



Report 2009-068

**Capacity Building for
CDM in Uganda**

Capacity Building for CDM in Uganda

Commissioned by
NORAD

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Executive Summary

This report presents an overview of existing Clean Development Mechanism (CDM) capabilities in Uganda, identifies areas of knowledge-gaps and lists potential capacity building initiatives that could assist in closing the gaps. Recommendations for targeted assistance are made with the aim that this should contribute to a functioning CDM infrastructure and the development of projects that are eligible under the CDM.

Priority areas for CDM capacity building in Uganda

Overview: Barriers, CDM capability status and possible capacity development interventions

Uganda has benefitted from a number of CDM support programs since the beginning of this decade. This has included support to project developers and institutional support to government institutions. Currently nine bilateral and multilateral development agencies are funding climate change related support programs that also include CDM. Obviously this creates challenges with respect to donor coordination.

The World Bank has suggested assigning a person dedicated to coordinate the cross-cutting issue of climate change engagement amongst the development partners. One important task is to channel information on adaptation and mitigation measures to and from the concerned parts of GoU. This would undoubtedly improve the general understanding of climate change and hopefully also ensure better goal achievement on new initiatives. We suggest that Norway considers supporting such a position, but that location and role be discussed and defined among development agencies.

It should be highlighted that CDM is a mechanism designed to address climate change, while climate change is a national problem that goes beyond the scope of this report. It is our recommendation that the climate change issues are looked at more broadly than CDM alone, and that climate change should be included or addressed in all programs that Norway is supporting in Uganda.

Further, while climate change is a national problem, it is currently the responsibility of the Ministry of Water and Environment. Support from Norway is needed to encourage the office of the President, Prime Minister, and Ministry of Finance, Planning and Economic Development to get involved, so that the issues of adaptation to climate change could be addressed in all sectors of government planning.

The DNA

The Designated National Authority (DNA) for the CDM was established already in 2004. The DNA secretariat is located within the Climate Change Secretariat of the Ministry of Water and Environment. The Climate Change Secretariat is staffed by four professionals and three support staff. Support to this institution seems to be adequately covered through a Danish supported program. It also appears that the DNA is not a barrier in the CDM project development and approval processes.

Other institutional support

Support to government agencies is relevant in order for these to fully understand and help promote CDM project developments, and on a broader basis for them to take an active part in the work of the National Climate Change Steering Committee. It is

recommended, however, that such support is provided as an integral part of existing support programmes. For Norway this means that the CDM and climate change issues should be addressed in the ongoing and new institutional support programmes with energy and forestry institutions such as the support to the Ministry of Energy and Mineral Development (MEMD) and the National Forestry Authority (NFA).

Institutional support to energy

The principal CDM potential in the electricity sector is within hydro power. Calculating emission reductions for such projects requires well documented “grid emission factors”. Data recorded by the Uganda Electricity Transmission Company Limited (UETCL) are vital for calculating the relevant grid emission factors and could be made more readily available for project design documents (PDD) preparation. This and/or other relevant institutions should therefore take active part in providing project developers with relevant data so that credible emission factors can be included in PDDs without unnecessary delay. One way of accomplishing this is by continuously publishing the necessary data at the Electricity Regulatory Authority’s website. Another approach is to facilitate that the data is computed and presented in a form that is user friendly for project developers. This approach would naturally fall under the mandate of the proposed Belgian programme on technical support to the DNA office, which is currently under development.

Institutional support related to forestry

Similarly, forestry projects require data, often long time series, in order to meet the criteria for project validation and registration. This is data primarily from public national sources, and in some cases from international sources such as satellite data from NASA. The data ought to be made available to project developers in a form applicable for PDD requirements. Forestry projects are normally more complex than hydro projects, and the barriers to develop PDDs in line with existing methodologies are significant. The need for combining data dissemination with theoretical knowledge and practical experience within the relevant forestry institutions (e.g. National Forestry Authority) is therefore important. The National Forestry Authority has CDM capabilities, but strengthening of this and its capacity to promote forestry CDM projects seems to be a relevant target for support.

Support to project developers and projects

Uganda has benefitted from a number of CDM support programmes since the beginning of this decade. This has led to a few early project developments, of which one was registered in 2007¹. Another seven projects are under validation, primarily reforestation and biomass projects. A further seventeen projects have been identified that are at the PIN stage. Forestry and hydro power investments dominate among these projects, but there is also interesting new work related to Programme of Activities (PoA).

There are few active CDM project developers in Uganda and a barrier to project development is a lack of capability and financial resources to carry projects through the entire project cycle to UNFCCC registration. Particularly projects that require deviations from existing CDM methodologies or development of new ones have a high risk of getting stranded in the CDM development process. The fact that Uganda has

¹ West Nile Electrification Project - as part of the capacity building project with Ugandan Authorities by the Global Environmental Fund and the World Bank. Project is registered with the Carbon Prototype Fund.

only one registered project out of more than twenty at PIN or PDD stage illustrates this. Successes (meaning CDM registration) is the best way of promoting new project developments and encourage project developers not to give up on projects that are “stuck” in the CDM project cycle. Financial support to project developers and local consultants may therefore be the best way to help promote CDM project developments in Uganda. This should also include support to develop methodologies.

Programme of Activities (PoA)

As in other African countries, a predominant part of energy consumption is in traditional fuels used at very low energy efficiency. There are many programs for modernisation of energy supply and use, some of them within the context of the Uganda Renewable Policy. Some could be CDM relevant and others not. The new Programme of Activities scheme under the CDM allows for bundling of small projects in order to significantly reduce CDM project development costs. Approved PoAs may be relevant for investment plans in Uganda and support to project developers and relevant public institutions. This is an area of relevance to many Ugandan institutions and development agencies and would therefore require careful planning and donor coordination before any support activity is started.

REDD

Last year Uganda prepared its Readiness-PIN, a document needed to qualify for the World Bank initiated Forest Carbon Programme Facility (FCPF), and was in October recommended as one of the pilot countries.

Although, outside the scope of this report, we would like to emphasize that a success of the REDD mechanism at national level is closely related to the ability of monitoring and documenting changes in biomass land cover. Consequently there is a need for strengthening monitoring institutions like the National Biomass Study (NBS). Given its commitment to the Ugandan Forestry Sector, Norway should assess the status of the NBS and take this into consideration in its ongoing support to the National Forestry Authority.

Recommendations

The following concrete recommendations are made for interventions from Norway to promote CDM in Uganda, in order of priority:

1. Improve local project development capacity, both in local availability of qualified consultants and enabling project developer to access finance for developing PDDs.
2. Use the support mechanism for CDM project development could be used as part of an integrated capacity building and project development programme. The financial support for preparation of the PDDs would be provided directly to local consultants within the framework of a capacity building programme where international experts would provide training and technical assistance to the local experts throughout the PDD preparation process.
3. The World Bank has suggested assigning a person dedicated to coordinate the cross-cutting issue of climate change engagement amongst the development partners. One important task is to channel information on adaptation and mitigation measures to and from the concerned parts of GoU. Norway should consider supporting a dedicated position for this purpose.

