route, etc.

“THE QUESTION FACING US NOW IS ONE THAT GOES TO THE ROOT OF POLITICAL ACTION: SHOULD WE PLACE LIMITS ON THESE DEMANDS FOR TRANSPARENCY? WHAT IS THE RIGHT BALANCE BETWEEN INDIVIDUAL INTERESTS AND THE PUBLIC INTEREST?”
D.M.: Do you think this greater capacity for mobilization against projects might also be due to a certain sense of distrust among citizens towards their political representatives?

M.W.: It is true that there is greater detachment nowadays between citizens and their political representatives. This detachment — rather than distrust — should once again be seen as a positive development, since it means that the citizens’ critical and analytical spirit is growing stronger.

As far as distrust is concerned, it perhaps isn’t so marked in Belgium when it comes to major projects. There are not many cases of conflicts of interest involving politicians and the world of business, for example.

I think, moreover, that distrust about politics tends to diminish as you get closer to the local level, which is such an important element in Belgium. The bourgmestre, or mayor, is in direct contact with the inhabitants of the municipality. This face-to-face contact generates trust. On that point, I have in mind some cable laying projects carried out in several Belgian municipalities where the local residents really took ownership of the project. So currently, perhaps, representative democracy is less concerned by this issue at the local level.

D.M.: While these developments are generally positive and reflect, as you suggest, a strengthening of our democracies, they are currently contributing to the blockage of a growing number of projects. How can we strike the right balance to avoid major projects being rejected too frequently?

M.W.: It’s all about not going from one extreme to the other: from the absence of consultation to consultations that are loosely managed and liable to lead to the blockage of certain projects for reasons that are intangible and/or insufficient.

For a long time the State imposed major projects on citizens, in the name of its vision of the public interest, without any form of consultation. And for a long time, again, we “did” consultations without really taking citizens’ opinions into consideration. The risk, in our participatory societies, is that the principles of citizen consultation and participation allow individual interests to take precedence over the public interest.

A balance needs to be struck between protecting individual interests and defending the public interest, which is what drives our political systems. The cursor needs to be moved along the scale so that everybody’s interests are heard, while avoiding situations where the individual interests of one or two people can block a project from being implemented in the name of the wider public interest.

D.M.: In concrete terms, what principles could be put in place to ensure a balance between protecting individual interests and defending the public interest during the consultation process?

M.W.: It seems to me that we can identify three principles — three golden rules — for taking individual interests into account without it necessarily allowing them to take precedence over the public interest. Indeed, these rules are often applied to major projects... but the rules of the game have to be accepted by everyone.

The first rule is that of open and systematic dialogue. Yes, every major project must give rise to genuine consultation of local players and populations affected by the project. This consultation must be open, it must be representative, and it must ensure that everyone has room for expression. The people being consulted must also bear in mind that participating in a consultation does not necessarily mean that their individual interests will lead to the project being modified in the way they would like. Consulting doesn’t mean agreeing all the time. This form of education in participatory democracy is essential.

Secondly, projects must be presented transparently to the population: any decision that is not clearly explained will, in general, not be understood. Transparency inevitably involves an element of pedagogy. You have to make citizens understand not just the technical dimensions of the project but also — perhaps above all — how it contributes to the public interest.

Finally, appropriate legislation and procedures must be applied to the sphere of major projects. This is a key element, and perhaps the one where Belgium has the greatest room for improvement. We often find a lack of proportionality in our laws. For example, when an appeal is lodged against a public contract, we often have to start the whole procedure over from the beginning, even if the real impact of the appeal on the project was actually minimal. Lawmakers need to anticipate the effects and consequences of laws and procedures. I often wonder about this question of the proportionality of the laws and procedures applied to major projects. Do we not have the means available to us, nowadays, to simplify them for the sake of the public interest? Creating a single permit for projects that can be replicated and controlled, like the RER for example, could help simplify procedures and add greater proportionality.
D.M.: Is there a point, during the course of a project, which is particularly suitable for consulting citizens?

M.W.: There is no one answer to that question; the consultation calendar depends so much on the project.

Generally speaking, the consultation should be done as soon as possible in order to adjust the project and find compromises with the populations concerned. With wind farm projects, for example, which take a fair amount of time and for which there is some room for maneuver, the consultation can be done very quickly, at the start of the project. On some projects, by contrast, such as cable networks, there is very little room for maneuver in adjusting the project. Before the consultation process starts, you evidently need to have all the key information required to provide the best possible answers to citizens’ concerns.

D.M.: Do you think some citizens and voters are now expressing discontent about the blockage of certain projects? Aren’t some people worried that the principle of consultation is encouraging inertia?

M.W.: Yes, I think a certain number of citizens now have the feeling that it is no longer possible to carry out projects without protests springing up. But in reality, there is a distinction to be made between private interest and public interest, between the micro scale and the macro scale. From a macro viewpoint, there may be a consensus about the public interest in implementing a project. But from a micro viewpoint, opposition can quickly arise once it threatens your private interest. You may understand the added value offered by a new stretch of motorway for the population as a whole, but if it runs in front of your window, that’s another matter. This tension between private interest and public interest is perfectly natural. It has to do with human nature. Which is why an educational effort — to explain the public interest of such and such a project — is an essential key to gaining acceptability.

Finally, it may be a question of democratic maturity. Take the example of Switzerland, where the people recently voted against a tax cut... in the name of the public interest!

D.M.: What role do you think businesses should play in the acceptability of major projects and in the consultation process? Do you think private players have made any progress in the way they consult citizens in recent years?

M.W.: My feeling is that businesses today have grasped the issues of local acceptability, and are integrating them into their commercial strategies. They are aware of the risks they run if they fail to conduct the processes of participation and consultation with the local population correctly. Delayed works, legal objections, and the risks relating to demonstrations all have a cost that can no longer be ignored.

I also find that private players have become much more professional in the way they conduct projects. Once again, it is a positive development. The planning applications — at least the ones I had to deal with during my political career — have always been solidly prepared. Nothing is left to chance: with the pressure from the competition, and the demands of laws and procedures, no private player is now in a position to say “we’ll get the project whatever happens”.

This growing professionalization also means that in most projects, the likely areas of tension and opposition are generally well identified in advance. We can anticipate the reactions — good or bad — that a project will generate. In fact, I was only really surprised just once by the reception given to a project during my career: the design of the air routes for Brussels, where there was a sudden coming-together of negative and unforeseen elements. There is sometimes a kind of alchemy, positive or negative, with a project, and it can’t be foreseen.

D.M.: Sometimes businesses accuse those in authority of shirking their responsibility as soon as a project, despite being democratically supported by an elected assembly, suddenly comes up against some kind of social opposition. What’s your take on that?

M.W.: I don’t think the question should really be phrased in those terms. Admittedly, the authorities may go back on a decision because of overly strong opposition. That strikes me as normal; it corresponds to what we expect from our representatives. When strong opposition arises, the authorities have a duty to re-examine the legitimacy of a project. Then again, it also happens occasionally that certain businesses fail to comply with the agreements made with the government about a project.

Once again, dialogue, transparency and appropriate, proportional legislation emerge as the necessary ingredients to ensure that projects are rolled out under optimal conditions and can be understood and accepted by local populations in the name of the public interest.

“MY FEELING IS THAT BUSINESSES TODAY HAVE GRASPED THE ISSUES OF LOCAL ACCEPTABILITY, AND ARE INTEGRATING THEM INTO THEIR COMMERCIAL STRATEGIES. THEY ARE AWARE OF THE RISKS THEY RUN IF THEY FAIL TO CONDUCT THE PROCESSES OF PARTICIPATION AND CONSULTATION WITH THE LOCAL POPULATION CORRECTLY.”
INTRODUCTION

Corporate Social Responsibility (CSR) is gaining momentum in the Indian business strategic agenda, after the Indian Companies Act made it compulsory in 2013. This political turn has accelerated the evolution in CSR approach by Indian firms: CSR has evolved from a philanthropic action, disconnected from the firm’s activity, to a strategic asset for a sustainable business future. This is particularly true for firms that engage closely with local communities that live around their plants to gain and/or strengthen their social license to operate. Through the cases of Ambuja Cements and other Indian companies, this article presents the four key factors of success of such strategies: co-creation, sustainability, local teams and long-term investment.

DEVELOPING COMMUNITIES AROUND FACTORIES through Strategic CSR - A Critical Step towards Shared Value in India

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Sattva is a Bangalore-based advisory and consultancy which co-creates inclusive businesses that are scalable, global and sustainable. Sattva works with social organizations, corporations and funders to help them find their “magic quadrant” where they can maximize their social impact along with economic value. It assists organizations in designing and executing inclusive models that are innovative, economically viable and add equitable value to all the different stakeholders involved in the chain, in 16 States in India, Nepal and other parts of South Asia.

The Indian CSR context has changed in the last few years (particularly following the amendment to Section 135 of the Indian Companies Act in 2013): there is now a requirement for corporate firms to devote 2% of their net profit to social impact. The stake is particularly crucial for extractive and manufacturing companies, as community engagement and development is essential to gain their social license to operate. Through the cases of Ambuja Cements and other Indian companies, this article presents the four key factors of success of such strategies: co-creation, sustainability, local teams and long-term investment.

KEYWORDS
- INDIAN COMPANIES ACT
- STAKEHOLDER ENGAGEMENT
- LOCAL COMMUNITIES
- SUSTAINABILITY
- BUSINESS STRATEGY

www.factsreports.org
1. CSR IN INDIA: FROM PHILANTHROPIC INITIATIVES TO STRATEGIC SHARED VALUE OPPORTUNITIES

1.1 A NEW CONTEXT: THE 2013 AMENDMENT TO THE INDIAN COMPANIES ACT

Indian CSR context has recently undergone a radical legislative reform. Whilst previously, corporate actions with regards to social responsibility were neither compulsory nor regulated anyhow, the Section 135 of the 2013 Indian Companies Act\(^1\) introduced, inter alia, several provisions that aim at defining a new regulatory framework for CSR - making CSR compulsory to a large number of firms. This evolution is the result of strong social pressures and expectations in a country that, in spite of being one of the largest and fastest-growing economies in the world, still has to cope with 21.3% of its population living below poverty line\(^2\) (World Bank threshold of $1.9 per day) and a relatively low Human Development Index (0.609 in 2014, ranking India at 130\(^3\) position).

In this context of uneven distribution of the benefits of economic growth, companies have been growingly pressured towards participating in the development of communities impacted by their activities. The Indian Parliament’s adoption of the Companies Act in 2013 responds to these social demands. The new text came into force on 1\(^{st}\) April, 2014, but its introduction had been initially prepared by the National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business (NVGs)\(^4\), edited in 2011 by the Ministry of Corporate Affairs. This document’s principles have also been scrutinized in 2012 on Indian top-100 companies by the Securities and Exchange Board of India (SEBI), for the purposes of the Annual Business Responsibility Reporting\(^5\).

The Indian Companies Act’s provisions on CSR concern firms, both public and private, and both Indian and foreign, that are included into at least one of the following thresholds: (1) a net profit of minimum INR 5,000 million (€65 million); (2) a turnover of minimum INR 10,000 million (€131 million) or (3) a net worth of minimum INR 50 million (€650,000). These companies are now obliged to spend at least 2% of their average net profit of three years on CSR activities on the Indian territory. Areas under which companies can undertake CSR in compliance with the Act are also listed in the Act’s Schedule VII.

