9. Public–private partnerships in CDM implementation in Vietnam

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INTRODUCTION

Public–private partnerships (PPPs) have been developed all over the world as innovative tools for public policy since the 1980s–1990s (Caroll and Steane 2000; Osborne 2000; Rosenau 2000; Walzer and Jacobs 1998). They are defined as a new form of global governance in which a diverse number of actors from civil society, government and business circles merge into a decentralized multi-sectoral network that can bridge multilateral regimes and local action. Within the climate regime, the Kyoto Protocol's Clean Development Mechanism (CDM) can be seen as such a decentralized multi-sectoral network, designed to implement greenhouse gas (GHG) emission reduction projects at the local level.

During the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg, the increasing participation of non-state actors was recognized as a new defining element in global environmental governance. The WSSD embraced two important messages: (1) that sustainable development is no longer solely the concern of environmentalists, but should involve and engage people all over the world; and (2) that the promotion of partnerships across different actors and levels of governance should be a key approach for sustainable development (Benner and Witte 2004; Biermann 2010; Rogers et al. 2008).

Yet, while it is generally acknowledged that public–private partnerships (PPPs) have become more widespread and pervasive in environmental governance processes worldwide, there is surprisingly little research on their performance in global climate governance (Pattberg 2010; Pattberg and Strippel 2008). This knowledge gap is of significant importance, as public–private cooperation is said to be crucial for climate change politics, since the state is not capable of achieving mitigation objectives on its own or moving towards a climate compatible and sustainable future without fundamental engagement of the private sector (CDKN and DFID 2011; De Boer 2012).

This chapter presents an analysis of PPP processes in CDM implementation in Vietnam and attempts to discern whether they are inclusive with regard to different stakeholder interests and provide for mechanisms to hold decision-makers accountable and in that sense impact upon the CDM's environmental outcome, particularly in relation to sustainable development. The CDM has two main objectives: that is, assisting non-Annex I countries in achieving sustainable development, and reducing global GHG emissions. The sustainable development objective has been examined quite extensively in the academic literature in recent years (for example Olsen and Fenhann 2008; Sterk and Wittneben 2006). Scholars have argued that there is an inherent bias in the CDM towards promoting cost-effectiveness at the expense of sustainable development, since sustainable development has no monetary value within the mechanism (for example Paulsson 2009: 70). Internationally, there is no common standard for sustainable development in CDM projects, as host countries retain all rights to decide whether a project is compliant with (its domestically set) sustainable development priorities. Suggested solutions to this problem are, for example, an international standard for assessing the sustainability development benefits (Olsen and Fenhann 2008), the creation of (market) demand for high-quality projects through the establishment of high standard credits such as the Gold Standard (Humphrey 2004), strengthening the institutional capacity of host countries so that they can actively coordinate CDM activities with local development goals (Michaelowa 2003; Zhang 2006) and procedures to secure the rights of local stakeholders (Streck 2007). There seems to be no general consensus in the field on the precise direction of such reform, but the literature demonstrates that an assessment of accountability, representation and transparency within the mechanism plays a particularly important role.

This chapter attempts to contribute to the literature by, firstly, presenting the CDM as a specific type of PPP. Secondly, a conceptual framework is developed for analysing PPP processes and testing input legitimacy. The framework is an analytical model that envisages three major parts: input, throughput and output. Thirdly, the model is used to discuss the PPP process of CDM implementation in Vietnam and assess the different actors' interests, goals and motives (input); shared information, communication strategies and patterns of interaction (throughput); and performance (output). The analysis concludes with a summary of the key findings and the establishment of a future research agenda.

THE CLEAN DEVELOPMENT MECHANISM: A PUBLIC-PRIVATE PARTNERSHIP

Public-Private Partnerships

In the academic literature, a PPP is often defined as 'cooperation between people or organizations in the public or private sector' (Holland 1984). From that basic assertion, a PPP is further defined as a form of policy network and, more particularly, a form of policy network implementation (Klijn and Teisman 2003). In addition to a set of specific actors, a second defining characteristic of a PPP relates to its goals. PPPs are seen as instruments for providing collective goods, such as environmental protection (Schäferhoff et al. 2009: 454). PPP definitions can also indicate how the contributions and benefits should be distributed among the participating actors and why the actors participate in the first place. Stratton defines a PPP as 'collaboration among business, nonprofit organizations, civil society and government in which risks, resources and skills are shared in projects that benefit each partner as well as the community' (Stratton 1989 in McQuaid 2000: 11). The rationale behind engaging in PPPs is interpreted as the recognition of its advantages in terms of resource availability, effectiveness, efficiency, legitimacy, transparency and accountability (Börzel and Risse 2005; McQuaid 2000; Osborne 2000).