4. Facilitate that basic data needed for CDM-project development is computed and made readily and easily available for project developers. This applies for both energy and forestry sectors.
5. Climate change should be included or addressed in all programs that Norway is supporting in Uganda. Climate change it is currently the responsibility of the Ministry of Water and Environment. Support from Norway is needed to encourage the office of the President, Prime Minister, and Ministry of Finance, Planning and Economic Development to get involved, so that the issues of adaptation to climate change could be addressed in all sectors of government planning.
6. Success of the REDD mechanism at national level is closely related to the ability of monitoring and documenting changes in biomass land cover. Consequently there is a need for strengthening monitoring institutions like the National Biomass Study (NBS). Given its commitment to the Ugandan Forestry Sector, Norway should assess the status of the NBS and take this into consideration in its ongoing support to the National Forestry Authority.
7. Approved PoAs may be relevant for investment plans in Uganda and support to project developers and relevant public institutions. Approved PoAs may be relevant for investment plans in Uganda and support to project developers and relevant public institutions. It is our recommendation the use of PoA in relation to the URP is discussed in the Development Partner Group for Environment and Natural Resources, and that GTZ programmes are taken into consideration assessing further intervention.

Abbreviations

A/R	Afforestation /Reforestation
CCS	Climate Change Secretariat
CD4CDM	Capacity Development for CDM
CDM	Clean Development Mechanism
CER	Certified Emission Credits
COP	Convention of Protocol
DFID	UK Department for International Development
DNA	Designated National Authority
DOE	Designated Operational Entity
DoM	Department of Meteorology
DP	Development Partner
DPG	Development Partner Group
EIA	Environmental Impact Assessment
EP	Econ Pöyry
FCPF	Forest Carbon Partnership Facility
GEF	Global Environmental Fund
GoU	Government of Uganda
GTZ	German Technical Cooperation
MWE	Ministry of Water and Environment
NASA	National Aeronautic Space Agency
NEMA	National Environmental Management Authority
NGO	Non Governmental Organisation
NSS	National Strategies Study
NFA	National Forestry Authority
PDD	Project Design Document
PIN	Project Idea Note
PoA	Programme of Activities
PV	Photo voltaic
REDD	Reduced Emissions from forest Degradation and Destruction
UCCEE	UNEP Collaborating Centre on Energy and Environment
UETCL	Uganda Electricity Transmission Company Limited
UIA	Uganda Investment Authority
UJAS	Uganda Joint Assistance Strategy
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
UWA	Uganda Wildlife Authority
VER	Verified Emission Reduction
WB	World Bank

1 Background

1.1 Objective and outputs

The primary objective of this project was to map existing CDM capabilities within Uganda, identify areas where gaps in knowledge exist and provide a list of potential capacity building initiatives that could assist in closing the gaps. This was done through background research, a series of interviews with potential project developers and stakeholders, and a review of documents collected prior and during the mission.

The principal output from this project is recommendations for targeted assistance that will result in tangible results: a functioning CDM infrastructure and projects that are eligible under the CDM. In addition, the project resulted in a list of potential CDM projects in Uganda.

1.2 Methodology and team

The mission visit was undertaken during the period 21 to 29 January 2009. The field visit in Uganda was carried out by Knut Ødegaard from Econ Pöyry (EP) with support from Mari Sofie Furu from Norad. EP's Francois Sammut and Maja Tofteng completed the team with support in Norway. Inputs from the Norwegian Embassy were by Solveig Verheyleweghen and Nils Dårflot. The methodology used in this and other country studies (Tanzania, Angola and Mozambique) is described in the table below:

Ref.	Task	Output
1	Desk study and field work preparation	List of project developers, officials, and other experts to be consulted, scheduling visits when possible. Outline of areas to be addressed in field visit. Preliminary assessment of CDM capacity in each country based on review of publicly available and assessable information.
2	Field visit/interviews	Descriptive presentation of the current CDM framework and available information on potential CDM projects, identification of potential areas.
3	Report	Presentation of main findings, conclusions and recommendations, including specific proposals to assist countries in strengthening institutional framework for CDM facilitation.

1.2.1 Document review

The team first collected reports and other outputs of the previous capacity building programmes in Uganda (see Section 3), reports and assessments from other donor countries

(also section 3) and NGOs were also collected, as well as available and relevant Ugandan policy documents and information relevant to the DNA function in Uganda (section 2).

These documents were reviewed to prepare for the field visit, identify contacts and potential project developers, and also to identify potential CDM projects that could be supported.

1.2.2 Pre-visit contact and interviews

Almost all of the CDM stakeholder contacts listed in Appendix B were contacted during to the mission to check the status of their project ideas, assess whether or not they were likely to have projects, and set up appointments for the mission.

1.2.3 Interviews during mission

During the mission to Kampala in the period from 21 to 29 January, relevant development partners, Ugandan officials, public and private sector stakeholders were interviewed about their programmes and projects. A summary of these discussions on potential projects is presented in Section 4.

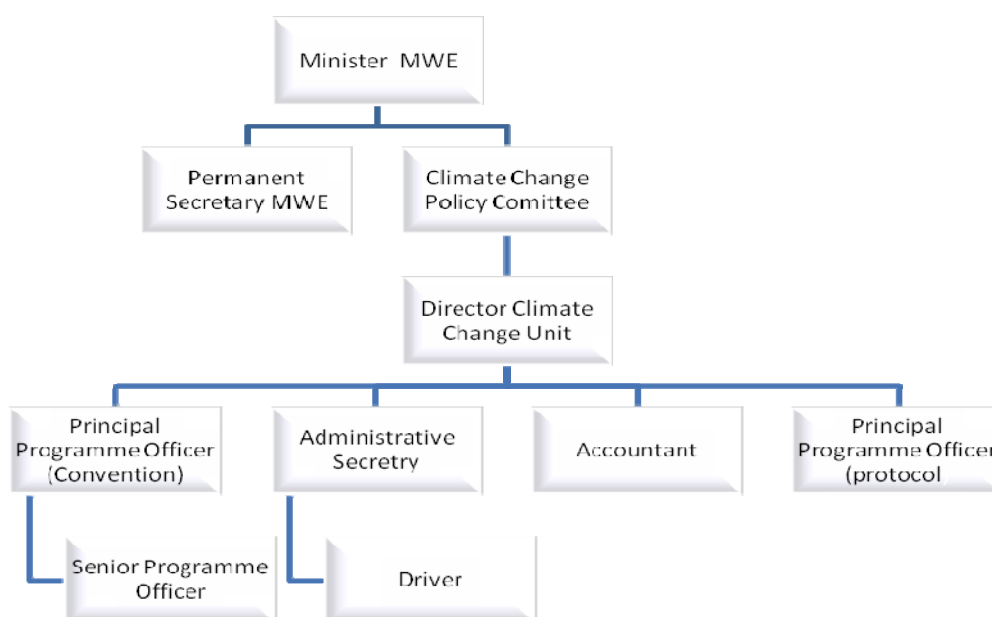
2 Status of the DNA and supporting institutions

2.1 Institutional location, staff and management

The Designated National Authority (DNA) is organized under a single government department model, where the Ministry of Water and Environment (MWE) undertakes all the activities of the DNA. The MWE acts as a secretariat, and calls upon technical experts from other government agencies/ministries, NGOs and private sector to evaluate/analyse and validate CDM projects/investments. Since its inception in 2004, the DNA secretariat has been the Department of Meteorology (DoM), operated by with a single person from DoM, and without a budget for addressing the DNA duties and responsibilities.

Since the beginning of 2009, a new structure has been put in place, which is illustrated in figure 1 below.