This main innovation in Indian corporate legislative framework is expected to concern at least 16,000\(^6\) Indian companies (according to the Indian Institute of Corporate Affairs), many of which are Small and Medium Enterprises (SMEs). It is estimated that these companies will spend INR 90,000 million (€1,175 million) in 2015-2016 fiscal year and up to INR 200 billion (€2,620 million) in the subsequent years in order to comply with the Act - many of them undertaking CSR activities for the first time. Moreover, these activities shall be made public by the companies (online, on their strategic documents and on ad hoc CSR documents). The Act also provides that companies affected by its provisions will have to constitute a CSR committee with at least three directors (with slightly different rules for some particular firms). The following diagram summarizes the CSR governance required by the Act:

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**Role of the board and the CSR committee**

**Net worth > 500 Crore INR**
- Form a CSR committee
- Approve the CSR policy
- Ensure implementation of the activities under CSR
- Ensure 2% spend
- Disclose reasons for not spending the amount (if applicable)

**Turnover > 1000 Crore INR**
- Formulate and recommend a CSR policy to the board
- Recommend activities and the amount of expenditure to be incurred
- Monitor the CSR policy from time to time

**Net profit > 5 Crore INR**
- Three or more directors with at least one independent director
- Formulate and recommend a CSR policy to the board
- Recommend activities and the amount of expenditure to be incurred
- Monitor the CSR policy from time to time

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5. See the August 13\(^{th}\), 2012 SEBI circular on business responsibility reports: [http://www.nseindia.com/content/requites/SEBI_Circ_13082012_1.pdf](http://www.nseindia.com/content/requites/SEBI_Circ_13082012_1.pdf)
The Act hence clearly states that CSR has to be fully integrated in a company’s business strategy and thus has to be defined at the highest decisional level, involving board members of the company. As a result, the Act does not solely provide a compulsory framework but it also, and more importantly, aims at changing the national “philosophy” of CSR. Whereas CSR-related activities have long been implemented by companies in India, they were not, traditionally, integrated into the corporate strategy. In this sense, when they were indeed aware of their social potential, Indian companies acted more as philanthropists, without a clear social impact goal, a set timeline or a strategic evaluation of value for their core business. As a PwC report on CSR in India points out, “in keeping with the Indian tradition, [CSR] was an activity that was performed but not deliberated. As a result, there is limited documentation on specific activities related to this concept.” In terms of value for money, traditional CSR in India was more about reinvesting profit that had already been made, rather than rethinking how to make those profits, in a manner that could be beneficial to both the company and the local community.

1.2 SATTTVA’S STRATEGIC CSR FRAMEWORK: AT THE CROSSROADS BETWEEN BUSINESS AND SOCIAL RESPONSIBILITY

In this new context, Sattva developed a strategic CSR framework, aiming at assisting companies in rethinking their CSR strategies, by articulating these elements further. Indeed, at Sattva, we believe that the most effective CSR anchor lies at the intersection of identified benefits to a community, benefits for the firm to engage in such an activity, and the company’s expertise in creating value by implementing the strategy. From these variables, we draw four ideal-types of CSR anchors that define what the company’s objective in terms of social impact can be:

- The “compliance” type of CSR, mostly limited to low-risk financial contributions to social programs, e.g., the Prime Minister Relief Fund (eligible to the Act’s compliance);
- The “social cause” CSR, which consists in project-based philanthropy, disconnected from business;
- The stakeholder engagement-based CSR, focusing either on employees, on local community or on customers;
- The “business value” CSR approach, strongly focused on company’s expertise and equitable value to both business and society.

SATTVA’s strategic CSR Framework

Source: SATTVA

Meet the requirements of the law and ensuring there are no risks to the organisation. Initiatives are usually low-touch and aligned to statutory and governance norms.

Focus is on leveraging the company’s expertise to build products and solutions that bring business value as much as it solves a social need.

Co-creating products and solutions for emerging markets with social partners who bring strong on-ground understanding along with leveraging the business expertise of the organisation to effectively address the problem. Key outcomes: market-led scalable and long-term solutions.

Build capacity of the skilling ecosystem. Key outcomes: sustainable livelihood creation.

Focus on building and strengthening the chain both upstream and downstream. Key outcomes: sustainable livelihood and holistic community development.

Building awareness and community demand that set a firm foundation for organisations to introduce new products and services. Key outcomes: Demand creation and behavioural change.

Ensure that the employees in the organisation are engaged and involved in social impact activities on an on-going basis. Key outcomes: Employee engagement and realisation of a “people-centric” CSR roadmap.

Primary stakeholder is the community and focus is on community development around the company’s operational units and manufacturing centres. Key outcomes: good relationships and brand with the local community.

Primary motive is to be a responsible corporate and dissociate CSR from any business value. Focused on addressing a specific social cause emerging from internal priorities or aligning with international and national goals (eg: MDGs, SBA program of Indian Government etc).

Enable initiatives that are customer-centric. Key outcomes: strong branding and better customer relation.

Product Innovation

Social Cause

Business Value

Value Chain Building

Market Development

Employees

Consumers & Customers

Stakeholder Engagement

Local Community

Supply Chain

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1.3 COMMUNITY ENGAGEMENT: A KEY ASSET TO STRENGTHEN LOCAL COMPANIES’ ACCEPTABILITY

The stakeholder engagement-based CSR approach is particularly suitable and relevant to companies with plants in rural or peri-urban disadvantaged areas, and willing to analyse and improve community development around their factories. This “local” approach to CSR is also the one promoted by the Indian Companies Act, that structures CSR by articulating it around three main points: (1) its target group; (2) its geographical base; and (3) its sector and issue. Regarding community engagement strategies, the latter choice (sector and issue) is widely left to the company’s appreciation, as the topics listed as CSR activities in compliance with the Act are numerous: health and sanitation, environment, extreme poverty alleviation, employment and skills, education, gender equality, etc. As to what concerns target group and territory, the Act is more directive, as it strongly advises companies to focus on specific segments of a community, e.g. on the marginalised and disadvantaged populations, and to privilege actions that are geographically contained in the local or « catchment » area of a business.

For companies that leave a tangible print on the local environment and communities, as extractive or manufacturing companies’ plants, local community development is an asset to strengthen their reputation and engagement around their factories. “Local community” refers to those population groups that are situated within the company’s ecosystem, i.e. approximately within a 50km of radius from the plant. A strategic CSR approach will hence focus on understanding local needs (e.g., social development), articulating them with business needs (e.g., gain social license to operate) and launching initiatives that respond to both and that are realistically feasible with regard to the company’s expertise. CSR is hence strongly anchored around plants in order for these companies to earn and/or consolidate their social license to operate in these communities.

2. KEY FACTORS OF SUCCESS: HOW TO SUCCESSFULLY ENGAGE LOCAL COMMUNITIES?

Key factors have to be kept in mind by companies that are willing to launch a community engagement strategy. As a matter of fact, for a company that has already gained some local license to operate, a wrong step can mean going back to starting point again, and lose all legitimacy that it had previously fulﬁlled.

We identiﬁed four key aspects that a company should keep in mind when launching local CSR programs:

- Sustainability
- Co-creation
- Local team
- Long-term investment

2.1 SUSTAINABILITY

Ensuring that a CSR initiative is sustainable is primarily achieved by developing a healthy relationship with local communities and working with them as partners. Rather than treating them like beneﬁciaries and mere receptacle of corporate donations, the company should work on teaming up with the community, and other local stakeholders like the Government, rural entrepreneurs, etc. to create winning collaborations that can sustain over the long-term.

Example

A leading materials manufacturing company with plants across India has worked on the creation of institutional structures that are community-owned and community-led and can create a strong foundation for the sustainability and in the long-term, self-sufﬁciency of CSR operations. This company is now working with local community-based organizations that have a deep relationship with the local community, and funds the formation of “Self-Help Groups”, “Producer Co-operatives” and “Farmer Groups”, including support in provision of ﬁnancial access, training, capacity building and development of local infrastructure. Over the last 3-4 years, the company has managed to create over 4,000 such groups and leveraged over one-third of the investment in partnership with the Government.

2.2 CO-CREATION

As sustainability, co-creation is crucial to ensure that the community has a stake in the development scheme, and hence fully engages in order to achieve the success of the CSR initiative. Co-creating solutions with the community, rather than adopting a top-down approach, is the best way to ensure these will be feasible, accepted, and successful. This means that the company will not necessarily implement the exact strategy it had planned. On the contrary, it requires a sense of compromise and adaptation to how the community envisions its own development.

Example

Danone has adopted this principle in its CSR activity. The Danone Ecosystem Fund has been created to support all stakeholders involved in Danone's ecosystem (small agricultural producers, small suppliers, proximity distributors, etc.) in order to generate powerful social change. The Fund is designed to support initiatives with general interest purposes, which are identiﬁed by Danone subsidiaries in the territories where they operate. Selected initiatives add value in three areas: employment, skills and employability, and micro-entrepreneurship. The Fund works with a manager from Danone and a partner from the non-proﬁt sector to co-design, co-manage and co-monitor the project over time. NGOs or community-based organizations facilitate dialogue between communities and provide expert knowledge of the local context. This co-creation process commits Danone to evolving its practices and models through partnerships with local experts.
2.3 LOCAL TEAM

Having a dedicated on-ground implementing team is an essential feature. A local team, contrary to a corporate one, lies at the interface between the company and the community. By its knowledge of the field, it can easily avoid mistakes and it can re-orientate the strategy as soon as difficulties or blockages emerge. In addition, its proximity with the community is the guarantee of continuous corporate/community dialogue and personal engagement of team members in initiatives that affect their own community.

Example

A large health insurance company, Max Indial, has adopted this approach in its nation-wide immunisation programme in India, as part of its CSR initiatives: the programme is solely run through partnerships with local non-profits in remote villages. These local non-profits work intimately with the community, understand the socio-cultural context and are able to track the patients’ progress and issues throughout the year – making health a year-round activity rather than merely during the health camp. Complementing the efforts of these non-profit partners, local units of the insurance company – doctors and other health professionals – volunteer skills and expertise to the health camps over weekends, thus ensuring that local teams are strong from both a technical and community linkage perspective.

1 http://www.maxindiafoundation.org/initiatives.html

2.4 LONG-TERM INVESTMENT

Finally, long-term investment is the condition for success of local CSR initiatives and of their most valuable outcomes. As a matter of fact, what is most valuable in CSR initiatives is also what takes more time to be built: trust, social license to operate and reputation, and the belief that the corporate will stay with the community in retaining the long term social outcomes like better health, infrastructures or livelihoods. Long-term engagement is thus crucial if the company is willing to achieve these objectives, by establishing a trustful relation with the community. Without mutual trust, the money invested can be frittered away in mere activities and the initiative’s success of local CSR initiatives and of their most valuable outcomes. As a matter of fact, what is most valuable in CSR initiatives is also what takes more time to be built: trust, social license to operate and reputation, and the belief that the corporate will stay with the community in attaining the long term social outcomes like better health, infrastructures or livelihoods. Long-term engagement is thus crucial if the company is willing to achieve these objectives, by establishing a trustful relation with the community. Without mutual trust, the money invested can be frittered away in mere activities and the initiative’s success can become unsustainable.

Example

This principle guided Tata Consultancy Services (TCS), a technology company of the TATA group, when 12 years ago it started a pioneering Computer-Based Functional Literacy programme following their core philosophy of “bringing together your core competencies to serve the community”. The project has been using computers, multimedia presentations and printed material to teach uneducated adults the most basic of the three R’s: reading. Through partnerships with NGOs, TCS’ training program has reached over 200,000 people, and emphasises how long-term vision in program design and investment can lead to significant social innovation that brings together the core expertise of a company with the social expertise of non-profit partners. Since its launch, the software has been translated in 9 Indian languages and in Arabic, has travelled to Africa, and has cut learning time for each learner from 200 hours to just 40 hours.

3. REALISING THE ‘TRUE VALUE’ OF COMMUNITIES: CSR AT AMBUJA CEMENTS

To illustrate this article, we wanted to present a detailed case-study of a company which has implemented an ambitious CSR programme in India: Ambuja Cements - a part of the global cement conglomerate, LafargeHolcim, and one of the leading cement industry players in India since 1986.

The community has always been a primary stakeholder for Ambuja Cements Ltd. (ACL) and the company has a long history of innovating for sustainability and social impact, presented at the forefront by its ‘True Value’ initiative.

ACL believes that ‘True value’ is the result of environmental and social value adding to economic value. The core objective of the corporate responsibility projects at Ambuja is to empower communities to recognise their true value and work towards its fulfilment – with Ambuja serving as a catalyst to help the community develop with the same strides as the company. ACL focuses on Agro- and Skill-based Livelihoods and Entrepreneurship, Water Management, Women Empowerment, Health and Sanitation and other related issues across the communities around its factories and areas of operations (21 locations in 11 States).

