

# Assessing Support Activities by International Donors for CDM Development in Sub-Saharan Africa with Focus on Selected Least Developed Countries

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## ABBREVIATIONS AND ACRONYMS

ACAD	African Carbon Asset Development
ACP	African, Caribbean and Pacific
ACTS	African Centre for Technology Studies, Kenya
AfDB	African Development Bank
AMADER	Agence Malienne pour l'Energie Domestique et l'Electrification Rurale
AMCEM	African Energy Ministers, African Ministerial Conference on Environment
BCR	Banque Commerciale du Rwanda
BK	Bank of Kigali
BMU	German Ministry for the Environment and Nuclear Safety
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung
BNR	Banque Nationale du Rwanda, National Bank of Rwanda
BRD	Banque de Developpement
CaPP	Climate Protection Programme
CASCADE	Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation
CD4CDM	Capacity Development for the Clean Development Mechanism
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CF	Carbon Finance
CFL	Compact Fluorescent Lamp
CF-SEA	Carbon Finance for Sustainable Energy in Africa
CIM	Centre for International Migration and Development
CME	CDM PoA Coordination/Managing Entity
COOPENER	Community Cooperation with Developing Countries, EU programme with focus on capacity building and training
COP	Conference of the Parties to the UNFCCC
CSS	Carbon Capture and Storage
DANIDA	Danish International Development Agency
DEG	Deutsche Investitions- und Entwicklungsgesellschaft mbH
DFI	Development Finance Institutions
DIFID	UK Department for International Development
DNA	Designated National Authority
DOE	Designated Operational Entity
DRC	Democratic Republic of Congo
EB	Executive Board
EC	European Community
ECIG	Earth Council Institute Geneva
ERM	Environmental Resources Management
ERPA	Emission Reduction Purchase Agreement
EU	European Union
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
ICI	International Climate Initiative
IDRC	International Development Research Centre Canada
IFC	International Finance Corporation
IPP	Independent Power Producer

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ISAR	Institut des Sciences Agronomiques du Rwanda
KCB	Kenya Commercial Bank
KfW	Kreditanstalt für Wiederaufbau
KIST	Kigali Institute of Science and Technology
LDC	Least Developed Country
LoA	Letter of Approval
LULUCF	Land Use, Land-Use Change and Forestry
MEAs	Multilateral Environmental Agreements
MININFRA	Ministry of Infrastructure of Rwanda
MRV	Measuring, Reporting and Verification
MSW	Municipal Solid Waste
MW	Megawatt
MWh	Megawatt Hour
NAFA	National Forestry Authority
NAMA	Nationally Appropriate Mitigation Action
NEPAD	New Partnership for Africa's Development
NORAD	Norwegian Agency for Development Cooperation
NUR	National University of Rwanda
OECD	Organisation for Economic Co-operation and Development
OMVS	Organisation pour la mise en valeur du fleuve Sénégal
PDD	Project Design Document
PIN	Project Identification Note
PoA	CDM Programme of Activities
PV	Photovoltaics
ProBEC	Programme for Basic Energy and Conversation in South Africa
RCCP	Regional Climate Change Programme
RDB	Rwanda Development Board
REEEP	Renewable Energy & Energy Efficiency Partnership
REMA	Rwanda's Designated National Authority
SADC	Southern African Development Cooperation
SEA	Swedish Energy Agency
SIDA	Swedish International Development Cooperation Agency
SPEAR	Small-Scale Programme of Activities in East Africa covering Renewable Energies
SSA	Sub-Saharan Africa
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UoB	Urwego Opportunity Bank
URC	UNEP Risoe Centre
USD	US Dollars
UCCBP	UNDP-UNEP CDM Capacity Building Programme
WB	World Bank
WI	Wuppertal Institute for Climate, Environment and Energy

## PREFACE

The African continent belongs to the regions that are most vulnerable towards climate change. Least developed countries in sub-Saharan Africa will be hit hardest and have the least capacity to respond. While international carbon markets cannot provide financing for adaptation efforts, they can play a crucial role in attracting carbon finance, providing innovative green technology and fostering access to renewable energy. These technologies are essential for meeting the increasing energy demand in Africa. While Africa is only responsible for approx. 4% of the world's greenhouse gas emissions, vast emission reduction and carbon sequestration potentials exist in the forestry and agricultural sector. However, there are also opportunities for CDM projects in the sectors energy efficiency and renewable energy, which have been widely disregarded by now.

For the past 14 years, the Clean Development Mechanism (CDM) has been successfully utilized to attract investments into emerging markets and developing countries. Yet, the CDM performance in Africa has been very limited so far: Africa's share in registered CDM projects amounts to only 2% of the global CDM pipeline. However, the African continent is itself by no means homogenous – most of the projects are implemented in North Africa and South Africa, only few are located in Least Developed Countries (LDCs). In general, demand for Certified Emission Reductions (CERs) from African countries currently exceeds supply.

In order to enhance the representation of the continent in the carbon market, the EU directed efforts to improving the investment climate in Africa. With regard to the CDM, the EU Climate and Energy Package, adopted in 2009, foresees special provisions for CERs from LDCs. Even in the absence of an international agreement on climate change, certainty on the acceptance of credits from projects that started in LDCs post-2012 will be provided until 2020 provided that these projects are clearly additional and contribute to sustainable development. The revised EU Emissions Trading Directive and the EU Effort Sharing Decisions both include further provisions to foster CDM project developments in LDCs.

During the climate negotiations at Copenhagen, Parties agreed to further improve regional distribution of the CDM projects and to develop measures for countries with less than ten registered CDM projects. Against this background, the last months have shown a number of steps forward: In July 2011, the CDM Executive Board adopted guidelines for taking into account the concept of 'suppressed demand' in CDM methodologies. This marks an important advancement for acknowledging the particularities of the CDM in African LDCs, where demand for energy is often artificially suppressed due to the prevalence of poverty and lack of economic resources. The concept implies that under such a situation, emissions remain low, while improved access to energy would result in higher emissions.

The ongoing development of standardized baselines on the international level will further contribute to improving the representation of Least Developed Countries in the global carbon market. As mitigation potentials in African LDCs are often high in the complex energy efficiency and renewable energy sectors, standardized baselines lower the complexity of baseline calculations for individual projects or PoAs.

In fact, statistics reveal that 2011 has shown an uptake on the CDM in LDCs: Registration of CDM projects in Africa has increased in relation to previous years. While LDCs have been underrepresented in conventional CDM projects, a good share of Programmes of Activities (PoA) are being developed in LDCs. The programmatic approach which allows to address multiple small emission reduction units in various locations seems well suited to the characteristics of African countries. This is a promising development.

In order to contribute to fostering carbon markets in sub-Saharan African least developed countries, the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) decided to expand the scope of its CDM/JI-Initiative to the region. Approaches comprise the development of appropriate methodologies, feasibility studies on CDM



potentials in respective areas and industries, pilot projects on household energy and programmatic CDM. Promising initiatives funded by the BMU's International Climate Initiative are the Gold Standard Foundation's project on "Innovative Tools to Lower the Entry Barriers and Allow for Scaling-up of Carbon Market Activities in Under-Represented Regions" and the "African Carbon Asset Development Facility" (ACAD), a public-private partnership between BMU, UNEP and the Standard Bank aiming at supporting replicable CDM projects and providing carbon finance training to local financial institutions in sub-Saharan Africa.

Complementing the above-mentioned activities, BMU has initiated a research project on the participation of LDCs in sub-Saharan Africa in the carbon market. It has a twofold objective: first, it shall assist BMU in developing its strategy for climate change mitigation activities in Africa with the additional intention that the results will see a wide uptake from other institutional donors and the private sector. BMU hopes that this may serve as a first building block for practical and operational climate mitigation activities. Second, conclusions with relevance for the international debate on climate change and the post-2012 carbon market will be used for valuable policy advice. Wuppertal Institute and GFA ENVEST with their combined knowledge and expertise in the carbon market, climate negotiations, policy advice, sustainable development, as well as practical CDM experience are fulfilling all expectations for successfully conducting the research. Complementary, a network of experts is involved in the process, ensuring that existing knowledge gained in related BMU project activities will be considered and synergies be used.

In a first step, the research team assessed technical CDM project potentials in eleven Sub-Saharan African countries in the renewable energy, energy efficiency, transport, waste management and other selected sectors.

This report analyses capacity building activities in the region carried out by multilateral organisations as well as by individual Annex I governments in order get an overview of the donor activities landscape. I am confident that this compilation will be of use for other actors that aim at fostering carbon markets in Africa.

*Berlin, December 2011*



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# 1 INTRODUCTION

This report assesses capacity building activities of multilateral organisations as well as individual Annex I countries in selected Least Developed Countries (LDC) in sub-Saharan Africa (SSA). In the context of the ongoing research project “Integrating Africa’s Least Developed Countries into the Global Carbon Market”, commissioned by the German Environment Ministry (BMU), it represents an interim step: it paints the picture of an overall donor activities map of the region, while an in-depth evaluation of the specific situation as regards local capacities and concrete capacity building needs is part of the subsequent work packages. These are going to focus on two different countries, thus making it possible to assess and to evaluate the local climate policy and the state of the Clean Development Mechanism (CDM) infrastructure in detail and on the ground.

Therefore, the following provides for a broad overview of support activities funded by developed countries in the study region. This comprises both country-specific programmes as well as activities addressing regional aspects.

This is followed by a short glance at the overall capacity building needs of sub-Saharan LDCs, complemented by an analysis of the capacity situation and the support needs in selected countries based on expert judgment.

Conclusions on lessons learnt for future support activities of Annex I donors complete this report. In an annex, a summary of all donor activities is presented, which is complemented by an even more detailed Excel-sheet with the underlying raw data.

