



PBL Netherlands Environmental  
Assessment Agency

# PUBLIC–PRIVATE PARTNERSHIPS IN DEVELOPMENT COOPERATION

POTENTIAL AND PITFALLS FOR  
INCLUSIVE GREEN GROWTH

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**POLICY STUDY**

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# **Public-private partnership in development cooperation**

## Potential and pitfalls for Inclusive Green Growth

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**Public–private partnerships in development cooperation.  
Potential and pitfalls for Inclusive Green Growth**

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# Executive summary

Public–private partnerships have become increasingly popular in global and Dutch development cooperation. The Dutch Directorate General for Foreign Trade and Development Cooperation co-finances a substantial number of public–private partnerships in the fields of water and sanitation, food security and renewable energy, to enhance access to water, food and energy and thus contribute to economic development and poverty alleviation. Partnerships bring the private sector, civil society and public authorities together, a combination that is expected to improve public services delivery, enhance local representation and stimulate efficiency.

This study assesses the potential contribution of public–private partnerships to Inclusive Green Growth, which is one of the main goals of Dutch development cooperation. Inclusive Green Growth – or ‘the economics of sustainable development’ – implies that growth should enhance welfare for both current (inclusive) and future (green) generations. This warrants attention for both ecological sustainability and the distribution of resource access.

To analyse the potential of partnerships for reaching Inclusive Green Growth objectives, we selected nine ongoing partnerships financed by the Dutch Directorate General for Foreign Trade and Development Cooperation. Using the academic literature on a) the requirements for effective Inclusive Green Growth strategies and b) the potential of public–private partnerships, we developed an analytical framework to be used for data collection (e.g. partnership documentation, interviews) and analysis.

## **Partnerships have Inclusive Green Growth potential...**

Our main finding is that partnerships have Inclusive Green Growth potential and that by bringing private sector, civil society and public actors together, innovative approaches towards addressing Inclusive Green Growth issues are found. Partnerships have a clear added value in creating multi-stakeholder platforms and facilitating learning and exchange across actors and scales.

Sustaining partnership activities remains challenging, as the cost recovery of public service delivery remains an important bottleneck. In addition, inclusiveness requires that stakeholders are well-represented and green growth that environmental externalities are included, both rather complex challenges for partnerships to tackle if prior institutions for doing so lack.

## **...but certain pitfalls need to be addressed upfront**

Hence, realisation of the Inclusive Green Growth potential of partnerships requires that the challenges are acknowledged in partnership design. For example, additional financing may be required to compensate for the non-monetary returns of green investments and additional efforts may be needed to build local institutions for safeguarding inclusiveness and sustainability. It also requires that in the design of the partnership agreement more attention is paid to the allocation of risks and responsibilities, and that the interests of the different partners are explicitly defined, negotiated and aligned.

### **Different types of partnerships**

Our assessment of the various partnerships indicates that there are significant differences between them. In most water partnerships, the public objective is clear (improved access to water and sanitation) and responsibilities are clearly defined. Private partners, however, are not really private (e.g. a semi-public water company), and the business case of most water partnerships is rather weak. In most of the food security partnerships studied, the opposite holds; clear business cases but unclear public objectives. Here, private partners often are global commodity traders who invest in sustainable resource sourcing, with an additional farm-household income improvement component. The three renewable energy partnerships studied are rather diverse. One is a conglomerate of public and private partners brought together for a huge wind energy project in northern Kenya. The second is a small-scale partnership that provides off-grid solar energy solutions to rural populations in Africa. The third focuses on capacity building and knowledge generation for geothermal energy development in Indonesia.

### **Potential contribution of partnerships**

In our analysis, we identified the potential contributions partnerships could make to growth, green growth and inclusive growth.

#### **Growth**

With regard to growth objectives, we found that partnerships provide added value in facilitating multi-stakeholder knowledge platforms, and in stimulating learning and the exchange of information between organisations, as well as on local, regional, and global scales. In doing so, a key condition for partnerships to enhance the efficiency of public goods provisioning is being met; the donor has less information than the actors involved in the partnership, and, through better targeting and a more efficient design of partnership activities, the efficiency of development cooperation can be improved. It is, however, not always self-evident that partnership actors also have the local, context-specific information that is required in order to effectively target, design and implement their activities. Some of the partnerships do not seem to have a clear picture of the baseline from which partnership activities are developed. This could reduce the efficiency of the partnership for development cooperation as it may result in activities that do not address the main constraints for Inclusive Green Growth pathways. Including local organisations and authorities in the partnership may help address this issue. Including local authorities may also help to define the public objectives of partnerships. However, we found that such authorities are not always included, or even consulted, in the current partnerships. This is problematic, since

without locally defined public objectives, there is the risk that partnerships are not effectively contributing to an improved public services delivery.

There are reasons to doubt that partnerships contribute to sustained growth, as long-term cost recovery is an issue in all partnerships. In the Lake Turkana wind energy partnership, this issue is addressed in the power purchase agreement, but cost recovery in the other partnerships studied, is not explicitly addressed. When cost recovery is related to public services delivery, the partnership cannot tackle the problem on its own; in most countries, water tariffs are set by the government, and energy prices are regulated, as well. In the case of private goods and services delivery, there is more scope for partnerships to tackle the issue of cost recovery, but here issues concerning market power arise. In many cases, the actor providing the services, such as credit, input delivery or extension services, is also the party that farmers sell their crops to. Linking input and output markets benefits the business case when it comes to recapturing investments in information and credit provisioning, but this is not necessarily to the benefit of farmers, who often have little choice in whom to sell their products to. When entirely new markets are being developed, there could be a public case for temporarily allowing monopolisation, but given that the partnerships were found to target relatively well-developed commodity markets in relatively well-developed countries, this is not the case. In fact, it is important to be aware of rent seeking behaviour in private-sector actors, as public funding may otherwise contribute to the development of less- rather than more-competitive agricultural markets. The final issue with respect to cost recovery is that inclusiveness implies that everyone has access to the public services, even the people who do not contribute towards the related costs. This clearly weakens the business case, but is crucial from the perspective of poverty alleviation and inclusiveness.

#### **Green Growth**

Partnerships contribute to green growth objectives by enhancing resource use efficiency through awareness raising and resource use monitoring, and by using integrated, watershed or landscape-based planning approaches. Also, the renewable energy partnerships contribute to climate change mitigation by reducing the dependence on fossil fuel energy, and the food security partnerships contribute to improved soil management and biogas use. The use of integrated, watershed, or landscape-based approaches is positive because using the boundaries of the ecosystem as a planning unit means more attention is being paid to the externalities of natural resource use. Awareness raising and monitoring may trigger more sustainable behaviour, but voluntary

mechanisms alone are often not sufficient. However, partnerships are generally not in the position to change the incentives for sustainable resource use, unless they manage to create markets for environmental goods and services, such as in the case of watershed or ecosystem payments. Although several of the partnerships studied are attempting to create such markets, they often encounter difficulties; for example, in trying to link up with carbon markets.

Alternatively, regulation may enhance the ecological sustainability of resource use, and one of the expected contributions by public-private partnerships was that they would help to enforce resource use restrictions where formal mechanisms are lacking. In the partnerships studied, however, we saw few examples of self-regulation. The partnership agreements included few enforceable, environmental objectives and, with the exception of the Colombian water partnership and the Kenyan energy partnership, we found that environmental objectives do not form an explicit part of the business case. In fact, we even encountered some potential negative trade-offs, with a shift in decision-making from local to national authorities being advocated by the partnership in Indonesia, with potentially negative repercussions on local forest conservation. Hence, for partnerships to significantly contribute to green growth objectives, this would require a different design of partnership facilities, possibly also including different financing mechanisms. For example, getting individual partnerships to tap into carbon markets may be asking too much, but directly linking funds for ecosystem restoration and natural resource management may help to enhance impacts, in terms of ecological sustainability.

### **Inclusive Green Growth**

Another point is that of putting inclusiveness at the centre of partnership facilities, which has directed the focus towards resource access, poverty alleviation and benefit distribution. This is a positive development from the perspective of Inclusive Green Growth, but achieving these objectives has proven difficult for the partnerships studied. For example, in the food security partnership, getting poorer farmers to borrow money for income diversification has proven challenging, and in the solar energy partnership, it has been difficult to get poor people to buy the solar lamps. Clearly, this is related to the poor farmers' and households' lack of funds, and their high risk aversion. Also, the poor may have different needs than people who are better off, and whether the specific needs of the poor are being addressed is debatable. Many of the partnerships studied, particularly in the domains of water and food security, closely work with local user organisations in identifying constraints and entry points at local levels. Here, it is critical to know

the types of users who are represented in such organisations – which often are not the poorest people. Although the problems and solutions as identified by user organisations may coincide with those of the groups not represented, there is no guarantee that this is the case.

To tackle this issue, including civil society organisations has become mandatory in the partnerships. They are supposedly well-connected at the local level and deemed capable to represent the interests of the marginalised and poor. In many cases, however, the civil society organisations included in the partnerships are Dutch or international non-governmental organisations (NGOs) and, although they have often been active in the target region for a considerable time of period, it is not always clear who's interests they represent. The partners interviewed were generally very positive about the role of the NGOs in the partnership, but this related mostly to their coordinating activities and less to their effectiveness in representing local interests.

More generally, when local institutions are lacking or when they do not represent stakeholder interests well enough, the objective of inclusiveness calls for efforts directed at local institution-building and empowerment – activities that are often beyond the scope of partnerships, as they require a commitment beyond the partnership's lifetime. In fact, many of the partnerships studied seem to be banking on previous investments by non-governmental organisations in local institution-building and empowerment, investments that need to somehow be maintained or continued for partnership activities to be inclusive. Overall, the analysis suggests that partnerships may not be the most appropriate mechanism for poverty alleviating, as activities are growth-oriented and are thus targeted at actors capable of benefiting from growth.

### **Strengthening partnership design**

Next to assessing the potential contributions partnerships make towards achieving the Inclusive Green Growth objectives, we considered how the design of partnership agreements can help partnerships realise this potential. With regard to the current design of partnership agreements, we found that considerable attention is being paid to goals and ambitions and less attention to the way in which these goals and ambitions are to be achieved. For example, partnerships have to meet a number of criteria relating to partnership composition, intervention strategy and impacts, but although the division of risks and responsibilities is part of these criteria, there is no requirement to explicitly define risks and allocate them between partners or to specify responsibilities in a partnership governance plan. As a result, few partnerships have a governance plan that



is sufficiently elaborate, and there is very little attention for possible contingencies and how these will be dealt with in the contract term. This is surprising, as there are standard public–private partnership contracts that do include such factors, and it is important to have a contingency plan. Finally, monitoring and enforcement of partnership objectives is not an established part of partnership agreements. Clearly, the ministry has certain reporting duties, but these are no guarantee that any public objectives of the partnership will be achieved.

Strict top-down enforcement of partnership agreements is undesirable, because of the high costs involved in monitoring and enforcement of partnership contracts, and because strong enforcement could scare away the very actors that could help improve the efficiency of public goods provisioning. Hence, alternative mechanisms are needed to ensure that the public objectives of the partnership will be achieved. Interest alignment and enhanced accountability and transparency can help facilitate self-enforcement. This study, however, illustrates that a good balance is difficult to find. For interest alignment, the business case and public interests need to be clearly defined. This was only the case for one of the renewable energy partnerships, where contract negotiations took almost seven years to be completed. In other words, interest alignment requires time to define the various interests and to negotiate how the risks are to be allocated among the partners involved – time which is

not available in the current set-up of most partnership facilities. With respect to transparency, the business case of several partnerships includes the information developed as part of the partnership; sharing this information implies giving up strategic benefits, something that partners are unlikely to do unless there is some form of compensation. Transparency, therefore, needs to be negotiated and cannot simply be assumed. Also, being transparent about partnership objectives and planned activities makes partners accountable. This has the advantage of enabling bottom-up monitoring and enforcement, but also reduces partnership flexibility. From a public perspective, accountability is important, also because there is public funding involved. However, as private investments constitute up to half of the partnership budgets, the room to negotiate transparency and accountability may be limited.

This leads us to the potential tension between using public–private partnerships for efficient public goods provisioning and for leveraging additional private funds. If the requirements for public funding are weakened in order to secure the maximum amount of private funding, this may reduce the added value of partnerships for development cooperation and Inclusive Green Growth. This would clearly not be desirable, as partnerships have clear Inclusive Green Growth potential.

# Introduction

Since the World Summit on Sustainable Development in Johannesburg in 2002, partnerships have been gaining institutional momentum (WSSD, 2002). They have become a widely used policy instrument in the sphere of international cooperation (UN Sustainable Development Knowledge Platform, 2014). In the Netherlands, the Directorate General of Foreign Trade and Development Cooperation of the Ministry of Foreign Affairs is directing an increasing part of its budget towards public–private partnerships. Currently, it is funding three partnership facilities: 1) water management and sanitation; 2) food security and 3) renewable energy. The current total amount of funding for these facilities is approximately 250 million euros.

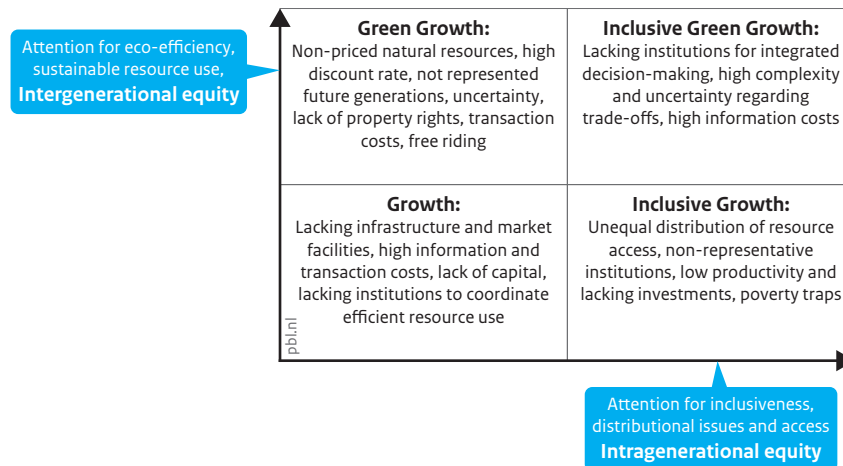
Partnerships are popular because, in a globalised world, national governments lack the influence, capacity and mechanisms to coordinate actions across different levels and to effectively stimulate sustainable development (Pattberg, 2012). Partnerships are more flexible and by combining roles of private, public and civil society actors, in principle, they would be able to be more effective than governments, NGOs or businesses alone. The popularity of partnerships can also be explained by the decreasing government budgets. By creating partnership facilities, governments hope to attract additional funding, using the limited public funds to create a leverage effect.

Partnerships have the potential to combine the efficiency of the market and the regulatory capacity of the public sector and social representation of civil society

organisations, but it remains unclear whether this potential will be realised. Partnership results, so far, are mixed (Hart, 2003; Sami et al., 2002; Franceys and Weitz, 2003; Kolk et al., 2008), and seem limited, especially in terms of sustainability impacts (IOB, 2013; Pattberg, 2012; Glasbergen et al., 2007; Koppenjan and Enserink, 2009; Mert and Pattberg, 2015). This raises questions about the suitability of partnerships for development cooperation, especially when considering topics such as Inclusive Green Growth, one of the key objectives of international development cooperation (World Bank, 2012).