All CSR initiatives at Ambuja are driven by a dedicated Foundation – Ambuja Cement Foundation (ACF), with over 439 members in its countrywide CSR team – that was set up 23 years ago with the idea of bringing together professionals working with a systematic and strategic approach towards solving community issues.

The reach and impact statistics achieved by ACL over the last 3-4 years reveals a sustained process of community development and empowerment:

• 25,000 youth trained in over 38 locally relevant trades with a 75% placement rate;
• 28,000 farmers supported in capacity building, cost optimization and yield increase through the Better Cotton Initiative;
• 1,142 SHGs promoted and supported with a focus on livelihoods and empowerment (2 federations have been promoted as apex organisations);
• ACL has extensively worked on water resources development management at several locations by supporting communities for construction and/or renovations of more than 2,000 different water harvesting structures. The extensive programme on water has helped ACL achieve the ‘water positive’ status 4 times (assured by Det Norske Veritas - DNV).

The following CSR practices and principles at Ambuja Cements have ensured buy-in, whole-hearted participation and ownership among the community and are worth emulating:

A bottom-up approach to assessing needs

All ACL programmes are designed through bottom-up need assessment discussions. Ambuja’s Foundation has set up a rigorous process of
assessing local community needs through multiple rounds of focused discussions that bring together women’s groups, farmers, youth, village administration and local Panchayats (elected local governing boards in India). Programme design is based solely on what the community resonates with as important issues to them. This ensures subsequent buy-in and cooperation in all activities undertaken by the Foundation.

Collectivization and community empowerment

ACF actively promotes community ownership, control, access and maintenance of resources through peoples’ participation and strengthening of community-based institutions. ACF has funded and encouraged the formation of many such groups like associations gathering water users, Pani Samitis (local committees on sanitation and water), Watershed Committees, Farmer Groups, co-operatives or Self-Help Groups (SHGs). For instance, in Sanand, the Participatory Irrigation Management (PIM) project was implemented with 36 Irrigation Cooperative Societies and 3,408 farmers with 5,150 ha of land. Their work has earned the 21 Water User Associations a one-time functional grant of INR 4.6 million (€60 000) from Sardar Sarovar Narmada Nigam Ltd., and other grants. In Chandrapur, ACF has been focussing on Community-led Total Sanitation since last about 2 years – village development committees are promoted and strengthened through rigorous processes and capacity building programmes. This has resulted in 9 villages achieving 100% toilet coverage and overall improvement in general sanitary condition. A similar programme is being replicated at other locations as well.

Several SHGs and farmer groups trained 3-4 years ago have now further aggregated as Federations at the district level. These Federations have also been able to take up and replicate models like the Open-Defecation Free efforts of ACF in neighbouring villages, furthering the impact.

Leveraging native wisdom

ACF has always worked by leveraging the traditional knowledge systems of the local community to craft local solutions to issues. For example, in the water-scarce areas of Rajasthan, ACF worked by reviving traditional water harvesting structures called khadins, which prolong irrigation throughout the year. ACF has local teams, numbering anywhere between 2 and 40, to implement programs on the ground, supported ably by the last mile community mobilizers such as sakhis (healthcare) or bal mitras (education).

Partnerships and sustainability

ACF has actively reached out to build partnerships with local banks, non-profit institutions, other companies, development agencies, policy makers and the Government in a process to make ACF projects sustainable through effective collaboration. Examples of partnering are many: ACF implemented 550 rooftop harvesting systems under the Coastal Area Development Programme supported by WASMO, an agency of Government of Gujarat; Gruh Finance has provided revolving fund to federations promoted by ACF for sanitation and income generation programmer; NABARD has partnered on watershed projects, micro irrigation promotion, skill training etc. at several locations; Apollo Tyres partnered for awareness and prevention of HIV/AIDS at 4 locations; Schneider, Taj and other companies have partnered on various skill development initiatives; etc. In 2014-15, 14% of the total budget spent on ACF programs was leveraged from the Government and donor agencies, 13% came from people’s contribution and 18% was facilitated directly to communities on various development projects.

Empowering women in the community

ACF supports as many as 1,142 Self-Help Groups (SHGs) across locations, facilitating change through the creation of empowered women’s groups. ACF supports the entrepreneurial activities of these SHGs through funding, regular training, and promoting income-generating activities.

Women from various villages have been stepping out of the shadow and creating a difference in their roles as a sakh, a bal mitra, an artisan, a farmer or an entrepreneur. Across locations, women in SHGs are involved in activities such as dairy development, nurseries, vegetable farming, mushroom cultivation, incense-stick making, handicrafts and food processing. These activities have been instrumental in creating a value for women’s work while strengthening their entrepreneurial spirit.

Process and systems rigour

From utilising the strengths of a central management and distributed implementation team for efficient functioning, to creating rigorous field reports and documentation, comprehensive monitoring of outputs and third party audits for completed programs, case study booklets and knowledge dissemination, ACF has put in place the necessary rigour and systems to realise a strategic long-term CSR program that is deeply connected to the local contexts and communities around the 22 plants across the country.

For Ambuja Cements Ltd, the 2013 Companies Act has only served to enhance reporting of work as the company has always been spending more than the stipulated 2% of its profits on community development.

CONCLUSION

This article has explored how CSR has evolved in India in the last decade. The example of Ambuja Cements and other Indian firms showed how CSR has now become a key asset for companies and is strongly linked to strategic business planning. These experiences are also inspiring for other companies wishing to engage in long-term strategies with local communities, as they highlighted the key factors of sustainability of a CSR initiative: a bottom up, locally rooted approach that crosses the local needs with the firm’s capabilities, and that aims at empowering the community and teeming up with stakeholders. This is what Sattva considers the most successful strategy for a firm to gain its social license to operate around plants. The CSR initiatives to come, triggered by the enforcement of the 2013 Companies Act in India, will certainly strengthen Indian firms’ strategic vision and operational know-how on CSR.
NGO-business partnerships have been multiplying for several years now. These new alliances help to strengthen the legitimacy and social acceptability of companies, but they also – above all – make essential goods and services accessible to a wider population. In this way, these partnerships boost the efficacy of NGO actions while reinventing the way in which businesses envisage their activity in developing countries.

In this interview, Franck Renaudin goes back over the potentialities, the key success factors and the possible risks associated with these new forms of partnership. The founder and executive director of the NGO Entrepreneurs du Monde explains how these partnerships appear to offer a win-win model for NGOs and for businesses – provided that they are put in place with sincerity, conviction and good will.

Since its creation in 1998, the French NGO Entrepreneurs du Monde has been working with communities in developing countries. The organization enables thousands of women and men living in extremely difficult circumstances to improve their living conditions: it provides support for their own economic initiatives and helps them gain access to products offering significant health, economic and environmental benefits. The organization is active in 11 countries, focusing on three main areas: social microfinance, access to energy, and support for the creation of micro-businesses.
David Menascé: A growing number of businesses, whatever their sector, are launching initiatives aimed at consolidating their social acceptability. How do you explain this phenomenon? What, in your view, is at stake for businesses—both at head office and at local level?

Franck Renaudin: Clearly, it is important for businesses to reinforce their brand image with the general public, and also with all of their partners, customers and suppliers. Nowadays, a company that has dubious practices is soon pointed out, becoming a target for the media, or for online petitions, with very serious consequences for its image. The reputational risk is a very real one. The challenge for a company setting up in a developing country will be to integrate smoothly into the local social and economic fabric, avoiding conflict with communities, and so on. Funding a new football field for the local kids is a good start, but it takes more than that. Often, in the imagination and expectations of local populations, a Western company setting up in a new territory ought to offer better conditions than the market – the assumption being that, it has come to take advantage of cheap local labor.

Given these challenges, the level of engagement that businesses display varies a lot. There are some companies that worry about their social acceptability only because of this fear of reputational risk. They will often do the strict minimum and will give their actions a strong “marketing” slant. And there are some that have understood that in a fast-changing world, business-as-usual is no longer an option, and that they have to revolutionize their way of acting by putting human and environmental issues at the heart of what they do. Businesses vary greatly in the sincerity of their engagement.

D.M.: In this context, what do you see as being the role of the NGOs? Can they help to reinforce the social acceptability of businesses?

F.R.: NGOs are not there to reinforce the social acceptability of businesses. They are there to improve the living conditions of populations without access to vital goods and services. But in order to reach a large number of people quickly and much more effectively, partnerships with large companies often make sense, so long as the products and services distributed have a real impact on local populations. At Entrepreneurs du Monde, for example, we obviously rule out working with companies that promote tobacco or alcohol.

Businesses bring in know-how on products that are sometimes highly technical, with a whole logistical setup and broad experience in marketing and distribution. But they rarely know how to reach the poorest population groups. Conversely, NGOs know how to work with economically insecure groups and how to listen to their needs, but they often lack resources. Consequently, their actions are often limited.

The complementarity is therefore obvious, and indeed essential if we want to have an impact on populations that are currently cut off from access to vital goods and services.

The consequence of these partnerships is, certainly, that the social acceptability of the business is reinforced. But so is the reputation of the NGO regarding its impact and effectiveness. As long as these partnerships are set up with a sense of authenticity, we are entering a virtuous circle. If either party is not sincere in engaging with the other, it is rare for the partnership to be fruitful.

I think, also, that NGOs can play an early-warning role for businesses, thanks to their proximity to local populations, with regard to issues that the business might have failed to identify, due to a lack of knowledge about the social environment, local traditions and beliefs, and so on.

D.M.: As you rightly said, partnerships between businesses and NGOs are multiplying rapidly nowadays. Could you give us any examples of partnerships set up by Entrepreneurs du Monde, and explain how they helped reinforce the legitimacy and social license to operate of companies you work with?

F.R.: Entrepreneurs du Monde works with several major corporations such as L’Occitane, Total, EDF and Schneider Electric. In each instance, it involves actions designed to make services (access to credit, savings or training) or products (solar lamps and kits, gas stoves, etc.) accessible to economically deprived populations. The “research” component of these partnerships is important: in several cases, we work with these partner companies in a spirit of innovation, in terms of distribution channels as well as products themselves. With L’Occitane, for example, women who produce shea (karite) make a living from that activity for about six months a year. But for the other six months, L’Occitane wanted to give them the opportunity to develop income-generating activities, and approached Entrepreneurs du Monde to put in place savings, credit and training services. With Total, we set up a program in Haiti to provide affordable high-quality solar lamps, principally for people living in slum towns. That program has since evolved into a
local Haitian social enterprise in which Entrepreneurs du Monde acts as a majority shareholder. In the Philippines, we are testing, again with Total, a new way of distributing solar lamps for slum dwellers. In Haiti, with Schneider Electric, we are also looking into the possibility of developing training centers in electrical trades, to create career opportunities for unemployed youths. With EDF’s Research and Development team, we are looking to get back to very cheap and easy-to-use products for populations excluded from any kind of electrical network. Discussions are also under way with Danone, L’Oréal and Bel.

This means that, in these companies with which we are in partnership, people are working with us on projects, from design through to implementation. We are a long way from the conventional “donor-beneficiary” approach; this is a real partnership, where the complementarity of the actors involved is as essential as it is meaningful. Each of these partnerships started out from a need identified in the field and a determination to find a joint response. At no point was there a phase simply to drum up funding prior to these joint actions.

**D.M.:** With your long experience of working with the private sector, how would you define the key success factors for this type of NGO-business partnership?

**F.R.:** The main thing is that all of the stakeholders must be sincere about what they are doing, as we said earlier. If the business acts not out of conviction about the relevance of the actions being taken, but primarily just to enhance its brand image, you can be certain that before too long the actions will be undermined by diverging goals and visions. Likewise, if an NGO signs up to a project in order to obtain funding, to the detriment of the purpose of the action, it will unbalance the partnership and possibly wreck it. Having a shared vision between the stakeholders about the target populations, how to serve them, and the means for achieving these goals, is undeniably a key success factor.