Figure 2.1: Generic structure of the Climate change unit (2009)



Source: Royal Danish Embassy, 2009

The change in organization came as a result of an ongoing process in the Government of Uganda (GoU). An emerging realization that climate change will impact the economic development of Uganda has led the GoU to request for assistance from the international donor community in order to prepare the country for new challenges. In July 2008 GoU and the Royal Danish Embassy (RDE) signed an agreement on 5 million DKK in support of the establishment of a Climate Change Unit (CCU). In December 2008, GoU and RDE signed two agreements: One on Support to mainstreaming of climate change adaptation (4 million

DKK 2009-2012) and one on Support to preparation of Uganda's participation in the COP15 (2009-2010). More specifically the program supports the following areas:

- i) strengthening the Climate Change Secretariat (DNA);
- ii) preparation of Uganda's participation in the COP 15, and
- iii) formulation of a climate change policy and integration of climate change into relevant sector policies, plans and programs.

In the new organization, the Minister of Water and Environment still heads the DNA, but the day to day operations are now attended to by a Climate Change Secretariat (CCS), which is located directly under the MWE. The CCS is supervised by a broadened national steering committee headed by the Permanent Secretary of MWE. The secretariat has recruited a staff of seven, including 4 professionals. This new staffing and the provision of an operational budget to be gradually taken over by government (after 4 years) will greatly increase the capacity of the operational activities of the DNA.

2.1.1 The CCS responsibilities and regulation

The CCS is now not only responsible for Uganda's reporting commitments to UNFCCC, but shall hereafter also prepare adaptation and mitigation plans for climate change, and also assist line ministries in preparing strategies for climate change

CCS's main responsibilities are to raise awareness on climate change at policy level and in Uganda general. This shall be accomplished by:

- Preparing adaptation and mitigation plans for climate change
- Liaising with the UNFCCC secretariat and advise government;
- Acting as the Focal Point for UNFCCC, coordinating implementation of UNFCCC and the Kyoto Protocol including development of policy;
- Providing assistance to line ministries and sectors in the preparation of strategies to address the climate change challenge;
- Identifying capacity building needs and mobilising resources to address such needs;
- Coordinating and implementing CDM projects; negotiating purchasing agreements on CDM projects; approving CDM projects; developing CDM operational guidelines and approval procedures; providing technical assistance to CDM project developers; maintaining a register of CDM and keeping track of certified emission reduction units.

Regulations

The primary focus of GoU is poverty eradication. Poverty Eradication Action Plan (PEAP) is Uganda's Comprehensive Development framework, and the current PEAP (2004/05 – 2007/08) aims at transforming Uganda into a modern economy (the PEAP is currently under revision and will be replaced by the National Development Plan).

The PEAP operates on the basis of the following five pillars:

- Economic management,
- Enhancing production, competitiveness and incomes,
- Security, conflict resolution and disaster management,
- Good governance,
- Human development

The Ugandan government gives priority support to activities and programmes that have direct and positive implications to the 5 pillars of the PEAP. For any project to be included in the government development programme for financial or material support it must address poverty eradication directly. Sectoral policies have been developed with the goal to support the PEAP, and provide a good basis for implementation of the UNFCCC. The relevant policies are:

- National development Plan (from June 2009)
- Renewable Energy Policy (2008)
- Plan for Modernisation of Agriculture (2000)
- National Population Policy (1995).
- National Health Policy (1999)
- Disaster Management and Preparedness Policy
- National Forestry Policy (2001)
- National Forestry and Tree-planting Act (2003)
- National Environment Regulations (2001)
- National Water Act (1995)
- Energy Policy for Uganda (2002)
- National Wetlands Policy (1995)

A Project Design Document (PDD) must be in line with priorities of the PEAP, and conform to sustainable development criteria in these policies.

2.2 Procedures for project approval

The first step of the DNA approval process is, based on submitted Project Idea Note (PIN), a review and possible issuance of a *letter of consent* to develop a CDM project. The review should consider the project's CDM eligibility and fulfilment of the sustainable development criteria. Upon reception of a *letter of consent* the investor is encouraged to go ahead and prepare a full Project Design Document, PDD. Having a complete PDD, the investor

applies to the DNA for a *letter of approval*. The PDD must satisfy the sustainability criteria, and is examined by the National Climate Change Steering Committee. Within thirty days the steering committee comes up with a recommendation advising the minister of MWE on whether or not to sign the letter of approval. If satisfied, the Minister signs the letter of approval on behalf of the DNA. The cost of the process is according to the DNA a “very nominal, negligible fee that should not discourage any project developer from making use of CDM”.

3 CDM capacity building programme initiatives

The Framework Convention (UNFCCC) was signed by Uganda in 1992 and ratified in 1993. The Kyoto Protocol was ratified in 2002, whereas the DNA was formally established in 2004.

3.1 Previous programmes

Multilateral donors have dominated the funding of climate change and CDM activities in Uganda². There have been four projects supporting the establishment of the DNA, all completed by 2008. The first of these was the CDM Susac project funded by the EU/UK (2000–2002) aimed at identifying investments in key sectors, primarily energy, and at identifying market players and developing operational secretariats to coordinate national and international CDM activities. Secondly, the UNCTAD/Earth Council project (2002–2004) aimed at engaging national stakeholders in taking steps to designate a CDM National Authority, to establish a DNA and to develop a CDM project portfolio. Further, the Capacity Development for the CDM (CD4CDM) project (2002–2006) was implemented by UNEP Risø, and the latest initiative has been the World Bank CF-Assist project (2004–2007).

In addition, there have been two projects in the voluntary market for emission reduction, the FACE foundation project in collaboration with Uganda Wildlife Authority, and the Plan Vivo/Ecotrust projects on voluntary tree planting for small holders. Other capacity building projects are aimed at building promotional abilities in institutions such as the Uganda Investment Authority. All CDM capacity building programmes undertaken in Uganda are summarised in the table below.

² GTZ 2006

Table 3.1: CDM capacity building programmes

Time	Project	Partners
1994– 2000	The Forest Absorbing Carbon-dioxide Emissions (FACE) project	The project was a joint venture between the FACE Foundation of the Netherlands started by an electricity generating company and the UWA
2000– 2002	Start-up CDM in African Caribbean and Pacific(ACP) countries	Funding from the EU and UK's Climate Change Challenge Fund to Department of Meteorology
2000– 2001	Capacity Building in CDM in Uganda	Support from UNEP through UCCEE to Department of Meteorology
2001	Uganda West Nile Hydropower Project -	Funding from GEF and the WB under the Energy for Rural Transformation Program and the Prototype Carbon Fund
2003	The WB National Strategies Study: Capacity Building for the Kyoto Protocol	WB support under the NSS program to Department of Meteorology
2002– 2004	Uganda Plan Vivo Pilot Project on Carbon Trading: Tree planting in Bushenyi and Kasese districts	A joint project between Care Uganda and the EcoTrust. Funding comes from a UK-based branch of TetraPak and training was provided by the Edinburgh Centre for Carbon Management (ECCM)
2002– 2004	Getting started with the CDM in Least Developed Countries	Funding from UNCTAD/The Earth Council to the Sustainable Development Promotion Centre in Uganda
2003– 2004	A CDM Promotional Concept Paper for Uganda	Support from the WB Carbon Finance Project to an Ugandan consultant contracted for the Uganda Investment Authority

2002– 2006	Capacity Development for the CDM in Uganda	Funding from the Dutch government through UNEP and the UNEP Risø Centre to Uganda Management Institute(Phase 1), Department of Mechanical Engineering, Makerere University and Department of Meteorology (Phase 2)
2004– 2007	African-assist Initiative. African regional capacity building and technical assistance for carbon finance	Support from the WB to Department of Meteorology

Source: Olsen, 2006

3.2 Current CDM-related initiatives

3.2.1 Multilateral and bilateral initiatives

Royal Danish Embassy has initiated several avenues of support and is the most active of the development partners in supporting Uganda on climate change. The programme includes funding of around 5 million DKK over 4 years to establish the National Climate Change Secretariat within the Ministry of Water and Environment.