While many scholars have embraced the emergence of PPPs because of the intended beneficial outcomes mentioned above, critics however have pointed out multiple deficiencies in the PPP process, such as the consolidation of privatization of governance, the reinforcement of the neoliberal model of globalization and (ironically) a lack of transparency, representation and accountability (Bäckstrand 2006b; Paterson 2001). These criticisms highlight that one of the crucial questions in the debate is the performance of PPPs in terms of legitimacy, that is, whether these networks contribute or not to a more accountable and transparent system of governance.

Decision-making procedures obtain legitimacy only when those who are affected by a decision have input into the decision-making process, as argued by Schäferhoff et al. (2009: 465). Schäferhoff also asserts that the interests of affected stakeholders should be represented in decision-making and the affected actors should have the opportunity to hold decision-makers accountable. This analysis makes clear that legitimacy involves at least two elements: accountability and representation. Other scholars, such as Steven Bernstein, define legitimacy as the acceptance and justification of a shared rule by a community (Bernstein 2001: 142). Scharpf (2001) explains the concept of legitimacy by dividing it into input

legitimacy and output legitimacy. Representation and accountability are aspects of what is called input legitimacy (Curtin and Meijer 2006; Scharpf 2001). A PPP's input legitimacy concerns the extent to which PPPs are accountable to a broad range of stakeholders, such as donors, non-governmental organization (NGOs), media and governments and the extent to which PPPs include participation by various stakeholders (Scharpf 1999). Output legitimacy concerns the effectiveness and 'problem solving capacity' of PPPs (Bäckstrand 2006a: 292). The assessment of a PPP's effectiveness encompasses the identification of its objectives, outputs, outcomes and impact aspect, its institutional design and conditions under which it is an effective tool (Schäferhoff et al. 2009). The analysis in this chapter will mainly focus on input legitimacy by assessing the level of accountability and representation in PPP processes, as elaborated below.

The inclusion of non-state actors in policy networks can pose legitimacy problems in global governance processes because those actors are not necessarily held accountable for their actions, in contrast to, for example, an elected government. This is especially true where for-profit actors participate in a policy network, as is the case in the CDM. It is questionable whether profit-seeking motives 'automatically' stay aligned with the provision of the public good. With regards to accountability, the question then arises of who is empowered to control the decision-makers. Keohane (2006) divides the concept into external and internal accountability. External accountability stipulates that organizations are to be held accountable not to those who delegated power to them, but to those affected by their actions (Keohane 2006: 79), while internal accountability concerns authorization given by principals to agents. Finally, a critical element for accountability is transparency because decision-makers can only be held accountable if accurate information on governance processes is available (Steets 2005: 12).

It is clear from the literature that there is a lively debate on whether PPPs have the capacity to provide collective goods in an effective and legitimate manner (Schäferhoff et al. 2009). Schäferhoff (2009: 452) recommends neither granting a priori status to PPPs as effective and legitimate governance instruments, nor dismissing them altogether. It is important, in that sense, to examine the characteristics and operation of specific PPPs, for example by looking at CDM implementation in Vietnam.

The Clean Development Mechanism: A Public–Private Partnership

In Vietnam, PPPs are seen as a solution for raising capital for infrastructure development. Vietnamese government representatives are in favour of

replacing BOT (build, operate and transfer) and BT (build and transform) models with the PPP approach as regulated in Decision 71/2010/QĐ-TTg, with an expected 50 to 60 per cent of total investment to come from the private sector (MOPI 2010).¹ Targeted areas include transport infrastructure, electricity generation and distribution infrastructure, and water infrastructure (Business News 2010). This example supports the claim that the government is seeking additional resources by combining their efforts with those of the (emerging) private sector. Mitigating climate change certainly requires substantial resources. Net climate mitigation costs in developing countries, over and above the cost of business-as-usual investment needed for economic development, are estimated to be in the range of \$60 billion to \$175 billion a year (World Bank 2010). It can be argued that cooperation between the public and private sector in Vietnam is recommended in order to optimize the efficiency of investment in climate mitigation. Catalyzing private investment thus appears to be crucial for moving towards a climate compatible future and having a chance at achieving the 2°C objective (Rabhi and Shiga 2012: 128).