This study explores the potential contribution by public–private partnerships to improved efficiency and effectiveness of development cooperation, with a focus on the potential contribution to Inclusive Green Growth. We do this for the Dutch Directorate-General for Foreign Trade and Development Cooperation, Department of Inclusive Green Growth. It is important to note that it is an explorative study, not an evaluation. Most of the partnerships facilitated by the Dutch ministry of Foreign Affairs have only recently started, and simply cannot be evaluated yet. Also, although the different partnership facilities include Inclusive Green Growth elements, they are not necessarily targeted towards Inclusive Green Growth. To still explore the potential of partnerships for Inclusive Green Growth we specifically selected partnerships with explicit attention for both ecological sustainability and the distribution of resources and promotion of resource access.

Figure 1.1  
Market and governance failures



Source: PBL

In order to learn about the potential contribution of public–private partnerships to Inclusive Green Growth objectives, we collected information about the partnership approach, intervention strategy and first results. By studying the academic literature on the requirements for effective Inclusive Green Growth strategies and the potential of public–private partnerships, we developed a conceptual framework for data collection and analysis, which we subsequently used to study the potential of partnerships and implications of the outcomes for partnership design. For the empirical part of the analysis, we commissioned a study by Jan Joost Kessler (Aidenvironment) and Stephan Slingerland (Trinomics), who brought in their experience and expertise in water and sanitation, food security and renewable energy projects in the developing world. They present their findings in Kessler and Slingerland (2015), which formed the basis for our analysis. Subsequently, we further interpreted those findings by using the academic literature and studied how these reflect on the implications for partnership design. Below, first the concept of Inclusive Green Growth is presented together with the potential contribution of public–private partnerships, followed by a description of the partnership facilities funded by the Dutch Government and introduction to the rest of the study.

### 1.1 Inclusive Green Growth

The concept of Inclusive Green Growth acknowledges that growth is needed for welfare improvement and that, for this improvement to happen, such growth needs to be

inclusive and green (WB, 2012). Stimulating Inclusive Green Growth is difficult, not only because it is difficult to stimulate growth in itself, but because failures in market and governance systems make it difficult for this growth to also be green and inclusive. For example, growth requires that scarce resources are used more efficiently, so that productivity can be increased. However, environmental goods and services are not priced in the current market system, so there is no incentive to use environmental goods and services efficiently. Similarly, poor and marginalised people generally lack access to assets, and institutions fail to properly represent their interests. Therefore, they tend to benefit less from growth than those who are better off. Correcting market and governance failures is difficult, since vested interests and entrenched behaviour constrain institutional change. Creative solutions are needed to overcome these barriers, together with integrated approaches to balance interests, compensate trade-offs and coordinate use (World Bank, 2012; Bouma and Berkhout, 2015).

In their study, Bouma and Berkhout (2015) review the literature to assess the challenges that Inclusive Green Growth strategies need to address in order to be effective. Starting with the challenges of stimulating growth, they discuss the challenges of green growth and inclusive green growth by considering the difficulties associated with intergenerational and intragenerational welfare distribution. Figure 1.1 summarises the main challenges; please note that the different challenges add up; for example, Inclusive Green Growth needs to address the challenges of both Growth, Green Growth, Inclusive Growth and Inclusive Green Growth.

Thus, for partnerships to effectively contribute to the achievement of Inclusive Green Growth objectives, partnerships not only should pay attention to ecological sustainability and resource access, but also address the underlying market and governance constraints. Partnerships that pay attention to ecological sustainability without addressing the underlying constraining factors are unlikely to have a sustainable impact, whereas those that only consider the systemic level make no direct contribution to Inclusive Green Growth. For example, a project directed at integrated information systems may facilitate Inclusive Green Growth strategies, but it will not have a direct impact, for example, in terms of achieving an actual reduction in deforestation or improvement of local forest-related livelihoods. On the other hand, an integrated conservation development project that fails to address the high transaction costs caused by a lack of infrastructure and non-representation of local communities in national decision-making will not succeed in improving local livelihoods and forest conservation beyond the intervention strategy. Hence, both aspects need to be addressed.

## 1.2 Partnerships in development cooperation

In their literature study of public-private partnerships, the Policy and Operations Evaluation Department (IOB) of the Dutch Ministry of Foreign Affairs discusses the many definitions of partnerships (IOB, 2013). Partnerships can take many forms, varying from contractual arrangements between public and private actors to loosely defined networks of public and private organisations. Partnerships may arise spontaneously or be formed in response to a call for proposals, and their objectives may vary from the actual provisioning of (public) services to joint knowledge development or political lobbying (Hodge and Greve, 2008).

This study focuses on partnerships in the fields of water and sanitation, food security and renewable energy, which are fully or partly financed by the Directorate General for Foreign Trade and Development Cooperation of the Dutch Ministry of Foreign Affairs. These are the so-called tripartite partnerships, involving at least one public, one private and one civil society actor and based on a contractual arrangement, but with ambitions that go beyond that arrangement and therefore require a certain amount of collaboration between the partners involved.

It is important to note that these are highly complex partnerships. Traditionally, public-private partnerships focus on clearly defined tasks, such as infrastructure development, where they help to enhance the efficiency of infrastructure development while the public interest is safeguarded by the public actor involved. In the realm of development cooperation, infrastructure development may be just one of the objectives, in combination with those on, for example, capacity building, infrastructure maintenance and poverty alleviation. Thus, such partnership agreements need to specify not only the conditions for infrastructure development, but also the way in which access is guaranteed for the poor and how the infrastructure is maintained. This is also where the contribution of public-private partnerships may be largest; in a context where institutions are lacking, information is costly and the poor are not represented, public-private partnerships may be more effective than traditional development cooperation, as they combine the creativity of the private sector, with the regulatory capacity of the public sector and the social representation of civil society organisations.

A key question when considering the potential of public-private partnerships for development cooperation is that of how achievement of public objectives of the partnership can be ensured. Development cooperation has many public objectives, such as infrastructure development, poverty alleviation and integrated resource management. There is little incentive for private actors to invest in public objectives, which is why these require public funding. To ensure that private actors work towards achieving public objectives it is important that those objectives are properly defined (which is difficult given the above mentioned complexity) and that the agreement is both monitored and enforced (Hart, 2003; Williamson, 2000). This is difficult, especially in an international context, and also due to the voluntary nature of public-private partnerships. However, strong enforcement is likely to scare off the private sector and civil society actors that the government hopes to engage. Especially when public-private partnerships are meant to generate additional funding, this may create tension between the aim to engage private sector actors in development cooperation and the wish to achieve public development cooperation goals through public-private partnerships.

These issues are further elaborated in our conceptual framework. The next section introduces the partnership facilities offered by the Directorate-General for Foreign Trade and Development Cooperation.

### 1.2.1 Partnership facilities

The partnership facilities studied here are financed by the Directorate General for Foreign Trade and International Cooperation of the Dutch Ministry of Foreign Affairs and described in the *Staatscourant* (2012a, b), and in the Dutch renewable energy programme. In particular, for the partnership facilities on water and food security, project objectives are in line with those on Inclusive Green Growth, although it is important to note that sustainability mostly refers to ‘sustained economic growth’ and less to ecological sustainability (Bouma and Berkhout, 2015). For renewable energy, inclusiveness is not an objective, although one of the partnerships studied is funded under the former Energy access for all programme which addresses inclusiveness.

1. The *Sustainable Water Fund (FDW)* stimulates public-private partnerships in the water sector formed to contribute towards water safety and a reliable water supply in developing countries. Partnership proposals should contribute to one or more of the following objectives, and should involve at least one (local) government body, one industrial party and one NGO or knowledge institution.
  - Improved access to drinking water and sanitation;
  - Efficient and sustainable water use, particularly within agriculture;
  - Safe deltas and improved basin management.
  
2. The *Facility for Sustainable Entrepreneurship and Food Security (FDOV)* stimulates public-private partnerships in the fields of food security and private sector development in developing countries. With regard to food security, partnership proposals should contribute to one or more of the following objectives, and should involve government bodies, businesses and NGOs or knowledge institutions:
  - Contribute to improving local or regional availability of nutritious food of good quality;
  - Focus on national and regional markets;
  - Include food crops.
  
3. Within the *DGIS Promoting Renewable Energy Programme*, the Dutch Government allocated a budget of 500 million euros for promoting the use of renewable energy in developing countries in the 2008–2014 period. The programme involved over 30 partners including the World Bank, GIZ, HIVOS/SNV, and a range of innovative private sector partners. The objective of the programme was to encourage the use of renewable energy in developing countries. The ultimate goal was to support developing countries to draw up and implement effective renewable energy policies.

Proposals for all three programmes must demonstrate to have a positive impact on access to water or food security or renewable energy, and to contribute to poverty reduction. Proposals are also assessed in terms of their possible negative effects on environmental and social sustainability issues, and where negative effects are identified these must be mitigated or compensated. Proposals should adhere to the so-called ‘FIETS’ criteria, which include financial, institutional, environmental, technical and social sustainability criteria. Since the renewable energy programme is not specifically targeted at partnerships, it does not contain a detailed description of partnership requirements.

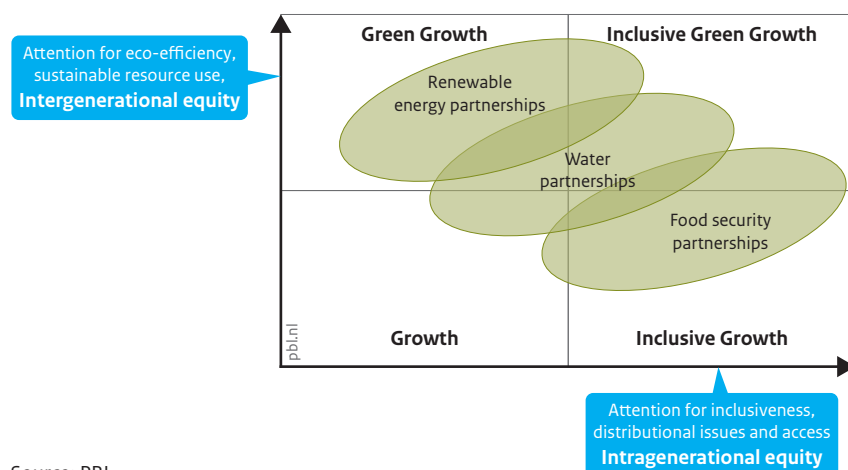
### 1.2.2 Partnership requirements

The *Staatscourant* (2012 a,b) specifies requirements for water and food security partnerships. In addition to these partnerships having to contribute to the programme’s objectives, the programme also requires that partnerships elaborate their business model and intervention strategy to create an enabling environment – for example, to address how they plan to tackle the underlying systemic constraints. Examples mentioned under systemic constraints include joint knowledge development, market creation, institutional capacity, and financing. Thus, in both FDW and FDOV facilities, attention is paid to Inclusive Green Growth objectives on both a project level and a systemic level.

With regard to the financing of the partnership activities, the FDOV facility finances 50% of the costs, and the FDW facility finances 60% to 70%, depending on whether activities relate to sanitation, drinking water and water-use efficiency (60%) or safe deltas and integrated water management (70%). The rationale behind this relates to the type of benefits generated by the project, with food security projects generally generating more private benefits than those related to integrated water management. In the business model, the partnership has to elaborate how the activity will be financially independent to continue after the project period is over and what the investments of the other partners will be. An important requirement of the proposed activities is that public funding is additional; projects that are already commercially viable will not be funded, public funding is only available to create an enabling environment. Funding for food security partnerships ranges between 500,000 and 1 million euros, and for water partnerships between 500,000 and 4 million euros.

Both the proposal and partnership composition are evaluated. The policy relevance of the project proposal is evaluated, as well as the quality of the intervention strategy, including business model, its compliance with specified sustainability criteria, the quality of the plan,

Figure 1.2  
**Inclusive green growth in water, food security and renewable energy partnerships**



Source: PBL

the price–quality ratio and the attention for the division of risks, monitoring and adaptive management. The partnership itself is evaluated with respect to the expertise and proven capabilities of the partners, the partnerships' composition and its added value. Please note that the partnerships included in our analysis were funded under the 2012 call for proposals. For the subsequent call, in 2014, changes were made in facility objectives and requirements – especially those related to the FDOV facility. The most notable changes involved the mandatory inclusion of an NGO partner, an increase in the importance of having local authorities on board, a restriction on the inclusion of multinational business partners, more flexibility in financing arrangements, an increase in funding and in entry requirements.

A closer look at the evaluation criteria reveals that the requirements were rather comprehensive with regard to the impacts the project should have or avoid. Also, considerable attention was paid to the fact that activities should become financially independent and that they be non-commercial at the project's start. Financial requirements were also described in detail, but this was not the case for monitoring and evaluation. With regard to enforcement, the call simply stated that this would be the responsibility of the main applicant, and that the partnership agreement should specify partner responsibilities. Regarding the allocation of risks, the call only mentioned that risks were to be shared, but did not provide a definition of these risks or the way in which they were to be allocated between the partners. Other contractual provisions (e.g. a contingency plan) were not specified, but were supposed to be further elaborated in the inception phase of the partnership.

### 1.3 This study

As mentioned in the introduction, this study is an explorative study of the potential contribution of public–private partnerships to Inclusive Green Growth. We focused on contributions to the achievement of Inclusive Green Growth objectives on both project and systemic levels. To be able to assess the potential contribution of partnerships, we distinguished between the requirements for effective Inclusive Green Growth strategies and the factors determining partnership effectiveness. With regard to the requirements for effective Inclusive Green Growth strategies, see Bouma and Berkhout (2015), for an elaboration of the market and governance constraints that effective strategies need to address. For the factors determining partnership effectiveness, we reviewed the academic literature on public–private partnerships. We used the framework that resulted from this review for three purposes: 1) to interview partners in selected, ongoing partnerships, 2) to reflect on the findings from these interviews to learn about the potential of partnership for Inclusive Green Growth, and 3) to draw lessons for partnership design.

We selected the partnerships for our analysis from the 44 partnerships funded under the first rounds of the FDW and FDOV facilities. We selected specifically those partnerships that paid attention to both inclusiveness and green growth objectives, in order to learn the most about the potential of partnerships for Inclusive Green Growth. Before selecting the partnerships for our study, we first grouped the 44 ongoing Phase 1 partnerships in our Inclusive Green Growth matrix (see Figure 1.2).

Table 1.1  
**Framework for the analysis of partnership potential**

	Direct (project level) effects	Indirect (systemic) effects
<b>Partnership characteristics</b>	<ul style="list-style-type: none"> <li>• Partner expertise and role in partnership</li> <li>• Partnership objectives</li> </ul>	<ul style="list-style-type: none"> <li>• Partner authority, influence and (local) commitment</li> <li>• Attention for systemic factors in objectives</li> </ul>
<b>Factors influencing partnership performance</b>	<ul style="list-style-type: none"> <li>• Design of partnership agreement (financing, risks/responsibilities)</li> <li>• Internal organisation</li> <li>• Internal monitoring &amp; enforcement</li> </ul>	<ul style="list-style-type: none"> <li>• External accountability</li> <li>• Stakeholder participation</li> <li>• Learning and flexibility</li> <li>• Involvement local authorities</li> <li>• Long-term cost recovery</li> <li>• External monitoring &amp; enforcement</li> </ul>
	Context <ul style="list-style-type: none"> <li>• Conditions of the partnership facility</li> <li>• Prior experience with topic/in region</li> <li>• Institutional and socio-economic context</li> </ul>	

In line with the objectives of the various partnership facilities, partnerships in the realm of food security were found to focus mostly on Inclusive Growth objectives, whereas for renewable energy partnerships the focus was more on Green Growth. Most water partnerships paid attention to both, given the nature of the call for proposals. In collaboration with the Netherlands Enterprise Agency (RVO) and the Dutch Ministry of Foreign Affairs, we selected 3 food security and 3 water partnerships from those in the upper right quadrant of Figure 1.2. In addition, we selected the 3 renewable energy partnerships that are being implemented. Please note that the grouping of partnerships was made on the basis of limited information (e.g. partnership descriptions published on the RVO website).