Further, in July 2008 GoU and RDE signed an agreement on 5 million DKK in support of establishment of a Climate Change Unit. In December 2008, GoU and RDE signed two agreements: One on Support to mainstreaming of climate change adaptation (4 million DKK 2009-2012) and one on Support to preparation of Uganda's participation in the COP15 (2009-2010).

World Bank does not foresee any specific requests for support to climate change through loan instruments. At present it is, together with the United Nations Development Program (UNDP), supporting a Sustainable Land Management (SLM) project which has strong linkages to climate change and has been supporting activities related to CDM - in particular an 18 district initiative with the National Environmental Management Authority (NEMA) - to capture emissions from decomposition of municipal waste. The Bank is active in other areas in Africa in providing analytical support to climate change and its economic relevance.

Royal Belgian Embassy: Belgium has in principle agreed to a proposal to co-finance a €2 million project to support CDM initiatives via the climate change secretariat (CCS) in the Ministry of Water and Environment (MWE). Duration 2009-2011.

The project is a three year project and largely focuses on reducing the identified barriers, particularly strengthening technical capacity and creating awareness among the private sector institutions with special focus on financial institutions. Although the detailed

programme is not yet fully defined, the project will involve class room training coupled with actual project identification and PDD development. The target sectors are energy generation, energy efficiency, agriculture, municipal waste and forestry.

UNDP: Climate change is a priority for UNDP and a new position is being established in the country office on environment. They are also supporting a US\$ 3.6 million programme around Sustainable Land Management in the Cattle Corridor – which has a considerable emission reduction potential.

UNEP are supporting the Katoomba Group to develop initiatives around REDD, and are providing support through the Poverty Environment Initiative to NEMA to integrate climate change into the NDP.

Royal Norwegian Embassy: Norway focuses on mitigation and adaptation activities through its support to the forestry sector (REDD activities in the Mount Elgon Regional Ecosystem Programme, Sawlog Production Grant Scheme and National Forestry Authority), as well as commitments to the energy sector.

DFID will not provide specific support to climate change but will instead increase its advocacy efforts so that climate change is integrated into national policy, programs and expenditure.

Oxfam has provided analytical and advocacy support to climate change and as part of this effort has recently published a report entitled “Turning up the heat: climate change in Uganda” (June 2008).

GTZ is following a downstream approach that aims at building capacity for private sector players to tap the carbon finance market. Knowledge transfer is promoted and practical advice and support for activities associated with carbon finance is given to the ministries, public, and private sector. GTZ promotes renewable energies and energy efficiency and fosters technical development in the field of wood-fuel efficiency, micro-hydro, solar PV systems. Considerations were made to include components under the new programmatic CDM (PoA) facility; however, this is still in the planning phase.

3.2.2 The Uganda Joint Assistance Strategy (UJAS)

Uganda Joint Assistance Strategy (UJAS). is a strategy put in place by development partners as a response to the PEAP to harmonize their efforts with a view of lowering transaction costs. UJAS was an initiative originally taken by a group of 7 (and later 12) development partners to respond to this by streamlining the way in which they work with government and with each other. A possible extension of UJAS is currently under discussion among the development partners.

3.3 Organisations with CDM capabilities

The major constraint in developing projects under CDM has been the development of the PDDs. From the list in section 4, a total of 13 projects are still at PIN stage, while 6 are in some stage of developing their PDDs. Developing PDDs is expensive and requires

specialized expertise which is not readily available in Uganda. Currently, the DNA advises independent project developers to have their PDDs and PINs developed by experts in the department of Technology of Makerere University. Apart from the university and the organizations mentioned below, the remaining capabilities can only be found at individual level.

3.3.1 Organizations

Uganda Carbon Bureau

The Uganda Carbon Bureau is a Uganda based organisation offering services on climate adaption and mitigation to companies, NGOs and institutions active in Uganda. This includes advice on energy saving and emission reduction, as well as brokering services of locally sources carbon credits. The company also engages in the development of new standards and methodologies for smallholder schemes within tree planting. Lastly the bureau is active in educational and promotional work to develop awareness about the carbon markets and ways in which Uganda can increase its involvement as well as monetise on climate related issues.

Busoga Forestry Company

BFG, a subsidiary of Green Resources ASA, is a Norwegian based forestry company with forestry plantations for sequestration of carbon, production of forest products and development of renewable energy projects. The organisation has two A/R CDM projects in the pipeline in Uganda, and has in-house expertise in methodology and PDD development within afforestation and reforestation projects.

3.3.2 Institutions

National Forestry Authority (NFA)

NFA was established under the Forests and Tree Planting Act (2003). Section 54 of the Act provides the functions of the NFA which include monitoring the management of forest reserves, providing technical support and guidance in the delivery of forestry services, monitoring and guiding the development of tourist activities in the forestry sector and acting as a lead agency in EIA for the forestry sector. The NFA is lead authority for CDM projects implemented in the central forest reserves. Furthermore the NFA has also been engaged in the development of PDDs and PINs for CDM projects based in the forestry sector and currently has 5 projects at validation with the UNFCCC. NFA is one of the most knowledgeable institutions with regard to CDM and the Reduced Degradation and Destruction of Forests, REDD. It has just recently been included in the World Bank Forest Carbon Partnership Facility (FCPF).

The Uganda Wildlife Authority (UWA)

This is a semi autonomous body under the Ministry of Tourism, Trade and Industry which is responsible for the management of wildlife and national parks in Uganda. Among others UWA is responsible for identifying and recommending areas for declaration as wildlife conservation areas and the revocation of such declaration. UWA is therefore the lead agency when it comes to wildlife management issues.

UWA has issued sectoral EIA guidelines for protected areas in Uganda, which are compulsory for those interested in undertaking any development activity in protected areas. UWA has for a decade been involved in voluntary programmes aiming at preserving forest cover by using sale of verified emission reduction credits (VERs) from planted trees within their jurisdictional areas. These programmes have been in collaboration with Plan Vivo.

National Environmental Management Authority (NEMA)

Under the National Environment Act, the National Environment Management Authority (NEMA) is the principal agency in Uganda for the management of the environment, as well as for the coordination, monitoring and supervision of all activities in the field of the environment. NEMA is a semi autonomous body under the Ministry of Water and Environment, but has a cross-sectoral mandate to review and approve EIAs submitted to it in accordance with the law. NEMA is required to review and approve all EIAs for CDM projects in the energy sector, and therefore plays a key role in this regard. NEMA is currently developing a bundled landfill gas recovery initiative within eighteen municipalities under the CDM, with World Bank support.

The Uganda Investment Authority (UIA)

The Uganda Investment Authority (UIA) has the overall responsibility of registering and licensing private investment. The functions of the UIA include the promotion, facilitation and supervision of investment in Uganda and provision of assistance to potential investors in identifying and establishing investment projects in the country. In 2002 the UIA joined the meteorology department in laying out plans to interest local industrialists in the CDM. As such the active involvement of the UIA in CDM projects has been well established. UIA is the focal point for investment in the country, and is charged with promotion and facilitation of foreign domestic investment, promotion of employment creation, and promotion and encouragement of technology transfer. With specific regard to CDM projects, UIA performs the following functions;

- Receives investment proposals for CDM projects and provides relevant investment guidelines to the prospective project proponent;
- Ensures that the CDM project is in line with the established sectoral regulations;
- Licenses investment activities;
- Assists the project proponent in acquiring the necessary land and the necessary utility provisions like water, electricity and telephone;
- Assists the project proponent to sort out any disputes that may arise in the course of their activities; and
- Facilitates the project proponent in any other formalities including accessing key incentives.