How then should the objective to catalyze private investment be pursued? Engaging the private sector is no easy thing, especially in developing countries such as Vietnam. In that situation, investors perceive substantial risks and refuse to deploy capital and know-how in low-emission projects in the absence of risk-adjusted returns or other safeguards. Several World Bank reports therefore argue that the public sector has a critical role in setting goals and building an enabling environment by addressing investment barriers and by investing in research, development and public infrastructure. Doing so provides incentives for the private sector and supports the transition towards a climate compatible future, while at the same time triggering economic development opportunities (Stern 2007; World Bank 2005, 2006). Those dynamics are all present in the CDM, which constitutes a prime example of an attempt to involve the private sector in mitigation activities in developing countries and attract (private/public sector) finance from developed countries to developing countries (see *supra*; CDKN and DFID 2011).

The CDM allows industrialized countries or entities in industrialized countries (Annex I parties) to invest in project activities in developing countries (non-Annex I parties) aimed at cost-effective abatement of GHGs and sustainable development benefits (United Nations 1998: Art. 12; see Belis and Bruyninckx 2010). These project activities generate Certified Emission Reductions (CERs). Industrialized countries purchase CERs, each equivalent to 1 tonne of carbon dioxide equivalent (CO₂-eq), as a means of meeting part of their emission reduction target under the Kyoto Protocol. These investments should enable the development of

projects that would not have taken place otherwise because developing countries lack capital and human resources.

The market for CERs comprises both public and private sector entities. CER supply, demand and prices are volatile and subject to both political events as well as market conditions (Benecke et al. 2008). The CDM involves public actors that have constitutive and/or operational rule-making power at the international level (United Nations Framework Convention on Climate Change – UNFCCC, CDM Executive Board) and national level (Designated National Authority). However public actors are also involved as project developers as well as CER buyers. Private actors in both developed and developing countries are involved as industrial partners, carbon brokers or consultancy companies. Even civil society groups are involved; sometimes as carbon buyers or project developers, but mostly with regard to providing public input and/or scrutiny for individual projects or the CDM as a whole (Benecke et al. 2008; Streck 2007). Public–private cooperation under the regulatory framework of the CDM therefore takes place at the level of implementation (Streck 2007). With regards to CDM implementation, the level of implementation encompasses several activities, such as identifying the potential to develop a CDM project, looking for investors, preparing submissions to the CDM Executive Board (EB), constructing the project, managing the project's operation and so forth, all aimed at realizing a project that will assist the host country with moving onto a sustainable development path and which will contribute to reductions in global GHG emissions.

Now that the locus of both public and private actor involvement in the CDM has been identified, we will set out the theoretical framework for analysing PPP processes in CDM implementation in Vietnam.

A THEORETICAL FRAMEWORK FOR ANALYSING PUBLIC–PRIVATE PARTNERSHIPS

For analysing PPP processes in CDM implementation in Vietnam, we present a conceptual framework that combines elements of sustainable development theory and the public management policy network. It is inspired by the Dutch network model (Kickert et al. 1999) and can be applied to assess modes of governance in which both public and private actors are involved (see Figure 9.1).

The model consists of three parts: input, throughput and output. Input is aimed at answering the following questions: Who participates in the policy network? What characterizes the participating actors? Why do the participating actors engage in the policy network? What do participat-

Input	Throughput	Output
Public and private actors ↓ Institutional background Resources Incentives Goals	Patterns of interaction ↓ Forging the initial agreement Building leadership Building legitimacy Building trust	Performance and product evaluation ↓ Representation Accountability Transparency Level of participants Level of network

Figure 9.1 Process tracing of a policy network

ing actors aim for? The input of the PPP process is primarily defined by the actors involved. These actors are a set of persons and organizations originating in the private or public sectors and constitute the nodes of the network (Grahame et al. 1991; Rhodes 1999). In addition to identifying the participating actors, the input also concerns the actors' characteristics in a specific network setting, such as the institutional setting and available resources. Resources are understood as a whole range of formal and informal competencies, for example, decision-making power (authority), legitimacy, strategic capability, mobilization power and so forth; and more tangible resources such as money, membership of or integration in (governmental) organizations and human resources. The resources have to be identified by investigating the characteristics of the participants' institutional background, the strengths and weaknesses of the system they belong to, as well as their performance in that system (Bryson et al. 2006). Both resources and institutional setting shape the participants' motivation to participate and the goals that they wish to obtain through participation (Ansell and Gash 2007; Kickert et al. 1999; Klijn and Teisman 2003).

Throughput explains the actual implementation process and intends to answer how participating actors collaborate in the network. The assessment of the implementation process identifies the different patterns of collaboration between the participating actors, including the different collaborative process activities. The different patterns of interaction have to be analysed in light of the identified input factors. The collaboration process activities (throughputs) are evaluated on the basis of the following elements: forging of the initial agreement, building leadership, building legitimacy and building trust (Bryson et al. 2006).