Interviews were conducted with 3 partners per partnership. After each interview, a transcript was made of the interview and presented to the respondent for confirmation. The interviews were conducted by Aidenvironment and Triple E consulting, who also collected the documentation from and on the selected partnerships. Interviews were semi-structured, based on

an analytical framework which we jointly developed using the literature (see also the Annex). In the interviews, we distinguished between project level and systemic effects, and between partnership characteristics and factors influencing partnership effectiveness. We expected partnership characteristics to influence performance through the knowledge and expertise of the partners. With regard to long-term sustainability and systemic impacts, we expected inclusion of local authorities in the partnership to be important, as well as long-term regional engagement of the partnership’s partners. When considering the factors influencing partnership performance, we expected the design of the partnership agreement to give an indication of the extent to which the partnership would be likely to reach its objectives. In addition, we expected that the embedding of the partnership in its wider institutional and socio-economic context would provide an indication of its potential to generate systemic change. The following section further elaborates on the factors that influence partnership effectiveness. Table 1.1 summarises the various factors, and the subsequent section discusses the various underlying concepts and literature.

# Conceptual framework

In line with the multiple definitions of public–private partnerships, the factors that influence them have been analysed from various disciplinary perspectives. The economic literature traditionally focuses on how public–private partnerships may improve the efficiency of public goods provisioning and, given the associated externalities, what this implies for contract enforcement and design (Williamson, 1979, 2000; Besley and Ghatak, 2001; Hart, 2003). The governance literature combines several strands of literature; some focusing on the characteristics of policy networks and complementary governance roles (Pattberg, 2012; Mert and Pattberg, 2015), some on the organisational factors influencing partnership performance (Kolk et al., 2008), and others considering the legal aspects of public–private partnerships and their accountability (Minow, 2008; Forrer et al., 2010).

The tripartite, public–private partnerships that are the focus of this study can be defined as non-standard, contract-based partnerships. They are contractual because they have a contractual relationship with the government, and, since they are intended to enhance the efficiency of public goods provisioning (in our case: development cooperation), they fit the economic description of public–private partnerships. They are non-standard because the tasks defined in the contract go beyond infrastructure development. In fact, the partnerships considered in this study are supposed to tackle several governance failures (e.g. underrepresentation of poor people, non-

enforcement of environmental regulation) and as such they also fit the governance literature on policy networks. We considered that the potential policy network contributions of partnerships would be part of their contractual obligation (e.g. partnership objectives were defined such that addressing these governance failures was required to reach the partnerships goals) so we basically integrated the governance literature in our economic approach.

To understand the lessons from the economic literature with regard to the design of public–private partnerships, it is important to understand the concept of public goods. Hence, the following section reflects on the public-goods and other characteristics of partnerships and discusses the factors that influence partnership effectiveness.

## 2.1 Characteristics of partnerships

Public goods are goods that are non-rivalrous and non-excludable, which basically means that i) its consumption by one person does not impact its consumption by other people, and ii) that nobody can be excluded from having access to its benefits. Think, for example, of a dyke, which protects all people living behind it against flooding; it is non-rivalrous as one person's flood protection does not reduce that of others, and it is non-excludable since nobody can be excluded from being protected. However, only few goods are pure public goods; most often consumption is rivalrous, but



exclusion is difficult; for example, in the case of infrastructure, knowledge development and environmental resources (with common pool resource rights).

The problem with public goods provisioning is the so-called free-rider phenomenon: because it is difficult to exclude others from enjoying the benefits, there is little incentive for individual actors to contribute to the related costs – each actor hopes that others will contribute first. Thus, public goods provisioning requires collective action, which also explains why public goods provisioning is traditionally a task of governments. Governments can collect and coordinate contributions, for example via the tax system, and they have the authority to control free-rider behaviour and regulate use. Similarly, in the case of common pool resources, where individual actors are able to over-extract, public authorities can control free-rider behaviour and regulate use. The choice who should have access to common pool resources or public goods is a political one, and determines whether public funds (e.g. from taxation) are used to provide such goods or resources for everybody, or whether private actors provide goods or resources only to those who contribute (club goods). It is important to note here that the concept of Inclusive Green Growth suggests that resource access should be inclusive, implying that everybody should have access, even if they do not contribute to the costs. Finally, it is important to acknowledge that, for goods and services with strong public goods characteristics, the transaction costs of allocating individual user rights may be considerable. This will constrain provisioning by NGOs and private actors, as high transaction costs imply that market mechanisms are not very efficient at allocating resources to their most efficient use. For example, allocating and enforcing individual user rights to groundwater aquifers is possible, but costly, which explains why groundwater management is usually a government task.

Governments are usually not very efficient in providing public goods and common pool resources, because there is little incentive for them to produce quality against the lowest possible costs. This fact underlies the idea of contracting out public services delivery to the private sector, with the public actor specifying the contract and private actors providing public services delivery at the lowest cost. In addition, governments do not always fully represent local interests, as they are less aware of local issues and because formal institutions tend to underrepresent marginalised and poor people. The inclusion of civil society organisations is therefore expected to improve partnership effectiveness, especially in the realm of development cooperation, where poverty alleviation is an important objective.

Thus, the assumed efficiency gains of partnerships are expected to be achieved through more cost-effective implementation and better targeting of public investment projects, as private sector and civil society actors are expected to have better and more context-specific information and expertise (Mookherjee, 2006). In terms of partnership characteristics, this implies that expertise of the partners, and their context-specific knowledge and local embeddedness are important for the partnership to be effective. With regard to the public goods characteristics of partnerships, the public goods component in water and sanitation partnerships is much larger than in food security partnerships. This is important, as it implies the need for a greater or smaller role for public authorities in the partnership. At the same time, it weakens the business case, as it becomes more difficult to appropriate the benefits generated by the partnership, and recover investment costs. In the following, we briefly discuss the public goods characteristics of the partnership programmes and wider welfare implications in terms of potential contributions to Inclusive Green Growth.

### 2.1.1 Water and sanitation

The construction and maintenance of water supply and sanitation infrastructure is a traditional objective of development cooperation. The governments of developing countries often lack access to capital to construct water infrastructure, while access to clean drinking water and sanitation would have great impact on welfare and poverty alleviation. Investments in water supply and sanitation have semi-public goods characteristics. Often, recovering the costs of investments in water infrastructure is a problem, because of the discrepancy between water tariffs that allow for full cost recovery and the (social-political) objective to provide water access for all people. Integrated water management objectives have more recently been added, to ensure long-term sustainability of water supply. Here, benefits are even more difficult to appropriate, water being a collective resource, which limits the business case.

Partnerships in water supply and sanitation closely resemble the traditional public-private partnerships, whereby private actors build and operate infrastructure financed by a government. The difference is that the government body responsible for water service delivery and infrastructure is not the government body that finances infrastructure development, which complicates partnership design and enforcement. The Inclusive Green Growth dimension of water and sanitation projects is related to the environmental impact of water supply systems (water use efficiency, integrated water management), and to the question of whether poor people will be granted access to water infrastructure even if they cannot contribute to its costs (including those of maintenance).

### 2.1.2 Food security

In the food security partnerships, the public goods dimension is less clear. Food is not a public good or common pool resource, but governments are responsible for agricultural market development and secure access to food. Development cooperation projects often focus on agricultural production and marketing systems, because the potential gains in efficiency and poverty alleviation are large. Raising agricultural productivity is achieved by stimulating market efficiency and infrastructure provisioning, including access to roads, credit, information and input use. Market failures typically are caused by high market transaction costs, the key public task being to facilitate market transactions and coordinate efforts.

Partnerships in food security are often related to initiatives in integrated supply chain management, with some additional attention for the income diversification of farmers and the local production of food. The Inclusive Green Growth dimension of food security partnerships is that poor farmers are specifically targeted, and that the sustainability of land, water and input use are included in the partnership design. The business case for these projects is that of improved supply of resources in global supply chains (e.g. coffee), and improved access to potential customers (e.g. small-scale producers) with a latent demand for agricultural input, micro credit and marketing.

### 2.1.3 Renewable energy

In the renewable energy partnerships, the main types of public goods supplied are of a global nature, as investments in renewable energy for example mitigate the global issue of climate change. Furthermore, the construction of power grids also has local or national public goods characteristics, as the provisioning of electricity in most countries is the responsibility of government or semi-government bodies. Off-grid solutions are less public, but the broader welfare impacts of providing people with access to energy are large. Cost recovery is usually less of a problem, although leakage and illegal tapping of electricity are problems in large parts of the developing world. The Inclusive Green Growth dimension is related to the low-carbon intensity of renewable energy, and the fact that access to energy is essential for Inclusive Green Growth. The business case is clear and related to energy provisioning, although the risks related to infrastructure development can be considerable.

## 2.2 Factors influencing partnership effectiveness

Effective partnerships thus increase the efficiency of public and semi-public goods provisioning, while increasing local representation and improving resource access.

Governments are ultimately responsible for public goods provisioning, so they have to define the requirements for public services delivery. This is often difficult, because public services delivery involves ownership, maintenance and access issues, which are hard to specify up front. In addition, governments do not know the exact costs involved in providing the public services, which gives private sector parties the opportunity to overstate the costs. This is called the principal-agent problem, or the problem of asymmetric information (the principal having less information than the agent). If this issue is not adequately addressed, it may make public-private partnerships less efficient. The problem is especially large in the realm of development cooperation, where there is, literally, a large distance between the funding government and the implementing private sector, civil society agents, and the local government responsible for public goods and services delivery.

Given their replicability, and the large number of infrastructural development projects, contractual arrangements for infrastructural projects have largely been standardised (World Bank, 2007). Core elements are the allocation of risks and long-term financing arrangements, including the allocation of costs and benefits resulting from the partnership, conditions of partnership transparency and confidentiality, contract duration and contractual provisions about how to deal with possible contingencies, such as conditions for refinancing and renegotiation and dispute resolution (World Bank, 2007). The fact that contracts specify governance mechanisms beyond contract enforcement, such as renegotiation and dispute resolution, indicates that it is impossible to foresee all possible contingencies. This is what Williamson (1979, 2000) framed as the problem of incomplete contracts; the observation that in case of complex, unique and uncertain projects it is impossible to define all contingencies up front.

Incomplete contracts are even more common when considering public-private partnerships in development cooperation. Here, infrastructure development may be just one of the objectives of the partnership, in combination with those on, for example, capacity building, community maintenance and poverty alleviation. Clearly, these are objectives that are difficult to specify in contracts and, given their complexity and the many market and governance failures that may affect provisioning, require additional efforts to address them. Also, contractors do not always adhere to contract conditions, this may be a moral hazard that needs to be controlled. The risk of moral hazard is not specific to partnerships in developing countries, but the international dimensions of partnerships in development cooperation do complicate legal contract enforcement.

For public–private partnerships in development cooperation, for example, it implies that legal contract enforcement may be difficult and costly and that attention needs to be paid to alternative mechanisms to ensure that the public objectives of public–private partnerships are achieved. This brings us to the core of our argument, which is that effective public–private partnerships require self-enforcement.

Self-enforcement implies that when external enforcement (by a government or regulator) is lacking the actors concerned self-enforce the collective agreement made. This is difficult, because in every contract or partnership there is a certain amount of tension between the interests of the individual actors and those of the collective. Self-enforcement basically requires the alignment of individual and collective interests. Take, for example, infrastructure development, and consider a project that develops water infrastructure and sanitation in Africa. The contract specifies the number of households that needs to be provided with access to drinking water, possibly including a number of marginalised households. The interest of the private actor may be to construct the infrastructure against the lowest costs, but for the NGO it is that poor people obtain access to water. By allocating construction risks to the private actor, and adding a contractual obligation that the private actor is ultimately responsible for a well-functioning system, the private actor will prepare construction carefully and make sure that the sustainability of the water supply is secured. By making the NGO publicly accountable for water distribution, it has an interest in making sure that the objective of delivering water to the poor is being achieved.

Thus, partnership design needs to carefully create incentives by aligning tasks and interests. Besley and Ghatak (2001) analyse this issue theoretically, arguing that responsibilities should be allocated in such a way that the partner who attaches the most value to the collective objectives should have ownership. Forrer et al. (2010) consider several examples of partnerships, concluding that partnership agreements should pay attention to the distribution of risks and responsibilities, acknowledging differences in perceived costs and benefits, and that they should specify reward and punishment mechanisms and compliance monitoring. The OECD (2012) recommends several principles for the public governance of public–private partnerships, recommending 1) a clear, legitimate and predictable institutional framework; 2) a grounding of the selection of partnerships in value for money and c) a transparent procurement process, as the three key aspects.

Kolk et al. (2008) discuss the changing role of private sector actors in partnerships. They suggest that, in public–private partnerships, business actors are mostly involved through their core business (e.g. in line with their private interest), whereas in more complex tripartite partnerships this is less

so the case. The reason behind this is that tripartite partnerships are supposed to also address governance failures, but this reduces the incentive for private sector actors to self-enforce the partnership commitments made. The observation by Kolk et al. (2008) is an important one, as it points to the different expectations surrounding partnerships. Partnerships may contribute to improved governance, as Franceys and Weitz (2003) illustrate for the water sector, but it is important to acknowledge that the interests of the private sector are not to improve governance but to reach their companies' goals. If, in order to achieve this, it is necessary to invest in local institutions and improved governance, then there might be room for synergy, but Koppenjan and Enserink (2009) warn that private sector actors have a short-term agenda, whereas partnerships that aim to address market and governance failures require a longer time horizon. This is not to say that private sector actors cannot contribute to longer term objectives, but that, for partnership objectives to materialise, it is important that commitments made by the private sector are in line with the sector's corporate interests, or that specific contractual provisioning for additional tasks and responsibilities is made.

Given the public funding of public–private partnerships, and the fact that they contract out public services delivery, Minow (2002) underlines the importance of safeguarding the public accountability of partnerships. Partly, this is done by addressing monitoring and enforcement in the partnership agreement, but accountability is also related to self-enforcement and reputation, as the accountability of the partners is to each other and the outside world. Hence, if there is transparency about the partnership objectives and partners are accountable, reputation effects may cause partners to increase their efforts towards reaching the collective goals.

In summary, the factors that influence partnership effectiveness include the fact that the government needs to well-define the public objectives of partnerships and to ensure that they are achieved. Given that top down enforcement of the contract can be difficult, the government should pay specific attention to the conditions for self-enforcement, aligning private and collective interests in partnership design. This implies that risks and responsibilities are distributed in such a way that incentives are created for self-enforcement, although self-enforcement alone would be insufficient, as the public objectives of partnerships would also require contract enforcement by the government. Facilitating factors for enforcement of the partnership agreement consist of partnership transparency, accountability and internal enforcement mechanisms related to partnership decision-making and organisation. Before discussing our findings, the next section briefly introduces the selected partnerships and their main objectives, partners, budget and project period.