4 Summary of CDM project concepts

4.1 Status of CDM Projects in Uganda

The potential for Uganda to benefit from CDM is significant; the Uganda Investment Authority which markets opportunities for CDM and carbon market investment has identified thirty sites suitable for mini-hydro power investment which could generate between 1 -20 MW each; NFA has available large areas set aside for industrial forest plantation in chunks of 500 to 15000 hectares on 49-99 year leases, and the new PoA facility opens up huge potential for programmatic efforts within wood fuel efficiency projects – 93% of Uganda’s energy consumption originates from biomass.

4.2 Registered projects/projects under validation

To date Uganda has not benefitted from the CDM at any meaningful scale. The West Nile Hydro Power Project (2003) is the only Ugandan project registered with the UNFCCC. However, during the past year eight projects have reached the stage of validation with the Designated Operational Entities (DOE’s). Five of these projects are part of the same small scale forestry programme, two are cogeneration projects in the sugar industry, and one is a small scale hydro power project. An overview is given in table 2 below.

Table 4.1: Registered projects or projects under validation

Project name	Status	Type/ total CER’s (10 years)	Methodology used
West Nile Electrification Project (WNEP)	Registered	Hydro, 580 kT	AMS-I.D.+AMS-II.B.
Uganda Nile Basin Reforestation Project No.3	At validation	Reforestation, 77 kT	AR-AMS1
Kakira Sugar Works (1985) Ltd. (KSW) Cogeneration Project	At Validation	Biomass energy, 681 kT	ACM2+ACM6
Bugoye 13.0 MW run-of-river Hydropower project	At Validation	Hydro, 543 kT	AMS-I.D.
Uganda Nile Basin Reforestation Project No 1	At Validation	Reforestation, 88kT	AR-AMS1
Uganda Nile Basin Reforestation Project No 4	At Validation	Reforestation, 71 kT	AR-AMS1
Uganda Nile Basin Reforestation Project No 2	At Validation	Reforestation,64 kT	AR-AMS1
Uganda Nile Basin Reforestation Project No 5	At Validation	Reforestation, 100 kT	AR-AMS1
Bagasse Cogeneration Project Kinyara Sugar Limited (KSL)	At Validation	Biomass energy,801 kT	ACM6

Source: UNEP-Risoe, 2009

4.3 CDM project pipeline

During the mission CDM project developers were contacted to get the status on project development. This section summarises the status of the different project ideas registered with the DNA. In addition to the ones listed below, Busoga Forestry Company (Green Resources) has two potential A/R projects under PDD development, (Kachung forestry project and Bukaleba forestry project).

Table 4.2: Potential projects in the CDM project pipeline

Project name	Status	Type/ total CERs³ <u>For forestry: to 2025</u> <u>Others: 10 year period</u>	Needs
Industrial Wood Plantation of Pine and Hardwood species	PIN developed	A/R, 104 kT	Brokering services
Mityana Fruit forest initiative	PDD drafted	A/R, 44 kT	JV-partner, funds for PDD development
Nanga Farmers Ltd	PIN developed	A/R, 120 kT	JV-partner, funds for PDD development
Micro Hydro Power for rural electrification	PIN developed	Hydro, 6.5 kT	JV-partner, funds for PDD development
Rural Electrification in Uganda	PIN developed, under WB Carbon Finance Unit	PoA (Solar PV), 500 kT	
Gold empire industrial Forest	PIN developed	A/R, 426 kT	JV-partner, funds for PDD development
Hydromax Hydro project	PIN developed	Hydro, 575 kT	PDD experts, funds for PDD development
Hydromax Mt Elgon	PIN developed	Hydro, 515 kT	PDD experts, funds for PDD development
Municipality Landfill to Energy project for 18 municipalities	PIN developed	PoA (Methane red, waste management), 690 kT	Project is with NEMA & WB
Solar Energy Uganda (PV) Rural areas	PIN developed	PoA, 170 kT	PDD experts, funds for PDD development
Nengo Bridge – Jacobsen Elektro	No action yet	Hydro, ? kT	PDD experts, funds for PDD development
Kampala Jellitone-Briquettes	PIN developed	Bio energy,	PDD experts, funds for PDD development
Uganda Cattle Methane Reduction	PIN developed	Methane	PDD experts, funds for PDD

³ Estimate of total CERs for varying crediting periods. Forestry projects have stated total sequestration potential up to 2025, others have in a 10 years period. Since none of the projects has been validated, we remind the reader that these figures are estimates only.

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Project			development
Plan Vivo Uganda	PIN developed		Brokering services
Timber Plantation in Kikonda Forest Reserve	PDD drafted	A/R, 2,703 kT	Brokering Services
Busoga Kingdom Forestry project	PIN Developed	A/R, 350 kT	PDD experts, funds for PDD development
The Namanswa Reforestation Project	PDD Developed, submitted and withdrawn from UNFCCC	A/R 3,900 kT	Risk sharer to develop project further

Source: DNA, 2009

From tables 2 and 3 above it is obvious that forestry and hydro power investments dominate among these projects, but there is also interesting new work related to Programme of Activities (PoA). These sectors also have the largest potential for CERs. However, while hydropower projects seems to be able to develop PDDs and get them to validation stage, the other categories (apart from National Forestry Authority) does not seem to have the financial and technical capacity needed in order to develop their projects to validation.

Table 3 highlights the fact that most of the projects currently in the pipeline claim that they need support and funding for further PDD development. In this respect, Norway's existing support mechanisms for CDM project development could be very relevant. However, as identified in section 3.3, one of the major constraints in developing projects under the CDM in Uganda is the lack of relevant expertise in PDD development in the country. The support mechanism for CDM project development could therefore be used as part of an integrated capacity building and project development programme. The financial support for preparation of the PDDs would be provided directly to local consultants within the framework of a capacity building programme where international experts would provide training and technical assistance to the local experts throughout the PDD preparation process. The format for this programme would be similar to the CDM project identification and capacity building programmes already undertaken in many countries, but instead of the programme aiming to identify relevant projects and complete PINs, the ultimate aim of the programme would be completion of PDDs for projects which have already been identified and are currently in the pipeline.

5 Conclusions and recommendations

To date there are few successes and tangible results from CDM projects development efforts in Uganda, and although there are signs of development in the recent months, a lot of effort has still to be made in order to ensure that Uganda captures the opportunities within the CDM, REDD and voluntary markets.

The Danish initiative is fundamental in order to establish a focus on climate change within the GoU, and strengthening of the CCS will enable Uganda to take care of its climate change mitigation and adaptation issues. The scale and focus of the Danish support programme means that there probably is little if any need for other broad based institutional support to the CCS. To the extent that Norway should provide CDM related institutional support to GoU institutions it would rather be related to specific institutions and sectors where support activities are already provided, and hence incorporating CDM and climate change issues more explicitly into these. Further, the Belgian programme aimed at supporting project development seem complimentary to the institutional support to the CCS and should to a large extent cover the needs of “on the job training” project developers require.

Additional CDM support from Norway should be centered on sectors and project categories where Norwegian development assistance plays a role. Sectors in question are primarily power generation and forestry.

5.1 Fast track interventions

5.1.1 Donor coordination

During the mission all the development partners met expressed a need for stronger leadership and better coordination on climate change issues. Already there are signs that disparate donor supported activities on climate change are risking damaging outcomes, both in terms of overloading the limited expertise within government and initiating a new and potentially damaging circus of workshop culture on the issue.