This shared vision often depends more on the sensitivities of the people themselves than the entities they represent. It has already happened, in certain countries, that we couldn’t make any progress with a company because the country director of the partner company didn’t share our concerns and didn’t buy in to our proposals, only to find that when he was replaced by a new director, we were given a radically different reception, so much so that the synergies fell into place quickly and easily. Conversely, a new country director, freshly arrived and unconvinced by the partnership, or the arrival of an NGO manager skeptical about collaborating with the business world, can also jeopardize what their predecessors have achieved. Getting the right match between the people who carry the project and share the same vision is therefore essential.

Going beyond the human investment, and with the aim of building a healthy and equitable power balance, the company and the NGO must both invest financially in the joint project. By relying on actors who know the field, the company makes precious savings of time and money while developing new markets and reinforcing its social responsibility. Consequently, it is legitimate for it to shoulder its share of the project. The NGO, meanwhile, accomplishes its mission of reaching the poorest segments of the population, while reinforcing its experience, its visibility and its reputation. It isn’t working for the company, but it is working with it to build an action aimed at a target population that lies at the heart of its mission. It is therefore healthy for the NGO also to contribute financially to the actions.

Complementarity between the actors is also essential, and it often comes quite naturally. For instance, in our partnership with Total in Haiti, the roles were distributed in a natural way. Now that the target populations have chosen the solar lamps promoted by Total – through focus groups and tests on different lamps from a number of suppliers – Total is taking care of managing relations with the supplier, importing the products, and handling press relations. In the meanwhile, Entrepreneurs du Monde is taking care of developing the “last mile” distribution network and recruiting resellers, the development and promotion of financial services for potential buyers, direct marketing, and impact assessment.

**D.M.:** On the downside, are there any watch-points and/or potential risks that need to be kept in mind when embarking on this type of partnership?

**F.R.:** The risks are very real. In 18 years of activity, Entrepreneurs du Monde has called a halt to two partnerships that started off on the wrong footing.

One company that we had approached expressed a keen interest in developing a program with us. After two years of fruitful partnership, the program began to experience ever stronger intervention from the company in question, which ended up demanding that we stop the training that was being given to the beneficiaries, and that we locate our savings and credit agencies not in the slum towns but on much more commercial routes. The divergence about the choice of target population, and the purpose of such programs, was clear. We later learned that going through Entrepreneurs du Monde costs the company five times less than when it operated directly – mainly due to the cost of human resources – and so it had developed the habit of setting up its actions via NGOs rather than directly. There was therefore clearly no sincerity in the company’s partnership approach, and no shared vision about the actions to be implemented. But, as it is often the case, that had more to do with the person in charge of the program at the company than with the company itself – which, in this case, ended up letting that person go.

In another context, we were approached by a foreign company that came to see us at our head office in France and very quickly validated financial support for one of our programs. In no time at all, they voted through and paid us a subsidy of €60,000. A few months later, during a field mission, we discovered that the name of the company featured on the front page of local newspapers: it had been responsible for an accident that had
caused the deaths of several people and was denying responsibility. We immediately decided to return the subsidy to the company, since we doubted that they had approached us in good faith.

As these two examples show, we have to be lucid about these NGO-business partnerships. Once again, they underline the importance of the authenticity of the approach. Of course, it’s impossible to define the degree of authenticity objectively, whether for the NGO or for the company. And the criteria for assessing this authenticity will, naturally, vary from one person to another when it comes to making a decision. Nonetheless, it is a key element.

There are other risks, too. For example, the potential implications for local industries of implementing actions that might compete with local production. When we set up our partnerships, we are careful not to favor the import of products that could be manufactured locally.

On the NGO side, there is a risk of being tempted by the prospect of obtaining funding regardless of the utility and impact of the actions put in place.

With regard to all of these risks, we have had several discussions at Entrepreneurs du Monde before deciding whether to set up or close down a partnership, and we are currently defining our ethical charter to help us in our decision-making. If there are any doubts about engaging in a partnership, the quality of the personal relationship with our contacts often proves to be the determining factor in our final decision. The quality of this relationship is an indicator of our ability to change mindsets – and, ideally, practices – in the partner company when we are not completely convinced of its sincerity. It might sound pretentious to claim that a little NGO like ours can influence a large company, but we know from experience that the success of a pilot project in the field, which demonstrates its ability to reach a very economically insecure target group, can influence the top management of a major corporation in its strategic decisions and encourage it to no longer ignore that segment of population. Conversely, companies as innovative as Danone, for example, have done a great deal to move NGOs forward in their practices by acting as a driving force for new ideas in implementing these partnerships. Companies also help NGOs to evolve.

D.M.: How do you see these NGO-business partnerships changing? Do you think we are entering a new era of co-creation and collaboration between the non-profit and private sectors, or will this trend remain limited to the most innovative businesses and NGOs? What is at stake for businesses and for NGOs?

F.R.: Examples of NGO-business partnerships are more and more numerous and diversified in their content. This is great news, and it probably foreshadows what tomorrow’s company will look like: an increasingly responsible actor, both by obligation (due to ever greater pressure from consumers and legislators) and by conviction: those at the forefront have already realized that it’s possible to serve the poorest population groups and still not lose any money – if not make a little.

The implications for companies that have understood this are very significant, at every level: that of the employees, who find meaning in their work; that of the suppliers and customers, who feel as though they’re getting the best of both worlds by choosing the company in question or its products; that of the social utility of the company, which serves vulnerable populations (provided, of course, that the products are of good quality and meet essential needs); and that of the social acceptability of the company and its reputation. We have a fantastic opportunity to put the race for growth of the last 45 years behind us and return to a virtuous business model that contributes to the wellbeing of everyone it comes into contact with. What’s more, the choice made by these companies pays off, as can be seen from all the current initiatives that dare to adopt a different, and much more responsible, model. Very often, these initiatives achieve excellent results.

For the NGOs, it is a grave mistake to embark on this type of partnership out of opportunism, in response to the ever-tighter funding context; it must be done out of conviction, with all the authenticity demanded by such an approach, if we want to get results. It’s not a question of selling your soul to business, if you’re not convinced that the complementarity between NGOs and businesses is meaningful… and there are still many reservations in the world of the NGOs. Ultimately, what we are seeing is not so much an evolution of the longer-established NGOs towards this new way of reaching deprived populations, as the emergence of new players which are convinced that such partnerships make sense. It is these new players that, in future, will probably occupy an increasingly important place in the NGO world. Their emergence is favored by all the younger generations now arriving on the labor market; they hold the previous generations responsible for the dead ends we now find ourselves in, and they no longer identify with the conventional business as we knew it 10 or 20 years ago. They want to make their contribution to a better world by inventing a new economic model, in which there is a part to be played by these NGO-business alliances that have become such a feature in recent years.

The trend goes much deeper than the company’s concern for its brand image, or the NGO’s difficulty in obtaining funding. In this respect, it is highly positive, and heralds a new – extremely healthy – economic model for a more equitable and therefore more peaceful world… even if there is still a long way to go.
3. ASSESSING THE SUCCESS OF THE ACCEPTABILITY APPROACHES
Finally, it is essential to know how to measure the effectiveness of the policies companies implement to ensure the greater acceptability of key projects.

Two types of measuring and assessment tools are presented in this section. Once implemented, these tools will ensure that the interests of local communities, businesses, and the various stakeholders are aligned.

**Impact assessment: a key indicator to determine the satisfaction of local communities**

The first assessment measures the impact of the strategies carried out in the field.

Without an assessment, there is considerable risk that the acceptability strategies may not meet actual needs, or that they may have strayed from their original objectives.

Strictly speaking, it is the assessment of the societal initiatives that businesses implement that is most important.

As Esther Duflo remarked, only a credible and independent impact assessment makes it possible to create a virtuous system. Indeed, there is nothing reprehensible in seeing companies “enhance their reputation” by engaging in social initiatives, if their strategy has an actual effect on development. It is therefore necessary to ensure that their improved image actually corresponds to a positive impact in the field in emerging countries.

This is the point of the article by Minh Ha-Duong, Lan Anh Nguyên, Tracey Strange and An Ha Truong, which compares the directives on international best practices in the field of social impact studies with current practices in Vietnam. The article discusses ways to improve the investment of all stakeholders in the social impact assessment and management.

**Societal performance: a key indicator for businesses**

The second assessment required is a tool for the companies themselves. Their efforts can only be sustainable if they are carried out in a way that can be measured.

In his article, Witold Henisz sets out to create the conditions for such a performance indicator, by proposing to incorporate the societal and environmental issues into a financial framework, thus creating what he calls “corporate diplomacy”.

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We compare international best practice guidelines on Social Impact Assessment with current practices in Vietnam, based on a desk review of relevant regulations, participative observation, stakeholder interviews and three case studies. We find that infrastructure development is booming in Vietnam despite administrative complexity and inefficiencies; resettlement for hydropower projects has become a kind of lightning rod for questions of environmental justice; and compensation is the key issue there, overshadowing other social impact considerations. Options to improve the investment of all stakeholders in the social impact assessment and management are discussed.

INTRODUCTION

Infrastructure development is a necessary condition for economic growth and modernisation. Globally, between 7 to 10 per cent of Gross National Product is invested in infrastructure. In a fast developing country like Vietnam, the percentage is even higher. Costs to people and ecosystems match this scale. Throughout history, in all countries, millions of people have been displaced to make way for roads, water canals, and dams. Indirect impacts from projects such as real estate speculation modify access to natural resources and environmental pollution further escalates their impact.

Hydropower, once put forward as essential to modernization, continues to play an important role in low carbon clean energy development. Hydropower is a low CO2 emissions source of electricity, it does not rely on imported fuels and it can be turned on and off to follow demand – unlike solar and wind. In recent years it has drawn considerable criticism for its negative impact on people and the environment. WWF (2004) puts it simply: “Dams are both a blessing and a curse”. Large dams destroy ecosystems, impacting wetlands and freshwater species, while economic benefits are not necessarily distributed fairly, but rather preferentially to developers and investors.
As a means of navigating the complicated process of balancing benefits of large infrastructure projects against costs, governments and international funding organizations require Environmental and Social Impact Assessments (ESIA). In an ideal world, only projects with compliant ESIA would be funded, and this would guarantee acceptable impacts. Reality checking reveals some important impediments and inefficiencies, among them a significant problem of good faith. Almost all ESIA reports conform to the language of regulations. Yet failed resettlement or biodiversity loss issues still exist.

There is still no coherent mechanism for sharing the learning from ESIA across communities of practice or sectors of industry, resulting in the repetition of mistakes and inadequate pressure on ongoing and future projects to improve. Discussing the impacts of the Sesan river dam in Cambodia, Sangha and Bunnarith (2006) observe, for example, “The Sesan issue highlights the learned water governance lessons in the Mekong Region, yet shows how these learned lessons continue to be ignored.” Furthermore, a substantial amount of research literature on ESIA is project-specific, and contributes little to understanding how to improve ESIA systematically.

Another large share of ESIA-related studies are interested in environmental rather than social impact, resulting in an incomplete analysis of human-environment interactions. For example, the most popular online database of scientific literature returns 81,100 results for dam “environmental impact” versus only 13,700 results for dam “social impact” (accessed 2015-09-18). In an effort to address the need for a more thorough analysis of infrastructure impact, we chose to focus on the social dimension.

Previous research suggests that resettlement — the economic and/or physical displacement of people — is the main social issue for many projects. While most large infrastructure projects have to resettle some people to ensure effective implementation, the problem is especially acute for hydropower projects. Thus, hydropower projects are of particular interest in understanding how regulations attempt to mitigate the impact of resettlement and how effective these guidelines are to what happens on the ground.

Having examined the costs and risks of hydropower dams in Vietnam, Tu et al. (2013) concluded that “Regarding the costs for resettlement, it seems that citizens are generally worse off after resettlement. The Government of Vietnam has implemented the ‘land-for-land’ policy in land confiscation practices since the 1990s, including those for hydropower projects. However, in many cases, compensated land provided is less in quantity and worse in quality than the land that was taken. The compensation and support is insufficient for resettled people to conduct the same agricultural practices as on their former land. People have become poorer than before resettlement.” Huu (2015) noted that “To date, approximately 200,000 people have been displaced and relocated for the construction of hydroelectric dams, of which over 90% are ethnic minorities. The majority of resettled people have no stable life after resettlement, and their living standards are increasingly more difficult than before resettlement. In practice, very few cases of resettlement due to hydropower dam construction are considered as successful examples in Vietnam.”

