Assessing the structural capacity requirements that would allow developing countries to participate in evolving carbon markets

EXECUTIVE SUMMARY



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The international community agrees that current carbon market mechanisms will need to evolve significantly in order to achieve the much needed global Greenhouse Gas (GHS) mitigation targets. The aim of this paper is to set out the structural capacity necessary for developing countries to participate in these evolving market mechanisms. Capacity building is defined as the preparatory activities required to link countries, sectors, projects and/or businesses to carbon markets and allow them to participate in evolving carbon market mechanisms.

The first part of the study looks at the capacity needed for developing countries to participate in each of the current and future carbon market mechanisms; from the current Clean Development Mechanism (CDM), including Programmatic CDM, to a reformed CDM and towards mechanisms such as Large Scale Crediting and Trading. Throughout the paper there are a number of recommendations promoting the establishment of institutional bodies at the developing country level which could help facilitate the aggregation of data, technical expertise and other necessary capacity for increased carbon market participation. The set up of such institutional entities will support the aggregation of different levels of capacity and be sufficiently flexible to develop over time with new market mechanisms as they evolve. The main body concludes with a summary of these institutional recommendations and a pathway analysis illustrating the capacity requirements at each carbon market mechanism level. This analysis is followed by two in depth country case studies: **Ghana and Uganda**.

Capacity requirements for evolving market mechanisms are analysed by looking at the capacity for data management, institutional capacity and policy level capacity. Capacity needs are either government led or emitter focused depending on the type of mechanism.

In order to participate in the current CDM, developing countries must develop the institutional capacity in public and private entities to handle the entire CDM cycle from project identification, writing of the Project Design Documents, successful registration, implementation and monitoring of projects. The set up of a functioning Designated National Authority (DNA) is essential. In addition to this institutional set up, governments will need to ensure that there is a pipeline of CDM projects and mitigation opportunities available and that the incentives for the private sector to develop them are created through effective policies and regulation.

Programmatic CDM (PoA) requires the additional capacity of selecting and defining the Managing Entity of a programme from either a public or private entity. The Managing Entity's duties and responsibilities go beyond those of project developers in the traditional CDM.

The CDM is expected to evolve over time as reforms are introduced to improve the way it functions. One reform currently under discussion is greater use of 'standardised approaches' where projects would be compared against a pre-determined standard which is derived from assessing the performance of a similar set of installations. It remains a project based mechanism where emitters receive carbon credits directly. Thus, like the current CDM, it **does not require heavy government** **involvement**. The additional capacity necessary for a reformed CDM is likely to be tied to the technical expertise necessary for setting up meaningful standardised baselines. It will also consist of setting up appropriate data aggregation systems for the systematic collection and monitoring of emissions data.

In order to allow a wider range of developing countries to participate more effectively, the international community may wish to **institutionalise a coordinating agency that promotes greater use of standardised approaches in the CDM**. This coordinating agency could act as the international project manager responsible for consistency, coordination and timely implementation of the steps necessary for the development of standardised baselines. **Transparent policy reforms** and statements will also be needed to incentivise project developers and private sector engagement.

New market mechanisms such as large-scale crediting and trading have been proposed as a means of scaling up carbon finance to developing countries. If introduced, these mechanisms would represent a transition from an individual project-level approach to a sector wide mechanism. If adopted, these mechanisms will give developing countries the opportunity to make their own contribution to emissions reductions.

Large-scale crediting rewards emissions reductions at the sector level by crediting emitters *ex-post* for beating the baseline level of emissions for a particular sector (the baseline would be set below the Business As Usual emissions trajectory for the sector). The crediting baseline can be interpreted as a 'no lose' target: if emissions are higher than the baseline, no credits are earned, but neither is there a penalty imposed for missing the target. Large-scale trading would require setting absolute emissions targets at the sector level but with carbon units allocated upfront. Responsibility for reducing emissions (and benefits for doing so) could more easily be transferred to industrial installations and other emitters.

Capacity requirements for large-scale crediting and trading increase at the government level (relative to current CDM capacity requirements) as governments will be responsible for the baseline setting process as well as the design and implementation of policies and sector compliance mechanisms. **Large-scale trading** may make it easier for governments to devolve responsibility to emitters through an Emissions Trading Scheme (ETS). This would introduce additional **capacity needs at the emitter level**.

At the government level, large-scale crediting requires technical competence for data collection, notably for baseline setting and Measurement, Reporting and Verification (MRV). The process of identifying the most suitable performance indicators will require developing countries to assess their own level of capacity for data collection as well as the capacity building needs for improved reliability and availability of data. If there is a lack of sufficiently detailed data, a data collection phase should be established before the crediting baseline is determined. This phase would give developing country governments the opportunity to train key staff in the methodologies and expertise needed to implement data collection systems. This could be done by direct technical assistance provided by developed countries and/or multilateral institutions at limited cost. Large-scale trading, particularly if

accompanied by a domestic ETS, will also require additional technical capacity for establishing full sectoral inventories/registries.