Output evaluates the PPP's product and performance. Performance

concerns questions of legitimacy: are all affected actors formally included in decision-making processes? Have the participating actors equal opportunities to participate? Are the agents authorized by the principals to exert power? Are the participating actors held accountable to those affected by their actions? Is there accurate information available on the governance process? Does the policy network enrich and consolidate the participants' capacities and resources? Is the policy network democratic? The framework presented is particularly useful for analysing PPP performance in terms of representation, accountability and transparency, taking into account the inputs and the patterns of interaction, in addition to impacts and outcomes (products) that have been generated during the process in terms of building a democratic network and consolidating and enriching participants' capacity and resources (Voets et al. 2006). The model is thus primarily interested in measuring the outcome of PPPs in terms of the functioning of the network itself, in contrast to immediate material outcomes (for example GHG emission reductions).

ANALYSING PUBLIC-PRIVATE PARTNERSHIPS IN CDM IMPLEMENTATION IN VIETNAM

The theoretical framework, explained in the paragraphs above, will serve as an analytical tool for exploring the PPP process in CDM implementation in Vietnam. The analysis of this particular policy network identifies the actors involved, the links between the actors, the availability of resources, the distribution of power, dominant interests and organizational features that are typical for CDM implementation in Vietnam and allows for a reflection upon network performance, policymaking and governance issues.

Input: Actors

In Vietnam, it is mostly state-owned enterprises (SOEs) that carry out CDM project implementation (for example Petrovietnam, VN Renewable Joint Stock Company). SOEs are authorized to participate in the CDM by the central government and local authorities. Private domestic enterprises are also active in the CDM market (for example D&G Viet Nam, Dong Xanh Company Limited), in addition to a number of foreign enterprises (for example KMDK Vietnam, Japan-Vietnam Petroleum). Private enterprises face several barriers to participation in CDM implementation in Vietnam. Examples are the need for project developers to have direct access to domestic financial and policymaking circles, the preference

for quick and guaranteed profits, low electricity prices, consultancy-led projects and problems with CDM rules for additionality testing (see Van Eynde et al., Chapter 11 in this volume). In many cases, therefore, the local government and private (small and medium-sized) enterprises jointly participate in CDM projects. An example includes the Cao Phong reforestation project in Xuan Phong and Bac Phong communes (UNFCCC 2012a). This reforestation CDM project was the first of its kind. The project was identified through a Study on Capacity Development for AR-CDM Promotion in Vietnam, a capacity-building project funded by the Japan International Cooperation Agency (JICA). The actual implementation is carried out by local communities, in cooperation with the Vietnam Forestry University (VFU), the Research Centre for Forest Ecology and Environment (RCFEE) and the Department of Forestry under the Ministry of Agriculture and Rural Development (MARD).

The analysis presented by Belis and Bruyninckx (2010) indicates that consultancy companies are a second major category of project participants in CDM implementation. Examples include Camco, KYOTOenergy, INTRACO and Ecotawa. Nearly all CDM projects that are currently registered hire a consultant to facilitate the lengthy and intricate CDM registration procedure. Most projects are also executed unilaterally, that is, without any industrial Annex I entity investing technology or know-how in the project. Belis and Bruyninckx conclude, therefore, that a majority (93 out of 105) of registered Vietnamese CDM projects, as of 1 January 2012, can be classified as supported unilateral projects (SUPs).

A third important category of actors includes the CER buyers of CDM projects. These are often only indirectly involved in the project, but provide the necessary financial resources for project implementation. The majority of Vietnamese CERs are sold into the European Union's Emissions Trading System (Belis and Bruyninckx 2010; see also World Bank 2012).

Input: Resources

Resources include financial resources, technical competencies, political power, cultural and social assets and so forth. There is a clear distinction between the resources of the different participating actors in Vietnam (see Table 9.1). The division of resources is closely related to the actor's institutional background. The *doi moi* reform process in Vietnam is providing more and more entrepreneurial space for private firms to engage in economic activities, but large segments of the economy are still directly attached to the government (SOEs) or need to establish close ties to government officials in order to maintain their businesses – which increases

Table 9.1 Input: actors, resources, goals and incentives

Actors	Resources	Goals and incentives
Central and local authorities	Regulatory power, finance, other political assets	CER revenues, GHG reductions, sustainable development
Private domestic and international enterprises	Finance, technology and engineering	CER revenues
Consultancy companies	Technical and legal know-how, carbon market network	CER revenues
Local communities	/	Sustainable development

the risk of fraud and corruption.² Melanie Beresford argues, in this regard, that ‘Developing economies, like Vietnam, can rest on a knife edge between building a strong state-led economic system and degenerating into cronyism’ (Beresford 2008: 224).