So in spite of a robust set of guidelines attached to Vietnamese infrastructure projects, evidence of social impact remains a cause for concern. Is reduced wealth and quality of life an inevitable result of resettlement? Are there concrete, actionable ways of mitigating loss and even improving livelihoods, as the guidelines imply? With these questions in mind, we have undertaken an analysis of international best practice guidelines/ESIA compared to current practices in Vietnam, looking specifically for which characteristics constitute barriers to sustainable infrastructure development and which allow infrastructure projects to minimize damaging effects to people and environment while achieving the best balance between development goals and costs.

1. METHOD AND OBSERVATIONS

This reporting is based on 1) a desk review of relevant regulations, 2) our first-hand experience as consultants tasked with implementation for various hydropower and expressway projects, 3) interviews with international lending organization officers, impacted persons and consultants, and 4) three hydropower case studies discussed in section 3.

1.1 ESIA IN THEORY: THE GUIDELINES

Environmental and social impact assessments are, as their name indicates, assessment tools for evaluating the impact of projects on ecosystems or environments, and people (Morgan, 2012). The data contained within them informs decisions on the viability and potential consequences of infrastructure and other types of development.

The International Association for Impact Statement (IAIA) defines ESIA as:

The process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made. (IAIA 1999)

The first source of guidelines defining what these ESIA should contain is national law. In Vietnam, the Environmental Protection Law of 2005 (art. 18) requires Environmental Impact Assessment (EIA) for projects of national importance or those having potential risks or adverse impacts on the environment. Although these EIA do not include “social impact” as a distinct category, the law (art. 20) provides that assessments should contain opinions of the municipal-level People’s Committees and representatives of population communities in the place where the project is located, including unfavorable opinions. The law (art. 21) also states that before making conclusions or decisions, EIA appraisal councils must consider petitions or recommendations sent in by organizations, population communities and individuals. Government’s Decree 69/2009/ND-CP
and Decree No. 197/2004/ND-CP frame the role of local administrations: “basing themselves on local realities, the provincial-level People’s Committee presidents shall decide on other supporting measures to stabilize life and production of persons who have land recovered”.

International regulations constitute an additional level of rules governing the impact assessment of large infrastructure projects in Vietnam. Between 2010-2014, Vietnam ranked third highest for the amount of external aid received (OECD, 2015). Over 40% of infrastructure investment in the country is financed from external sources. With foreign funding comes a system of oversight intended to assess a project’s adherence to the funding organisation’s development goals. Regulations for oversight and reporting are meant to improve the likelihood of sustainable outcomes.

The major external funding sources for infrastructure in Vietnam include the World Bank, the Asian Development Bank (ADB), Japan’s JICA, Germany’s KfW/GTZ, and France’s AFD. Climate finance organizations, from the ailing Clean Development Mechanism to the newly created Green Climate Fund fund are also involved in hydropower. Each organization has its own preferred domain of intervention regarding the size, geographic location and type of projects supported. There is also variety in the financial structure and in the conditions attached to funding. However, these agencies all require some form of ESIA to be conducted prior to large project approval (ADB 2009, WB 2001, JICA 2010).

For example, according to current World Bank procedures, the Bank must satisfy itself that the borrower has explored all viable alternative project designs to avoid involuntary resettlement and, when it is not feasible to avoid resettlement, to minimize its scale and impacts, such as through the realignment of roads or reduction in the height of dams. The World Bank’s current involuntary resettlement policy presupposes that the project justifies the evictions or restrictions of access to resources and does not contain a requirement to first assess whether the project promotes the general welfare.

Although there has been progress in reforming national systems, there are still significant gaps between requirements and guidelines of various development partners (government, ministries, local agencies, international banks, other countries’ development agencies) which require harmonization. The gaps between the environmental and social impact assessment guidelines given by international funding organizations and current practices in the country can lead to unintended and/or unsustainable outcomes.

1.2 ESIA PROCESSES AND PRACTICES
Large infrastructure projects involve private actors, central ministries and local administrations.

Proper design is critical to minimizing impact. Private actors in charge of the detailed design determine project scope – it is their expertise and ways of working that drive a project in its early stages. The design consultant is usually a consortium led by one main consultant with many sub-consultants. The main consultant is selected according to the nature of the infrastructure, e.g. to build a highway one would hire those with experience in road and bridge engineering; for hydropower plants, design consultants with experience in dam and power plants are chosen. Expertise in environmental and social domains is not a primary criterion. The main consultant generally contracts out the EIA to a sub-consultant, who in turn may subcontract out the social assessment portion.

On the government side, planning and development of large projects involve the following ministries:
• Prime Minister – Approval of development orientation.
• Ministry of Construction (MoC) – Line Ministry for urban development.
• Ministry of Planning and Investment (MPI) – Allocates state budget. All major investment projects must have approval of MPI. Prepares Social Economic Development Plan.
• Ministry of Natural Resources and Environment (MonRE) – Manages water resources, water use, pollution and is in charge of land use planning.
• Ministry of Finance (MoF) – Distributes state funds to sectors and projects, sets annual sector goals and regulates accounting.

The coordination of official development assistance (ODA) projects follows a top-bottom approach with MPI being the focal point. Ministry of Finance being the official contractual “borrower”, and the branch Ministries or Line Agencies acting as state supervisors of operational implementation. The MoF, on behalf of Government of Vietnam, borrows funds from donors and development banks, which have their own specific financial conditions and technical policies. Then MoF either allocates the funds to the project implementing agencies through state treasury (for projects that do not bring future revenue), or re-lends the funds through the Viet Nam Development Bank (for projects that generate revenue in the future).

Projects involve many layers of responsible agencies at the national, provincial and municipal levels. The People’s Committees at the provincial and city levels in general have limited capacity to carry out ODA projects, lacking familiarity with procedures in project administration and management best practice. Local governments have little experience of mobilizing sources of funds other than central government transfers (Trần Tiếp Đệ 2012). Though they have final control

“ALTHOUGH THERE HAS BEEN PROGRESS IN REFORMING NATIONAL SYSTEMS, THERE ARE STILL SIGNIFICANT GAPS BETWEEN REQUIREMENTS AND GUIDELINES OF VARIOUS DEVELOPMENT PARTNERS (GOVERNMENT, MINISTRIES, ETC.).”
of project implementation, their standards and methods can differ from those of international funders, and consequently the building may differ from the approved design in problematic ways (Pham Tuyền-Ngoc Son 2015, MONRE 2011). On the other hand, funders can also lack sufficient knowledge and involvement at the ground level of implementation, thereby lacking a clear picture of how infrastructure building is actually affecting people and ecosystems.

The ESIA process is designed to inform “prior to major decisions being taken”. In practice, though, the timeline of ESIA studies and their influence on project approval is anything but straightforward or transparent. Many development projects that require acquisition of land or natural resources will resettle local communities prior to project implementation. The Phu Lac Wind Park in the Binh Thuan province, supporting agency KfW from Germany, illustrates this. Its feasibility study was approved in January 2010, but it took three years to sign the loan. Resettlement and other tasks like road construction and unexploded ordnance clearing were therefore conducted before the loan was granted. A three year delay is a long exposure to exchange rate fluctuations, given that wind farm projects are usually physically constructed in less than a year. The delay in this case can be explained by the fact that this was the first wind farm ESIA performed in the country. Donor oversight was very present in this case.

We have seen other cases where resettlement and displacement have occurred in anticipation of donor involvement for the specific reason of avoiding compliance with donor safeguard policies. Many development projects that require acquisition of land or natural resources will cause resettlement or displacement during a period prior to implementation of the project. For example, families in Tay Ho district, Hanoi have been threatened to remove houses for a resettlement project though no legal decision had been issued yet (DCSVN 2015).

After a project has been authorized, public services have less leverage to make the developer deal with the problems of impacted persons and environment. There is generally less supervision by authorities once a project is in operation.

### 2. EXAMPLES OF SOCIAL IMPACT MANAGEMENT STORIES

This section exposes three contrasting cases of hydropower social impact management coming from different parts of Vietnam. The first is funded by a Japanese bank and thus bound by domestic guidelines, the second and third follow WB and ADB donor policies.

#### 2.1 SREPOK 4A HYDROPOWER PROJECT

**Description:** Electricity generation utilizing the water from the discharge channel of Srepok 4 Hydropower Project upstream. Total installed capacity 64 MW, no dam or reservoir.

**Dates:** Start date Oct, 2010. Commissioning of the first unit on 25/12/2013.


**Funding:** Commercial loan from Sumitomo Mitsui Banking Corporation (Japan) under Non-binding Foreign Credit Insurance Program of Nippon Export and Investment Insurance (NEXI), guaranteed by Vietnamese Government.

A look at Srepok 4A reveals many examples of complications inherent in conducting large infrastructure building (damage to livelihoods and property, pollution, dislocation).

Project documents (EIA report, resettlement plan) for Srepok 4A were prepared in compliance with Vietnamese regulations. In the EIA, impact on water supply for the part of Srepok river extending from the dam of Srepok 4 to Srepok 4A’s powerhouse was considered adequate to ensure the water supply for cultivation and tourism. However, the actual situation did not match the ESIA calculation.

Water diversion for the project caused a lack of water in a part of the river upstream of the powerhouse and has had a negative impact on Buon Don village (a tourist destination, close to the Yok Don national park). The waterfall and river at the site have dried out and has had a negative impact on Buon Don village (a tourist destination, close to the Yok Don national park). The waterfall and river at the site have dried out and has had a negative impact on Buon Don village (a tourist destination, close to the Yok Don national park). The waterfall and river at the site have dried out and has had a negative impact on Buon Don village (a tourist destination, close to the Yok Don national park). The waterfall and river at the site have dried out and has had a negative impact on Buon Don village (a tourist destination, close to the Yok Don national park). The waterfall and river at the site have dried out.

The construction and existence of a water diversion channel for the powerhouse was thought to make communication and transportation more difficult. To resolve this issue the project owner built some bridges. However, during construction, people complained that the bridges were of low quality and unsafe. A group of about 50 gathered to prevent the construction of the plant, after which the local authority decided to postpone the bridge construction for review and safety checks. Finally, during construction, the water diversion channel was broken due to heavy rain, flooding land used for cultivation by local people.
Other problems included complaints about inadequate compensation, damage to houses from construction (cracks in walls, broken windows), pollution from solid wastes and floods.

On the positive side, farmers whose land was damaged were able to learn about their property rights for the first time and get legal aid for the right compensation.

2.2 TRUNG SON DAM

**Description:** The 260 MW Trung Son Hydropower Plant is a multipurpose project (power generation, flood regulation, CO₂ emission reduction).

More Information including the SEIA report is available at [http://trungsonhp.vn/](http://trungsonhp.vn/)

**Location:** Ma River and has its project site in Thanh Hoa, Son La and Hoa Binh province.

**Funder:** World Bank

**Dates:** expected to operate on QIV 2016.

Reports regarding environmental and social impact assessment, livelihood for indigenous people, etc., were prepared in accordance with WB regulations. All documents are available on the websites of project owner and WB.

The Trung Son project has a practical, efficient multi-layer monitoring and evaluation framework consisting of the following elements:

- Dam Safety Review Panel/Project Technical Advisory Panel (PTAP)
- Panel of Environmental and Social Experts (POE),
- Independent monitoring consultants (IMC),
- Regular supervision by staff of the World Bank.

It also has well-funded environmental and social impact mitigation programs, including the US $28 million spent for improvement of life and livelihoods of affected people and environmental protection (with a total of over 50 packages related to environmental and social issues).

In terms of addressing the grievances of impacted people, project owner TSHPCo established a detailed plan to ensure that all complaints related to compensation would be resolved quickly, via two channels: People’s Committees from town to provincial level and an Independent Grievance Panel set up by the project owner. The process of resolving complaints and claims only ends when people are satisfied with the outcome. TSHPCo has its own website [http://www.trungsonhp.vn](http://www.trungsonhp.vn) where public information related to addressing complaints and grievances is continuously updated.