# The selected partnerships

## 3.1 Partnerships in water and sanitation

### Malawi: Water Demand Management to Mitigate Water Shortages

Topic / sector	Water supply and sanitation through water demand management
Country & region	Malawi (1 region)
Budget	€ 2.6 million; around 49% of which are grants, 25% from the Dutch water company, 6% from Dutch NGO, and 20% from the Malawi water company. (cash and in-kind)
Types of partners	Dutch NGO (semi-public) Dutch water company (semi-public) Malawi water company (semi-public) Malawi local government (public)
Project phase	April 2013 to April 2019
Partnership summary	The semi-public Malawi water company intends, with the financial help of the Dutch Government, a semi-public Dutch water company and a Dutch-based NGO, to improve access to water in Malawi. The Dutch NGO has the lead

### Vietnam: Climate Change and Water Supply in the Mekong Delta

Topic / sector	Water supply and climate change adaptation
Country & region	Vietnam (3 provinces)
Budget	€ 10 million; 44% of which are grants. Both cash and in-kind contributions by Vietnam partners
Types of partners	Dutch water company (semi-public) Three Vietnamese water companies (semi-public) Three provincial government agencies (public) Dutch and Vietnamese research institutes (semi-public)
Project phase	April 2013 to April 2017
Partnership summary	The semi-public Vietnamese water companies intend to shift their water supply from groundwater to surface water and adapt their system to climate change. The Dutch water company has the lead, and provides both consultancy services (climate adaptation plan, capacity building) and hardware (including surface water treatment facilities and piped systems)

### Colombia: Integrated Water Management System for a Climate Intelligent Coffee Sector

Topic / sector	Integrated water management in 25 river basins, with the aim to increase water use efficiency and stabilise and improve coffee production
Country & region	Colombia (25 river basins: 25 coffee-growing municipalities in 5 departments (provinces) of Colombia (Antioquia, Caldas, Cauca, Narino, Valle del Cauca))
Budget	Total € 25 million; € 9.5 million of which from FDW, € 4.5 million from a private company, € 2.5 million from the National coffee federation, € 2.5 million from a public agency, € 4.3 million (in kind) from project beneficiaries (farmers).
Types of partners	National coffee federation (non-profit, semi-public) Global private company (private) Colombian ministries of agriculture, environment & water (public) Dutch and Colombian research institutes (semi-public)
Project phase	July 2013 to June 2018
Partnership summary	The private global coffee trader wants to stabilise and secure its special brand coffee supply and has committed to good water stewardship. Although water is the entry point, the PPP actually aims to develop a financially viable watershed management model. The coffee federation has the lead.

## 3.2 Partnerships in food security

### Ghana: Sustainable Maize Programme in northern Ghana

Topic / sector	Improvement of maize production and sales via a farmers' cooperative
Country & region	Ghana – northern region
Budget	Total € 4.1 million; € 2 million of which from FDOV, and the rest contributed by the farmers' cooperative (17.3%), a private fertiliser company (17.3%) and a private agricultural input company (17.3%).
Types of partners	Dutch NGO (semi-public) Global fertiliser and agricultural input provider (private) Global mineral fertiliser company from Norway (private) Farmers' cooperative, established by private companies (private collective) Dutch Government (public)
Project phase	2014 to 2018
Partnership summary	The NGO, who has the lead, wants to improve food security and the livelihoods of subsistence farmers in northern Ghana through improved farming methods. The private sector wants to stabilise and improve the maize supply chain and increase agricultural input use.

### Ethiopia and Kenya: Food Security through Improved Resilience of Small Scale Farmers in Ethiopia and Kenya (FOSEK)

Topic / sector	Improvement of coffee production and livelihood diversification through local food production
Country & region	Ethiopia and Kenya
Budget	Total € 9,267,581 (50% by FDOV, the rest by project partners)
Types of partners	Dutch NGO (semi-public) Global international coffee trader (private) Ethiopian and Kenyan coffee traders (private) Local farmer cooperatives (private collective) Coffee research federation (semi-public)
Project phase	2013 to 2020
Partnership summary	The NGO, who has the lead, wants to improve the resilience of coffee farmers by stimulating them to grow food crops/produce dairy for income and food security. The private sector wants to stabilise coffee production, improve productivity and secure supply.

### Uganda, Kenya, Tanzania: 4S@scale: Creating viable smallholder-based coffee farming systems

Topic / sector	Integrated farm management systems in coffee production
Country & region	Uganda, Kenya and Tanzania
Budget	€ 16.296.530; 45% of which from FDOV, 34% from the Global coffee trader and the remaining 32% from Dutch NGO (expected carbon income and carbon loans)
Types of partners	Dutch NGO (semi-public) Global coffee trader (private) Local trade companies (daughters of above) (private) Kenyan federation specialised in biogas (non-profit, semi-public)
Project phase	2013 to 2018
Partnership summary	The Dutch NGO, who has the lead, wants to improve coffee farmer livelihoods by improving their production system (soil fertility) and creating additional benefits. The private sector wants to secure long-term coffee production, increase coffee production yields and stabilise supply

### 3.3 Partnerships in renewable energy

#### Kenya: Lake Turkana wind power project

Topic / sector	Development of wind energy in Kenya
Country & region	Kenya – Lake Turkana
Budget	Total € 622 million (Equity € 125 million; Debt € 435 million senior debt, € 63 million mezzanine debt). FMO provides € 35 million in senior debt and up to € 8.5 million in partly stand-by equity through a shareholder. In addition, the Dutch Government has provided a € 10 million grant for the rehabilitation of the access roads to the project site.
Types of partners	International project developers (private) International development banks (public) International financial institutions (private) Kenyan transmission company and power company (semi-public)
Project phase	Construction phase 2015–2016, then 20 years+ operational
Partnership summary	The objective is to increase domestic renewable energy generation in Kenya by the construction of a 300 MW wind park, which will operate at commercial rates to the generate benefit of the private parties involved. As specified in a 20-year power purchase agreement, the power company will buy electricity generated by the wind turbines, against a fixed rate. Construction costs and risks are carried by the private project developers and public equity providers. Infrastructure development (road and transmission line) is financed by public participants.

#### Indonesia: Geothermal Capacity Building Programme

Topic / sector	Capacity building for geothermal energy development
Country & region	Indonesia
Budget	Total € 5,717,261 financed by DGIS. Partners contribute in kind.
Types of partners	Dutch research institutes and universities (semi-public) Dutch private consultancy firms (private) Indonesia Geothermal Association (semi-public) Indonesian universities (semi-public)
Project phase	January 2014 to June 2017
Partnership summary	The objective of the programme is to increase the capacity of Indonesia's ministries, local government agencies, public and private companies and knowledge institutions in the development, exploration and utilisation of geothermal energy sources, and to assess and monitor the resulting impact on the economy and the environment. The Dutch knowledge sector has the lead.

#### Uganda, Kenya, Ghana and Tanzania: Sustainable Energy Services for Africa

Topic / sector	Integrated farm management systems in coffee production
Country & region	Uganda, Kenya and Tanzania
Budget	€ 16,296.530; 45% of which from FDOV, 34% from the Global coffee trader and the remaining 32% from Dutch NGO (expected carbon income and carbon loans)
Types of partners	Dutch NGO (semi-public) Global coffee trader (private) Local trade companies (daughters of above) (private) Kenyan federation specialised in biogas (non-profit, semi-public)
Project phase	2013 to 2018
Partnership summary	The Dutch NGO, who has the lead, wants to improve coffee farmer livelihoods by improving their production system (soil fertility) and creating additional benefits. The private sector wants to secure long-term coffee production, increase coffee production yields and stabilise supply



# Findings

## 4.1 Partnership characteristics

Preceding the findings, it is useful to first reflect on the characteristics of the various partnerships. It is important to again note that we specifically selected those with explicit attention for ecological sustainability and for the distribution of resources and resource access.

The private actors of the water partnerships include two semi-public water companies and a semi-public federation of coffee producers including two leading global coffee firms. Only in one of the selected partnerships, therefore, a fully private actor is participating. In the other cases, the private actor is really a semi-public water utility company. In fact, considering all water partnerships, private sector actors play a rather limited role in the water partnerships, semi-public water utility companies usually take the lead. Local water management authorities are well-represented in all water partnerships, not only in the ones we selected. In all three selected water partnerships, the added value of the partnership in comparison to more traditional development cooperation projects is that the partners co-invest in integrated water management and improved water use efficiency, and work together with the local water management authorities in improving water service delivery and access. NGOs play a limited role in the various partnerships, although in one of the selected partnerships they take the lead.

In the food security partnerships, the private parties are true private sector actors and, here, the public local authorities are less well-represented. All of the selected food security partnerships are led by an NGO, with the private sector partners being global agricultural commodity traders and agricultural input providers. Activities focus on enhancing the value chain through better input provision and contract farming arrangements, with a dominant focus on stabilising supply for commodity traders. The added value of the food security partnerships in comparison to more traditional development cooperation projects is the involvement of agricultural market and international commodity experts (the private sector actors), the focus on enhanced services delivery to smallholders, and the attention for integrated landscape management and resource use efficiency. Local authorities are not included as formal partners in the various partnerships, but agricultural cooperatives – often established by the private sector partner – and local NGOs play an important role.

The partnerships that focus on renewable energy production are relatively diverse. One focuses strongly on capacity building for geothermal energy production, with relatively little private sector involvement, whereas another partnership features a large-scale wind energy project, including three private partners and substantial funding from various private and public parties. The third partnership focuses on energy access; more specifically, the access to off-grid solar energy at micro level, with a focus on the marketing of solar lamps to rural consumers



in Africa. Private sector partners are well-represented within the various partnerships. The private sector actor in the energy access partnership is a not-for-profit company, a former NGO turned commercial. Local authorities are included either as purchasers of wind energy over a 30-year period, or in the capacity of future regulators and facilitators of geothermal energy development in Indonesia. In the energy access partnership, local authorities include a semi-public tea plantation and teachers at secondary schools.

## 4.2 Potential contribution to Inclusive Green Growth

### 4.2.1 Partnerships in water and sanitation

We reviewed three partnerships under the Sustainable Water Fund (FDW) for water and sanitation, in Malawi, Vietnam and Colombia. In Malawi, concurrent partnership activities focus on improving sanitation and health on local levels, through training programmes on sanitation and promotion of ecotoilets, implemented by a Dutch NGO. In Vietnam, the focus is on mitigating salt-water intrusion and climate change adaptation. Part of the propagated solutions are technical, by shifting to the use of surface water instead of groundwater, part of the solution involves training that is aimed at creating local awareness and contingency plans. The third partnership in Colombia is led by a multinational coffee retailer in close cooperation with a farmer cooperative and the Colombian Ministry of Agriculture. Here, the main focus is on watershed stabilisation, with various geo-engineering works and reforestation activities, and enhancement of water use efficiency, both of which are expected to benefit coffee production.

### Growth

Despite the differences in scope, all partnership activities are expected to lead to an overall increase in a regulated and more stable supply of water to consumers and producers. In Malawi and Vietnam, the main focus is on connecting more households to water supply points. Such a provision is likely to have a positive – mostly indirect – effect on economic growth. Easier access to water will likely reduce the amount of time and effort spent on household chores and possibly lead to an overall reduction in the costs of sourcing water, which would free up time and resources for other activities. This line of reasoning also holds for private sector activities that are primarily dependent on water as a productive input. Here, the water tariffs are critical in determining the impact of partnerships. These tariffs are typically set low. In Vietnam they are even lower for the poorest people, while the connections themselves are installed free of charge.

This growth cannot be sustained, however, if water infrastructure investments are not maintained. With low or no water tariffs, the costs of infrastructure maintenance may not be recovered, which seriously hampers both long-term maintenance and the business case. Raising water tariffs is politically difficult, given that in many countries access to water is considered a basic right. In some cases, producers may, however, be willing to voluntarily increase spending on water in return for a more stable supply. This is the key entry point of the partnership in Colombia, where past irregularities in water supply have had a severe adverse impact on coffee production. Preventing such incidences by regulating water flows and thus making investments in coffee less risky, is the main objective of the partnership. The funding by the coffee retailer in this partnership highlights, in part, the fact that such benefits also accrue to the private actor.

### Green Growth

In addition to the objective of achieving a greater coverage of formal water provision, all partnerships aim to enhance water use efficiency, a clear green growth objective. In Malawi and in Vietnam, as in most places around the world, tariffs are set by their respective governments, but they often do not reflect the full cost of provision or the scarcity value. Thus, water is perhaps not used efficiently, something that may be achieved through an increase in water tariffs. Instead, increasing water use efficiency is primarily addressed by reducing leakages, theft and increasing the number of paying customers. Also, activities include programmes to raise awareness about the need for prudent water consumption. Arguably, a greater awareness is helpful, but whether consumers and producers will be willing to change production activities voluntarily remains to be seen. Other obstacles also remain. In Malawi, an army base is one of the largest consumers of water, but its water use goes unbilled, and the chances of this situation changing are minimal. Here, the project uses a soft approach to raise awareness; they have installed a water meter and are sharing usage figures with other government partners involved.

Some activities of the partnerships in Vietnam and Colombia yield additional results, potentially contributing to green growth. In Vietnam, one of the main concerns relates to seawater intrusion in groundwater basins. This is expected to become even more severe due to climate change. The partnership, therefore, invests in a shift towards the use of treated surface water, instead of groundwater, in addition to programmes that raise awareness about climate change and develop contingency plans. The partnership in Colombia recognises the polluting effect of some coffee production activities on water and is implementing activities to

reduce pollution. Such activities not only secure water availability for future consumers, but may also have a direct positive impact on the health of the local population as well as a reduced environmental impact.

### **Inclusive Green Growth**

Partnership results benefit rural populations, with indirect economic benefits, through greater access to water and possibly health benefits, also for disadvantaged people. Arguably, one may expect that current access to water is the least secure for the most disadvantaged people, as is recognised in Malawi. In Vietnam, specific attention is being paid to the provision of water to Khmer ethnic groups.

The partnership in Malawi has a strong focus on health, through programmes that improve sanitation (toilets) and access to clean drinking water. The provision of information on sanitation and health, with many indirect societal benefits, is a classic public good. It is nearly impossible to charge individuals for such information and the rationale for private sector involvement is minimal. Moreover, there is little investment by poor households in goods that would improve their health, even in the relatively short term (see e.g. Dupas, 2011), although the welfare benefits and impacts of improved water access and sanitation would be enormous, in terms of poverty alleviation. The Malawi partnership uses the method of Community Led Total Sanitation, a participatory approach informing communities on the health risks of open defecation, in particular. This method has been successfully applied in various regions, but requires substantial and prolonged investments by the NGO to become successful (Chambers, 2009).

### **Potential for systemic change**

The main advantage of the various partnerships is the formation of multi-stakeholder platforms, which enable consultation and identification of the main constraints or policy incoherencies, as well as capacity building. Many of the activities related to capacity building, such as on climate change in Vietnam, are geared towards local water companies and authorities, with a focus on authorities in the field of water management. The greater contribution of these platforms to Inclusive Green Growth objectives, however, may be their contribution to institutional innovation and change; the partnerships in Malawi and Vietnam bring actors together that were earlier not connected, and by facilitating collaboration between authorities, the partnerships may eventually stimulate institutional change.

In Colombia, the partnership not only facilitates knowledge exchange and learning, but also actively invests in the development of institutions for integrated

water management. Activities have not yet started, but the partnership aims to address cost recovery issues and to create incentives for integrated water management by establishing a payment scheme for ecosystem services. Although such payment schemes may not materialise in practice, because of low coffee prices and short-term financial trade-offs, the fact that the partnership is willing to address these issues suggests a focus on systemic change. Finally, by investing specifically in farmer extension and training regarding improved farm production methods and water management, the partnership is improving productivity on a farm level.