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## 2 METHODOLOGY

This report assesses support activities of international donors for CDM capacity building, technology and finance in Burkina Faso, the Democratic Republic of the Congo (DRC), Ethiopia, Malawi, Mali, Mozambique, Rwanda, Senegal, Tanzania, Uganda and Zambia. As the number of support activities in the region is significant and also due to time/budget constraints, the scope was limited to recent activities (past two – five years). Moreover, the work was limited to documents available in the public domain. This proved a restricting factor as especially reports of bilateral activities (i.e. one Annex I country is engaged in one recipient country) are not necessarily published.

In a first step the activities of major relevant institutions, such as World Bank (WB), European Union (EU), the German Kreditanstalt für Wiederaufbau (KfW), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), African Development Bank (AfDB) and others, were screened with regard to CDM capacity building in the relevant countries. This was complemented by an internet research in order to identify additional activities. For this purpose, the internet sites of national and international development and environmental agencies / bodies were browsed. In addition, a broad internet search was conducted on information including potential donors and implementing agencies as well as CDM-related activities in the selected African countries.

Moreover, support activities which indirectly support CDM activities or are directly linked to climate change and therefore enhance knowledge or capacities relevant for CDM activities were compiled. The latter are not regarded as direct CDM capacity building in the narrower sense; therefore they were classified in an additional section. These activities were not gathered systematically but included only when encountered during the main internet research. Furthermore, there are numerous funds related to CDM and carbon mitigation activities which are directly or indirectly involved in capacity building activities. These could not be considered in our analysis.

The detail and amount of information found vary considerably between the countries in question. For most countries, information on donor activities stemming from various sources was added one at a time. For Uganda and Tanzania, by contrast, systematic compilations of donor activities were found. In some cases, only limited information was available for a donor activity, obstructing its explicit identification.

The information gathered was classified according to the following categories: donor, implementing agency, name of activity, scope, activity, description, time/duration, budget, source and comments. These data are contained in an overall Excel data sheet which is accompanying this report<sup>1</sup>.

In a second step, this data compilation was then completed and validated against the practical background of one of the principal authors of this report, who has been working for several CDM project assessment, technical assistance and capacity building programmes in Africa, among them Capacity Development for the Clean Development Mechanism (CD4CDM), Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation (CASCADe), and Carbon Finance for Sustainable Energy in Africa (CF-SEA).

In a third step, a first evaluation of the actual CDM capacities in selected countries was produced. Due to time and budget limitations this is solely based on expert judgements / working experience in the countries. Hence, this evaluation covers only those countries where the project team can offer personal first hand experience.

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<sup>1</sup> Please note that the Annexes of this document contain condensed information, p.ex. consolidated categories

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Finally, the existing evaluations of CDM capacity building activities were analysed, see chapter 6. These evaluations allowed for the production of lessons learned for future CDM capacity building programmes in the region.

Based on all above described steps, recommendations for further support activities by Annex I countries were developed. These will be tailored and deepened in course of the in-depth country studies of the research.

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### 3 DONOR ACTIVITIES' LANDSCAPE

In this section, donor activities for CDM capacity building, technology and finance in Burkina Faso, the Democratic Republic of the Congo, Ethiopia, Malawi, Mali, Mozambique, Rwanda, Senegal, Tanzania, Uganda and Zambia are presented to give a brief overview of the donor activities' landscape. Also, relevant regional activities covering more than one country are included. Most of the regional donor activities are multi-donor activities.

This presentation is a brief summary of the activities listed in the annexes of this document, displaying more extensive information on all the programmes. These tables also list further support activities with a broader focus (i.e. climate change) or activities that indirectly support CDM project development. As the information on the support programmes is extensive, the tables also contain shortened information.

#### *Scope of Support Activities*

The donor activities are roughly grouped into three categories:

1. Capacity building,
2. Technology and
3. Finance.

The first category includes 'classical' institutional as well as project related CDM capacity building activities (e.g. by Norwegian Agency for Development Cooperation (Norad), Swedish International Development Cooperation Agency (SIDA) or the Nairobi Framework Joint Work Programme) as well as awareness raising activities and the set-up of a number of fora to exchange information on CDM projects (e.g. CDM Bazaar) or to discuss carbon investment in Africa (African Carbon Forum).

Activities supporting the whole CDM project cycle (such as project identification, design, approval, finance, implementation, monitoring, e.g. by Danish International Development Agency (Danida)) or which aim at developing a national CDM portfolio (e.g. CD4CDM and its follow-up initiatives) may belong to 'classical' CDM capacity building activities or technology specific support (or both), depending on the focus of the activity. Donor activities which concentrate on the development of specific technologies or sectors are classified as technology support.

Moreover, there are donor activities focusing on the financial settings of CDM projects (African Carbon Support Programme, World Bank activities) and promote private investment in CDM (e.g. by the UK Climate Change Projects Office). These are grouped under finance support. Some of these activities such as Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation (CASCADe) focus on specific sectors.

#### *German Engagement*

Germany is involved in several regional activities supporting the CDM. Like the multi-donor activities described, the German support activities include, inter alia, capacity building as well as finance and technology (e.g. African Carbon Asset Development Facility (ACAD), Programme of Activities (PoA) Support Centre Germany), while the KfW Advance Payment Facility centres on the provision of funds to assist projects. In addition, legal and regulatory capacity building for carbon trading and investment is provided. Some of the activities funded by Germany are embedded in a broader development context (e.g. Climate Protection Programme (CaPP)) or focus on civil society and sustainable development (e.g. Gold Standard Foundation). Other programmes and projects focus on specific technologies or countries, such as a project in Burkina Faso on biomass use, funded by the German International Climate Initiative (ICI).

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Further BMU-funded activities are currently considered.

### *Other donors*

There are numerous other initiatives by Annex I governments and multilateral organisations. The World Bank, for example, has been increasingly focusing on capacity building for supporting municipal carbon finance activities and helping countries prepare for future climate change instruments. Under the Carbon Finance Capacity Building for Cities programme funded by the Swiss government, the World Bank Institute has been working with the city of Dar-es-Salaam and three cities in South Africa who have expressed their needs to better understand possibilities to access finance.

In Tanzania, this has led most concretely to support for developing local waste management projects that have been under various stages of preliminary assessment and design (including a couple of Project Identification Note (PINs) developed under the CD4CDM activity). The programme seeks to replicate the successful registration of the Mtoni landfill gas recovery project, which is a public-private partnership between the city and an Italian waste management firm.

Agencies such as the United Nations Development Programme (UNDP) and the Swedish Energy Agency (SEA) have recently begun to think more in regional terms, i.e. with a view that regional programmes benefit not only from economies of scale and management efficiencies but also more effective knowledge management potential. They promote activities that are explicitly multi-country and regional, thus supporting institutional strengthening and cooperation on technical and regulatory issues – see, for example, the UNDP-United Nations Environment Programme (UNEP) CDM Capacity Building in sub-Saharan Africa Programme.

### *Country-specific activities*

The donor landscapes differ considerably in the countries in question. While we found only five activities in DRC, more than twenty were identified in Tanzania. In the following, a few selected programmes and activities are highlighted.

In **Burkina Faso**, quite a few of the regional capacity building programmes were carried out, such as Carbon Finance Assist of the World Bank, the CDM Green Facility (operated by UNEP Risoe Centre (URC), founded by Danida). One technology-specific activity focusing on improved cook stoves was supported by ACAD. Burkina Faso also hosts an ICI project on biomass use conducted by atmosfair.

In the **Democratic Republic of the Congo**, the Federal Ministry for Economic Cooperation and Development (BMZ) and URC, as well as UNDP/UNEP, Nairobi Framework, the World Bank and others are active in capacity building (Africa Assist) and pilot projects. Two activities focus on the promotion of and capacity building on biomass energy technologies and Land Use, Land-Use Change and Forestry (LULUCF) (Programme for Basic Energy and Conversation in South Africa (ProBEC), CASCADE).

Among other programmes, UNDP-UNEP CDM Capacity Building Programme (UCCBP) provides workshops and institutional capacity building as well as technical support for CDM project development in **Ethiopia**. Carbon Finance (CF)-Assist / Africa Assist and the CDM in Africa Initiative do capacity building as well. UNDP / UNEP's regional capacity building project for sub-Saharan Africa focuses on capacity building to facilitate access to the carbon markets.

In **Malawi**, African, Caribbean and Pacific (ACP)-CD4CDM supports institutional and project related capacity building as well as project development. Further capacity building activities are funded by the World Bank, Miombo Network, SIDA and BMU. United Nations Conference on Trade and Development (UNCTAD) / Earth Council Institute Geneva (ECIG) Carbon Market Programme is active in Malawi with its programme „Getting Started with CDM in LDCs“.

ProBEC, GIZ and SADC's Programme for Basic Energy and Conservation in Southern Africa, is developing capacity for Programmes of Activities with cook stoves.

**Mali** has benefitted (and still is) from a dozen of support programmes related directly to the CDM, ranging from ACAD, CASCADE, CF-SEA, CaPP as well as Africa Assist. The World Bank's BioCarbonFund is supporting a pilot CDM A/R project on reforestation around 6,000 ha of Acacia Senegal, a species endemic to the whole African Sahel. Moreover, a multi-donor initiative led by the WB and the Spanish Carbon Fund funds the Félou Regional Hydropower Project, a run-of-river hydroelectric installation on the Senegal River in Mali. The Félou project will deliver clean energy to the interconnected grid in the sub-region including Mali, Mauritania and Senegal.

**Mozambique**, like Mali, has seen considerable support by Annex I governments as well as multilateral organisations. Apart from the „standard support package“, the country has seen, inter alia, engagement by ProBec's Country Assistance, focusing on the promotion of energy efficient cooking technologies as well as biofuels.