2.3 SONG BUNG 4 DAM

**Description:** Song Bung 4 is a run-of-river Hydropower Project with total capacity 156 MW.

**Dates:** first unit commissioned on 1/10/2014.

**Lieu:** Vu Gia River, Quang Nam Province

**Funding:** Asian Development Bank

The two previous examples may suggest that issues related to resettlement and ensuring livelihood for relocated people are better addressed in internationally funded projects (ODA from WB or ADB) than nationally funded ones. Indeed, international projects have to comply with both VN regulations and sponsors’ guidelines. With these guidelines and close supervision from sponsors, the resettlement process has been significantly improved compared to that of VN-regulated projects. However, there are still some problems remaining.

For example, in the case of Song Bung 4 (165MW, ADB-funded project 36352-013), compensation was paid to affected households so they could build new houses themselves. This was an effort to address the widespread problem seen in many other hydropower projects of resettlement houses not meeting the needs of displaced people. However, when people received large amounts of money at once, some spent it instead on more ornate wooden houses, buying new transportation or other things unrelated to income generation. One unforeseen consequence was the deforestation caused by the wooden house trend (VNTimes 2012). By contrast, the Trung Son project avoided these problems because the World Bank required approval of house designs before paying compensation.

Another issue is land for cultivation in the resettlement area. For Song Bung 4, each household has 1.5ha as stated in the approved plan, but people claimed that this was not enough. Beyond resettlement, social impacts included claims of problem with illegal workers from China working for the project (Nguyễn Thành 2013) and allegations that corrupt local officers lied about the amount of property loss to steal compensation money (Vân Nguyên 2014).
3. RESULTS

3.1 ADMINISTRATIVE COMPLEXITY MULTIPLIES PROJECT COMPLEXITY

The complexity of projects is a significant barrier to efficient impact assessments. Factors which increase the difficulty of projects are:

- Projects have three working languages: Vietnamese, English and the language of the country behind the international funding. In general, Official Development Assistance projects require that the main consultant as well as the main contractor be of the donor’s nationality.
- Projects cover several towns or provinces. For example, the transfer of funds between provinces and general coordination requires time-consuming processes at the central level.
- Projects cover sub-sectors from different ministries. For example, different partners have different rates for the backhanders envelopes, which are not easy to know.
- Projects have multiple donors. For example, the first three lines of the Hanoi metro under construction are each financed by a different country (China, Japan and France); each requires the use of a national engineering company and national train provider. This is not only a technical absurdity, it complicates the impact study for no reason.

Complexity leads to delays in approval and start-up, particularly for procurement contracts, thereby inhibiting the effective implementation of infrastructure projects. Social realities keep changing during these delays. People move in and out, the economy grows (or shrinks), media can take interest and increase visibility, bringing to light conflicts or problems. Years of delay make social assessment a moving target and considerably harder to reach. Long timelines also make it easier to justify any discrepancies between the lowball estimates and the social problems encountered.

When the administrative system is too complex, it becomes inefficient. In the end, the role of the State in the compensation of displaced people becomes weaker, leaving the project owner to negotiate directly with impacted people.

Vietnam’s rapid economic and population growth has led to an increase in new infrastructure projects. Smooth administration of infrastructure projects needs more human resources and institutional capacity to regulate, plan, operate, and manage infrastructure assets and services (Pham, 2014).

3.2 RESETTLEMENT REMAINS A MAJOR CONCERN

Though the impact statement may appear to be a streamlined process, a closer look reveals some important challenges, in particular in the area of involuntary resettlement. Development guidelines call for resettlement that leaves people in “equal or better” conditions. But translating that into concrete outcomes acceptable to affected people is anything but simple. Those impacted by involuntary resettlement (IR) face a number of well-documented risks and human rights violations, including: homelessness; loss of livelihood; food insecurity; psychological trauma; negative health impacts; increased morbidity and vulnerability, especially among women and children; economic and cultural marginalization; and social disintegration. For example:

- The land disputes between the government and individuals have tended to worsen when farmers want to protect their land and assets. The forcibly evicted have been arrested, beaten or even worse. On 25 April 2014, Hanoï authority mobilized “thousands of people” including gangsters and mafia in a coercive land acquisition in Duong Noi, Ha Dong district – according to many witnesses (BBC Tiếng Việt, 2014).
- In June 2012, holdout families clashed with a group of men hired to clear their land for the EcoPark site, leaving several villagers injured and others vowing to protect their homes should demolition crews return in Van Giang, Hung Yen (Mac Lam, 2012).

Resettlement for hydropower projects has become a kind of lightning rod for questions of environmental justice in Vietnamese society (CPV, 2012). IRs are often viewed as discriminatory, as it is the poor and marginalized sections of the population, generally, who are required to move out of the way for development projects. Impacts from displacement are not constant across populations: dams are built in mountainous areas and tend to affect the poor disproportionately. Those living in remote and high mountain areas have less access to education, higher dropout rates, later school enrolment, less access to formal financial services, less productive land and less off-farm employment. On average, they have lower market access and poorer returns from markets. The difference in material living conditions of households in the deltas and those living in mountain areas is widening. The multi-ethnic makeup of Vietnam, with over fifty distinct groups and languages, adds to the difficulties of assessing and managing impact on these people and communities (UNDP, Poverty Situation Analysis Of Ethnic Minorities in Vietnam 2007-2012).

3.3 FAIR COMPENSATION, KEY TO SATISFACTION BUT DIFFICULT TO DECIDE

Determining what is fair compensation is a critical facet of social acceptability of large infrastructure projects. According to government statistics, 70% of citizen complaints are related to land disputes and many of them have remained in deadlock for a long time (VGP, 2015).

Although the law and guidelines define a unified compensation policy, in practice there is a difference between urban and mountain areas. In the mountain areas, compensation is often land for land. In the cities, impacted individuals are offered more options. For example, they can be offered a choice among several options: a) money; b) land for land, that is a comparable apartment or house in the resettlement area; or c) buying land at a preferential price in their current neighborhood. One reason for this difference...
is that impacted individuals in cities have a stronger political voice. In the mountains, contested sites have less visibility, given that it can take several days of travel for a journalist to visit.

The relation between the compensation amount and the market price of land is problematic, complicated by the lack of professional agencies working on land price assessment. Land prices issued by the government are not updated relative to changes in market price in some localities, leaving resettled households at a disadvantage. In some cases, the land price announced by the government is equivalent only to 30-60% of market price (BBC News, 2012).

The Provincial People’s Committee has the authority to make decisions for both land price and forced eviction. Due to the lack of specific guidance on the process of determining applicable land prices, each province or city offers different solutions which may cause inequalities across cases. In the vast majority of cases, the administrative decision was imposed and not in line with market prices. Additionally, in many cases, compensation for resettlement is slow (Gillespie et al. 2015).

Most people do not sign a formal contract agreeing to a compensation package. Thus, if they do not explicitly complain, they are assumed to be satisfied. Le Chi Cuong (2014) wrote for example: “According to assessment of the Consultant, almost all interviewed households are satisfied with the compensation plan that the Project proposed. Some households are not satisfied with the compensation price for land, crops or limit of support for agricultural land. However, after considering and clarifying, PC of Gia Lai concludes that the compensation plan for those households are totally in compliance with regulations of the State and PC of Gia Lai province. After that, those households have received compensation and support as provided in the approved compensation plan.” Yet even after compensation is taken, factors can impede the sustainability of resettlement, and lead resettled households to eventually move back to their previous land.

3.4 OTHER SOCIAL IMPACTS BEYOND RESETTLEMENT ARE INSUFFICIENTLY ADDRESSED

Comprehensive and independent reports on Social Impact Assessment of large infrastructure projects in Vietnam remain an exception today. Currently, SIA is typically included within EIA reports and often accounts for a very superficial part, typically about 10% of the EIA content, 20% maximum. This is insufficient to address adequately all social aspects such as gender issues, inequality or cultural heritage.

The ESIA we analysed focuses on emissions – how many tons of dust, SOx, NOx, how many dB of noise level – while other aspects such as water balance changes, deforestation, aquatic production and impact to cultural indigenous peoples are briefly described in only a few pages (see e.g. Đoàn Đại biểu Quốc Hối tỉnh Phú Yên 2013). Most of the EIA for industrial development, mining and urban transportation projects we reviewed scarcely addressed the forecasting of ecological and social impact and included very little information and data on local diversity
biological, ethnographic, cultural heritage, or archeology in their reports. Yet disregarding the culture of the impacted households can lead to inappropriate resettlement attempts, for example by building flat houses for people who live in stilt houses.

One reason for this may be methodological. Even in countries with the most advanced universities and research institutions, there are still controversies on the capacity of science to adequately forecast impacts on natural ecosystems or human systems. There is a risk that qualitative impacts, which are even harder to measure, are simply dropped out of the ESIA.

Guidelines have a key role to play here. Beyond quantitative measures, e.g. of CO₂ levels, they can provide explicit direction in how to employ the methods and tools of social sciences with which most engineers are unfamiliar.

4. DISCUSSION

4.1 ALIGNING THE GOALS OF PROCESS AND OUTCOME

The ESIA must be acceptable to funding organisations and public supervisors. If there is an unacceptable environmental and social issue, either the project’s execution or the impact assessment has to be modified. This poses the problem of process overtaking substance, creating situations where the studies are modified rather than the projects they are intended to inform.

Social impact assessment and social impact management are not distinct processes; they are closely related. For example, the consultants who perform the ESIA may have to ask people if they accept the proposed compensation. While they have a limited mandate, this is in fact an intervention, not an observation. They can defer the unresolved issues to project owners, who will negotiate further until resolution is achieved. In this example, it is the project that is modified by adjusting the compensation. Details of the transactions may not be discussed in the final ESIA report, which may only mention that there are no outstanding issues.

4.2 MITIGATING THE INHERENT CONFLICT OF INTEREST WITH EXPERTISE

Problems with conflict of interest in the ESIA process have begun to gain more attention recently with increased emphasis on questioning the “neutral” nature of these technical guidance documents (see for example Stoen et al., 2015).

Consultants are not independent experts. They are dis-incentivized to report negative impacts which may delay or impede project approval, affecting their pay. Whistleblowing also jeopardizes future business. Even if the social impact subcontractor finds issues which may stop the project, the report still has to go through the EIA subcontractor, the main consultant and the project owner before going to the funding organization. Each of these stages opens up possibilities for modifying, removing or re-doing sections describing risks fatal to the project.

EIA/SIA reports are commissioned by project owners as required by both Vietnamese law and donor guidelines. Investors and owners have an interest in exploiting any loopholes in the impact estimation guidelines in order to highlight positive impacts, minimize negative outcomes and downplay mitigation issues. This can happen in spite of the quality of experts and forecasting technology, because there is always some scientific ambiguity in the subject matter. Most social aspects are not easily captured in precise, deterministic quantified assessments.

One way to address this problem of expertise independence is to build upon the difference between social and engineering/environmental aspects: subjects can be involved in dialectic, that is a systematic reasoning, exposition, or argument that juxtaposes opposed or contradictory ideas and seeks to resolve their conflict. Counter-expertise capacity lies – or could be developed – within NGOs, universities and other community-based practices, which are capable of engaging in the types of collaborative knowledge production and learning called for in the literature (Duncan 2013).

4.3 IMPROVING TRANSPARENCY AND PARTICIPATION TOWARDS AN ESIA 2.0

By definition, large infrastructure projects have a national interest, which may or may not align with local interests. Thus, irrespective of the political situation in a given country, decisions about infrastructure development often challenge democratic processes. They are undertaken by governments and implemented in the name of higher national interests by large public and private actors. Such projects are not ultimately decided by the affected people.

Instead, assessing affected people’s needs and potential impact is accomplished through various types of participation processes. These processes can range from very thorough ones in which projects seek to resolve affected people’s concerns and co-construct the project before proceeding, to those that merely inform people of what will be done, without leaving them any choice as to the outcome.