With regard to the CDM, both state actors and (semi-)private actors seek to attract developed-country finance through the sale of CERs. However in view of the complex application procedures, both domestically as well as internationally (see Nguyen and Tran, Chapter 8 in this volume), private actors face an even greater risk when engaging in CDM project development due to their smaller resource base in terms of regulatory and political assets. Public actors in Vietnam are still, for example, in charge of providing (cheap) loans and land for nearly all types of economic development. Consultancy companies, the second category of actors, possess as basic resources the necessary technical skills to prepare project design documents (PDDs) and guide projects through the registration process. Foreign actors, finally, either provide direct capital investment in CDM projects as project participants, through the transfer of technology and/or know-how, or remain outside the PPP process as CER buyers. In the context of the CDM, this type of actor has by far the largest pool of financial resources of all actors involved and is also the least likely to take risks in CDM implementation in Vietnam.

Input: Goals and Incentives

The analysis of available resources for each type of participant elucidates the underlying reasons for collaboration between the private and public sector. These resources are remarkably diverse, making cooperation virtually mandatory (see Table 9.1). Considering private and public industrial

entities' lack of expertise and knowledge about the CDM, they hire consultancy companies to inject organizational and institutional capacity, know-how and awareness. In this sense, consultancy firms are pivotal participating actors because they pool all resource requirements and align all incentives, including those of the CER buyers, in the process of PDD development.

In theory, the CDM has two objectives: reducing global GHG emissions and contributing to sustainable development in developing countries. Are the participating actors' objectives in line with the objectives of the CDM? First of all, not all participants are concerned about reducing emissions, environmental impacts, climate change and working towards the long-term interests of the host country. Hence, the CDM's theoretical objectives often lie beyond the immediate interests of the parties. Why do private entities have a desire to develop CDM projects? In reality, interviews show that for SOEs and private enterprises, CERs are a secondary, though desirable, financial by-product in their entire business model, since relying solely on the CDM for deriving profit from a complete chain of economic activities is too risky in itself. CERs, therefore, create added value for businesses and a higher internal rate of return on their investment. Finance provided by the CDM offers an incentive to be more climate-friendly, but does not turn climate mitigation into an objective in itself for these actors (interviews 2011).

Interviews show that the engagement of public entities in the CDM is driven by a combination of factors. First and foremost, these entities are attracted by the financial gains in the form of CER revenues. Benefits related to sustainable development and the reduction of (global) GHG emissions, however, also stimulate – to a certain extent – the engagement of this type of actors in the CDM (interviews 2011).

For consultancy companies, CERs are the main product and direct target of their business operations. They identify the potential for developing CDM projects, investigate the technical feasibility of the projects, look for investors, prepare compliance procedures, assist in developing the PDD, apply for CDM validation and registration, and connect investors to the carbon market. As is the case for industrial entities, consultancy companies are first and foremost profit-driven, with environmental protection and sustainable development being merely a means to that end. However for the local community CERs are neither directly nor indirectly related to their involvement in CDM implementation. The community are concerned about issues that have an impact on their habitat, such as environmental protection, job creation, maintaining their coffee plantation or ensuring clean water for the fishing industry and so forth. The main reason why the community supported, for example, the Phuoc Hiep I Sanitary

Landfill Gas CDM project in Ho Chi Minh City was because they demanded a cleaner living environment (UNFCCC 2012b). The purpose of the project is to recover and utilize the landfill gas emanating from the Phuoc Hiep I Landfill in order to reduce GHG emissions and related environmental issues, such as the destruction of the pollutants found in landfill gas (chlorinated and ozone-depleting compounds) and avoiding the odour stemming from the landfill. The objective of foreign entities varies between profiting from the sale of CERs (carbon brokers and industrial partners), buying credits in order to comply with their Kyoto targets (for example energy-intensive industries and governments in the European Union), direct environmental concerns or a mix of all of these.

The different primary and secondary goals and incentives lead to a variety of different compositions in CDM project design in Vietnam, dominated by projects that are developed unilaterally and with the support of a consultancy company (Belis and Bruyninckx 2010).