The need for coordination is evident; the next step would be to find the modality for intervention. The World Bank suggested assigning a person dedicated to coordinate the cross-cutting issue of climate change amongst the DPs and channelling information on adaptation and mitigation measures to and from the concerned parts of GoU. This would undoubtedly improve the general understanding of climate change and hopefully also ensure better goal achievement on new initiatives. In view of the Danish and Belgian support to the CCS, we suggest that Norway consider supporting such a position, but that location and role be discussed and defined in the DPG and in collaboration with the CCS.

5.1.2 Support for PINs and PDDs

A common challenge for all types of projects is the specific expertise and efforts required to develop projects to the stage of validation, national approval and UNFCCC registration. This includes the development of baseline scenarios, additionality testing and monitoring plans to be specified in PDDs.

Hydro electric power

The principal CDM potential in the electricity sector is with hydropower. PDD development requires baseline scenario calculations with grid emission factors, which are essential for calculating the potential CER's. Information on load duration curves, as the day to day load grid electricity load composition, is also needed. Data recorded by the Uganda Electricity Transmission Company Limited (UETCL) are vital for calculating the relevant grid emission factors and could be made more readily available for project design documents (PDD) preparation.

This and/or other relevant institutions should therefore take active part in providing project developers with relevant data so that credible emission factors can be included in PDDs without unnecessary delay. One way of accomplishing this is by continuously publishing the necessary data at the Electricity Regulatory Authority's website. Another approach is to facilitate that the data is computed and presented in a form that are fully usable for project developers. This approach would naturally fall into the mandate of the proposed Belgian programme on technical support to the DNA office.

Forestry projects

One of the main challenges for the afforestation or reforestation projects globally is to find suitable approved methodologies for PDD development. There are ten approved methodologies⁴ for large scale A/R projects, and two approved projects (China and Moldova). Approximately 33 projects are at some stage of validation with a Designated Operating Entity (DOE).

However, even if the projects are approved, implementation of the project as CDM might prove to be difficult. One example is the Namaswa Project, developed by New Forest Company (NFC). NFC is a well financed company with base in London. They have planted approximately 5000 Ha of forests in Uganda and have ambitions to expand in Tanzania and Mozambique. NFC planned the Namaswa project as CDM, and hired Eco Securities for PDD development. The PDD is finished, but NFC decided to withdraw from further registration/validation due the rigorous framework that had to be followed. These were considered to be of such a disturbing character for how plantation establishment is normally run that NFC decided to give up developing the project under CDM. The reason is that they do not have the human resources needed to follow up the requirements under CDM.

The example above is an illustration of the current situation, with a low degree of approved projects, and theoretical methodologies that never has been tested in real projects. To enable successful implementation of the forestry projects listed in table 3, deviations of the existing methodologies might be required if they are to be implemented under CDM.

Another complicating factor for forestry projects is the relatively complex demand for baseline documentation. The baseline for A/R projects has to be calculated from a 1990 scenario, and the net carbon sequestration calculated on basis of this baseline. This adds

⁴ AR-AM 1 to 10

significant complexity to the CDM project as such data is difficult to obtain. Most of this data is located in satellite archives with organisations such as NASA in the USA.

An area for intervention is to make key information for baseline determination more easily accessible for project developers. This can be achieved by collaborating with the National Forestry Authority and the National Biomass study, where key data on existing and previous land cover is located, and where the required data could be computed and made available to project developers. This would require recruitment and training of qualified personnel, and should be integrated in the existing support Norway provides to National Forestry Authority.

It is also recommended that Norway makes public the support mechanisms for CDM-project development Norad already has available. Several of the projects listed in section 4 might qualify for support, and has also requested assistance for developing PDDs. This should be coordinated with the ongoing Belgian programme on support to CDM-project development.

5.1.3 Building local advisory capacity – A/R and energy

A general experience in CDM capacity building programmes in many countries in Africa and other developing regions has shown that one of the key success factors for CDM project development is a strong base of local firms that can provide CDM consulting and advisory services. Ad hoc capacity building workshops with foreign consultants cannot provide the follow through and ongoing support for project developers that are required to successfully develop a CDM project. Uganda has very few local organisations with both theoretical knowledge and practical experience in the CDM that could support project developers. Capability exists within the National Forestry Authority, and at regional level with Green Resources. Both organisations are prioritising own projects in lieu to assisting others.

Provision of a facility where the private sector and the GoU authorities could draw on skilled human resources would increase the volume of high quality PDDs within the sectors. The best way to build capacity in these supporting organisations is to combine short, introductory training workshops, with developing actual PINs and PDDs. Organisations like Uganda Carbon Bureau and NFA could become such organisations within the A/R and REDD sectors. For the energy sector, it would be natural to look within the local engineering consulting companies. The Belgian programme would be a natural arena for this intervention, but Norway should follow up and see whether such activities are taken care of when the detailed programme is finished.

5.2 Programmatic interventions

5.2.1 Reducing the deforestation and degradation, REDD

With areas of forests which are rich in biodiversity such as the Albertine Rift Montaine Forests, Lowland Rainforests, Lake Victoria Mosaics, wooded savannas and lots of wetlands, Uganda had prospects of becoming a REDD pilot country in the second phase of the World Bank initiated Forest Carbon Partnership Facility (FCPF). According to the World Bank:

“The new Forest Carbon Partnership Facility is designed to set the stage for a large-scale system of incentives for reducing emissions from deforestation and forest degradation, providing a fresh source of financing for the sustainable use of forest resources and biodiversity conservation, and for the more than 1.2 billion people who depend to varying degrees on forests for their livelihoods.

The FCPF will build the capacity of developing countries in tropical and subtropical regions to reduce emissions from deforestation and forest degradation and to tap into any future system of positive incentives for REDD. In some of these countries, the FCPF will also help reduce the rate of deforestation and forest degradation by providing an incentive per ton of carbon dioxide of emissions reduced through specific Emission Reductions Programs targeting the drivers of deforestation and forest degradation.”

Last year Uganda prepared its Readiness-PIN, a document needed to qualify for the FCPF, and in October 2008 was recommended as one of the pilot countries for the second phase. With its R-PIN, Uganda has provided a strong case for initial support to overcome several challenges associated with the issue of performance based system, especially if REDD shall have influence at the household level. Hence NFA calls for direct and substantial support to fully consult with and reach land owners to explain the benefits of REDD and build its own institutional and regulatory systems and capacities for REDD.

The R-PIN addresses the forestry/agriculture link and the rural livelihoods approach used in that has been identified as suited to REDD.

Apart from awareness creation on REDD at the national level, the next steps are likely to be establishment of an improved land cover / land use map. Further a review of the national grid for biomass monitoring with a view to improving its use to detect both degradation and deforestation, and lastly a system to estimate forest cover and estimation of carbon stocks and emissions from loss of forest cover. Although outside the scope of this report, we would like to emphasize that a success of the REDD mechanism at national level is closely related to the ability of monitoring. Consequently there is a need for strengthening monitoring institutions like Department of Meteorology and the National Biomass study.

5.2.2 CDM Programme of Activities (PoA)

Wood-fuel accounts for 93% of the Uganda’s’ energy balance, and access to grid delivered electricity is in the range of 5%. This represents an enormous potential for energy efficiency (EE) measures. Efforts within EE are widely recognized as one of the lowest-cost “sources” of energy. An example of an effective EE measure in Uganda would be to improve fuel efficiency in household cooking. Improvements here would mean that a lot of woody biomass could be saved for other purposes and is a cost-effective to invest in energy-efficiency improvements. Energy efficiency contributes to energy security, economic growth, and environmental sustainability through local emissions reductions and mitigation of global greenhouse gases (GHGs).