**Rwanda** has attracted nearly the same amount of donor activities. UNDP, funded by United Nations (UN) foundation and Fortis Bank, has for example developed a CDM project in the country involving water purification using solar energy displacing formerly fossil fuel sources. The WB's Community Development Carbon Fund supports a Compact Fluorescent lamp (CFL) distribution project, which is intended to be scaled up to national level.

Apart from the usual capacity building, **Senegal** (together with Burkina Faso, Mali, DRC and others) takes part in several COOPENER activities funded by the EU. Among others things, these focus on training platforms for biomass-energy technologies in the region as well as promoting best practice approaches of off-grid rural electrification and developing know-how of institutions and local operators.

There are various donor activities in **Tanzania**. Capacity building for relevant stakeholders (public, private, civil society, funding agencies and academia) was provided by UNDP/UNEP which also developed CDM projects. Furthermore, the CDM in Africa Initiative as well as SIDA and Norad supported project development. Also, CD4CDM, ProBEC Programmatic CDM Project, ProBEC's Country Assistance across Southern African Development Cooperation (SADC), the regional capacity building project for sub-Saharan Africa, Getting Started with CDM in LDCs, the World Bank, Renewable Energy & Energy Efficiency Partnership (REEEP), UK Department for International Development (DFID) and others are actively building capacities in Tanzania. Workshops on PoAs (KfW Carbon Fund), legal aspects (SIDA, BMU) were conducted and there is capacity building for CDM in buildings, the industrial sector and renewable energy (e.g. Photovoltaics solar energy, rural micro-hydropower, biogas energy).

In **Uganda**, the Belgian Technical Cooperation funds a long-term international consultant (CDM expert) and national carbon market expert to build institutional capacity within the Climate Change Unit of the Ministry of Water and Environment and the Ugandan Investment Authority. Moreover, Uganda is the seat of the Uganda Carbon Bureau, which has developed the Small-Scale Programme of Activities in East Africa covering Renewable Energies (SPEAR) PoA, supported by KfW PoA Support Centre and GIZ-CIM (Centre for international Migration and Development). SPEAR covers the five countries of the East African Community (Kenya, Uganda, Tanzania, Rwanda and Burundi), and the Republic of Sudan.

**Zambia** was host to the ProBEC's head office, which was established in 2005 at the GIZ office in Lusaka. Therefore, activities have taken place that include stakeholders' workshops, conducting baseline studies, sensitisation workshops for partners, publicity through exhibitions at national events, training in household stove production and use, institutional and rocket barn production, training in stove/fuel use as well as cooking demonstrations. Zambian activities of the CDM Green Facility, implemented by URC, included workshops, hands-on training of national experts, identification of potential CDM projects and technical advice, with the latter focusing on energy, waste management, industry, and others.



## 4 CAPACITY BUILDING NEEDS OF SUB-SAHARAN LDCS

The barriers to CDM development and capacity needs are fairly similar across SSA Least Developed Countries, although some countries have a higher institutional capacity and greater inherent CDM investment potential, cp. Arens et al. (2011).

The main barriers include:

- structural challenges (e.g. low energy consumption, low Greenhouse Gases (GHG) intensity of electric grid, weak regulatory frameworks for independent power production);
- limited skills base in energy project development (especially in the financial appraisal and technological risk aspects);
- limited awareness and involvement of local financial actors and investors;
- limited understanding of CDM methodologies and their application, as well as lack of available data to complete project documents sufficiently;
- weak or split incentives between decision-makers and technicians to pursue CDM opportunities.

The following presents a compilation of first impressions for further demand of support activities by Annex I countries in selected sectors and areas of SSA. These will be further elaborated and tailored in the in-depth country studies of the research. The text therefore is based primarily on expert judgment.

### *Ill-suited methodologies*

Lack of a “regional baseline” for the South African Power Pool or other methodological solutions to cross-border grid connected renewable energy projects has inhibited CDM project realisation in a number of African LDCs whose power sector is largely based on hydropower (e.g. Mozambique, Zambia, Malawi, DRC). Zambia, for example, produces 99% of the electricity with hydropower, and domestic Independent Power Producer (IPP) projects are generally to be considered to be unattractive due to low electricity tariffs. On the other hand, a number of larger-scale hydropower projects is under initial development and is seen to be bankable, in the context of regional electric power markets and given the impending electric power shortage in South Africa. Therefore, the CDM could be instrumental in realising such projects which would effectively displace new thermal capacity additions being added to the Southern African Power Pool at the margin.

In this context, BMU is already playing a constructive role through co-funding a concerted, two-phased effort to develop appropriate methodologies for addressing this barrier. A study has recently commenced spearheaded by a consortium led by the ACAD facility, with support from GFA ENVEST and regional energy / CDM experts. Given the strategic importance of this barrier to a number of countries under consideration, it would be beneficial to ensure a successful implementation and outcome of this activity, which is expected to include the need for supporting projects in a second phase to go through the CDM process using the newly developed methodologies or tools from the first phase.

### *Empowering the financial sector*

It is essential to increase understanding among local financial institutions of their potential role to play in the CDM market. It is important to tailor separate, non-technical investment briefings uniquely for local private investors and key national financial actors. These could outline the potential financial benefits to their engagement in market development, and build capacity on how to perform investment analysis and due diligence of emission reduction projects, and how they can help manage some of the complex risks associated with such innovative projects



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(such as funding private sector Coordination / Managing Entity (CMEs) for CDM Programmes of Activities (PoA)).

Although these could be conducted on a regional basis, it would be preferable to conduct such briefing meetings at the national level, in order to ensure the availability and focus of such actors, who would be unlikely to travel for a couple of days for a CDM workshop. In addition, these could be coupled with case studies of real, actual demonstration projects that have successfully achieved CDM validation or registration in the country/sub-region of Africa.

### *Successful and sustainable training*

Over the last decade, “hands on” approaches to capacity building and more segmented training activities for particular target groups have been established as the preferred approach, rather than general multi-stakeholder CDM awareness-building workshops. Most advisable are training activities that are more in-depth than the typical 2-3 day workshops and closely based on actual project concepts under development. If possible, case studies should also focus on projects with a high replication potential for other countries in the region that are not part of the immediate project, or projects that have a multi-country or “regional” dimension.

### *Fund for technical feasibility studies for CDM opportunities*

Quite often, the development of additional CDM project opportunities is hampered by a lack of funding programmes for technical feasibility studies. Many Project Idea Notes (PINs) remain at the level of pre-feasibility studies without advancing in the development stage. This approach would complement the loan scheme as currently developed by the United Nations Framework Convention on Climate Change (UNFCCC) secretariat since the support of the latter starts at the Project Design Documents (PDD) stage only.

A fund providing grants for the feasibility study costs (e.g. up to 75% of the feasibility study costs for small projects) may eliminate this bottleneck. Conditions for the provision of the grant could foresee e.g. that the fund’s contribution is repaid if the project is implemented. In a second step, this could be complemented by the provision of information on existing financing options for renewable energy / energy efficiency and carbon projects (e.g. African Carbon Asset Development Facility and Renewable Energy funding programmes, KfW Deutsche Investitionsgesellschaft (*German Investment and Development*, KfW DEG) / KfW Iplex Bank, Euler Hermes securities, various carbon funds etc.)

## **5 EXISTING CAPACITIES AND CAPACITY BUILDING NEEDS IN SELECTED SUB-SAHARAN LDCS**

The scope of this report focuses on compiling and structuring international donors' activities for the region as a whole (cp. work package 2 of the Wuppertal Institute / GFA proposal). Additionally, while scanning the various programmes, it was possible to develop first impressions of the capacity situation and the support needs in the different countries. These impressions are based, again, on personal experiences of the authors and are therefore non-systematic and subjective to a certain extent. Moreover, this preliminary assessment was not possible for all 11 countries under consideration. As explained above, a thorough examination of the situation on the ground will be conducted in the in-depth studies.

### **5.1 Capacities and Capacity Building Needs in Mali and Senegal**

According to the UNEP CF-SEA evaluation (2010), Mali has “a well functioning Designated National Authority (DNA) as a result of the programme, with a permanent secretary capable of promoting CDM in public networks, maintaining an updated CDM register, and participating actively in the Conference of the Parties (COP). It has also issued letters of approval.”

Mali has seen investment in programmes to support reducing fuel wood consumption by improving the efficiency of fuel wood transformation into charcoal, and improved efficiency of wood fuel and charcoal consumption through the dissemination of more efficient kilns such as the ‘meule Casamançaise’, and improving promoting a household energy fuel switch from fuel wood to renewable biofuel sources.

Complementary measures include the increase of fuel wood availability based on a more rational exploitation of forestry resources. This type of activity lends itself to a PoA approach, and requires additional “supportive” interventions beyond CDM technical assistance. Specific projects that could be case studies include: household energy management programme in Mali spearheaded by AMADER, the rural electrification agency, and partnerships with private enterprises such as Katene Katji and Deguessi Vert, which are active in the market of improved cookstoves and bio-briquettes or biomass “logs”. The germination of such a programme is already happening but a scale-up support is required. Cooperation with Organisation pour la mise en valeur du fleuve Sénégal (OMVS) is also possible to disseminate technologies in their zones of operation.

In both Mali and Senegal, there is also wide scope for capacity interventions to support CDM activities in the biofuel sector. There is technical potential for additional bioethanol production from molasses and cashewnut crops (CDM methodology development required, however). In addition, several projects are under advanced stages of development concerning Jatropha biodiesel, including one focused on rural electrification in twenty communities in Mali, developed by Mali Folkecenter, and a fuel switching project being developed by Deguessi Vert in the Kita and Kayes area (estimated to produce about 117,000 t/CO<sub>2</sub> per year).