### **4.2.2 Partnerships in food security**

The three partnerships reviewed under the food security partnership facility (FDOV) are remarkably similar in partner structure and activities. Each acknowledges the need to address a number of market failures that underlie low agricultural productivity. Activities in Ghana focus on the enhanced uptake of inorganic fertiliser for maize production, facilitated by the provisioning of farm credit. The two suppliers of the fertiliser sell their products on credit and subsequently purchase the maize produced by the farmers in the cooperative at a guaranteed price. A difference between farm-gate maize prices and wholesale prices elsewhere allows the traders to earn a profit.

The two partnerships in eastern Africa focus on enhancing the supply and quality of coffee production, with a concurrent focus on income diversification. In both projects, a Dutch NGO is lead partner and primarily responsible for partnership activities on farm and village levels. Key activities are the development of and subsequent support for farmer cooperatives in addition to training on improved farm production techniques. The private partners in both partnerships are coffee traders, and mainly subsidiaries of a single multinational coffee wholesaler who purchases coffee at guaranteed prices from the farmers. Activities in both partnerships concern the provision of agricultural credit to farmers and stimulate and commercialise the production of food crops. On-farm diversification, through increased commercialisation of food crops, is supposed to reduce the risks to farmers. In both partnerships, a Dutch NGO is responsible for the activities in food crop production and commercialisation. In one of the partnerships, activities involve stimulating milk production, whereby animal manure is either used in biogas digesters or as fertiliser in coffee production.

### **Growth**

The promotion of a more sustainable and higher yielding coffee production method features dominantly in both PPPs in eastern Africa, and in Ghana the focus is on an

improved maize production method. Market failures often translate into unfavourable cost–benefit ratios for farmer investments in improved productivity. Low output prices also limit the return on investments in Integrated Soil Fertility Management methods, which are already unattractive for most farmers due to considerable labour investments and the relatively long period over which returns materialise. Addressing these failures, as the partnerships attempt to do, thus contributes to growth. The provision of credit, tied to fertiliser purchases and maize sales, is a key component in the partnership in Ghana. The provision of credit is equally important in the other two partnerships. Credit markets have been proven to be poorly developed in rural areas in Africa (see e.g. Poulton et al., 2006). The main reasons for this include a lack of collateral, high transaction costs and high default risks. These risks are substantially smaller, as advocated by the partnerships, when credit is tied to specific output purchases by one and the same trader. The expected output serves as collateral and the risk of farmers selling their crops to other parties is minimal. Providing conditional, crop-tied credit serves the objectives of the partnerships, but unconditional credit may lead to greater welfare effects, since farmers themselves are better placed to assess their most rewarding investments, which may not be in coffee or maize. Although partnerships provide credit, they do not address the general underlying constraints of rural financial markets. Such interventions would require close cooperation with rural financial service providers; for example, by designing registers on outstanding farm loans (Poulton et al., 2006). As Kessler and Slingeland (2015) point out, it remains to be seen whether interventions aimed at solving this market failure will be significant and sustained.

The main avenue through which the partnerships aim to contribute to enhanced productivity and growth is through farmer extension services. In Ghana, up to 12,000 farmers are trained in improved farmer techniques and business skills. The coffee partnerships also make substantial investments in farmer extension. Farmer extension and training are typically activities in the realm of development cooperation, with the main difficulty being that of ensuring that farmers apply the new techniques in practice. Often, the fact that they do not do so is related to their lack of access to inputs and credit. The integrated approach of the partnerships is to tackle the various issues at the same time. However, to recover their investments in farmer extension, the various partnerships try to tie services provisioning to maize and coffee sales, which could have adverse effects. For example, one of the coffee partnerships aims to develop a model whereby farmers pay for services delivery. Since coffee purchases from Kenyan farmers are nearly

‘monopsonised’ by a single trader, costs could be recaptured via the retail price. This may facilitate the business case when it comes to recapturing investments in information provision and credit, but it could have possible negative effects on welfare as farmers have little choice in whom to sell their crops to.

Finally, partnerships may contribute to growth through the stimulation of land titling. It is an important prerequisite for the adoption of Integrated Soil Fertility Management, as farmers will not invest in labour-intensive activities if the risk of their land being expropriated remains high (Holden et al., 2009). Still, land tenure is addressed in only one of the partnerships.

### Green Growth

The partnerships reviewed make several contributions to green growth. One of the coffee partnerships features a sub-component that advocates the use of biogas digesters, which provide clean energy to households and organic fertiliser for crops. It is envisaged that the associated environmental benefits can be priced by coupling farmers to carbon markets, but the feasibility of pricing carbon still needs to be assessed. As discussed earlier, most partnerships advocate the adoption of Integrated Soil Fertility Management techniques. Although enhanced soil fertility and the associated production benefits, together, form a direct private good, these methods also lead to increased storage of carbon in soils. This is a clearly public and green benefit. Similar projects have attempted to link farmers with carbon markets and to internalise these benefits for farmers, although this has not proved easy. Finally, green results are implicit in all these projects since a more intensive use of land could reduce pressure on forests and other uncultivated nature areas.

### Inclusive Green Growth

Removing the barriers that prevent farmers from participating in rural markets, in principle, stimulates economic growth that is also inclusive. Some of the partnership activities specifically focus on vulnerable groups. The partnership in Ghana makes particular efforts in targeting female farmers, and one of the coffee partnerships focuses on bringing women and young farmers on board. More generally, these partnership activities are expected to result in reduced food insecurity, particularly amongst such vulnerable groups. Such goals, however, are difficult to achieve, and it is not self-evident that partnership activities will indeed succeed. For example, it is not always clear how marginalised and poor people are represented in partnership decision-making, or how partnership activities are supposed to reach the poor. In addition, partnerships explicitly target coffee farmers and/or those

who already own dairy cattle – these farmers are likely to reflect a relatively wealthier subsection of rural societies. Also, it needs to be understood which types of farmers are represented in local farmer organisations and how the interests of the under-represented are being met. As Kessler and Slingeland (2015) also point out, particular attention and resources are required to successfully reach smallholders. Finally, partnership activities need to be firmly grounded in an understanding of the local context; for instance, through detailed baseline information. Such information does not seem to be available in all partnerships, which may constrain partnership effectiveness.

### Potential for systemic change

The main contribution by the partnerships is that of sharing information and knowledge in multi-stakeholder platforms and across various levels of the commodity chain. In the process of disseminating new agricultural technologies, substantial transaction costs may arise when a technique needs to be fine-tuned to local conditions. In all partnerships, NGOs internalise these innovation externalities by using multi-stakeholder platforms and linking these with their own local networks. These connections can be used to discuss best local adaptations and are an efficient mechanism to speed up learning, an important component of systemic change.

The importance of learning not only applies to the adaptation of production systems, but also to more effective institutional arrangements. Here, a limitation of the partnerships is that none of them links up with existing extension services, while learning experiences in these PPPs may also benefit farmers in other, non-project regions. Similarly, local authorities are hardly represented in the food security partnerships, while information exchange and learning could be especially beneficial for agricultural departments, and thus induce institutional change. Moreover, partnership activities are not always sustained by relevant local technical expertise. For instance, there are no partners with local horticultural technical expertise in the east African partnerships, despite the focus on the development of such activities.

#### 4.2.3 Partnerships in renewable energy

The three partnerships reviewed differ considerably in set-up, geographical location and timescale, as well as in the scope of their operations. Two partnerships, one on wind energy in Kenya and the other on geothermal energy in Indonesia, focus on a substantial increase in renewable energy for national grids. The project in Kenya involves the actual construction of a wind power facility, while the project in Indonesia takes a longer-term approach through building capacity and designing and

advocating the most appropriate legislation. The third partnership has a specific focus on the supply of solar lights to relatively poor households in rural areas in eastern Africa. A particular focus here is on the design of an adequate rural distribution network.

Despite these differences, some of the public results embedded in the partnership activities are quite similar. Not surprisingly, each of them envisions an enhanced supply and consumption of renewable energy, sometimes with investments in power grid infrastructure, thereby directly contributing to a clean energy transition. Important building blocks that enable such a transition are the development of human capacity and the inclusion of initial learning, adaptation and research costs. All projects address these costs directly or indirectly. Finally, only one of these projects has a specific focus on the poorest groups in society, although these people may benefit indirectly from the other projects through an increased supply of electricity.

### Growth

As discussed earlier, without government intervention, markets are often found to supply not enough electricity, and/or at prices that are too high, due to the specific structures of the market. All three partnerships considered address these issues by either increasing the supply of electricity and/or its consumption. Undeniably, a stable and affordable supply of electricity spurs labour productivity, economic activity and eventually economic growth. If the planned project activities materialise successfully, these partnerships thus contribute to economic growth, directly or indirectly. Direct effects are particularly noticeable for the Kenyan wind energy partnership, with direct investments in wind farms, the power grid and road infrastructure. In the other two partnerships, the potential impact on economic activity is indirect. The Indonesian partnership focuses on building the right foundation, knowledge and legislature, for successfully exploiting Indonesia's geothermal energy potential. The partnership on solar lighting in eastern Africa promotes the use of small solar lights. The direct result may include reduced energy costs and health benefits due to reduced use of charcoal fires. Another result could well be enhanced learning in school children, and associated indirect productivity effects, as in some instances schoolteachers are trained as sales agents.

Market development is another contribution made by the partnerships. The project that focuses on solar lighting solutions explicitly aims to raise consumer awareness about the potential of these devices. One of the overall aims is not to monopolise the market for solar lights, but rather to open them up to other entrants. Similarly, the wind energy partnership in Kenya aims to demonstrate

that large-scale wind farms could be successfully build, operated and maintained in Africa; thus paving the way for other entrepreneurs elsewhere on the continent. Both of these projects thus capitalise on an expected positive learning externality; potentially justifying the use of public resources. The returns to society on such investments can be substantial.

### Green growth

Stimulating green growth also requires policies to address an additional market failure, namely that of environmental or green benefits typically not being valued within the goods' prices. Only the partnership on wind energy in Kenya benefits directly from the sales of carbon credits, thus capitalising on the green benefits that the partnership delivers. In the geothermal partnership, spin-offs from this partnership may equally tap into carbon markets, but such links are not explicitly defined. In some countries, solar lamps are exempt from VAT, but the wider societal benefits are not internalised in the consumer price.

As environmental benefits and costs of all sorts of goods go unpriced, the partnerships themselves also run the risk of harming the environment in other, unintended ways. This is apparent in the geothermal project; geothermal installations are often placed in pristine forest areas, with potentially negative impacts on biodiversity. In the solar lighting partnership, there is the hazard of toxic elements in the batteries ending up in the local environment when the lamps are discarded (IOB, 2014).

### Inclusive green growth

This section discusses how inclusiveness is addressed in these projects. It should be stressed, however, that in none of the cases this was an explicit requirement, and it would be unfair to judge them on this aspect. Nevertheless, the solar lighting project explicitly focuses on poor households. However, as argued above, the benefits of alternative activities, such as stabilising on-grid supply, could be greater, also financially, and also for marginal groups. This especially holds when considering the small demand for electricity and relatively large demand for energy for cooking. In the other two projects, inclusiveness plays no role, although project activities could have an adverse impact. For instance, the shift in decision-making authority in Indonesia, from local to national, propagated by the geothermal partnership, may also make it more difficult to account for the needs and concerns of local citizens.

### Potential for systemic change

Collier and Venables (2012) argue that many developing countries, considering their natural resource

endowments, possess the comparative advantage of having ample access to use renewable energy. However, the authors also iterate that success is contingent on the development of human skills and capacity. Indeed, human capacity development is a key prerequisite for the development of any skills-intensive economic sector. All partnerships recognise the need to invest in human capacity, most obviously so in the project on geothermal energy in Indonesia, although the actual investments in human capacity currently are limited. The size of the Kenyan wind energy project in itself may have a systemic impact, paving the way for more such projects, and by showing the feasibility of such a project in Africa; although the legal and institutional context of Kenya has proven to be an important enabling factor which cannot easily be replicated in other countries.

Activities in all three partnerships address specific governance constraints in order to facilitate the future adoption of clean energy technologies. The project in Indonesia facilitated the shift of authority on geothermal energy from local to regional and national authorities. The wind energy project already has a long history of negotiations with involved authorities, and it is imaginable that the current favourable stance of the Kenyan Government towards wind energy can be attributed to these negotiation rounds. The solar light project closely works together with local governments and institutional actors, such as the Kenyan tea board. Together, all these projects are likely to have created lasting awareness among policymakers at various levels.

## 4.3 Factors influencing partnership performance

### 4.3.1 Partnership composition and contract design

As discussed in Section 2, the expertise and experience of the partners and their project location-specific knowledge are important for partnership success. In both the water and food security partnerships, the partners generally know the region they are working in and include local partners in the partnerships. However, the extent to which they really know and understand the problems they are trying to address varies; in some cases, the partners have worked on the subject and in that region for years, but, in other cases, a concept is translated to a new setting where the partners do not necessarily know their way around. For example, in one of the food security partnerships, the project partners know the local context in Kenya, but they are less familiar with the other two countries where they plan to conduct activities. A baseline study is anticipated as one of the partnership

activities at the new sites, but it should already have been in place during the inception phase, as baseline information is crucial for effective targeting of activities. For instance, the use of inorganic fertiliser is already relatively common in coffee production in eastern Africa (Kherallah et al., 2002) as well as in the production of maize. Reductions in input use have been mostly attributed to rising input prices and relatively low output prices, particularly for coffee (Pender et al., 2006). Focusing partnership activities on providing farmers with fertiliser may thus crowd out existing traders, which would be an undesirable side effect (Xu et al., 2009). Hence, the main precondition for ensuring enhanced efficiency in public goods provisioning is that the partners bring in context-specific information and relevant expertise, but this is not always met. Another example is the lack of expertise with regard to the production and marketing of horticulture and dairy products in one of the partnerships, although these are key activities.

An important way to include local information and expertise in the partnership is by involving local partners and authorities. This has the additional advantage of increasing long-term commitment to the partnership objectives, and may thus help facilitate systemic change. In the water partnerships, long-term commitment has been safeguarded by including local authorities. Still, systemic change will depend on how committed local authorities are towards institutional change and water use efficiency, as capacity building alone will not induce systemic change. In the case of Colombia, on water use efficiency in coffee production, long-term commitment comes from the leading coffee federation who has its basis in the region and is committed to secure coffee production during events of flooding and drought. Similarly, in Vietnam and Malawi, local authorities are logically committed to ensure water access and long-term water supply.

In the food security partnerships, long-term commitment comes from the commodity traders active in the region, although they are not necessarily committed to the actual region of the partnership. The Dutch NGOs leading the partnership are committed, but they are also not necessarily tied to the region they are working in. Local producer organisations would obviously be committed to the area, but they are not always included in the partnership or, sometimes, there is no such organisation. Local extension organisations, ministries of agriculture or other local authorities are not included in the selected food security partnerships, which is surprising also from the perspective of the Paris declaration of aid effectiveness that promotes cooperation with local authorities and government (OECD, 2008). In addition, not having local authorities on board reduces the chance

of public objectives of the partnership being clearly defined. The Dutch Directorate-General for Foreign Trade and Development Cooperation does define public objectives, but the involvement of local public authorities is needed in order to specify these objectives and to embed them institutionally, as well as for monitoring and enforcement of the partnership agreement. The Dutch Embassies in the partnership countries also play a role here. The food security partnerships do contribute to the linking of information at multiple levels; combining the NGO's contextual knowledge with the commodity trader's global market knowledge and the farmer cooperative's production knowledge.