Our research has shown that the ESIA process often remains “top down”, leaving affected or displaced people with insufficient opportunity for substantive input. Publishing relevant project information to the widest possible audience would open up more possibilities for dialogue around impact. Alan Potkin (2014) for example notes that aesthetic issues caused by the de-watering of cascades by hydro projects in the Mekong area can be understood better by interactive multimedia experiences than by traditional ESIA methods. Communication on social platforms open to comments by all netizens has become common for all projects in Vietnam.

Impact varies significantly among project locations. People in urban areas have wider access to public information, media and to the authorities than affected communities in remote areas. Poor people, people in remote areas, less educated people and ethnic minorities have little or no effective choice or decision-making power. This should lead to different approaches to Social Impact Assessment if the goal is to assess impact as accurately as possible and generate meaningful solutions. For example, oral methods in local languages may have to be used instead of written questionnaires in Vietnamese.
SUMMARY AND CONCLUSION

Infrastructure development is booming in Vietnam despite administrative complexity and inefficiencies. Hydropower is likely to continue to be an important part of energy infrastructure in the near to medium future. Resettlement for hydropower projects has become a kind of lightning rod for questions of environmental justice in Vietnamese society. Impacts from displacement are not constant across populations: dams are built in mountainous areas and tend to affect the poor disproportionately. Compensation is the key issue, overshadowing other social impact considerations.

Funders rely on the information included in ESIA to make decisions about which projects get approved. This can lead to an emphasis on the result – a report that looks good and omits issues – over the process – dealing with the conflicts at hand. Consultation mechanisms and compensation schemes that give a strong voice to impacted people and make project advancement contingent on resolution of any claims are an important part of managing resettlements for sustainable outcomes. Dialogue alleviates the problem of dependent expertise. New collaboration practices can improve the investment of all stakeholders in the assessment process, from project owners to funders to impacted people, and lead to more robust decisions.

Finally, the potential conflict between people’s interests and preferences and those of developers and governments is not easily resolved. ESIA is not an insurance policy. But ESIA, done thoroughly and thoughtfully, with real investment in ensuring sustainable livelihoods as a project goal, can go far in improving the status quo.

4.4 REVISITING THE LAWS AND REGULATIONS

Vietnamese regulations on consultation process still have limitations. First, stakeholder consultation is still not adequate. According to the Decree 29/2011/ND-CP, only two groups of stakeholders are required to be involved in the consultation process (People’s Committee at commune level and representatives of local community that is directly affected by the project). This does not cover other stakeholders that might be relevant such as: environmental/land/water management authorities at commune level or higher; entities involved in environmental consultation; social/political groups in charge of ensuring that environment and resources benefit the people within their scope of work; media working in project areas; international or regional organizations; individual experts/scientists and citizens willing to contribute to sustainable development.

Second, the responsibility of organizing stakeholder consultation meetings still belongs to the local authorities instead of project owners. The People’s Committee of the town is responsible for announcing the summary of EIA to local people as well as organizing the consultation meeting between stakeholders and project owners. This allocation of public consultation responsibility is not practical, as the responsibility for the whole consultation process should lie with the project owners.

Finally, the time period for the consultation process is only 15 days. After that period, if there has been no written response from the stakeholders to the project owner, then it is considered that there is no opposition to the project plans. Such a short amount of time is insufficient for conducting a thorough consultation process.
REFERENCES


ADB: Safeguard Policy Statement, June 2009

JICA: Guidelines for Environmental and Social Considerations (Translation of Japanese Version), April 2010


THE COSTS AND BENEFITS OF CALCULATING THE NET PRESENT VALUE of Corporate Diplomacy

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INTRODUCTION

Despite the mounting evidence that understanding and addressing the concerns of external stakeholders such as government officials, regulators, communities and NGOs is a critical driver of strategic success for companies, particularly in emerging markets, there remains a widely held perception that such efforts constitute a giveaway of hard-earned returns that management will come to regret in the future. These operationally- or financially-minded critics view the “tree-huggers” sitting together in the executive dining room as temporary invaders on their terrain whose influence the company will soon regret. They view the CEO’s commitments at Davos and other international events to be unfunded liabilities.

The voice of such critics strengthens during periods of cost pressure or intense competition when managerial attention is focused on cost efficiencies and potential low-impact redundancies. In recent years, as the price of minerals and oil and gas have plummeted, investments in stakeholder relations previously argued to be essential to generate value from risky deposits and fields have been slashed. Staff in government affairs, community affairs and sustainability have borne far more than their share of cutbacks.

A common pattern emerges in which managers begin with an overly optimistic forecast for a new investment that ignores the full range of concerns and potential costs associated with external stakeholders. The investment is approved and the true nature of reality is slowly realized. Additional costs will have to be borne, additional concessions made to external stakeholders and the pace of investment will have to slow. Often, the revised returns remain profitable and the company’s revised strategy includes many of the elements of corporate diplomacy. However, when prices come under pressure and, especially, when a

This article aims to demonstrate how social, political and environmental risk management can be integrated into a financial framework. To do so, corporate diplomats must use the same tools and performance indicators that their counterparts in operations, marketing or finance use. The financial valuation, both in terms of avoided cost and net value added by acceptability strategies appears to be a necessary condition to have them leave their siloes and gain acceptance across an organization.

KEYWORDS
- STAKEHOLDER ENGAGEMENT
- CORPORATE DIPLOMACY
- COSTS AND BENEFITS
- FINANCIAL RETURNS
- NET PRESENT VALUE
new leadership team arrives, these investments and changes in plan are viewed with scepticism. They are compared explicitly or subconsciously to the original plan which promised far greater returns with lower up-front costs. No matter that the original plan was naive in its assumptions and impossible to realize on the stakeholder landscape that existed in reality. New managers want to prove themselves to be adept at the turnaround and to right the ship that has strayed off course and must be seen to do so quickly. They slash the add-on investments and headcount of staff in the corporate diplomacy functions. In so doing, they reduce the long-term value of the asset but show a short-term improvement in the financial balance sheet. By the time the true costs of their short-sighted management strategy is revealed, they have likely moved on to their next position.

It is absolutely critical to guard against such short-term pathos that corporate diplomats be able to prove the net present value of their investments. It is not enough to tell stories or point to historic write-offs. They need to be able to calculate using the same tools, key performance indicators and financial models that their counterparts in operations, marketing and finance use that their investments are not “nice to haves” but are core to the long-term value of the asset.

1. THE NEED FOR CORPORATE DIPLOMATS TO EMBRACE THE DOMINANT LOGICS OF THEIR ORGANIZATIONS

In order to survive business downturns, the corporate diplomat must successfully integrate their insights and value proposition into the dominant systems and logic that drive business decision-making. They must abandon hopes of transforming or supplementing the existing systems or convincing their peers of the virtues of corporate diplomacy as an end in and of itself. Instead they must accept the dominant logics of their organizations and embed corporate diplomacy within them.

1.1. THE USE OF DISCOUNTED CASH FLOW (DCF)

Put simply, to win workplace arguments involving the allocation of scarce funds for material investments and payroll, you must quantify your evidence in terms of the return on those investments. Companies use discounted cash flow (DCF) analyses to evaluate potential investments, consumer surveys to assess new products and click-through studies to track online ad campaigns. Stories matter too — we humans are storytellers and make sense of the world by shaping facts into narratives. But stories alone will not convince colleagues — unless those stories are supported by numbers.

Corporate diplomats too often ignore numbers. They assume that moral appeals or dire prophecies will sway colleagues. Those can help. Companies care about right and wrong, and we all learn from mistakes. But those alone will not beat spreadsheets, and they will not build company wide support for stakeholder engagement, especially in times of tight budgets. In an influential review of Newmont Mining’s social responsibility practices, law firm Foley Hoag wrote that engagement is still seen as “voodoo” by professionals from other fields. Marketing and human resources departments have embraced the tools of the social sciences to improve the precision of their analyses and to make their cases more convincing to colleagues. Corporate diplomats must follow, quantifying costs and benefits and providing credible estimates of how their programs can yield financial returns.

A DCF analysis is the standard way of making that sort of estimate. The term may seem forbidding, but anyone who can plug numbers into a spreadsheet and understand what those numbers mean can learn to do a DCF analysis. A day-long seminar will teach the basics. As a bonus, you will learn that the estimates emanating from the finance department are not as precise as they seem; the final number, positive or negative, depends partly on the assumptions. One of the key assumptions is where you draw the line on counting costs and benefits. It is simpler to look at direct short-term costs and benefits, and short-term estimates are typically more accurate.

In the construction industry, advocates of investing in energy conserving design and materials were originally stymied by a convention to focus the DCF analysis only on the period of construction and not on subsequent operation. Poorly insulated structures will typically be cheaper to build, but, on account of the greater need for air conditioning and heating, more costly to operate. Until the convention shifted from pricing buildings based on their lifetime operating costs, the green building movement struggled to go beyond principled rhetoric, while study after study showed that customers were choosing poor designs. The introduction of life-cycle cost accounting transformed practice, not because it changed the facts but because it empowered key decision-makers in finance and accounting to take those facts into consideration.

A similar revolution is underway in addressing the environmental costs of production of goods and services. Companies such as furniture maker Herman Miller, IT services provider SAP, and retailer Walmart, have found that efforts to reduce waste and resource use yield high economic and social returns. The Economist Intelligence Unit highlighted the successes of these companies and others:

• Forrester Research found that Herman Miller’s efforts to improve sustainability generated a 32% annual return on investment;
• Walmart’s calculations revealed that a 5% reduction in packaging would translate into $11 billion of cost savings, of which it would capture $4.3 billion;
• 3M saved $1.7 billion through its pollution prevention savings, of which it would capture $4.3 billion;
• WalMart’s pollution prevention efforts to reduce pollution prevention pays (3Ps) program since it was introduced in 1975. The program seeks to prevent pollution upfront by reformulating products, manufacturing processes, redesigning equipment, and recycling and reusing waste from production;


FedEx aims to convert its entire 35,000 vehicle fleet to electric or hybrid engines. To date 20% have been converted, which has already reduced fuel consumption by over 50 million gallons; Procter & Gamble seeks to create an estimated $20 billion new product line in detergents that are effective in cold water.

Corporate diplomats must embrace the DCF analyses that many of them have long decried for not incorporating the true costs and consequences of short-term business decisions. But their DCF analyses will encompass not only longer (and thus more realistic) periods, but also secondary costs and benefits related to the stakeholders they have long championed. Sceptics will always argue that it is cheaper to ignore community complaints. They can do this successfully only if the data available shows short-term costs and ignores long-term benefits. Imagine a similar debate ten years ago at Walmart about reducing packaging or at FedEx about reducing fuel. Progress requires that someone makes a business case using the same tools and models that went into decisions to purchase computers, buy planes or build warehouses. Once corporate diplomats can calculate the likelihood of continued confrontation with stakeholders, and the costs and lost opportunities that confrontation brings, costs and benefits will look very different.

1.2. JENSEN’S WORK: INTEGRATING STAKEHOLDER COSTS AND BENEFITS INTO TRADITIONAL DCF MODELS

They can then break down the barrier between those who emphasize shareholders and those who stress stakeholders. One of the academics who has done the most to champion a shareholder focus within corporations is Michael Jensen of Harvard Business. Yet in a 2002 paper, Jensen said: “We cannot maximize the long-term value of an organization if we ignore or mistreat any important constituency. We cannot create value without good relations with customers, employees, financial backers, suppliers, regulators and communities.” He argued, though, that without means to translate the costs of mistreatment into firm value, stakeholder theory fails to give concrete guidance to managers. Instead, he proposed “enlightened value maximization” as a decision-making criterion, and argued that it was identical to an “enlightened stakeholder theory.” Jensen said that managers should “spend an additional dollar on any constituency provided the long-term value added to the firm from such expenditure is a dollar or more.” In essence, the challenge that Jensen presented to corporate diplomats is how to incorporate stakeholder costs and benefits into the traditional DCF models, which omit them.