At least two other very large-scale jatropha biodiesel projects are being developed by local private actors, including Tissina SARL. Although there are methodological, financial, and other implementation barriers to successful project development, this type of project has a high degree of replication potential for the region. Furthermore, large investments are already secured in some cases, lending an opportunity to leverage CDM for ensuring high local sustainable development benefits. For example, such projects could promote rural electrification using multi-functional platforms or dedicated simple engine turbines.

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## 5.2 Capacities and Capacity Building Needs in Mozambique

The Norwegian Government has played the lynchpin role in supporting the energy and CDM sector in Mozambique. For example, it has supported the elaboration and implementation of a strategy plan for rural electrification and an energy master plan, as well as the establishment of necessary institutional frameworks. The Norwegian Embassy in Maputo has undertaken a number of capacity needs assessments on CDM, including those oriented to the viability of developing specific projects (e.g., Matola Gas or Cementos do Mocambique) as well as entire sectors (e.g., natural gas Independent Power Producer projects, Carbon Capture and Storage (CCS)). Currently a national capacity building programme is underway, being implemented by Pöyry consultancy, the scope of which includes technical assistance to projects under development (PDD development) as well as institutional capacity building support to the DNA and other relevant ministries. Therefore, any potential BMU intervention in Mozambique would benefit from close coordination with the Norwegian government in order to avoid any potential overlap.

In the energy sector, Mozambique still has vast hydropower resources that are yet to be tapped, with a technical potential of between 12,500 to 14,000 MW (Ministry of Mineral Resources and Energy) of which only some 20% is currently exploited. Like for Zambia, a methodology would need to be in place for Mozambique to earn carbon credits from power exported to South Africa as 90% of its produced electricity is exported. Sustainable biofuel production also has a large potential for increased exploitation, with a number of major resource mapping, feasibility studies and pilots already having been carried out. These concern not only sugar cane based ethanol, but also biodiesel production from plantations of *Jatropha* and various sorghum varieties. A national biofuels policy and strategy (until 2015) was also adopted in 2009, underpinning the viability of CDM programmes along these lines.

The majority of the Mozambican population does not have access to electric power, and depends on wood or charcoal to meet their energy needs. For rural populations, there would thus be a large scope for CDM PoAs that focus on increased charcoal production efficiency and energy efficient stove dissemination. However, in the context of the latter, it is unclear whether there is any justification for BMU engagement as the private sector is already developing a number of such projects across Africa seemingly without the need for project development support.

## 5.3 Capacities and Capacity Building Needs in Rwanda

Rwanda accounts already for roughly 2.5% of the expected Certified Emission Reduction (CERs) to be generated in Africa with four projects in the CDM pipeline – a significant accomplishment as a landlocked LDC with a very small territory. Rwanda has five projects in advanced stages of documentation development, three projects under formal validation, and one registered CDM activity. A bundled small-scale hydropower project is being developed by the Ministry of Infrastructure (MININFRA) and funded by the Rwanda Development Board (RDB) with an existing offtake agreement for CERs by the Swedish Energy Agency. Rwanda has what is generally considered to be one of Africa's more "business friendly" environments, and it continues to rise in rankings on traditional indexes on institutional stability, effectiveness and transparency year after year.

Rwanda has benefited from a Japanese-funded and UNDP-administered CDM capacity building programme, which started in 2009 and plans to finish in September 2011. A hallmark of this assistance has been the funding of an international carbon expert and a local CDM development officer in the Secretariat for Rwanda's Designated National Authority (REMA). According to REMA, this twining of international and local expertise over a dedicated period of

time has significantly contributed to building local capacity for pinpointing CDM opportunities and assisting local project proponents to develop specific transactions.

Four distinct sets of stakeholders have benefited from CDM awareness raising and training under this programme:

- members of the DNA Secretariat staff within REMA and its Steering Committee members from various Ministries such as Natural Resources, Agriculture, Commerce, Infrastructure, Economic Planning, National Forestry Authority (NAFA), Rwanda Development Board (RDB), Rwanda Agriculture Development Authority, National Land Centre, Institut des Sciences Agronomiques du Rwanda (ISAR), Kigali Institute of Science and Technology (KIST), National University of Rwanda (NUR),
- CDM project developers including 120 people from the private sector,
- local banks including the Central Bank (BNR), Banque Commerciale du Rwanda (BCR), Kenya Commercial Bank (KCB), Urwego Opportunity Bank (UoB), FINA BANK, COGEBANK, Banque de Developpement (BRD), Bank of Kigali (BK), and ECOBANK
- journalists.

The assistance provided by UNDP also supported the calculation of the country's national grid emission factor and cooperation with the Ministry of Infrastructure on how to enter into negotiations with private investors and carbon buyers concerning CDM transactions.

The UNEP Risoe's CD4CDM programme started its activities in Rwanda in mid-2010 and will extend to the end of 2013. Its design was closely coordinated with UNDP and in many ways picks up where this programme ends. Two national CDM workshops have already taken place. The programme supports internal training activities of REMA staff and the DNA Secretariat to ensure continuity in the institutional capacity of the DNA when the UNDP programme ends. In addition, a number of the projects in advanced stages of development will be supported to finalize their CDM documentation (e.g. PDD).

## **6 LESSONS LEARNT FOR FUTURE CAPACITY BUILDING PROGRAMMES**

While a consistent evaluation of the ongoing capacity building programmes was not part of the work package, a few insights into existing evaluations available in the public domain as well as personal experiences provide for valuable insights into success factors for capacity building programmes. For example, an external evaluation of the 'Using Carbon Finance to Promote Sustainable Energy Services in Africa' (CF-SEA) programme found the overall impact rating to be 'satisfactory' with the economic efficiency of the project rated as 'highly satisfactory' and the sustainability rated as 'likely'. Four CDM projects have been registered in three of the target countries and the programme successfully assisted in the establishment of DNAs and supportive legislative frameworks and in improving the operational capacity of governmental institutions to regulate CDM projects. The evaluation noted that the project's value of having set in motion a process created a snowball effect that should not be underestimated.

The existing evaluations shed some light on the success factors for effective programme interventions, which are enumerated in the following in a non-systematic manner:

1. African countries need to build more robust systems and processes for policy and development to support carbon market investment and project implementation. All too often knowledge and power related to CDM and the carbon market is too highly centralised and governments have been ineffective in building effective coalitions with the private sector and civil society organizations (Clark et al., 2010).
2. The experience in past capacity building programmes in many countries has shown that one of the key success factors is an approach that builds a strong base of local firms that can provide ongoing CDM consulting and advisory services after the programme has stopped. Initiatives that are either overly reliant on external expertise or on government agencies and their internal expertise are often unsustainable. For example, the Austrian CDM in Africa Initiative utilised significant resources to calculate grid emission factors for a few countries in the region using Austrian experts; these required subsequent updating and ongoing training of local actors by other capacity development programmes in order for these to be systematically integrated and maintained by power systems operators and validated by Designated National Authorities. Pairing new or existing local organizations with more experienced regional and international consultants to transfer skills in carbon project development under a "learning by doing" approach is far more likely to be sustainable (Pöyry, 2010; UNEP 2010, LTS International, 2009).
3. Local financial institutions are important actors whose capacity is critical to build to deepen the carbon market. An increasing body of evidence in the academic literature also points to the fact that the majority of CDM projects that have been realised to date have been largely funded by host country financial institutions, with little to no foreign direct investment leveraged. CDM and other carbon financing mechanisms are normally only capable of supplying a small portion of total project costs especially for smaller renewable energy and biomass projects. Although local banks (including development banks but also commercial banks and micro-finance organizations) have expressed an interest in greater engagement with the carbon markets as a means to fulfil their own mandates and promote local development, it is still seen as a "high risk" area. Risk mitigation instruments (contingent grants, guarantees, export credits, concessional credit lines for on-lending to renewable energy projects, etc.) funded by Development Finance Institutions (DFI) and other public financing sources are necessary to overcome the internal barriers to their more active role in providing private finance and injecting capital into new businesses that can support CDM market development (PoA Coordinating / Managing Entity and consultancies, for example) (Clark et al., 2010; UNEP 2010).
4. The Southern African Development Cooperation region is the geographical area in sub-Saharan Africa that has benefitted the greatest from CDM capacity building

programmes. A large number of past programmes have targeted at least one or more countries in SADC, although few past programmes were explicitly regional. These past efforts vary widely in approach, scope, and level of funding. While some programmes produced CDM documentation as an output, many did not. The newer programmes appear to place greater emphasis on project development activities with a view toward PDD and/or validation of near-term CDM opportunities (Pöyry, 2010).

5. Activities that are explicitly multi-country and regional can promote institutional strengthening and cooperation on technical and regulatory issues. Agencies such as UNDP and the Swedish Energy Agency take the view that regional programmes benefit not only from economies of scale and management efficiencies but also more effective knowledge management potential. It would also be beneficial to foster greater dialogue on CDM development strategies into regional fora for energy sector decision-makers (e.g. SADC Energy Ministers, Forum for African Energy Ministers, African Ministerial Conference on Environment (AMCEM), etc.). Yet, care should be taken in programme design to take into account country-specific barriers and challenges which can exist, despite apparent similarities on the surface (Pöyry, 2010; Clark et al., 2010).
6. Supporting early stage project development requires grant funding and should be linked as much as possible to existing development finance and commercial finance channels in the region. Some of this work happens through capacity building programmes such as CD4CDM, or the UNDP-UNEP CDM Capacity Building programme. These programmes are all generally limited to supporting only a few projects. Transaction cost financing should build on the work by ProBEC and African Carbon Asset Development (ACAD) and explore what gaps still exist and how to cost-effectively address those gaps. In general, improving access to project financing from (foreign) investors and concessional loan financing is a fundamental pre-requisite if real progress is to be made on CDM market penetration in Africa (Pöyry, 2010; UNEP, 2010).
7. Capacity building is a necessary but insufficient pre-condition for increased CDM investment. Other barriers difficult for any capacity development to surmount include a generally poor investment climate, uncertainty over the future of the post 2012 climate regime, and a relatively high level of transaction costs that need to be spent on developing CDM projects with no clear sense of likelihood of return.