The renewable energy partnerships are too diverse to warrant a general statement. However, given the innovative character of renewable energy investments in general, the added value of all three partnerships lies in developing knowledge and information, not in collecting already available information. Sound baseline studies have been performed in both the energy access and wind energy projects. The focus in the geothermal energy project is not on the local context but on the sharing of technical information – which has its basis in the Netherlands. In this project as well as in the wind energy partnership, attention for local context and local knowledge seems lacking, with possible negative effects on inclusiveness.

### Contract design

As discussed earlier, to ensure partnership effectiveness, it is essential that the public objectives of the partnership are clearly defined. In both the water and food security partnerships there is room for improvement. Partnership agreements state general objectives, such as the number of farmers targeted or the number of households connected to a water supply network, but fail to define targets more specifically. Even more importantly, there is limited attention for the definition and allocation of risks, the division of tasks and responsibilities and the handling of possible contingencies during project delivery (e.g. conflict resolution, renegotiation). Some partnership agreements include a paragraph about conflict resolution, such as that of the maize productivity partnership in Ghana, but risk allocation is often only discussed in general terms. In terms of responsibility, the lead partner carries most of the risk in all partnerships, and especially in the food security partnerships this is perceived as too heavy a load. Responsibilities are defined more clearly in the water partnerships, possibly because these types of partnerships are of a more standard set up, as there is more experience with international cooperation in the water and sanitation domain.



An exception is formed by the renewable wind energy partnership in Kenya, which has a well-designed contract that specifies all possible contingencies and risks. Here, contract negotiations took almost 7 years, which was obviously necessary because of the huge economic interests involved. The other partnerships could learn from the amount of detail with which all possible risks and contingencies have been defined and allocated in this contract, which is important to ensure that the project objectives are met. Interestingly, in several of the food security partnerships, private sector partners complain about the lack of flexibility in partnership design. This could well point to the focus on project results and indicators, instead of on the allocation of risks and responsibilities, which allows for more flexibility in the planning of activities and project design.

As a result of the varying degree of detail with which risks and responsibilities are defined and allocated, the internal organisation of the partnerships varies, as well. Some partnerships, such as the Colombia water partnership and the Kenyan food security project, have defined a governance plan in addition to the partnership agreement, to specify internal organisation, including decision-making processes, monitoring of individual responsibilities and evaluation. This is not only essential for contract enforcement (also see Section 4.3.3), but also for the efficiency of the partnership, and thus for meeting the target of improved public services delivery. In partnerships without a clear organisational structure, coordination takes a large amount of time and resources, and reduces the capacity of the partnership to deliver on its potential. Some of the partnerships frame this as learning by doing, but, even in this case, clear organisational responsibilities are crucial for ensuring coordination of activities and facilitating learning within the partnership. Thus, sharing and exchanging knowledge within the partnership are two of the key ingredients of a good governance plan and policy, as the experience of effective partnerships has shown.

Universities and knowledge institutes can play an important role in sharing knowledge and other information. Given their neutral interest in partnership objectives, they can connect the various partners and create external linkages. As such, they can also play a role in trust building and the lowering of cultural barriers, although it is important to note that knowledge itself is not neutral and that norms about the sharing of knowledge vary between cultures. All partners interviewed pointed at the importance of trust for partnership effectiveness; it is something that takes time to establish but can be easily lost again. Given that in most of the partnerships studied partners already knew

each other, trust was not an issue, but it definitely plays an important role in partnership effectiveness in general.

Finally, with regard to the optimal number of partners, some partnerships indicated they had limited the number of partners deliberately, whereas for others a required limitation on the number of local authorities that could be included (e.g. as a condition of the partnership funding facility, only one local authority could be involved) proved a constraint. In general, it is not the number of partners that determines effectiveness, but the way coordination and communication issues are tackled, which in turn depends on the internal organisation and governance plan. Thus, large well-organised partnerships were found to function effectively, while smaller ones without a plan seemed less effective.

#### 4.3.2 Alignment of interests

Overall, for the partnerships in this study, it is safe to say that in the water partnerships a clear business case tended to be lacking, whereas in the food security partnerships the public objectives were not clearly defined. The renewable energy partnerships both had a clear business case and clear public objectives, although given the nature of the geothermal energy project (capacity building), the private and public benefits were less clearly defined.

Having an unclear business case and unclear public objectives is a problem for partnership effectiveness, as it limits partner commitment and complicates contract enforcement because partner interests are difficult to align. For the water partnerships, their inability to recover costs could lower the interest of the semi-public water utility company in committing beyond the duration of the project. For the food security partnerships, undefined public objectives could reduce the potential return on public investment. This is not to say that not having clearly defined public objectives and a good business case cannot be corrected; contracts can be designed in such a way that they create incentives for partner commitment and enforcement. For example, to create incentives for water utility companies to commit to a long-term, climate proof supply of water, the partnership contract could include certain safeguards, such as the sustainability clause that has been added to second phase water partnership contracts, to ensure that hardware investments remain functional for at least 10 years. Similarly, in food security partnerships, collaborations may be sought with parties in the financial sector to create better returns on public investments, such as through reduced interest rates or the creation of price premiums through certification for financing soil fertility improvement measures or inclusiveness goals. It is important to note that non-monetary incentives also

can be important. For example, private investors committed themselves to the wind energy project because of its flagship character, and in many food security projects resource access and reputation effects were found to play a key role.

Thus, for aligning individual and collective interests, the partnership agreements play a crucial role. Without mechanisms to ensure interest alignment, partners can simply focus on their own interest and leave it to the lead partner to take responsibility for the whole. Partly, this can be prevented by distributing costs, benefits and risks, and by answering the question of who benefits from the partnership and who carries the costs. Here, issues of appropriation play an important role, too, as partnerships generate collective benefits (knowledge creation, innovation, environmental benefits) that have not been allocated beforehand. For example, in the food security partnerships, substantial investments have been made in farmer extension services. Benefits from investments in innovation, made by a single private actor, typically accrue also to other private actors. It is difficult for the investing party to claim such innovation externalities. For instance, a coffee trader could invest in the promotion of an improved coffee production method amongst farmers. The rewards of such an investment accrue, in the first place, to the adopting farmers who, in turn, may not exclusively sell their coffee to that investing trader. The returns on investment for the coffee trader could thus be low, and this discourages them from making such investments in the first place. On the cost side, the provisioning of information on sanitation and health, with many indirect societal benefits, is a classic public good. It is nearly impossible to charge individuals for such information and the rationale for private sector involvement is minimal. If the NGOs involved would have to bear these costs alone, without access to partnership benefits, this is likely to limit their commitment, unless their efforts are aligned with a health-oriented organisation that pays for these costs.

Furthermore, appropriation issues arise with respect to human capacity building. This plays a role in the renewable energy projects, where capacity building is important but costly, as investments are highly technical. The risk that a competitor hires trained, expensive staff is substantial. As illustrated earlier, all partnerships capitalise on positive information and learning externalities, assuming that generated knowledge and information will be shared. But private actors could also choose to withhold specific information – thus gaining a competitive advantage, which is why it is important to negotiate these issues beforehand, explicitly, in the partnership agreement. Also for outside stakeholders, the distribution of partnership benefits is important, as it

may determine whether the knowledge is open access, or can be appropriated by one of the partners in the partnership.

This is linked to the final issue under interest alignment, which is the potential tension between green and inclusive, and between efficiency and equity. Making sure that interventions are inclusive, generates additional costs that cannot be borne by the targeted actors. Especially when in a partnership some are responsible for inclusiveness and others for efficiency, this will affect the distribution of partnership costs and benefits, which should be in line with the allocation of public funds. In some cases, public funds seem to be allocated to efficiency goals, however, whereas these are typical costs for private sector actors to bear. On a more fundamental level, inclusiveness is related to participatory decision-making and organisations that represent stakeholder interests. However, by including stakeholders in decision-making processes, they will want to have a voice also in the distribution of partnership benefits. In several partnerships, this seems to have resulted in an approach where local stakeholders are not included until the partnership is up and running, possibly to avoid conflicting interests at the start. This is understandable, and perhaps unavoidable, but it limits the potential of partnerships to be truly inclusive, especially when local institutions that represent stakeholders are lacking or when local authorities do not participate in partnership design.

#### 4.3.3 Accountability and contract enforcement

In the previous sections, several issues were discussed that are relevant for contract enforcement. This section presents the factors that facilitate contract enforcement and the external accountability of the partnership. It is important to note that contract enforcement is not explicitly addressed in most partnership agreements, and that accountability issues are mostly defined in relationship to the funder; in our case, the Dutch Ministry. Accountability of the partnership to the stakeholders is also important, however, especially given that partnerships are partly funded with public funds. Accountability between partners is important for contract enforcement. It requires transparency, however, which may be in conflict with strategic partnership benefits. Especially when the business case of the partnership has been built around innovative solutions and risky investments, partners are unlikely to be transparent about their activities and the results from these activities, as this could lower their profits and/or reduce positive reputational effects. However, transparency about the partnership objectives is important to facilitate bottom-up enforcement. Top-down enforcement is costly, particularly in the context of development cooperation,



but it may be partly induced, bottom up, by empowering local stakeholders and beneficiaries.

In the partnerships studied, few examples were found of stakeholder accountability and facilitation of bottom-up contract enforcement. The NGOs are generally made responsible for stakeholder representation, but they do not necessarily have an interest in empowering stakeholders to play an enforcement role. Also, more in general, NGOs tend to be well-organised in terms of upward accountability (to the funder) but not in downward accountability (Ebrahim, 2003). Transparency is also important for avoiding corruption, but only one of the partnerships was found to have an explicit anti-corruption policy. An important way in which partnerships create transparency about their objectives and results is through learning platforms and multi-stakeholder dialogues. Here, universities play a role in facilitating the exchange of information and function as a

catalyst in the process of learning and knowledge creation. Also, in providing information about poverty, exclusion and the distribution of resource access, they can help target interventions and improve partnership effectiveness.

Internal monitoring and evaluation processes were set up in several of the partnerships, but the effectiveness of these mechanisms depends on the decision-making power of the partners involved. Can a small NGO effectively oppose the actions of a multinational? Several partnerships have struggled with this issue, and some of the interesting solutions include equal decision-making power in the steering committee and a strong chair who uses partner reputation to enforce the commitments made. Again, transparency of partner efforts is key for contract enforcement, and accountability within the partnership.

# Discussion:

## Potential and pitfalls for Inclusive Green Growth

Based on the findings, some inferences can be drawn with regard to the potential of partnerships for Inclusive Green Growth. First, the expected contributions of partnerships to Inclusive Green Growth objectives is discussed and how this potential may be improved. Second, the role of partnerships in development cooperation and their potential contribution to Inclusive Green Growth strategies in general are examined.

The findings, by and large, suggest there is a potential for public–private partnerships in development cooperation and for stimulating Inclusive Green Growth, in particular. Partnerships have added value in bringing together actors, organisations and stakeholders across various domains and levels, and as such they are successful in creating new avenues for the exchange of knowledge and information and for facilitating institutional change. The other side of partnerships is that, due to their voluntary nature, it is difficult to safeguard public partnership objectives, such as sustainable management of natural resources and redistribution of assets. As a result, using partnerships in Inclusive Green Growth strategies requires specific attention for the design and enforcement of the partnership agreement, including a careful alignment of private and public interests to ensure the commitment of private sector and civil society actors to the public objectives of the partnership.

### 5.1 The contribution of partnerships

In assessing the contribution of partnerships to growth, green growth and inclusive green growth objectives, our analysis suggests that partnerships have several contributions to make. With regard to growth objectives, partnerships have added value in facilitating multi-stakeholder knowledge platforms, and in stimulating learning and the exchange of information between organisations and on local, regional, and global scales. If these activities are done effectively, a key condition for partnerships to enhance the efficiency of public goods provisioning has been met.

Another condition for partnerships to contribute to improved public goods provisioning is that the partnership actors also have the local, context-specific information that is required for the most effective targeting, design and implementation of partnership activities. Although conditions seemed to be met in most of the partnerships studied, some did not seem to have a clear picture of the baseline from which activities would be developed. In a couple of examples, a baseline study was even described as one of the partnership activities, suggesting that the partnership was not yet familiar with the project context. This may reduce the efficiency of the partnership for development cooperation, as it could result in activities that do not address the main constraints limiting Inclusive Green Growth. Also, in defining the public objectives of partnerships, local authorities are not always included,

or even consulted. This is problematic, since without clearly defined public objectives, partnerships cannot effectively contribute to improved public services delivery.

With regard to the contribution of partnerships to sustained growth, the findings indicate that there are reasons to doubt whether partnerships generate such growth. Most importantly, long-term cost recovery was found to be an issue in all partnerships. In the Lake Turkana wind energy partnership, this issue has been addressed in the power purchase agreement, but none of the other partnerships explicitly address cost recovery. When cost recovery is related to public services delivery, the partnership alone cannot tackle the problem; in most countries, water tariffs are determined politically and energy prices are regulated. In the case of private goods and services delivery, there is more scope for partnerships to tackle the issue of cost recovery, but here issues concerning market power arise. In many cases, the actor providing services such as credit, input delivery or extension services, is the same actor that farmers sell their crops to. Linking input and output markets benefits the business case when it comes to recapturing investments in information and credit provisioning, but this is not necessarily beneficial for farmers, who often have little choice about whom to sell their products to. When completely new markets are being developed, there could be a public case for temporarily allowing monopolisation. However, given that the partnerships studied were found to target relatively well-developed commodity markets in relatively well-developed countries, this did not seem to be the case. In fact, it is important that rent-seeking behaviour by private sector actors is avoided, as public funding may otherwise contribute to the development of fewer competitive agricultural markets, instead of more. The problem of cost recovery still needs to be tackled, as sustained growth requires that the costs of public services delivery are recovered from either the user group or from a public entity, such as a Department of Agriculture or of Water Management.

Partnerships also contribute to green growth objectives by investing in awareness raising and resource use monitoring, which is expected to help increase resource use efficiency, and by using integrated, watershed or landscape-based planning approaches. Also, the renewable energy partnerships were found to contribute to climate change mitigation by reducing dependence on fossil fuel energy, and the food security partnerships contribute to improved soil management and biogas use. The use of integrated, watershed, or landscape-based approaches is positive because, by using the boundaries of the ecosystem as a planning unit, more attention is paid to the externalities of natural resource use.

Awareness raising and monitoring may help trigger more sustainable behaviour, but voluntary mechanisms are generally not sufficient to trigger behavioural change. Partnerships are generally not in the position to change the incentives for sustainable resource use, unless they manage to create markets for environmental goods and services, such as in the case of watershed or ecosystem payments. Although several of the partnerships studied are attempting to create such markets, they encounter difficulties accessing global carbon markets, as this requires a long-term commitment that goes beyond the project period. The creation of ecosystem payment mechanisms without additional financing turned out to be difficult, as, with low commodity prices on the world market, the willingness and ability to pay for non-priced resources appeared limited.

Alternatively, regulation may enhance the ecological sustainability of resource use, and one of the expected contributions of public-private partnerships was that they would help to enforce resource use restrictions in areas where formal mechanisms are lacking. In the public-private partnerships studied, few examples were found of any self-regulatory capacity. The partnership agreements described few enforceable, environmental objectives and, with the exception of the Colombian water partnership and the Kenyan energy partnership, environmental objectives did not form an explicit part of the business case. In fact, we even encountered some potential negative trade-offs; for example, in Indonesia, where the shift in decision-making from local to national authorities, as advocated by the partnership, may have repercussions for local forest conservation. Hence, if partnerships are to significantly contribute to green growth objectives, this will require a different design of the partnership facilities, possibly also including different financing mechanisms. For example, getting individual partnerships to tap into carbon markets may be asking too much of them, but linking funds for ecosystem restoration directly to natural resource management may help increase positive impacts in terms of ecological sustainability. Clearly, this would also require stricter monitoring and enforcement, and a strengthening of the self-regulatory and self-enforcement capacity of partnerships. Further research is required to analyse whether such approaches would be feasible, and whether they would be effective in stimulating green growth.