The IFC, in partnership with the Norwegian Ministry of Foreign Affairs, Deloitte, The Multilateral Investment Guarantee Authority (MIGA), Rio Tinto and Newmont Mining, has developed a freely available online net present value (NPV) project management tool that rises to the challenge posed by Jensen. It can be downloaded at www.fvttool.com.  

2. MANY EXISTING STUDIES DEMONSTRATE THE POSITIVE ASSOCIATION BETWEEN SOCIAL AND FINANCIAL PERFORMANCE

Increasingly, company- or project-level evidence shows that numbers support the case for stakeholder engagement and that companies that ignore outside stakeholders do so at their peril.

2.1. THE COST OF IGNORING STAKEHOLDER ENGAGEMENT

A 2009 Goldman Sachs study examining the largest capital investment projects in the world highlighted that the time for new projects to be completed doubled between 1998 and 2008. More delays were caused by stakeholder and sustainability problems (70%) than commercial (63%) and technical (21%) ones. On average, the largest 230 projects in 2009 were 20 months behind schedule and 135% over budget compared with the 2006 forecasts for these same projects. Work by Ed Morrow at the Independent Project Associates comes to a similar conclusion. Projects that score best in what he calls “front end loading” (i.e., up-front definition of the project including the mechanisms to manage conflicts between stakeholders’ objectives and goals), come in on budget and on-time whereas those that score poorly are 26 months late to completion and over 50% over budget. A 2012 Accenture study of the projects in mining and metals likewise found that two-thirds were more than 25% over budget and that regulatory and stakeholder-related issues accounted for nearly half of the delays.

Similarly, in a study with Sinziana Dorobantu and Lite Narrey, I found that, for the 19 publicly traded gold-mining companies, the amount by which investors discounted the cash flow projections of a mine was highly correlated with the degree of stakeholder conflict or cooperation. We were able to estimate DCFs for the 26 mines owned by these companies. If investors and analysts had ignored stakeholder opinions, then the market capitalization of these firms should have equaled the NPV of their future cash flows.

What we found differed starkly. The average firm had a market capitalization equal to only 22% of its DCF projections. In other words, when these companies told investors that they had discovered gold that would generate $1 billion of new value, investors increased the companies’ average market capitalization by only $220 million. Next, we coded over 20,000 newspaper articles, which contained over 50,000 reports of stakeholder actions or statements that connoted conflict or cooperation. We found that, for the 19 publicly traded gold-mining companies, the amount by which investors discounted the cash flow projections of a mine was highly correlated with our conflict–cooperation measure. When we adjusted the DCF projections using our measure as a proxy for higher costs or lower revenues, we found that the investor discount ranged from a high of 99% for firms with the worst stakeholder conflict to as low as 13% for companies with the highest levels of stakeholder cooperation. This finding demonstrates that investors and analysts tracking a stock are monitoring the media and updating their estimates of cash flow, the opening dates of new mines, and company costs, based upon stakeholder actions covered in the press. The long-standing complaint by managers that investors do not pay attention to their efforts simply does not stand up. Our takeaway: any cash flow projection that does not incorporate the costs of stakeholder conflict is as inadequate as one that omits commercial or technical risks.

While the magnitude of the returns to corporate diplomacy that we found in our sample of publicly traded small capitalization mining companies is certainly above the average available to most firms, other studies have corroborated the finding of consistent positive returns. These include Eccles, Ioannou & Serafiim (2011) who found that a basket of leaders on environmental and social performance financially outperformed a basket of laggards by 4-6% per annum. Schnitz and Epstein (2005) and Albuquerque, Durnev and Koskinen (2014) show that firms with higher environmental and social performance are less susceptible to risk and crises with the latter study finding a reduction in β of up to 4%. As a result of these benefits on average and in crises, better performing firms have a 40-45 basis point advantage in costs of finance (Schneider, 2011; Oikonomou, Brooks & Pavelin, 2011; Goss & Roberts, 2011) and are more likely to receive an investment grade rating (Goss & Roberts, 2011). Consumers reward such companies with higher sales growth and price premiums (Haimueller & Hiscox, various) and higher retention rates (Du, Bhattacharya & Sen, 2011). Workers in these firms are more productive (Tonin & Vlassopoulos, 2014), less likely to quit (Vitaliano, 2010), willing to work for a lower wage (Burbano, 2014) and are more engaged in their jobs (Wong, 2011: Grant, various).


In the financial sector, where skepticism is relatively strong, the evidence of a positive association between environmental and social performance and financial performance continues to mount. Surveys of financial institutions reveal that as much as 10% of all credit losses involved environmental issues (Scholz et al., 1995). One German bank’s rollout of stronger Environmental Social Risk Management (ESRM) practices reduced error in risk classification by 23% (Weber et al., 2010). Companies that receive credit from banks with stronger ESRM practices outperform peers on stock market (Aintblain, 2007). Environmental concerns are associated with a higher cost of debt financing and lower credit ratings whereas proactive environmental practices are associated with a lower cost of debt (Bauer & Hann, 2010). Banks also face a large and growing number of lawsuits of financial institutions for environmental liabilities (Coulson & Dixon, 1995). 14% of all US commercial banks incurred clean-up costs on property held as collateral and 46% have suspended lending to certain sectors with high potential liabilities (Jeucken, 2001). As a result, financial institutions with stronger environment and social risk management practices are found to enjoy higher ROA and lower loan losses (Simpson & Kohers, 2002), higher ROA and growth in assets (Hu & Scholtens, 2012), faster growth and stronger performance in Lebanon (Elie, 2011) and India (Hossain & Reaz, 2007). Their ESRM practices service as a signal of quality to peers, lenders and investors (Scholtens & Dam, 2007) attracting less price sensitive customers (Matute-Vallejo et al., 2010) and helping them to gain market share and suffer fewer NGO attacks (Watchman, 2005) as well as higher yield spreads especially over longer maturities (Coleman et al., 2006).

The importance of Environmental and Social Governance is now recognized and highlighted by the largest financial investors including Larry Fink, Chairman and Chief Executive Officer of BlackRock: “Investing in innovation and future production, developing talent and ensuring robust supply chains are among the many environmental, social and governance (ESG)-related management actions that enhance a company’s ability to generate long-term financial returns. Businesses that fail to make sufficient investments in the future can doom themselves to irrelevance.”

In 2015, BlackRock entered into a partnership with Ceres to develop a novel integrated approach to considering ESG factors as part of a long-term investment strategy. Ceres President Mindy Lubber notes: “21st century institutions and their shareholders are facing an increasing array of ESG challenges that can affect business and investment results. Climate change, water scarcity, community conflicts, resource depletion, supply chain breakdowns, worker well-being and economic inequality, coupled with instantaneous communication, can all present material risks and opportunities to businesses. Sustainability has become an imperative for successful corporations, and a variety of studies have shown that companies with strong sustainability cultures outperform their laggard peers. The business case for integrating ESG issues into mainstream investment practices has never been stronger. More than ever, investors are actively engaging with their portfolio companies on ESG issues as part of their fiduciary duty and also to protect the long-term value of their assets.”

As a result of this collaboration, BlackRock seeks novel mechanisms to consider the strategic impact of ESG factors for long-term value: “We actively seek to integrate environmental, social and corporate governance issues into our investment process. We believe that ESG factors are often a signal of management quality, particularly over the long term. The CGRI team partners closely with colleagues in BlackRock portfolio management to help raise awareness of potential risks, such as exposure to companies that are more likely to face litigation or reputational harm as a result of poor management of the impact of their operations on the environment or society.”

BlackRock is not alone. According to a PRI survey, while 57% of CEOs believe that their sustainability reports set out the business case for environmental and social governance and 38% believe they quantify the returns to these investments and 47% recall discussing them on quarterly earnings calls, the investors covering these firms have a very different perception. Only 9% are satisfied with current reports’ ability to set out a business case. Only 7% believe that business case includes a quantification of returns and only 27% recall the senior management discussing these topics on quarterly earnings calls. 82% want better information from companies on how environmental and social risks are identified and quantified in financial terms (PwC).
3. CAPTURING THE BUSINESS VALUE OF SUSTAINABILITY

Hopefully, the pressure imposed by BlackRock and other investors in quarterly earnings calls to explore the link between ESG practices and long-term value will lead to a shift not only in company-level reporting but, more importantly, in management practices. The shift will take time and substantial effort. Gathering data needed for a specific DCF analysis is, of course, harder than talking about its importance or highlighting the benefits of doing it well. Doing so demands an upfront investment of scarce personnel time and requires support from bosses.

3.1. STARTING WITH EASY-TO-QUANTIFY DATA

You do not have to do an exhaustive analysis on the first attempt. Start small, gathering the easy-to-quantify data and feeding that into the early estimates. Build from there. A 2013 Accenture study\(^8\) surveying CEOs on sustainability highlights the potential benefits of even simple approaches: 63% of CEOs surveyed believed that sustainability would transform their industry within five years, and 76% believed that embedding sustainability into core business functions would drive revenue growth and new opportunities. But the CEOs also reported that they struggled to "quantify and capture the business value of sustainability." 37% of them reported that this lack of a clear link to business value was hindering further action.

3.2. EXAMPLES OF MAIN RELEVANT DATA

Among the readily quantifiable costs that one will want to include are:

- Direct costs, including staffing, capital investments and raw materials both initially and over a project’s life
- Overheads or other hidden indirect costs

One should also consider the less obvious cost reductions and revenue enhancements that a project might generate. Possibilities are:

- Revenue lost (gained) due to:
  - Lower (higher) consumer willingness to pay
  - Production stoppages or delays (accelerations in the timeline)
  - Ease of entry into markets due to new government regulations or policies that respond to opponents’ (supporters’) pressures

- Staffing expenses, including:
  - Managers to oversee engagements after a conflict
  - Engineers to redesign controversial plans and government affairs or regulatory staff to repermit after redesign
  - Guards to protect personnel and property when tempers flare
  - Lawyers and lobbyists to provide representation in proceedings or investigations
  - Higher training and recruitment costs as well as retention costs at corporate sites that have seen conflicts

- Insurance, risk management and compliance expenses, including fines and penalties
- Depreciation for property, plant and equipment (PP&E) that goes obsolete during delays and repairs for PP&E damaged during conflicts
- Higher PR expenses stemming from particular disputes

Many corporate diplomacy initiatives become easy to justify once their direct benefits and costs have been accurately measured and tracked. With accurate data, they become analogous to the well-known cases where expenses incurred in reducing waste delivered quick paybacks through lower costs for supplies, packaging and disposal. Many more corporate diplomacy initiatives may generate positive returns once their indirect benefits are considered, though indirect benefits will always be difficult to pin down.

CONCLUSION

The real benefits to this process for companies, however, will not be in merely calculating a return on investment or satisfying the demands of external investors. Certainly, those are important short-term goals. What happens next within the company will be far more important. Quantifying financial benefits helps to show how intelligent measurement and tracking can improve the effectiveness of engagement and how the benefits of diplomacy flow to the bottom line. This transforms the dialogue about corporate diplomacy from one in which sceptics demand a justification for current costs to one in which they work with corporate diplomats to jointly identify new opportunities to create value.

It transforms the management of corporate diplomacy from a peripheral “nice to have” to a core strategic concern of the entire senior management team. Showing colleagues that corporate diplomacy can create financial value will turn some sceptics into evangelists, who return to their departments and lobby on behalf of corporate diplomacy. Their employees, in turn, begin to explore for shifts in management practices or strategies or entirely new practices that address the concerns of external stakeholders and deliver shareholder value. Suddenly, innovations emerge in operations, finance or security as well as government affairs, communications or sustainability. The act of using a common model and toolkit creates an artefact around which cross-functional collaboration and problem solving can readily mobilize. The act of calculating the "net present value" finally allows the discussion to get beyond whether the net present value is positive or negative and onto the collaborative exercise of pursuing enlightened self-interest for shareholders and stakeholders alike.

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Environmental and social acceptability of major projects

This issue of FACTS examines the social and environmental challenges faced by high-impact industries (extractive industries, major infrastructure construction projects, etc.) when managing new projects, and shows how to move from a risk-prevention mindset to a process of shared wealth creation that benefits all local stakeholders.

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