## 7 RECOMMENDATIONS FOR CAPACITY BUILDING ACTIVITIES

The analysis shows that quite a number of capacity building activities were carried out in the recent past. However, not all programmes were successful and sustainable in the sense of providing enduring, long-lasting effects on the development of local CDM policies, capacities and project implementation.

In the following, some tentative recommendations regarding capacity building activities in African LDCs in general will be given. As noted above, these will be further elaborated and adapted to the local situation in the respective country studies.

- **Support the development of more conducive regulatory and policy frameworks that will increase host country attractiveness to carbon investors. Facilitate greater sense of host country ownership and prioritization in CDM implementation.**

This would comprise technical assistance and policy advisory work focused on the development of, inter alia, CDM national action plans, legal reviews/ gap analyses by sector and for the DNA operations, and new legislation either directly or indirectly related to carbon investment in the context of general trade and investment promotion policies.

Outcomes of such work could include:

- Streamlined and more legally robust DNA procedures, e.g. improved documentation of management flows
- Development of new fiscal instruments such as tax relief on carbon credit sales, harmonization of fiscal and other investment policy incentives so that CDM can complement other policy instruments to promote climate mitigation
- Establishment of minimum technology standards for small-scale Renewable Energy / Energy Efficiency products which are most relevant to PoAs
- Development of framework policies to facilitate CDM projects among different line ministries, which could also lead to identification of priority national programmes that could be implemented with the support of CDM investment through publicly or privately led PoAs.
- Development of climate change and CDM legal registries
- Training of public and private sector lawyers on carbon law and negotiating equitable emission reduction purchase agreements (ERPAs)

Zambia has, for example, established a governmental office or committee to ensure that CDM considerations are holistically integrated within national policies and priorities. Other countries, such as Mali, have undertaken studies to improve CDM regulatory frameworks and DNA operations and to pinpoint areas for future institutional strengthening. Such “good practice” should be reinforced and more widely promoted among other LDCs.

- **Support the development of simplified methodologies for sectors with high potential in Africa.**

This could be based on the standardised baselines concept and monitoring approaches / requirements such as average deemed savings that are realistic for rural African contexts. Simplified methodologies should be focused on project types particularly suited to PoA approaches. They should also take into account opportunities to address the problems of “suppressed demand” for power in Africa and the reliance on antiquated, diesel gen-sets in energy baselines (see, for example, a discussion paper prepared for the 5<sup>th</sup> DNA Forum). These new, Africa-appropriate methodologies could be developed through partnerships between global and regional research institutions with CDM expertise, local project developers, and regional energy / carbon experts, in such a



way that expertise in carbon methodology development and verification can be more widely shared among African experts. This would be a stepping stone to building national capacities for future National Appropriate Mitigation Activities (NAMA) in the coming decade, mainly in the field of measuring, reporting and verification (MRV).

- **Establish emissions baselines for energy-intensive sectors in each country.** Building on past work on sectoral CDM potential by the World Bank and GFA ENVEST, develop clear sectoral benchmarks and technology benchmarks for the energy-intensive sectors in LDCs that are most likely to be the subject of fuel-switching and / or energy efficiency interventions under a CDM approach. Such an exercise should engage local industry organizations and appropriate ministries to collaborate in data collection and validation, again as a bridge to future sectoral CDM and/or NAMAs capacity development
- **Further capacitate local investment stakeholders** to realize opportunities associated with carbon finance. This could be achieved by enhancing the capacity of national investment promotion agencies to engage with foreign investors, building on the work of the CD4CDM and ACP-CD4CDM programmes, and continuing to support training/hands-on transaction support for local bankers and funds through, inter alia, ACAD Facility. Similarly, regional activities that bring together investors with local project developers and policymakers, such as the African Bankers Investment Forum and the Africa Carbon Forum, seem to be well received by stakeholders as providing concrete platforms for deal-making away from the “crowded” space of Carbon Expo where African needs get lost.
- Establish a **fund for financing CDM feasibility studies** for filling the gap between projects at the PIN level and the wide range of financing programmes for renewable energy projects with a completed feasibility study. Although regional and global financing programmes for projects with completed feasibility studies are in place, for many project developers it is difficult to secure the funding to bring their projects to even this stage. A specific African LDC climate fund could provide grants to promising and innovative project opportunities. Financing modalities may e.g. foresee that the grant will be repaid in case a project is successfully implemented. This fund would ideally complement the UNFCCC loan scheme currently under development (cp. above).
- **Pioneer effective knowledge management activities**, either as a stand-alone activity or as an integral component of any BMU supported capacity development. It is widely known that knowledge management and information sharing activities, when properly designed and implemented, can be among the activities with the highest return of impact in relation to cost. Unfortunately, much of the CDM knowledge management and networking activities that have taken place in the past have fallen short of creating sustainable, proactive networks to share lessons learned, analytical guidance, and success stories. Typically this is a result of limited resources being dedicated in programme budgets to “serious” efforts at information sharing, network creation, and shared knowledge dissemination. Such activities are often after thoughts or part of ex-post programme evaluations at which point in time much of the robustness of the lessons learned have been lost. A key element for success lies in the approach: good knowledge management activities must be highly participatory at every stage, and it is important that web-based tools are adequately supported by active facilitation and expertise in information management so that the utility of the learning tools is properly framed in the context of user-driven needs and level of existing capacity. The slow internet technology capacity in African LDCs would need to be taken into account in the development of any web-based knowledge management tool, however the CDM in Africa social network site demonstrates that this need not necessarily be a major barrier.

- **Explore opportunities for public private partnerships between local governments and Annex I industries**

As CERs from LDCs will gain more attention soon, it should be explored in what ways industry and other CER buyers from Annex I countries could be better involved in project development in sub-Saharan LDCs. One possibility would be initiating and coordinating the implementation of lighthouse projects / programmes in the region.

Much has been said in the past in relation to the barrier constituted by the lack of locally based designated operational entity (DOEs). African LDCs clearly are disadvantaged in terms of lower access and higher cost of carbon validation and verification services compared to other regions. There has been some progress in this issue recently: at Executive Board (EB) 60, finally, the first Africa-based DOE was accredited, Carbon Check (Pty) Ltd., based in South Africa. Furthermore, a couple of other well-established DOEs have expanded their local presence in the African market, with either permanently based representatives or local offices in Cape Town, Nairobi, etc. However, this can only be a beginning.

Yet it is unclear how BMU could effectively support candidate Designated Operational Entities from the African region without essentially distorting the market. A more neutral option could be to support training of Africans that are seeking to develop their credentials in carbon auditing through pre-existing online training activities (as offered through the GHG Management Institute, for example). There is no guarantee that this would translate into development of DOE capacity in LDCs in Africa, as it is quite likely that their skills would be used by existing DOEs for deployment in other regions or that such experts would be poached by other institutions. In the end, only once there is greater market demand for such services would DOEs probably commit to a higher degree of local presence.

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## ANNEX A: CDM CAPACITY BUILDING PROGRAMMES

### Annex A.1: Regional Capacity Building Programmes

This table lists support activities funded by Germany as well as other international donors in the target region. Country-specific activities are listed in the respective country tables, see below.

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
BMU	UNEP/URC in partnership with Standard Bank	African Carbon Asset Development (ACAD) Facility	Capacity building, Finance, Technology	ACAD provides seed funding as well as conducts training and outreach activities with the aim of empowering African entrepreneurs to access upfront finance and technical support that have been a bottleneck in developing carbon projects. ACAD's strategy draws upon three complementary support lines: risk and transaction cost sharing, technical assistance to project developers, and targeted training and outreach for financial institutions.	end 2009 - mid 2011	EUR 1.54
BMU	KfW	PoA Support Centre Germany	Capacity building, Finance, Technology	Support to the development of CDM Programmes of Activities (PoA). KfW offers advisory, structuring and assessment services for programme proposals as well as financing and grants to cover the preparation of programme concepts, PDDs and monitoring plans.		
BMU	KfW / UNEP Collaborating Center / URC	Kfw Advance Payment Facility	Finance	KfW provides up-front grant funding to assist projects in their carbon asset development. The project preparation grants are then "repaid" in the form of CERs which are then retired through a public foundation.		
BMU	Gold Standard Foundation		Capacity building	Support to Gold Standard Foundation - embedded experts in all regions (including SSA) to work with project developers and to promote an understanding of the Gold Standard certification system and project cycle.	2009-2010	
BMU	Gold Standard Foundation	Training Local Gold Standard Experts	Capacity Building	Development of top-down simplified baseline methodologies. Training and promotion of Gold Standard projects. Development of voluntary Gold Standard methodologies suitable to pro-poor African carbon investment activities.	2008 - ongoing	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
SIDA and BMU	UNEP, UNEP Risoe Center, STEM and the African Carbon Asset Development (ACAD) Facility	Legal and Regulatory Capacity Building for Carbon Trading and Investment	Capacity Building	Regional workshop in Nairobi with participants from Benin, Botswana, Burundi, Cote D'Ivoire, Kenya, Malawi, Nigeria, Rwanda, Sao Tomé und Principe, Tanzania, Uganda, Zimbabwe. Case study Zambia, designed to build capacities on the legal aspects of carbon trading and CDM among African countries.	Sep. 2010	
DFID and BMU	CDM Watch Initiative	Support to civil society organisation impacted by CDM	Capacity building	DFID is supporting a programme, led by the CDM Watch initiative, to enable developing country civil society organisations and local communities that are impacted by CDM projects to voice their concerns before projects are approved or rejected by the CDM Executive Board.		
BMZ	GIZ	Climate protection programme for developing countries (CaPP)	Capacity building	CaPP supports developing countries in meeting their obligations arising from the UNFCCC. Specific promotion of individual measures supports sustainable development in the partner countries and reinforces their ability to adapt to climate change. Recipient(s): E.g. Indonesia, Chile, China, Columbia, Ghana, Morocco, Peru, South Africa, Mali; Burkina Faso, Mozambique, Senegal, Vietnam, Mexico; Peru, Madagacar, Rwanda.	1999-2010	
BMZ	gtz climate protection program, URC , Perspectives, E+Co	CDM Capacity Development for Sub-Saharan Africa	Capacity building	The program aimed to provide access to clean and affordable alternative sources of energy to the majority, to stimulate their development and generate revenues from the emission reductions. This comprises technical, institutional, and financial aspects, amongst others.	2008-2009	\$0.5 million
UNFCCC, UNDP, UNEP, UNEP Risoe Center, UNITAR, UNCTAD, IETA, AfDB, WB		Africa Carbon Forum	Finance, Capacity Building	"The African Carbon Forum (AFC) is a trade fair and knowledge sharing platform for carbon investments in Africa that brings together representatives from designated national authorities (DNA), national focal points, UN agencies, governments and the private sector. The Forum includes matchmaking and deal facilitation sessions aimed at enabling potential CDM project participants and developers to showcase their projects to interested parties, including investors and carbon buyers."	First forum: 2008, Second forum: 2009, Third forum: 2011	Roughly \$200k per event