The challenge of using CDM to promote investments in EE in Uganda is that the individual installations and sites are too small to be viable as CDM. The small installations are too small for offsetting the transaction costs for preparing the CDM project documentation and getting the project registered. One solution is the newly approved “CDM Programme of

Activities” (PoA) process, where a project document is prepared for a large programme with many small sites, even if not all of those sites are known in advance. This allows the coordinating entity of the programme, whether a public or private entity, to apply for carbon credits for the entire programme, and pass those benefits along to the individual site owners.

In view of the Uganda Renewable Energy Policy (URP) efforts should be made to bring in knowledge and expertise on how Uganda could make use of PoA to enforce its policy. One of the most likely areas for applying the PoA approach is for small scale renewable energy technologies such as solar PV systems, solar water heaters, micro hydro projects, or micro-scale wind turbines. The GTZ is having programmes and experiences on solar PV, micro-hydro, biogas and wood fuel efficiency as well as policy advisory. These programmes are not coordinated with the Development Partner Group for Environment and Natural Resources.

It is our recommendation the use of PoA in relation to the URP is discussed in the Development Partner Group for Environment and Natural Resources, and that GTZ programmes are taken into consideration assessing further intervention.

5.3 Recommendations

The following concrete recommendations are made for interventions from Norway to facilitate more CDM-projects in Uganda, in order of priority:

1. Improve local project development capacity, both in local availability of qualified consultants and enabling project developer to access finance for developing PDDs.

In order to facilitate better PDDs and ensure CDM project development, more local project development capacity needs to be developed. The Danish missions to Uganda are currently building capacity with the DNA, while the Belgian mission is preparing a programme to facilitate support to project development. Norway should cooperate with these two institutions and follow them closely in order to identify gaps that could be filled with support from Norway. This would especially apply to the forestry and energy sectors, where Norway traditionally has been in lead among the donor community in Uganda. Based on the findings in this report, technical and financial support to project developers and local consultants may be the best way to help promote CDM project developments in Uganda. This should also include support to develop methodologies.

The support mechanism for CDM project development could be used as part of an integrated capacity building and project development programme. The format for this programme would be similar to the CDM project identification and capacity building programmes already undertaken in many countries, but instead of the programme aiming to identify relevant projects and complete PINs, the ultimate aim of the programme would be completion of PDDs for projects which have already been identified and are currently in the pipeline.

2. The World Bank has suggested assigning a person dedicated to coordinate the cross-cutting issue of climate change engagement amongst the development partners. One important task is to channel information on adaptation and

mitigation measures to and from the concerned parts of GoU. Norway should consider supporting a dedicated position for this purpose.

3. Ensure that data on basic data is computed and made readily and easily available for project developers. For energy projects this would be to make available the load duration curves and compute yearly grid emission factors. This should be done within the existing cooperation with the Ministry of Energy and Minerals to be performed by UETCL and made publicly available at ERA and with the DNA. For forestry projects Norway should make use of the existing cooperation with NFA. Baseline data could be computed and made available from the Biomass Study Department, but the need for combining within the relevant forestry institutions (e.g. National Forestry Authority) is therefore important. The National Forestry Authority has CDM capabilities, but strengthening of theoretical knowledge and practical experience seems to be a relevant target for support. This could serve as data source for both NFA areas and private forest project developers.
4. Climate change it is currently the responsibility of the Ministry of Water and Environment. Support from Norway is needed to encourage the office of the President, Prime Minister, and Ministry of Finance, Planning and Economic Development to get involved, so that the issues of adaptation to climate change could be addressed in all sectors of government planning. It should be highlighted that CDM is a mechanism designed to address climate change, while climate change is a national problem that goes beyond the scope of this report. It is our recommendation that the climate change issues are looked at more broadly than CDM alone, and that climate change should be included or addressed in all programs that Norway is supporting in Uganda.
5. Although outside the scope of this report, we would like to emphasize that a success of the REDD mechanism at national level is closely related to the ability of monitoring and documenting changes in biomass land cover. Consequently there is a need for strengthening monitoring institutions like the National Biomass Study (NBS). Given its commitment to the Ugandan Forestry Sector, Norway should assess the status of the NBS and take this into consideration in its ongoing support to the National Forestry Authority.
6. Approved PoAs may be relevant for investment plans in Uganda and support to project developers and relevant public institutions. This is an area of relevance to many Ugandan institutions and development agencies and would therefore require careful planning and donor coordination before any support activity is started. It is our recommendation the use of PoA in relation to the URP is discussed in the Development Partner Group for Environment and Natural Resources, and that GTZ programmes are taken into consideration assessing further intervention.

Appendix A: List of literature

The Clean Development Mechanism in Relation to Energy in East Africa	GTZ, 2008
National Population Policy	GoU, 1995
National Water Act	GoU, 1995
National Wetlands Policy	GoU, 1995
National Health Policy	GoU, 1999
Plan for Modernisation of Agriculture	GoU, 2000
National Forestry Policy	GoU, 2001
National Environment Regulations	GoU, 2001
Energy Policy for Uganda	GoU, 2002
Uganda National Communication to UNFCCC	GoU, 2002
National Forestry and Tree-planting Act	GoU, 2003
National Adaptation Programmes of Action	GoU, 2007
Renewable Energy Policy	GoU, 2008
Final Wetlands Subsector Paper for PEAP Revision	GoU, 2008
Draft Forestry Subsector Paper for National Development Plan	GoU, 2008
Environment and Natural Resources Sector Working Group Paper	GoU, 2008
Subsector paper for the sector on environment, natural resources and climate change	GoU, 2008
Carbon Sequestration Projects in Uganda	ICEIDA, 2007
State of voluntary Carbon Market	Katoomba Group, 2008
A Reformed CDM	UNEP-Risoe, 2008

Appendix B: Mission Programme

Time	Organisation	Contact
Thursday 21 st	Tronder Power Ltd	Gunnar Salseggen Kristin Wæringsaasen
	Norwegian Embassy	Solveig Verheyleweghen Nils Dårflot
Friday 22 nd	National Forestry Authority	Damian Akankwasa
	Uganda Carbon Bureau	Bill Farmer
	Belgian Embassy	Alain Schmitz
Monday 25 th (National holiday)	UNDP	Rose Hogan
	SPGS revision team	Campbell Day
Tuesday 26 th	Electrical Regulating Authority	Frank Sebbowa
	Uganda Investment Authority	Issa Mukasa Godfrey Ssemakula
	Designated National Authority	Philip Gwage Paul Isabirye Chebet Maikut Lawrence Aribo
	Austrian Development agency,	Robert Bürtcher
	DFID, British High Commission	Rob Rudy
	Uganda Wildlife Authority	Imelda Bacudo Richard Kapere
Wednesday 27 th	New Forests Company	Paul West Pierre la Roux
	GTZ	David Otieno Jasmin Fraatz
	World Bank	Martin Fodor
	Danish Embassy	Karina Hedemark
Thursday 28 th	Participation on CDM - workshop organised by UK Department for Business Enterprise and Regulatory Reform, BERR	Margaret Magera
	Norwegian Embassy, summary of mission	Solveig Verheyleweghen Nils Dårflot