Furthermore, putting inclusiveness at the centre of the partnership funding facilities has triggered a focus on resource access, poverty alleviation and benefit distribution, which is positive from an Inclusive Green Growth perspective, but meeting these objective has proven difficult for the various partnerships. For example, in the food security partnership, getting poorer farmers

to borrow money for income diversification proved challenging, and in the solar energy partnership, it was equally difficult to get poor people to buy solar lamps. Clearly, this is related to the low ability to pay of poor farmers and households, and their risk-averse behaviour. Also, poor people may have other needs than those who are better off, and it remains to be seen whether the specific needs of poor people are being addressed. Many of the partnerships that were studied, particularly in the domains of water and food security, work closely with farmer organisations in identifying constraints and entry points on a local level. Here, it is critical to understand which farmers are represented in such organisations. Several studies (e.g. Bernard et al., 2007) have suggested that it is mostly middle class farmers that join farmer organisations, as for them the benefits of joining are greater and the costs of investing time are most favourable. Although the problems and solutions identified by such organisations may coincide with those of the groups not represented, there is no guarantee that this will be the case.

To address this issue, the inclusion of civil society organisations has become mandatory for the various partnerships. These are supposedly well-connected at a local level and, thus, deemed capable to also represent the interests of marginalised and poor population groups. In many of the cases studied, however, the civil society organisations included in the partnerships were Dutch or international non-governmental organisations (NGOs), and, although they had often been active in the project region for a considerable period of time, it was not always clear whose interests they represented. Here, it is important to mention that the partners interviewed were generally very positive about the role of the NGOs in the partnership, but this related mostly to their coordinating activities and less to their effectiveness in representing local interests. More generally, when local institutions are not included or when they do not properly represent stakeholder interests, the objective of inclusiveness calls for efforts directed at local institution-building and empowerment – activities that are often beyond the scope of partnerships, as these would require substantial investments and long-term commitment. In fact, many of the partnerships are relying on previous investments by non-governmental organisations in local institution-building and empowerment. But such investments need to be continued if partnership activities are to have an inclusiveness impact.

Overall, the analysis suggests that partnerships are not the most appropriate mechanism for alleviating poverty, as activities are growth-oriented and therefore targeted at actors capable of benefiting from growth. Although it would be possible and highly desirable to target activities to women or to more vulnerable households, this would require additional efforts and attention for constraints such

as lacking land titles, non-inclusive institutions and capacity building, which were found to be only marginally addressed by the partnerships studied.

## 5.2 Lessons for effective design

In the design of the partnerships studied, the partnership agreements were found to pay considerable attention to goals and ambitions, but far less attention to the way in which these goals and ambitions were to be achieved. For example, partnerships had to meet a number of criteria relating to partnership composition, intervention strategy and impacts, but although the division of risks and responsibilities was part of these criteria, there was no requirement to explicitly define risks and allocate them between partners or to specify responsibilities in a partnership governance plan. As a result, few partnerships were found to have an elaborate governance plan and very little attention was paid to possible contingencies or to how these should be dealt with during the contract term. This is surprising, as there are standard public-private partnership contracts that specify such factors. Finally, monitoring and enforcement of partnership objectives was not engrained in the agreement or in the governance plan. Clearly, the ministry has certain reporting obligations, but these are not necessarily focused on whether public objectives are being achieved.

As concluded earlier, strong, top-down enforcement of the partnership agreement is undesirable, because of the high costs of monitoring and enforcement, and because strong enforcement would scare away the very actors that could help improve the efficiency of public goods provisioning. Hence, alternative mechanisms are needed to ensure that the public objectives of partnerships are achieved and that the interests of individual partners also are being served. As discussed, interest alignment and enhanced accountability and transparency could help to facilitate self-enforcement, interest alignment in some ways forming the core of public-private partnerships. However, from the partnerships studied, it became clear that a good balance is difficult to find.

Several of the partnerships pointed at the importance of trust between partners and the previous experiences of effective partnerships, indicating that the process of clarifying, defining and aligning interests takes time. Although trust between partners can go a long way in facilitating self-enforcement, structuring the partnership facility such that funding is for example released in two phases may better support partnerships and improve their effectiveness. For example, releasing the first half of funding for the inception phase, in which a well-

negotiated contract and governance plan must be developed, and this being the precondition for receiving the rest of the funding in the second phase. This may also help support the involvement of local authorities and civil society organisations in partnership development, including the formulation of objectives, alignment of interests and allocation of risks. In addition, strengthening local commitment to partnership objectives may facilitate systemic change – which is yet another reason for reserving a sufficient amount of time for contract negotiations and partnership design.

As argued in previous sections, transparency and accountability are important for ensuring partnership effectiveness. In this respect, it is important to acknowledge the tension between private and public interests, and the link with accountability. First, part of the business case of several of the partnerships studied was the information they developed. Sharing this information would imply giving away strategic benefits, which partners are unlikely to do unless they receive some form of compensation. Hence, transparency is something that needs to be negotiated and cannot simply be assumed. Second, being transparent about the objectives and planned activities makes partners accountable. This has the clear advantage of making bottom-up monitoring and enforcement possible, although it may also reduce partnership flexibility. From a public perspective, accountability is important, also because there is public funding involved. If, however, private sector actors are financing up to half of the partnership budget, the room to negotiate transparency and accountability will be less. This may lead to tension when public–private partnerships are to achieve efficient public goods provisioning, and when additional funds need to be generated. Although this study focuses on the first rationale for using public–private partnerships, in the reality of Dutch development cooperation with its severe budget cuts, the second rationale also plays an important role. Although private co-funding may be a good idea, depending on the business case, large amounts in private financing may compromise public returns. For example, when the requirements for public funding are weakened in order to secure private funding, this may reduce the added value of these partnerships for development cooperation and it may also lower public returns. Hence, increasing private financing in public–private partnerships, or more generally in development cooperation, has consequences that need to be acknowledged, as it reduces the negotiation power of public parties in establishing an enforceable contract and necessary for safeguarding public returns.

### 5.3 Partnerships for Inclusive Green Growth

In conclusion, what would be the potential of partnerships for Inclusive Green Growth? And would the findings in this study also hold for a larger subset of partnerships?

For this study, clearly, the most innovative and most inclusive and green-growth-oriented partnerships were selected, but would other partnerships also have the potential to achieve Inclusive Green Growth objectives? A general lesson, which seems to apply to all partnerships, is that often tension arises between green growth and inclusiveness objectives, or more simply put, between inclusiveness and growth. This is related to partnership targeting, and it reflects a classic trade-off between efficiency and equity. For example, targeting commercial farmers is likely to generate higher returns on investment, but targeting subsistence farmers may contribute more to inclusiveness. Similarly, targeting well-connected regions with good infrastructure is likely to contribute most to growth objectives, whereas targeting remote, marginalised regions may contribute more to inclusiveness. Achieving both objectives may be difficult, because of the inevitable trade-offs.

In fact, combining several objectives in one partnership may not be very efficient, and it may be better to focus partnerships on either green growth or inclusive growth objectives, with possibly an additional requirement that the partnerships are not to have a negative impact on inclusiveness or green growth. Finally, there is often a certain amount of tension between short- and long-term objectives, as interventions that are oriented to Inclusive Green Growth inherently have a long-term focus, whereas the time horizon for most private sector actors is rather short. This reduces the suitability of public–private partnerships for inclusive green growth targets, although this last issue may be addressed by including more public partners or public funding in partnerships.

With regard to the targeting of regions and stakeholders, it can be concluded from the partnerships studied that most partnerships target relatively stable countries with strong institutional environments. Colombia, where one of the water partnerships operate, is considered the Latin American country where doing business is the easiest. Similarly, the majority of most African partnerships operate in countries with a more favourable business climate. When considering the Ibrahim Index of African Governance, which more broadly measures institutional risks and quality of governance, it becomes apparent that most partnerships operate in lower risk countries.

Table 5.1  
**Characteristics of the countries targeted by the partnerships**

Target countries in the partnerships studied	World Bank Ease of doing business indicator (Ranking relative to countries on the same continent)	Ibrahim Index of African governance (out of 52 African countries)
<b>Latin America (out of 32 countries)</b>		
Colombia	1	
<b>Africa (out of 47 countries)</b>		
Ghana	4	7
Tanzania	13	15
Ethiopia	14	32
Kenya	15	17
Uganda	22	19
Malawi	31	16
<b>Asia (out of 25 countries)</b>		
Vietnam	10	
Indonesia	17	

From the perspective of the partners this is understandable, also because partnerships need to be financially independent after the funding period is over, and the chances of that being achieved are greater in countries where institutional risks are lower. But it also raises questions about the suitability of partnerships for development cooperation, as development cooperation should also target regions that are less favourable for private sector investment, if only to contribute to the objective of reducing extreme poverty (although it is important to note that there are partnerships (not included in this study) that do include some less favourable regions).

In terms of the targeting of certain stakeholders, as concluded earlier, partnerships were found to mostly target farmers who are represented by farmer organisations and who tend to be the better off. Also, more in general, partnerships do not seem particularly well-suited to improve the livelihoods of extremely poor population groups, nor to alleviate extreme poverty. Extremely poor people cannot contribute to the costs of (public) services delivery, they generally have fewer assets and capabilities, and are underrepresented in institutions that represent stakeholder interests, such as farmer cooperations and water user groups. This is not to

say that partnerships would not be able to reach the more marginalised producers, but this will increase costs for the partnership and often weaken the business case. Increasing access to safe drinking water directly contributes to poverty alleviation, but whether it also does so for the poorest and most marginalised groups remains to be seen.

Finally, it needs to be considered whether partnerships can effectively maximise public returns. In other words, considering a variety of possible public investment options, do public-private partnerships seem the best use of public funds? Although it is impossible to provide a definitive answer, due to the set-up of this research, there are some compelling arguments to conclude otherwise. For instance, in the food security partnerships, a greater reach and impact could have been achieved with the same amount of public resources if the focus had been on other crops. Also, the focus on coffee farmers and livestock farmers (for manure use in biogas digesters) is likely to exclude the poorest and most vulnerable groups. Again, baseline information on current production activities and market constraints is needed to understand the most promising entry points. Also, additionality of public resources or, more broadly speaking, balancing public and private funds is a concern. It is not always clear

whether public funds are additional to the maximum amount of private funding that companies could source in credit markets. In other words, are private actors leveraging public money for private goals, or is it the other way round and are public actors leveraging private money for public goals? This question cannot be answered with respect to the partnerships studied here, but spending public funds without additionality is considered a serious risk (Poulton, 2012), a risk that can only be avoided through close monitoring and evaluation.

Summarising, public–private partnerships have a clear added value in knowledge sharing and capacity building, but whether this is also true in terms of more efficient public goods provisioning, improved local representation, implementation and enforcement, remains to be seen. Integrated approaches as found for several partnerships are interesting and innovative, but long-term sustainability cannot be secured when changes are not

embedded institutionally or without the involvement of local authorities. In terms of systemic impacts, the partnerships studied were found to be making important contributions in terms of institutional change, innovation and integrated approaches, but an important constraining factor would be the lack of cost recovery. If the costs of public services delivery cannot be recovered the business case will be weak, and effective partnerships require both a strong business case and a clear description of their public objectives. Similarly, with weak institutions and underrepresentation of marginalised stakeholders, improving inclusiveness seems too much of a challenge for public–private partnerships. Finally, stimulating green growth requires green funding to create an incentive for environmental investments. Gaining access to green investment flows is too complex for individual partnerships, but may be incorporated in the partnership funding facility if partnerships are indeed meant to seriously contribute to (inclusive) green growth.

# References

- Barrett CB. (2008). Smallholder market participation: concepts and evidence from Eastern and Southern Africa. *Food Policy* 33(4): 299–317.
- Bernard T, Gabre-Madhin E and Seyoum Taffesse A. 2007. Smallholders' Commercialisation through Cooperatives. *IFPRI Discussion Paper 00722*. Washington, D.C.: International Food Policy Research Institute (IFPRI).
- Besley T and Ghatak M. (2001). Government versus private ownership of public goods. *Quarterly Journal of Economics*: 1343–1372.
- Biermann F, Pattberg P, Van Asselt H and Zelli F. (2009). The fragmentation of global governance architectures: A framework for analysis. *Global Envir. Politics*, 9(4), 14–40.
- Bouma JA and Berkhout E. (2015). Inclusive Green Growth – Reflection on meaning and implications for the Dutch agenda on international cooperation. PBL Netherlands Environmental Assessment Agency, The Hague/Bilthoven.
- Chambers R. (2009). Going to scale with community-led total sanitation: reflections on experience, issues and way forward. *IDS Practice Papers* 1: 01–50.
- Collier P and Venables AJ. (2012). Greening Africa? Technologies, endowments and the latecomer effect. *Energy Economics* 34 (1): 575–584.
- Doss C, Kovarik C, Peterman A, Quisumbing AR and Van den Bold M. (2013). *Gender inequalities in ownership and control of land in Africa. Myths versus reality*. IFPRI discussion paper 01308. International Food Policy Research Institute (IFPRI), Washington D.C.
- Dupas P. (2011). Health behaviour in developing countries. *Annual review of economics* 3: 425–449.
- Ebrahim A. (2003). Accountability in practice: Mechanisms for NGOs. *World Development* 31 (5): 813–829.
- Finus M. (2008). Game Theoretic Research on the Design of International Environmental Agreements: Insights, Critical Remarks, and Future Challenges, *International Review of Environmental and Resource Economics*, 2: 29–67.
- Forrer J, Kee JE, Newcomer KE and Boyer E. (2010). Public–private partnerships and the public accountability question. *Public Administration Review*, 70(3), 475–484.
- Franceys R and Weitz A. (2003). Public–private community partnerships in infrastructure for the poor. *J. of International Development*, 15(8), 1083–1098.
- Ghebru Hagos H and Holden S. (2013). *Efficiency and productivity differential effects of land certification program in Ethiopia*. IFPRI discussion paper 01295. International Food Policy Research Institute (IFPRI), Washington D.C.
- Glasbergen P, Biermann F and Mol AP. (Eds.). (2007). *Partnerships, governance and sustainable development: Reflections on theory and practice*. Edward Elgar Publishing.
- Grimm M, Munyehirwe A, Peters J and Sievert M. (2014). A first step up the energy ladder? Low cost solar kits and households's welfare in rural Rwanda. IZA discussion paper, IZA DP No. 8594.
- Hart O. (2003). Incomplete contracts and public ownership: Remarks, and an application to public private partnerships, *The Economic Journal* 113: C69–C76.
- Hodge GA and Greve C. (2007). Public–private partnerships: an international performance review. *Public administration review*, 67(3), 545–558.
- Holden ST, Deininger K and Ghebru H. (2009). Impacts of Low-cost Land Certification on Investment and Productivity. *American Journal of Agricultural Economics* 91(2): 359–373.
- Hoppe E and Schmitz P. (2010). Public versus private ownership: Quantity contracts and the allocation of investment tasks, *Journal of Public Economics* 94: 258–268.
- IOB (2013). Public-Private Partnerships in developing countries – a systematic literature review, IOB Study no. 378, Dutch Ministry of Foreign Affairs, The Hague.
- IOB (2014). Access to energy in Rwanda. Impact evaluation of activities supported by the Dutch 'Promoting Renewable Energy Program'. IOB evaluation no. 396, Dutch Ministry of Foreign Affairs, The Hague.
- Iossa E and Martimort D. (2012). Risk allocation and the costs and benefits of public–private partnerships, *RAND Journal of Economics* 43 (3): 442–474.
- Iossa E and Martimort D. (2015). The Simple Microeconomics of Public Private Partnerships. *Journal of Public Economic Theory*, 17(1), 4–48.
- Kessler JJ and Slingerland S. (2015). Study on Public Private Partnerships for Contribution to Inclusive Green Growth, consultancy report, Aidenvironment/ TripleE, Amsterdam.