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Various governments	UNFCCC, UNDP, UNEP, UNEP Risoe Center, UNITAR, UNCTAD, IETA, AfDB, WB	Nairobi Framework Joint Work Program	Capacity Building, Finance, Technology	Helping developing countries, especially those in sub-Saharan Africa, to improve their level of participation in the CDM. UNFCCC coordinates, the other partners implement programmes of work. 5 pillars: <ul style="list-style-type: none"> <li>* Build and enhance the capacity of Designated National Authorities (DNAs) to become fully operational;</li> <li>* Build capacity in developing CDM project activities</li> <li>* Promote investment opportunities for CDM projects;</li> <li>* Improve information sharing and outreach on activities, education and training; and</li> <li>* Foster inter-agency coordination.</li> </ul>		
UNFCCC	URC	UNFCCC CDM Bazaar	Finance	The UNFCCC CDM Bazaar is a cost-free "virtual information exchange place" for sharing information on CDM project activities and CER transactions among stakeholders worldwide.		
French Global Environment Facility	URC and UNEP, CIRAD, French National Forestry Office	Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation (CASCADE - Africa)	Capacity building, Technology	"CASCADE aims at enhancing expertise to generate carbon credits in land use, land use change and forestry (LULUCF) as well as bioenergy activities in Sub-Saharan African countries. Capacity building efforts will adopt a hands-on, learning by doing approach in which local developers are given the opportunity to develop and prepare Project Idea Notes (PINs), Carbon Finance Documents (CFDs), and/or Project Design Documents (PDDs) through direct technical assistance. Pilot projects will be supported in the following target countries: Benin, Cameroon, the Democratic Republic of the Congo, Gabon, Madagascar, Mali, and Senegal.	2007-2011	overall budget: € 2.3 M
Directorate-General for International Co-operation (DGIS) of the Netherlands Ministry of Foreign Affairs	URC	Capacity Development for the CDM (CD4CDM)	Capacity building	"The objective of the project was to equip participating developing countries with a broad understanding of the opportunities offered by the CDM and to develop the necessary institutional and human capabilities that allow them to formulate, review, approve and implement projects. A global project carried out in selected countries from sub-Saharan Africa, South-East Asia, Middle East & North Africa, and Latin America. Target African countries for phase I: Egypt, Ghana, Morocco, Mozambique, Uganda and Côte d'Ivoire. Target African countries for phase II: Tanzania, Algeria and Mauritius."	Development, Phase I and Phase II: 2002-2009	\$15 million unfccc-source: \$12.5 million



Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
European Commission	URC	Capacity Development for the CDM in ACP countries (ACP-CD4CDM)	Capacity building, Finance, Technology	"The project is a component of the larger umbrella Project "Capacity Building related to Multilateral Environmental Agreements (MEA) in African, Caribbean and Pacific (ACP) Countries", funded by the EC. "The activities enable countries to identify, design, approve, finance, implement and monitor CDM projects that address their sustainable development priorities and offer cost-effective options for carbon credit buyers to comply with obligations under the Kyoto Protocol. Activities implemented by URC will emphasize the development of a national CDM portfolio of projects that could be marketed in international carbon events (such as Carbon Expo) and posted on the website of each country's Designated National Authority (DNA).	03/2010-12/2014	EUR 4.35 million, approximately EUR 1.25 million for African activities
SIDA	Swedish Energy Agency (STEM) / National Environmental Management Authority of Kenya, Ministry of Energy and Minerals of Tanzania, and Ministry of Water and Environment in Uganda. Consultants: Cornland International and Baker & McKenzie	Capacity Development for CDM in East Africa	Capacity Building, Technology	"The East Africa programme has a regional character and follows two parallel tracks. The first track aims at institutional capacity building through build awareness and knowledge about CDM among different categories of stakeholders, for example potential project owners, financial and legal institutions and governmental agencies. Information about the aim and implementation of CDM projects is disseminated through for example workshops and seminars. Three of the program's workshops were carried out in Nairobi in partnership with UNEP & ACAD Facility, including a regional workshop on legal and regulatory capacity building for DNAs and commercial lawyers and two seminars for local bankers and project developers.  The sub-regional program's main activity is the second track which involved preparation of PDDs as a way of building capacity among local entities through a "learning by doing" approach involving close training by international experts to draft Project Design Documents (PDD). The aim is to register and validate the projects according to the CDM rules and subsequently carry out the project in practice."	08/2007-07/2010	US\$ 1.95 million, \$60,000 for NEMA in Kenya
Norway - Ministry of Foreign Affairs	African Development Bank experts from Pöyry consultancy	African Carbon Support Program	Capacity Building	Embedded international consultants working with African Development Bank to support integration of carbon project development into lending and investment operations. Additional regional capacity development activities planned.	2010-2012	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Norway - NORAD	Central Energy Fund of South Africa; Greenstream Network	Capacity Building Support for Development of Clean Development Mechanism (CDM) Projects	Capacity Building	Funding of local and international carbon experts to build capacity within CEF Carbon, an arm of the South African Central Energy Fund under the Department of Energy. Focus on internal capacity building as well as support for development of a portfolio of municipal and other CDM activities within South Africa and neighbouring countries.	2008-2010	
Netherlands (Development Cooperation)	Twente University	"Formulating Successful CDM Project Proposals"	Capacity Building	An annual course for mid-level developing country policymakers and practitioners for roughly 3-4 weeks' duration. Increasing focus on CDM project development preparation training. Co-sponsored and facilitated by experts from URC. A number of participants from African LDCs take part every year.	2000 - ongoing	
Danish International Development Assistance (Danida)	URC	CDM Green Facility - Phase I and II	Capacity Building, Technology	A bilateral technical assistance on advanced CDM development support with the aim of complementing other initiatives supported by different donor governments such as the UK, Sweden and Finland towards achieving Nairobi Framework objectives. Phase II started in 2010 in two countries: Ghana and the Maldives.	Phase I: 2007 - 2009 Phase II: 2010 - 2013	Phase I: US\$ 0.54 Million Phase II: US\$ 0.9 Million
Finland, Spain, Sweden	UNDP and URC	UNDP-UNEP CDM Capacity Building in Sub Saharan Africa - Phase I and II	Capacity building, Finance	"A regional CDM capacity building project aims at facilitating the access of sub-Saharan countries' access to CDM market... The objective of the project is to enhance public and private sector capacity to access carbon finance, and to overcome barriers impeding the take-off of a carbon project market in sub-Saharan Africa." Phase II will focus more strongly on project development support.	Phase I: mid-2007 to mid-2009 Phase II: mid-2009 to mid-2011	Phase I: US\$1.7 Million Phase II: US\$4.0 Million
UK BIS and DECC	IT power and other consultants	UK Climate Change Projects Office	Capacity building	"Promotes private investment in CDM and JI and provides advice to potential investors. Trade Visits throughout 2005- 08 bringing UK companies investing in CDM together with project developers abroad." Recipient(s): Asia, Africa, South America	2006-2008	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
World Bank	Energy Research Center (University of Cape Town), Imbewu Enviro-Legal Strategies		Capacity building	CCS piloting in Africa through research, support for developing legal/institutional frameworks, and project piloting		
Austria, others	IFC	Climate Change Investment Program for Africa (CIPA)	Capacity building	Promoting investment in sustainable energy working through financial institutions in Africa. The umbrella program has three separate implementation and management tracks, with targeted activities in Kenya, South Africa and Nigeria.	2010 - ongoing	
European Commission		CDM Awareness building for Key Govt. Institutions	Capacity Building	Workshops and stakeholder consultations to increase awareness and understanding of CDM Benefits. Participating Countries: Swaziland.		
Various countries	Central African States Development Bank	Financial Strategy for CDM projects	Finance	The Central African States Development Bank has also developed a financial strategy for CDM projects. Its aim is to facilitate access to funding.	2008-2009	
UN Foundation and the CDCF	UNEP Division of Technology, Industry and Economics (DTIE), the UNEP Risoe Centre, and the World Bank's Community Development Carbon Fund (CDCF)	Carbon Finance for Sustainable Energy in Africa (CF-SEA)	Capacity Building, Technology	The focus of this project was on developing projects in the energy sector, with strong community benefits. "Main activities included technical workshops, identification of projects, advisory support to DNAs in establishing guidelines and procedures, and assistance to local intermediaries (consultancies and/or NGOs) in preparing PINs and PDDs... A series of 3-4 workshops in each country was coupled with hands-on training for building local capacity to assess and implement CDM project opportunities. These targeted project sponsors in particular, but also newly formed DNAs, relevant line ministries, local banks, technical consultants, and industry associations."	2005-2009	US \$1.2 million, 50% for capacity development activities 50% for project development activities