Throughput: Patterns of Interaction

In an attempt to explain how participating actors in CDM implementation in Vietnam cooperate, we identify several modes of cooperation. A first modus operandi is cooperation on a voluntary basis. In the Cao Phong Reforestation Project, for example, the community are responsible for project implementation. The households located around the targeted area are responsible for planting, management, protection and monitoring of the plantations (UNFCCC 2012a). A second type of cooperation is benefit sharing. In many cases consultancy companies negotiate the budget with the CER buyer and receive a percentage of the revenue. Another type of benefit sharing is carried out on the basis of milestones. The consultancy company receives a sum of money every time a certain stage of the CDM process, such as, for example, validation or registration, has been concluded. Most projects in Vietnam include at least some form of benefit sharing, either in relation to a consultancy company or simply between two or more project participants sharing CER revenue. A third type of cooperation is a form of international joint venture, carried out by, for example the Ho Chi Minh City Department of Natural Resources and Environment (DONRE) and KMDK Vietnam Co. Ltd in both the Phuoc Hiep I and Dong Thanh landfill gas CDM projects in Ho Chi Minh City (UNFCCC 2012b, 2012c). These kind of transnational exchanges are relatively rare in the CDM market, but often provide substantial (economic) co-benefits, particularly for the host country, in terms of technology transfer, industrial development and capacity building. The Rang Dong Oil Field Associated Gas Recovery Project, being carried out by a consortium

of Vietnamese and Japanese oil and gas companies, is a prime example in this regard (UNFCCC 2012d).

One explanation for the trend for unilaterally developed projects is that the CDM business is perceived to be too risky by some participants. Foreign private entities are therefore reluctant to invest in developing a CDM project. Considering that the Vietnamese CDM portfolio is dominated by hydropower projects, other important barriers to attracting private investment in the area of electricity generation should be addressed. In Vietnam, the state-owned company Electricity of Vietnam (EVN) has a monopoly in the electricity sector and keeps the price of electricity artificially low. Private investors are therefore discouraged from investing resources in electricity generation projects. If we take this barrier into account, the consultancy companies play an even more important role by forging the initial agreement between a foreign and a domestic project partner or between a CER buyer and the project participants. They also play a key role in building trust between the different actors involved. Consultancies act as a go-between or even take a leadership role in the entire CDM development process. In sum, due to a divergence of institutional backgrounds and resources, in addition to a general lack of knowledge and awareness of the CDM and contextual factors, such as the Vietnamese electricity sector, the role of the consultancy company is essential in the development of PPPs in CDM implementation in Vietnam (interviews 2011).

While consultancy companies are crucial to forging an initial agreement, public entities are of significant importance for building leadership, legitimacy and trust. Due to Vietnam's political and societal context, PPP participants believe that private enterprises and non-governmental organizations have to cooperate with state or provincial authorities in order to plan and manage projects effectively. The importance of the closeness to political assets demonstrates that institutional factors influence the building of leadership and trust. Although consultancy firms play an important role in guiding a CDM project through the entire project cycle, it is state-owned enterprises and the support of state or provincial authorities that encourage investors to believe in the potential success of the project (interviews 2011).

An actor that remains almost invisible in the process of project planning and management is the local community. Local communities are only marginally involved in the process of project implementation, mainly due to their limited resources. Local communities mostly lack the knowledge and financial capacity to become structurally involved in the PPP process. This often undermines the legitimacy of CDM projects, as they stand to gain or lose the most with regard to environmental and socio-economic impacts.

Output: Performance Evaluation

One approach for evaluating the effectiveness of CDM implementation in Vietnam would be based on whether the mechanism contributes to reductions in GHG emissions and to sustainable development in Vietnam. The immediate product of the PPP process of CDM implementation in Vietnam is reductions in GHG emissions in the form of CERs. The PPP process in Vietnam can be viewed as moderately successful in that regard, as the 105 registered Vietnamese projects issued a total of around 6.7 million CERs as of 1 January 2012 (UNEP Risø Centre 2012). Measuring sustainable development is less straightforward, but from various contributions elsewhere in this volume, it can be concluded that the results were suboptimal at best (Van Eynde et al., Chapter 11 and Nguyen and Dang, Chapter 10 in this volume).

However another approach is to focus on the performance of the PPP process itself. This is the main aim of the presented conceptual framework. An evaluation of the performance of the PPP process discusses the accountability, inclusiveness and legitimacy of the policy network and assesses how it affects the participating actors in terms of resources, incentives and goals.