- Kherallah M, Delgado C, Gabre-Mahin E, Minot N and Johnson M. (2002). *Reforming Agricultural markets in Africa*. International Food Policy Research Institute and John Hopkins University Press. Washington D.C.
- Kolk A, Van Tulder R and Kostwinder E. (2008). Business and partnerships for development. *European Management Journal*, 26(4), 262–273.
- Koppenjan JF and Enserink B. (2009). Public–private partnerships in urban infrastructures: reconciling private sector participation and sustainability. *Public Administration Review*, 69(2), 284–296.
- Mert A and Pattberg P. (2015). Public-private partnerships and the governance of ecosystem services. Chapter 11 in ‘Ecosystem services: from Concept to Practice’, Bouma, J.A., Beukering, P. van (eds), Cambridge University Press, Cambridge (UK).
- Minow M. (2003). Public and private partnerships: Accounting for the new religion. *Harvard Law Review*, 1229–1270.
- Mookherjee D. (2006). Decentralization, Hierarchies, and Incentives: A Mechanism Design Perspective. *Journal of Economic Literature* 44 (2):367–390.
- OECD (2008). Paris declaration of aid effectiveness and Accra agenda for action, OECD, Paris
- Pattberg PH. (Ed.). (2012). *Public-private partnerships for sustainable development: Emergence, influence and legitimacy*. Edward Elgar Publishing.
- Pender J, Place F and Ehui S. (2006). Strategies for sustainable land management in the East African highlands. International Food Policy Research Institute (IFPRI), Washington D.C.
- Poulton C, Kydd J and Dorward A. (2006). Overcoming market constraints on pro-poor agricultural growth in Sub-Saharan Africa. *Development Policy Review* 24 (3): 243–277.
- Poulton C and Macartney J. (2012). Can public-private partnerships leverage private investment in agricultural value chains in Africa? A preliminary review. *World development* 40 (1): 96–109.
- Samii R, Van Wassenhove LN and Bhattacharya S. (2002). An innovative public–private partnership: new approach to development. *World Development*, 30(6), 991–1008.
- Staatscourant (2012a). Besluit van de staatsecretaris van buitenlandse zaken nr. Minbuza-2012.7786, tot vaststelling van beleidsregels voor het deelnemen aan samenwerkingsverbanden op het terrein van voedselzekerheid en private sector ontwikkeling [Decree by the Minister for European Affairs and International Cooperation, no. Minbuza-2012.7786, introducing policy regulations for the participation in collaborations in the fields of food security and private sector development (in Dutch)], *Staatscourant* 2012, no. 7351, The Hague.
- Staatscourant (2012b). Besluit van de Staatssecretaris van Buitenlandse Zaken van 21 maart 2012, nr. DJZ/BR/0311-2012, tot vaststelling van beleidsregels en een subsidieplafond voor subsidiëring op grond van de Subsidieregeling Ministerie van Buitenlandse Zaken 2006, Fonds Duurzaam Water (FDW) [Decree by the Minister for European Affairs and International Cooperation of 21 March 2012, no. DJZ/BR/0311-2012, introducing policy regulations and a cap on subsidies on the basis of the regulation on subsidies of the Dutch Ministry of Foreign Affairs 2006 (sustainable water foundation (FDW)) (in Dutch)], *Staatscourant* 2012, no. 6036, The Hague.
- Williamson O. (1979). Transaction-cost economics: the Governance of contractual Relations, *Journal of law and economics* 22: 233–261.
- Williamson O. (2000). The New Institutional Economics: Taking Stock, Looking Ahead, *Journal of Economic Literature* 38 (3): 595–613
- Xu Z, Burke WJ, Jayne TS and Govereh J. (2009). Do input subsidy programs “crowd in” or “crowd out” commercial market development? Modelling fertilizer demand in a two-channel marketing system. *Agricultural Economics* 40 (1): 79–94.

# Annex: Interview Guide

These annexes contain the information presented to those that were interviewed for this study.

## The study in short

This study carried out by PBL Netherlands Environmental Assessment Agency together with AidEnvironment and Triple E Consulting, examines the actual and potential contribution of Public–Private Partnerships (PPPs) to Inclusive Green Growth (IGG). The study's timeline is November - December 2014. The study is part of a larger, four-year PBL research project that explores and elaborates Inclusive Green Growth strategies for the Dutch Ministry of Foreign Affairs, specifically the Department on Trade and International Cooperation. The study examines, in detail, a number of public–private partnerships for their actual and potential contribution to IGG and their leverage effects for IGG beyond the scope of the partnership.

## Aim of this interview and use of the information

For the study, nine PPPs were selected to be studied more closely. For each of these PPPs, information will be collected on the basis of the study's outline and approach. This will be done by study of project documents, supported by in-depth interviews. We aim to carry out three interviews per PPP. You are involved in one of the PPPs as a partner, therefore we very much appreciate your participation in the project as a respondent. A brief report will be made of each interview, to be sent to the interviewed person to provide feed-back and agree upon. The interviews will be used to work out the main report. The report will not cite specific PPPs or respondents without explicit agreement from the PPP.

## Organisation of the interview

For each interview (face-to-face or telephone), we will agree with you a time and – if applicable - place that suits you. The interview will last about 1 hour. The interview is semi-structured, i.e. we work with a topic guide and ask more detailed questions based on information from project reports.

## Topic guide for the interview

In the interview, we discuss with you the following general topics that concern the PPP in which you are a partner (see next pages for a brief explanation of the different topics):

- Your role in the PPP (& basic characteristics of the PPP, if needed)
- Direct effects of the PPP (realised or expected)
- Indirect (systemic) effects of the PPP (realised or expected)
- Influencing factors (success, constraints) for direct effects
- Influencing factors (success, constraints) for indirect (systemic) effects

Attached you find the prospective interview questions and a more detailed outline of the project.

Thank you very much for your participation as a respondent in this project!

**Jetske Bouma** (PBL)

**Jan Joost Kessler** (AidEnvironment)

**Stephan Slingerland** (Trinomics)

## Outline and approach

### Background and objectives

Inclusive Green Growth, or 'the economics of sustainable development' (WB 2012) is concerned with the welfare of current and future generations, e.g. a growth that is both inclusive (relating to social issues such as equality) and green (relating to environmental sustainability). It acknowledges the need for growth- to reduce poverty and accommodate a growing world population- but underlines the need for growth to be green and inclusive in order for it to be welfare enhancing. Economic growth is usually not green nor inclusive because of failures in the current market system and lack of governance (non-priced environmental resources, non-representative or lacking institutions, weak property rights etc). Effective Inclusive Green Growth strategies address these underlying market and governance failures and thus manage to create synergies between growth, social inclusiveness and environmental sustainability.

Public-private partnerships (PPPs) have the potential to be an effective vehicle for Inclusive Green Growth strategies because they combine the efficiency of private sector actors with the regulatory capacity of public actors and social representation of civil society organisations. Whether they also meet their potential, and if not what are constraints, remains a question, which is why this project is relevant to the Dutch Environmental Assessment Agency (PBL), the commissioning agent of this study. Against this background, the objectives of this project are:

- a) to explore whether the PPPs promoted by the Dutch Ministry of Foreign Affairs address the objectives of Inclusive Green Growth in their plans and actions, and
- b) to reflect on the opportunities and constraints for strengthening Inclusive Green Growth impacts, by considering their (potential) role in addressing underlying market and governance constraints.

### Approach

For the analysis, we selected partnerships initiated by the Ministry of Foreign Affairs in the field of water (FDW), food security (FDOV) and renewable energy. We positioned the partnerships on the basis of their potential contribution to Green Growth (eco-efficiency, sustainable resource use), Inclusive Growth (resource access, poverty alleviation) or Inclusive Green Growth (attention for both access & eco-efficiency, integrated decision-making) objectives, as well as the expected potential of the PPP to address underlying market and governance constraints. From the 46 partnerships originally analysed we selected 9 partnerships (3 water, 3 food, 3 renewable energy) that contribute to Green Growth, Inclusive Growth and/or Inclusive Green Growth objectives. For these 9 partnerships we will analyse the available project documentation and interview the partnership partners to discuss and reflect on the potential of partnerships for Inclusive Green Growth.

At the project level, we are interested in how the project objectives are specified, how the risks and responsibilities are divided between the partners, how the project is financed and how knowledge sharing, communication and decision-making are organised. We are especially interested in the partnership agreement, including questions related to the monitoring and (internal) enforcement of responsibilities, but also related to external accountability and transparency of partnership objectives. We would also like to know how the different interests are represented in decision-making, both internally (of the different partners) and externally (representation of stakeholders). Finally, we are interested in the characteristics of the different partners, their track record in partnerships and their specific added value in the partnership and (context-specific) knowledge of the issue at stake.

With respect to the wider project context, we are interested in the extent to which the partnership pays attention to underlying market and governance constraints (systemic issues). For example, partnerships directed towards Green Growth objectives will often face financing problems (non-priced resources etc) or have to deal with unfavourable legislation, whereas projects directed towards Inclusive Growth will face governance problems, such as non-representative institutions or unequal distribution of rights. High information and transaction costs are an issue in all cases, as are lacking institutions to coordinate and facilitate integrated decision-making.

We expect to address our project level questions firstly by consulting the project documentation. Partnership objectives are normally elaborated in the design of the partnership and also reflected in the contractual agreement. To discuss potential constraints in realising the project's objectives, and partner experiences with the functioning of the partnership, both internally and externally, we will use interviews. For each partnership, about 3 interviews with stakeholders are envisaged.

Finding answers to our questions on systemic changes will be more challenging, as these issues normally go beyond the partnership agreement. Still, we expect that you will have useful insights and reflections on the potential of partnerships to address underlying market and governance constraints. Also, in assessing the existing partnerships we found that several partnerships are already explicitly addressing market and governance failures, for example through local institution-building, joint knowledge development with local governments, creation of financing arrangements etc. In the following we briefly present our analytical framework and explain what type of information we are interested in.

### Framework for analysis of the PPPs

Of the selected partnerships to be analysed in more detail we would like to receive the available project documentation and plan interviews with 3 partners per partnership, preferably a private sector, public sector and civil society partner. From the project documentation (including intermediary progress reports) we plan to collect basic project information as well as more detailed analytical information where possible. Key basic project characteristics are listed in Table A.1.

Table A.1

**Basic PPP characteristics to be collected**

**Basic characteristics**

Topic / sector (water, food, energy)
Project objectives
Country & region
Target group (stakeholders)
Budget (public/private)
Project period

**Direct effects and systemic effects of the PPP**

Regarding direct effects of the PPP, we distinguish here between environmental effects and socio-economic and equity effects ('inclusiveness'). Environmental effects can be in particular resource efficiency; (renewable) energy; CO2 emissions; biodiversity and ecosystems; waste. Inclusiveness impacts can be improved access to resources, finance and knowledge; improved / equitable income; appropriate technology; employment for the poor; green job creation; education; health.

Systemic effects of the PPP are mostly indirect (medium to long-term) and generally operate through leverage of the existing funding, or follow-up activities that can be either new subsidised projects or commercial activities, or through new stakeholders joining the project.

Furthermore, systemic effects can show in factors such as more equitable distribution of user rights; representation marginalised groups in decision making; improved accountability; leadership and alignment of multi-stakeholder interests; learning mechanisms and open access knowledge sharing mechanisms; appropriate technologies with enhanced mutual efficiencies.

**Factors influencing partnership performance and IGG effects**

Several underlying factors (both internal and external) can influence the performance of the partnerships, and whether results are being achieved. We distinguish between factors that show up in the design phase of the project, in the process or implementation phase and contextual factors.

One particular design factor is the nature and content of the partnership agreement. Other factors are characteristics of the partners involved in the PPP, problem analysis, objectives, intervention strategy, target groups, instruments and mitigation / compensation measures. With respect to success factors for systemic effects in the design phase, we will analyse to what extent upscaling and other impacts in the design phase are directly or indirectly addressed. Process- or implementation factors include the role of the public agency partner, working relationships in practice and internal knowledge exchange (project level effects) and the extent to which systemic effects are addressed during the implementation. Finally, also contextual factors will be examined on a project and systemic level. As not all analytical information will be available from the project documentation, any remaining questions will be addressed in the interviews.

	Direct (project level) effects	Indirect (systemic) effects
What are the characteristics of the partnership and its objectives?	<p><b>Partnership characteristics:</b> type of partners, earlier experience of partners with IGG-related subjects, earlier experience in region, in collaborating together etc.</p> <p><b>Choice of partnership objectives:</b> why attention for environmental (resource efficiency; (renewable) energy; CO<sub>2</sub> emissions; biodiversity and ecosystems; waste)and/or social (improved access to resources, finance and knowledge; improved / equitable income; appropriate technology; employment for the poor; green job creation; education) result areas, how are partner interests served?;</p>	<p><b>Long term commitment with topic/in region:</b> Plans for follow-up projects or activities, Leverage of funding for upscaling activities, active participation of stakeholders, involvement of local authorities</p> <p><b>Specific attention for systemic constraints:</b> attention for accountability, monitoring and enforcement mechanisms, attention for cost-recovery and long term financing, activities geared towards institution-building and co-management, division of user rights, attention for eco-innovation and technology transfer, investment in knowledge sharing/awareness raising.</p>
What are the factors influencing the performance of the partnership to achieve potential direct / systemic effects?	<p><b>Design of the partnership agreement:</b> Division of responsibilities/risks/financing, definition of objectives, attention for problem analysis of local context, intervention strategy and theory of change, definition of target group and stakeholders, attention for synergies and trade-offs, use of mitigation/compensation measures, instruments</p> <p><b>Process / Implementation phase:</b> Internal organisation, role of public agency partner, internal decision-making and leadership, internal monitoring and accountability mechanisms, internal enforcement of project objectives, and of responsibilities and tasks, internal learning and knowledge exchange, stimulation of creativity.</p>	<p><b>External accountability</b> of the partnership to stakeholders, governments and others</p> <p><b>Stakeholder participation</b> in the design of the partnership, its financing and organisation</p> <p>Attention for <b>learning and open access knowledge</b> sharing in and outside the partnership Involvement of local authorities in the design or implementation of the partnership's objectives</p> <p><b>Flexibility</b> of the partnership agreement and the financing agents to facilitate innovation and change</p> <p><b>External enforcement</b> of the partnership agreement, monitoring of project objectives and responsibilities.</p>
	<p><b>Context:</b>  <b>Conditions</b> of the partnership facility, including financing arrangements  <b>Prior experience</b> with the project topic, or innovative set-up: how complete is partnership agreement?            Attention for <b>potential risks</b> and external developments, anticipation of changes in the partnership agreement            The (local) <b>institutional context</b>, organisational level of stakeholder, lacking institutions, authorities            The (local) <b>socio-economic context</b>, lack of financing mechanisms and market facilities, transaction costs  <b>Stable environment</b> or dynamic setting</p>	

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