For large-scale crediting, it would be helpful to have one entity take responsibility for coordinating activities, including the development of proposals, relevant data collection, the monitoring of emission reductions and the coordination of all measures between the government, private sector and other stakeholders. This coordinating entity could also be the formal contact point between that country and the international carbon community.

Irrespective of whether large scale mechanisms are based on 'no lose' or more binding targets, developing country governments will need to choose the right domestic policy and policy frameworks when deciding **how best to incentivise private sector entities to reduce emission below the sector baseline**. In the case of a 'no-lose' target, policy instruments will play an important role since emitters will need sufficient incentives to make the necessary reductions before credits will be issued (ex-post).

Capacity requirements at **the emitter level** for industry and private entities very much depends on the chosen approach for national implementation. If a government chooses to implement a domestic ETS, emitters will need to develop capacity to measure and monitor their emissions and to report them to the appropriate government agency. At a minimum this will require technical and data collection systems training for key staff within private sector companies around energy auditing and the running of energy management systems.

Case Studies

In most cases, **low income developing countries are still developing the capacity to participate in the existing CDM at even a minimal level**. This is particularly true in Africa where the uptake of CDM projects has been very low (only 2.5% of total CDM projects are coming from Africa) and extremely fragmented.

The report has selected two low income countries in Sub Saharan Africa (SSA), **Ghana and Uganda**, for the in-depth capacity analysis explored in the case studies. The analysis recognises that **even countries at similar levels of development may have different obstacles and capacity needs**.

These case studies address the current capacity and capacity needed for carbon market participation within each country and recommendations for how these gaps can be filled by looking at the following four areas:

- 1) **Institutional capacity**: Are the right entities in place and empowered to act? Are the appropriate institutional frameworks in place?
- 2) **Policy level capacity**: How can cross-governmental policy measures be utilised to support carbon market participation?

- 3) **Capacity for data management (MRV and technical):** How will the country accumulate and manage the data necessary for greater carbon market participation?
- 4) **Financial Capacity:** Is there adequate opportunity and capacity in the market to attract public/private sector capital to support the development of the carbon market?

In many ways the existing capacity and capacity needed in these two countries is similar. Both countries have had low levels of carbon market participation despite having strong representation in international negotiations. Both countries have had support from development partners who have funded various capacity building efforts. Both countries have a shortage of the financial and technical resources necessary to fully embrace the carbon market opportunities within the country.

However, there are also important differences between these countries with regard to the specific obstacles that they have faced, the nuances of institutional capacity at a national level and the recommendations for actions that can be taken to facilitate greater carbon market participation in the next 3-5 years. These differences, explored in detail in each of the case studies, are **primarily around internal fragmentation on climate change initiatives at a governmental level, the roles of the DNA and private sector engagement.**

Throughout the case studies evidence gained from interviews and the authors' in-country experience is referenced. To ensure that this portrayal is accurate and reflective of the layers of local complexity and detail, the report has been 'ground tested' with the interviewees and a third party peer review panel. However, **the reader should note that these case studies provide a snapshot that is relevant in early 2010** and as the market evolves and the political arena at both a local and international level shifts, so too will the capacity analysis and the recommendations.

Additional financial, technical and human capacity is needed at all levels in both countries to ensure that they are well positioned to develop their carbon market potential. Whilst a unified national vision that systematically addresses all relevant climate issues would be helpful to safeguard sustainable development and to prepare these countries to participate in large scale mechanisms, it is not essential to have this level of cross governmental coordination for them to begin participating in project-based (including Programme of Activities) CDM.

Therefore, **initial capacity building efforts in both countries should focus on actions that can be taken to increase participation in the current CDM, particularly through the Programme of Activities (PoA)**, because a high level of government intervention is not necessary for participation in these mechanisms.

A parallel capacity building stream focused on building the institutional and private sector capacity necessary for the data management requirements of the more advanced mechanisms is also explored in these case studies.

Although the specifics of existing capacity and capacity gaps varies between the two countries, both countries need to scale up the involvement of the private sector, increase the technical capacity for

project development and data management and increase access to carbon finance if they are to increase their carbon market participation. Recommendations for how this can be done are summarised below:

- A private sector/civil society engagement strategy that incentivises local project developers and financial institutions to develop the technical/human capacity necessary to implement projects is an important precondition to carbon market participation.
- Development partners and multilateral institutions may choose to support technical skills training programmes that demonstrate how to prepare Project Design Documents (PDDs) and how to conduct the sector or sub-sector baseline studies necessary for standardised approaches.
- NGOs and Civil Society organisations can be trained and funded to act as managing entities for PoAs.
- Community outreach programmes can be formed to educate communities about PoA opportunities.
- Host country governments and development partners may wish to work with local financial institutions to encourage them to take on carbon finance projects. Local financial institutions have expressed an interest in participating in government/development partner backed credit export guarantee programs as a mechanism for mitigating risk and encouraging participation.
- If these countries are to fully participate in an evolving carbon market then they must migrate away
 from individual knowledge/power bases and move towards the formation of robust systems and
 systemic processes around national decision making, data aggregation/MRV and private sector/civil
 society engagement strategies. Host country governments can assist this process by committing to
 transparency and coordination of efforts whenever possible.