Fieldwork evidence shows that, overall, the PPP process strengthens both capacities and resources and changes the initial mindset of the various participating actors (interviews 2011). Firstly, the PPP process improves private entities' capacities in terms of project development, in addition to being a source of financial revenue through the sale of CERs. It also increases awareness of the economic potential of reducing GHGs and changes the attitude of (business) actors with regard to environmental protection. The Hydropower Joint Stock Company Mien Nam, for example, decided to invest in a second hydropower project, Da Dang 2, as soon as it realized the benefits generated by the CDM. Secondly, in addition to the contribution to the private actors' capacities and resources, the PPP process potentially benefits societies in terms of job creation and building an environmentally friendly and sustainable environment. The Cao Phong Reforestation Project is an example of a democratic network that has benefited society in terms of environmental protection and poverty reduction. The project is being carried out by different participants, such as the private sector, local authorities and the local community. This has resulted in increased awareness and changed attitudes towards environmental protection in these local communities and contributed to the further development of the Vietnamese forestry sector. If we look at the macro level, however, many difficulties still exist with regard to reforestation. For instance, there is no adequate forest planning at national or local

level. A more general observation is that the PPP process is regarded by public entities as indispensable for moving towards a climate-compatible development path. The CDM is seen as a cost reduction mechanism that enables investment in climate mitigation.

In many cases, the legitimacy of a PPP process can be questioned because those who are directly affected by CDM projects, local communities, are most of the time not given the opportunity to have substantial input into the decisions. Considering the scope of participation, the local community is not regarded as a formal project participant in the PDDs and is only informed about project activity during stakeholder meetings. Sometimes, communities even suffer severe social consequences from CDM project development through, for example, forced resettlement to other regions. This is particularly the case for hydropower projects. The quality of participation is quite poor because the mechanism has limited opportunities for stakeholder input. The poor quality of participation can be partly explained by a lack of resources and by the unavailability of institutional channels allowing their voices to be heard (interviews 2011).

The legitimacy of a PPP process can also be discussed in terms of transparency and accountability. This is of particular concern with regard to local governments in Vietnam. Vietnam is a country with a highly centralized and hierarchical government system. Provincial and local government officials, therefore, have to provide explanations to more senior levels of government before decisions are made. The technocratic and hierarchical system of government results in low levels of transparency in the decision-making process (Fortier 2010). Participating actors are rarely held accountable to those affected by their actions. In addition, Vietnam's political system tends to suffer from cronyism (Beresford 2008) and corruption, including with regard to climate change policies: 'In the context of climate change, the risk is therefore high of a repeat on a large scale of the post doi moi history of public funding awarding (including foreign aid) and, most importantly, speculation and corruption over land allocation, particularly through the spatial redefinition of urban zoning' (Fortier 2010: 240).

Vietnam ranks 112th out of 183 countries in Transparency International's 2011 Corruption Perceptions Index (Transparency International 2011) and concerns about current levels of corruption are widely reported to negatively contribute to Vietnam's overall political and economic environment (Beresford 2008; Fortier 2010; Nguyen and van Dijck 2012). In accordance with Fortier's reasoning (2010: 240), CDM implementation in Vietnam is seen by some private enterprises and government-led institutions and enterprises as a lucrative opportunity to claim and justify the

allocation of resources to their core businesses, at the expense of collective resources.

Stakeholder meetings could be upgraded and function as an arena where local communities would be able to hold local government officials and other project developers accountable and where transparent information about the project and project-related decisions could be shared with those affected by the project. Apart from the minimal stakeholder input required by current PDD regulations, there would appear to be an absence of strong accountability mechanisms in the CDM.

CONCLUSION

This chapter presented an analysis of the PPP process in CDM implementation in Vietnam. The discussion started with a concise explanation of both the concept of PPP and the issues of accountability and representation, in addition to a summary of how the CDM functions. Then, a theoretical framework was developed to analyse PPP processes in governance systems. The framework consists of three parts: input, throughput and output. We used the theoretical framework to discuss PPPs in CDM implementation in Vietnam.

With regards to the input part of the PPP process, we find that this particular policy network consists of a number of participating actors with various goals, incentives, resources and institutional backgrounds. Public actors provide cheap loans and land and perceive the CDM as an important cost and risk reduction mechanism to enable climate mitigation investments. For private investors, who provide finance, technology and engineering, the CDM is mainly an economic opportunity and opens up a new market in emission reduction credits. Consultancy companies contribute knowledge and awareness about the CDM and assist in developing the PDD, applying for CDM validation and registration and looking for potential CER buyers. The local community lacks resources to inject into the PPP process and is mainly concerned with issues that directly affect their lives, such as job creation and protection of the surrounding environment, which is often directly linked to their professional occupations (coffee plantations, fisheries and so forth).

With regard to throughput, several modes of cooperation are identified, namely benefit sharing, cooperation on a voluntary basis and joint ventures. Benefit sharing entails the participation of different kinds of participating actors, including consultancy companies. The latter provide legal and technical know-how, crucial for kicking off the procedure for starting a CDM project and, thus, for forging an initial agreement. The

benefits of the project are then shared with the public/private entities involved, mainly in the form of CERs. In Vietnam, the public agencies, in particular, are seen as important for building leadership, legitimacy and trust between the project participants. A joint venture is a mode of CDM development that includes a foreign industrial partner, while cooperation on a voluntary basis involves an even wider set of actors, including local communities. The latter two are comparatively rare, while benefit sharing is present in most Vietnamese projects (see also Belis and Bruyninckx 2010).