Appendix C: CDM Stakeholders contacted

Institution	Name	Email
Austrian Development Agency	Walther Ehmeir	kampala@ada.gv.at
Bakojja New Woods	Bakojja Richard	rbakojja@unffe.org
Designated National Authority	Philip Gawage	nccs@infocom.co.ug , pgwage@googlemail.com)
DIFID	Rob Rudy	r-rudy@dfid.gov.uk
Ecotrust	Byamukama Birihwaho	bb@ecotrust.or.ug
Electricity Regulating Authority	Frank Sebbowa	f.s.sebbowa@era.or.ug
Energy Systems	Emmy Kimbowa	emmikimbo@yahoo.com
Global woods	Kai Windhorst	windhorst@global-woods.com
Green Resources ASA	Mads Asprem, Karl Solberg	mads@asprem.com
GTZ	Philippe Simonis	Philippe.simonis@gtz.de , david.otieno@gtz.de , jasmin.fr
Integrated Rural Development Initiatives (IRDI)	Hellen Gakwaya	gakwaya@utlonline.co.ug
Kakira Sugar works	John Mukasa	projectm@infocom.co.ug
Kampala Jelltone	Meddie Ziwa	Kjslt2001@yahoo.com
Liberty Development Trust (LDT)	George Ochieng	gjochieng@yahoo.co.uk

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Makerere University	Moses Tenywa	tenywa@agric.mak.ac.ug
National Forest Authority	Damian Akankwasa, Paul Drichi	damianb@nfa.org.ug
NEMA	Rose Hogan	rhogan@nemaug.org
New Forests Company	Lee Cunningham	lee@newforestscompany.com
Rural Health Promotion and Poverty Alleviation Initiative (RUHEPAI)	Fredica Baguma	ruhepai@utlonline.co.ug
The Royal Belgian Embassy	<i>Alain Schmitz</i>	Alain.schitz@diplobel.fed.be
The Royal Danish Embassy	<i>Karina Hedemark</i>	karhed@um.dk
The Royal Norwegian Embassy	Nils Dårflot, Solveig Verheyleweghen	nils.darflot@mfa.no , sve@mfa.no
Tronderpower	Kristin Wæringsåsen, Gunnar Salseggen	gunnar@tronderpower.com , kristin.t.waeringsaasen@no
Uganda Carbon Bureau	Bill Farmer	bill@ugandacarbon.org
Uganda Investment Authority	<i>Issa Mukasa</i>	imukasa@ugandainvest.com
Uganda Wildlife Authority	<i>Imelda Bacudo, Richard Kapere</i>	Imleda.bacudo@uwa.or.ug , Richard.kapere@uwa.or.ug
Worldbank/IFC	Kundhavi Kadiresan, Martin Fodor	kkadiresan@worldbank.org , mfodor@worldbank.org

Appendix D: Terms of Reference

“Clean Development Mechanism in Tanzania, Uganda and Angola”

I. Background

Norad provides assistance to developing countries in the CDM field as part of its bilateral development cooperation. Funds for private sector development earmarked for climate related cooperation can be used for support to development of specific projects, as well as capacity building and institutional cooperation.

The distribution of CDM projects among Kyoto Protocol non-Annex B countries is highly uneven. Some countries, especially the Least Developed Countries (LDCs) are all but non-existing in CDM pipeline statistics. There are several reasons for these countries' lacking ability to benefit from the possibilities to promote investments and sustainable development. It is assumed that lack of capacity in the institutional framework and the CDM enabling framework are important factors, along with the general investment climate and risks.

Norad thus wishes to target our assistance towards strengthening these countries' capacity within CDM to enable them participate in the carbon market and reap the benefits from the mechanism.

Based on a pre-mapping and contact with the embassies in a number of countries, Norad has selected Tanzania, Uganda and Angola as focus countries for this effort.

II. Purpose

The primary objective of this assignment is to map and analyze the capacity to identify and develop CDM projects, with the goal of identifying needs and propose areas of improvement for possible Norwegian support to capacity development.

The results will be used to advise Norad and the embassies on how to promote initiatives in cooperation with relevant stakeholders and how to strengthen the countries' capacities within CDM..

The team shall also present an overview of potential CDM projects with a brief analysis of major challenges related to the approval process

The assignment shall be carried out in close dialogue with key actors in the concerned countries

III. Scope of work/priority issues

The team has two major tasks:

- 1) to carry out a mapping of the CDM status for each country
- 2) to propose capacity building initiatives for possible Norwegian support

Task 1 should cover the following aspects:

- A general overview of the countries' ongoing and planned CDM activities;
- An overview of the institutional framework, players and stakeholders (e.g. DNA, local scientists and consultants, Department of Energy, etc.) and their strengths and weaknesses;
- Bottlenecks that hinder CDM development;
- Other donors' efforts and initiatives on CDM;
- Identify needs for capacity building, (preferably) avoiding overlap with ongoing efforts by other donors, so as to avoid duplication of other donors' efforts/programs.
- Potential for CDM projects for various sectors, including if possible concrete projects in the relevant sectors.

Task 2: A proposal for areas of CDM capacity building cooperation with Norwegian assistance should be developed in line with the following:

- The proposed areas should be based on identified bottlenecks and needs for capacity building
- Initiatives should target sectors or fields of expertise in which Norway has expertise and can add value
- Harmonization with other donors' programs – avoiding overlapping efforts
- Initiatives should be developed in understanding with the related authorities who will be the owner of the project(s)/programme
- In order to ensure good effect of the capacity building initiatives, concrete projects should be implemented in parallel. Identifying potential projects during the mapping phase will therefore be an advantage.
- The proposal should also consider how cross cutting issues such as gender and anti-corruption may be an integral part of the recommended activities

IV. Implementation of the work

A. The plan for implementation

The plan for implementation shall follow the description given in 'Proposal T-2008-314 Clean Development Mechanism in Angola, Tanzania and Uganda'.

B. Team composition

The Team shall consist of:

Francois Sammut

Knut Ødegaard

Maja Tofteng

Norad will include own staff in the team for certain parts of the assignment.

C. Source of information and methodology to be applied

The study shall (mainly) be done as field work in Tanzania, Uganda and Angola.

The team is expected to meet with:

- relevant project developers
- relevant government representatives (first and foremost representatives from the Designated National Authority)
- the Norwegian embassy
- other relevant donors
- other partners and stakeholders who might provide relevant inputs

It is also important that the team consults and coordinates its work with other relevant publications and work on CDM (e.g. other donors' efforts, scientific publications, relevant energy masterplans, etc.).

CDM-related information from the Embassies in each country will be made available to the team, giving an early indication of specific fields which may need special attention.

D. Timetable for preparation, field work and finalisation of report

Schedule and tentative time frame:

- The assignment shall be carried out and finalized by March 1, 2009.
- The total number of work days for the whole assignment is expected not to extend a total of 36 days, including travel. The work shall be done within the following time frame:
 - a) 6 days of field work in each country, for a total of max 18 days,
 - b) 3 days per country, for a total of 9 days, for preparations in Norway before the travel (to get an overview and get relevant contacts in the concerned countries, etc.); and
 - c) 9 days for the finalization of the report and briefing(s) with Norad after the consultant has returned to Norway

V. Reporting

- The report shall contain a summary of the main findings, main conclusions and recommendations. The specific proposals for initiatives to assist the countries in strengthening their institutional framework for CDM facilitation shall be a separate chapter in the report.
- The report shall be written in English and not exceed 20 pages for each country excluding annexes.
- A draft report shall be presented to Norad. The team shall deliver the final report based on comments given to the draft report.
- The final report shall be submitted in electronic form within two weeks after Norad and the embassy have given their comments to the draft report.

Mari Sofie Furu

18.12.2008