The output of the PPP process in CDM implementation in Vietnam demonstrates that the PPP process has the potential to enrich and consolidate the capabilities and resources of participating actors, in addition to changing the attitudes of actors with regard to climate change and environmental protection. The overall performance of the PPP process in CDM implementation is relatively poor, however, due to the fact that the process is inherently constrained by a diverging and sometimes contradictory set of motivations (see Table 9.1). Private entities, including consultancy companies and domestic and international industrial partners, are primarily profit-driven, while public entities also aim for sustainable development benefits and (global) GHG emission reductions as secondary targets, in addition to selling CERs. Local communities are non-profit-seeking and highly concerned about the sustainable development impacts of CDM implementation. In the specific political situation of Vietnam, featuring high levels of cronyism and a lack of transparency, the overall legitimacy of the process can be called into question due to a lack of enforceable accountability mechanisms. Local communities are often excluded from the decision-making procedures and lack access to sufficient information about the allocation of resources and (potential) impacts of the projects on their living conditions.

Although the Vietnamese CDM portfolio has been growing during the past five years, this chapter has pointed out that cooperation at the implementation level of CDM projects in Vietnam faces a number of challenges and barriers, especially with regard to accountability and legitimacy. These issues are related to the broader socio-economic and political context in Vietnam, the limited resources available and more general shortcomings in the design of the CDM. The discussion on the future direction of international climate mitigation finance should take into account the barriers and challenges outlined in this chapter which has indicated the weak performance of the CDM policy network in terms of accountability and inclusiveness in the specific context of Vietnam.

INTERVIEWS

Vietnam, October 2011:

CDM project developers: 8

Central and local government officials: 6

CDM consultants: 7

Local communities: 3

Total: 24

Note: Strict anonymity rules are applied to all interviewees due to the sensitive economic and political context of the research topic. In total, 24 semi-structured interviews were held during research visits to Vietnam (October 2011).

NOTES

1. Decision 71/2010/QĐ-TTg, introduced on 9 November 2010, stipulates conditions, procedures and rules for the development of PPPs in the provision of public services and infrastructure. The private investment models such as BOT and BT have to be replaced by PPPs, in which state capital accounts for 30 per cent and private capital for 70 per cent (MOPI 2010).
2. *Doi moi*, launched in 1986, is an important process of economic reform, aimed at reforming the socio-economic system in Vietnam. The process led to the decentralization of state economic management and the replacement of administrative measures in a command economy by economic measures in a socialist-oriented market economy (Nguyen and van Dijk 2012: 2937) and, simultaneously, to the birth of Vietnam's private sector as an important engine for economic growth.

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10. Opportunities and challenges for Vietnamese enterprises involved in the CDM

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This chapter presents a comprehensive assessment of opportunities and challenges for Vietnamese enterprises involved in the Clean Development Mechanism (CDM). The analysis is based on extensive fieldwork information, expert interviews and a review of other primary and secondary data sources. The data will be used to analyse the present status of Vietnamese enterprises engaged in CDM projects, as well as to uncover the opportunities and difficulties they face and the potential they possess when developing such projects. Various industrial sectors in Vietnam have taken initial steps in researching and formulating prospective projects in domains such as energy conservation and savings; conversion and usage of fossil fuels; capturing and utilizing methane gas from waste and coal mining; renewable energy; afforestation and reforestation; capturing and utilizing biogas; and so forth. Vietnam is regarded by carbon market professionals as a developing country with strong CDM potential, particularly in energy savings, reforestation, capturing gas from waste and capturing and utilizing biogas. However the number of companies active in the CDM market is relatively modest and does not live up to the available potential (Asian Development Bank 2009: 120–179; Dang et al. 2006; Germany Trade and Invest 2009; UNEP 2010: 21). However as of 1 January 2012, Vietnam has had 105 CDM projects approved by the Executive Board (EB), with total avoided greenhouse gas (GHG) emissions projected to be over 40 million tonnes of carbon dioxide equivalent (CO₂-eq). Additionally, as of 1 January 2012, the number of successful Vietnamese projects approved by the EB was increasing faster than it was in the other countries in the Southeast Asian region (UNFCCC 2012a).

In that context, this chapter provides a valuable first-hand insight into the functioning of the CDM from a business perspective, based on a comprehensive assessment of the opportunities and challenges for Vietnamese enterprises in implementing the mechanism.