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Austrian Minister of Agriculture and Forestry, Environment & Water Management	Austrian DNA for CDM, Kommunalkredit Public Consulting (KPC), Energy Changes	CDM in Africa Initiative	Capacity building, Technology	"Development of local capacities in cooperation with respective DNAs; computation of grid emission factors for some countries A general feasibility check during the pre-project phase, an analysis of the potential contribution to ecological, economic and social development, support in the field of project development and project funding and purchasing of CERs, general feasibility check during the pre-project phase, analysis of the potential contribution to ecological, economic and social development, support in the field of project development, project funding."	2006-2008	EUR 1.5 million
GEF	World Bank	Capacity Building for Community-Based Carbon Management	Capacity building	Targeted capacity building for Sustainable Land Management in Sub-Saharan Africa. Many projects piloted linked to the World Bank's Bio Carbon Fund. Despite the large potential in the region for poor rural communities to enhance their livelihoods through long-term incremental revenues for carbon management activities on a sustainable basis, relatively few successful models exist. This project will address this gap by promoting sound models and promoting information sharing and replication of best practice in the region that are applicable to different social and geo-climatic contexts. Careful monitoring and comparative evaluation of pilot project outcomes will provide stakeholders and new potential beneficiaries in the target countries and beyond with information and strategies necessary to replicate and scale up carbon management activities.	2006-2008	\$1 million
AfD/French Global Environment Facility, Switzerland, Austria, others	World Bank Institute	Carbon Finance Assist (CF-Assist) - Africa Assist including its regional programmes (a) Southern Africa (b) Western Africa	Capacity Building, Technology	"A capacity-building programme designed to prepare CDM projects in Africa following a specific strategy for Africa to ensure them an equitable share of the benefits of carbon finance. This programme aims to develop knowledge acquisition capacities (training for experts, project identification, support to implementation and networking between interested parties).The programme's second objective is to carry out about forty CDM projects to serve as references for launching the CDM mechanism in Africa. A six-month preparation phase, followed by a five-year active implementation phase, with a core focus on facilitating CDM project development."	Regional programs (a) Southern Africa (b) Western Africa 2004-2008 (completed)	CFAssist FGEF funding: 2,0 M EUR, Total cost: 14 M EUR

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
UK Department for Environmental Affairs and Rural Development (DEFRA)	DEFRA, Marmanie Consultants	Africarbon	Capacity building	Africarbon was conceived as an incubation activity for a sustainable, for-profit entity to support project development in Africa which could be cross-subsidised through consulting and DNA capacity building. Initial private sector contributors included Barclays Bank, Shell, and Standard Bank. Initial funding led to a strategic business plan for the organization and supported an interim Secretariat which engaged with stakeholders at the Dakar Africa Carbon Forum. UK Government support for the initiative was eventually shelved, however.	2007-2008	
Sida	Lund University IIIIEE in collaboration with UNEP and UNDP	Online course for developing country practitioners under the Energy for Sustainable Development (E4SD) program on carbon finance and CDM	Capacity Building	This online course workshop "Carbon finance: current status and future opportunities" ran from 12 to 30 April 2010. The course is partially subsidised by Sida. The training seeks to bring together previous course participants to discuss their experiences with CDM projects, to address the current challenges related to CDM project development, institutions and markets. As such, the workshop also seeks to generate a brainstorming of ideas on potential and feasible actions that can contribute to accelerating carbon finance in developing countries. It also planned to discuss future potential Post-Kyoto mechanisms. The target audience for the workshop encompasses energy and development specialists from energy ministries, planning authorities, national utilities, financial institutions, multilateral and bilateral Official Development Assistance organisations, energy service companies (ESCO), NGOs as well as investors, project planners, producers of renewable energy and energy efficient technologies, and Independent Power Producers. Around 30-40 participants participated, many of whom came from LDCs in Africa. It was facilitated by a Sr. Carbon Finance expert from URC.	2010	
n/a	Abbas S. Kitogo (person)	CDM in Africa Network	Capacity building, Technology	"This Network Links all Stakeholders Interested in CDM in Africa." "This is a free networking website for all professionals involved in CDM throughout Africa or interested and connected with Africa in matters related to CDM, Carbon Credits, GHG reduction projects, VCS, Voluntary Projects, GHG/CDM Project Development, Financing, Clean Technology Transfer, Clean Technology selection, REDD. It is designed as a forum for exchanging ideas and views."	2009 - ongoing	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
African Development Bank	International experts	Internal training	Finance	"In 2009 the Bank reviewed about 170 projects in its 2010–2012 pipelines to identify those eligible for carbon financing from the Clean Development Mechanism (CDM) so that CDM components may be built into the qualifying projects at project design. The Bank also carried out staff training to help identify projects suitable for carbon financing and to build relevant implementation measures into project design."	2009	
UNEP	UNEP FI Climate Change Working Group (CCWG) and African Task Force (ATF), consultants	And yet it moves. Success stories and drivers of CDM project development in sub-Saharan Africa	Capacity building	<p>"The case studies compiled and analysed in this study show that despite the challenges encountered in sub-Saharan countries, a number of CDM projects have been successfully implemented, generating financial, environmental, and developmental returns. Their success relied on best practice by both public and private sector actors that have scope for replication and expansion. The aim of this study is to document generic success drivers which are key in ensuring the success of CDM projects in Africa. The success drivers identified fall under three broad categories:</p> <ol style="list-style-type: none"> <li>1. The institutional framework for the private sector to operate in;</li> <li>2. The institutional framework for climate change related projects to succeed;</li> <li>3. Project specific factors. "</li> </ol>	recent draft, undated	
UNDP and Brazilian Social and Economic Development Bank (BNDES)	Brasilian Ministry of Science and Technology and UNCTAD.	The Clean Development Mechanism - Guide 2009	Capacity building	<p>"This Guide has three main objectives:</p> <ol style="list-style-type: none"> <li>1. to provide information to all those interested in CDM project activities;</li> <li>2. to detail the specific regulations governing the submission of CDM project activities in Brazil; and</li> <li>3. to facilitate an understanding of the process and, consequently, promote the development of CDM projects in the country." </li></ol>		

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
DFID	DEFRA and ICF International	CDM needs assessment and evaluation of NF partner activities	Capacity building	"We are working to ensure the mechanisms of a new global agreement deliver thorough reform of the CDM. DFID commissioned a report analysing activities intended to expand access to the CDM in sub-Saharan Africa. The report was presented at the UNFCCC 3rd Designated National Authorities Forum in Addis Ababa in October 2007 and was very well received. The multilateral agencies that implement the CDM have since announced a new "joint proposal" to increase efficiency and address the outstanding capacity building needs. The study found examples of positive synergies with improved coordination of donors under the Nairobi Framework partnership and encouraged more partnerships to attract private sector investment. It also cited success stories in Africa including the CD4CDM initiative, the WB's efforts in empowering KenGen and DBSA in becoming "CDM champions", and the African Bankers Carbon Investment Forum held in May 2007 organised by UNEP/URC and DBSA.	2007	
DFID	LTS	The Potential to Help Increase Sub-Saharan Access to the Clean Development Mechanism (CDM)	Capacity building	"A study to identify the scope for DFID Africa Division to provide support that increases access to pre and potential post 2012 CDM funding by Sub-Saharan Africa. LTS reviewed the CDM experience to date in SSA and presented a detailed report that identified current and future ways for donors to help SSA to increase access to CDM and ways that donors can provide support to increase SSA CDM access. It also provided recommendation as to how DFID can help SSA to increase access to current and potential future CDM."	2009	
DFID	Marmanie Consulting	assessing structural capacity requirements that would allow developing countries to participate in carbon markets	Capacity building	This study examines the capacity needed for developing countries to participate in each of the current and future carbon market mechanisms - from the current CDM including Programmatic CDM, to a reformed CDM and towards mechanisms such as Large Scale Crediting and Trading. It then goes into detail on two case studies for carbon market preparedness: Ghana and Uganda. It goes into some depth on issues around building national MRV capacity at the national institutional level and on the ground. It finds that even in countries with similar levels of development there are unique challenges to building capacity in each context. It also found that weak policy coordination and knowledge management systems were a major barrier to developing robust capacity for countries in Africa to participate in carbon market mechanisms.	11/09 to 06/2010	



Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
AU	NEPAD	Africa Partnership Forum	Capacity building	A study on status of Carbon Finance in Africa and potential policy interventions commissioned by the UNECA and NEPAD under auspices of a special session of the Africa Partnership Forum for a regional meeting in Addis Ababba, November 2009. Describes predominant barriers and opportunities for developing the Carbon market in Africa, including domestic and international reforms as part of the international negotiations process.	2009	
Norway	Pöyry Consultancy	SCOPING STUDY ON SADC ENERGY SECTOR CARBON MARKET POTENTIAL and DESIGN OF SADC CDM ACTION PROGRAMME	Capacity building	Report conducted by Pöyry consultancy on behalf of the Norwegian government designed to assessment capacity needs in SADC region and to develop ideas for an action program that could be implemented in partnership with the SADC Secretariat. The review provides a comprehensive picture of CDM activity in the region, assesses overall CDM potential, and provides the basis for a SADC CDM Action Programme that would target specific capacity building and project development interventions. The overview covers institutional readiness for CDM, previous capacity building programmes in the region, the current project pipeline and the qualitative assessment of sub-sectoral CDM potential.	2010	
Norway	World Bank Mozambique Country Office, AustralCowi and Palmer Development Group	The CDM as an Institutional Catalyst for Carbon Emissions Reduction? Emerging Lessons from Southern Africa	Capacity building	The World Bank undertook a study to scope out the institutional conditions underpinning current efforts to reduce carbon emissions within developing countries. It did this scoping by focusing on recent efforts to participate in the CDM within a few countries in sub-Saharan Africa (Kenya, Mozambique and South Africa) – highlighting what works well; what works less well; and what are the opportunities for improvement."	2008	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Norway	World Bank	Low-carbon Energy Projects for Development in Sub-Saharan Africa: Unveiling the Potential, Addressing the Barriers	Capacity Building	Published in 2008 by the World Bank this study by Christophe de Gouvello, Felix B. Dayo, and Massamba Thiye examines the theoretic potential for CDM projects in the energy and infrastructure sector in SSA and the main barriers to realizing projects within key sectors	2008	
UNEP	UNEP SBCI and URC	The Kyoto Protocol, the CDM, and the Building and Construction Sector	Capacity Building	Published in 2008 by UNEP this study examines the potential for CDM projects in the buildings and construction sector, and includes a focused case study on low-cost housing in South Africa.	2008	
World Bank, European Commission	voluntary consortium of actors	Using Forest Carbon Credits in the Carbon Market - A Technical Workshop	Capacity Building	Policy initiative involving background paper preparation and a study by EcoSecurities on demand for tCERs among European Governments. Also included an extensive one-day technical workshop in Brussels on issues and methods for accounting for LULUCF carbon projects including participation of SSA project developers. Discussion on modalities for potential inclusion in the EU-ETS framework with representatives from EU member states.		
Imperial College, Centre of Environmental Policy	Filippo Berardi	Driving Carbon Finance to sub-Saharan LDCs through Forestry Projects: A Focus on Tanzania	Capacity Building	Masters thesis using Tanzania as a case study to show the attractiveness of carbon financing for developing sustainable forestry investments in LDCs in Africa. Examines effectiveness of ongoing VER and REDD+ pilot activities in the country and general issues of barriers to implementing carbon offset projects.		

## Annex A.2: Capacity Building Programmes in Burkina Faso

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
BMU	UNEP/URC in partnership with Standard Bank	African Carbon Asset Development (ACAD) Facility	Capacity building, Finance, Technology	See overview in "general activities and regional". An improved cook stove project in Burkina Faso implemented by Entrepreneurs du Monde is being supported by ACAD.	end 2009 - mid 2011	EUR 1.54
BMZ	GIZ	climate protection programme for Developing Countries	Capacity building	See overview in "general activities and regional".	•	•
BMZ	gtz climate protection program with involvement of URC (scoping phase for Francophone Africa component) and Perspectives cc for implementation, and E+Co for implementation in East Africa	CDM Capacity Development for Sub-Saharan Africa	Capacity building	See overview in "general activities and regional". In March 2008, three technical capacity development workshops with participants from Senegal, Mali, Benin, Rwanda and Burkina Faso supported by the GTZ were held in West Africa. The workshops focused on bio-power plants using agricultural residues, wind power and efficient stoves."	2007-2008	\$0.5 million
UNIDO, EU		Demonstration Project for 10/11 African Francophone Countries on the Clean Development Mechanism (CDM)	Capacity building, Finance, Technology	"(a) Institutional capacity-building to assist developing countries in establishing and strengthening DNAs" "(b) Increasing awareness, training and networking of developing country DNAs, NGOs, the private sector and all relevant stakeholders, particularly for the development of skills relating to the CDM project cycle" "(c) Improving geographical distribution, knowing well the difficulties of Africa to attract CDM projects, by supporting the development of CDM projects in LDCs and SIDS, through training, CDM market analysis and forums"	completed	\$ 249,162

Danish International Development Assistance (Danida)	Danish Forestry Extension	Technical Assistance to the Burkina Faso DNA/CDM regarding Capacity Development, Carbon Accountancy and Forestry	Capacity Building	<p>"The objectives of the Technical Assistance are to reinforce the capacities of all actors concerned with CDM, especially the DNA and potential project developers, and to develop a carbon accountancy system within the ministries in charge of energy/environment and the DNA of Burkina Faso, enhancing national opportunities to develop the better carbon projects. The present concern is the role of CDM projects, Carbon credit dynamics and biofuels. The TA will be provided within the frame of the Danish support to the energy sector."</p>	09/2008 - 2009	
Danish International Development Assistance (Danida)	URC	CDM Green Facility	Capacity Building, Technology	<p>See overview in "General activities and regional". In Burkina Faso, the project complemented ongoing work on CDM promotion implemented by the Danish Forestry Extension as well as other activities funded by the Danish Energy sector support Program. Hands-on technical advise was provided to the Director of Renewable Energy and Traditional Energy in the Ministry of Energy and Mines on integrating CDM into sectoral policies and projects development. A regional CDM expert was contracted to support PIN development.</p>	2007-2009	
AfD/FGEF, others	World Bank Institute	Carbon Finance Assist (CF-Assist) / sub-program Africa Assist	Capacity Building, Technology	<p>See overview in "General activities and regional". According to 2008 CF-Assist annual report, a country program was started in Burkina Faso in 2007. This included support for developing an initial portfolio of CDM project ideas. A national Workshop on CDM &amp; Energy Policy" was held in Ouagadougou in November 2007. Another training workshop was organised in Ouagadougou in collaboration with ESMAP's SME Program in 2008. The workshop brought together energy SMEs and other stakeholders to discuss issues related to the regulatory framework, carbon finance issues in the existing small-size energy enterprises and how this specific audience could benefit from CDM. It was the first exercise of collaboration on carbon finance issue between the two Ministries of Environment (DNA) and Energy.</p>	2007-2008	FGEF funding: 2,0 M EUR, Total cost: 14 M EUR

### Annex A.3: Capacity Building Programmes in DR Congo

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
BMZ	GIZ	Programme for Basic Energy and Conservation in Southern Africa (ProBEC)	Capacity building	<p>ProBEC will update NAG members on activities carried out in the last nine months and plan for the remaining of the project cycle. There will also be preliminary discussions around the possibility of ProBEC supporting the Ministry of Energy to develop a BEST. Running concurrently at the Grand Hotel was an institutional cook stove expo where different types of stoves currently in use in the DRC will be on display, together with technical information on their efficiency and price.</p> <p>A market study on the potential for improved cooking stoves in Kinshasa has been finalised, and will be used to draw up operational plans for the rest of 2010.</p>	2009 - ?	
French Global Environment Facility	URC and UNEP, in partnership with the French Agricultural Research Centre for International Development (CIRAD) and the French National Forestry Office	Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation (CASCADE - Africa)	Capacity building, Technology	<p>See general program overview in "General activities and regional". Provision of regulatory development support to DNA and in particular a legal review of forestry carbon framework and CDM. National workshops conducted as per program work plan. CASCADE supported carbon documentation for following projects: afforestation and fertility and Kimayala NKONDO (PREF Kimayala and NKONDO); reforestation project using native species in Maringa-Lopori-Wamba region; establishment of the "Bonobo Peace Forest"; EcoMakala and Ibi Batéké degraded savannah afforestation project for fuel wood production. Supported pilot project involving the dissemination of improved cook stoves in the district of Kinshasa.</p>	2007-2011	
Finland, Sweden, Spain	UNDP/UNEP	Regional capacity building project for sub-Saharan Africa	Capacity building, Finance	<p>"A regional CDM capacity building project aims at facilitating the access of sub-Saharan countries' access to CDM market. The target countries are Democratic Republic of Congo, Ethiopia, Kenya, Mauritius, Mozambique, Tanzania and Zambia. The objective of the project is to enhance public and private sector capacity to access carbon finance, and to overcome barriers impeding the take-off of a carbon project market in sub-Saharan Africa."</p>	2007-2008 2007-2009	

WB - Biocarbon Fund Tranche 2	project developer: NOVACEL UNEP's CASCADE program is providing technical assistance	Ibi Bateke Carbon Sink Plantation	Capacity building, Finance, Technology	"The Ibi Batéké Carbon Sink Plantation (IBCSP) project in the Democratic Republic of Congo is an afforestation and clean energy project. It will convert a natural grassy savanna, disturbed by man-initiated fires, into an abundant and sustainable fuelwood supply for charcoal production. Carbon sequestration from the atmosphere is combined with a reduction in GHG emissions, resulting from the disappearance of savanna fires and the energy switch to non-fossil fuel. To complete these objectives, the IBCSP will establish 4120 hectares of fast growing forest plantations (Eucalyptus urophylla, various species of Acacia and local species), on grass savannas with few scattered shrubs. The Ibi Batéké Carbon Sink Plantation (IBCSP) will be implemented on the Batéké plateau in Democratic Republic of Congo (DRC). This plateau is composed of 90% herbaceous or shrubby savanna, burnt many times per year, and of 10 % of forest gallery deforested by local populations for their subsistence farming (maize, cassava) and to produce charcoal.	•	•
FGEF, World Bank, AFD, others	FGEF, World Bank, AFD, Nairobi Framework	Africa Assist	Capacity Building	See overview in general activities and regional e.g. workshop "CDM & Carbon Finance Opportunities in the Rural Electrification Sector in Africa" (Burkina Faso, Congo RDC, Mali, Senegal among others)	•	FGEF funding: 2,0 M EUR, Total cost: 14 M EUR

## Annex A.4: Capacity Building Programmes in Ethiopia

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Finland, Spain, Sweden	UNDP and UNEP Risø Centre (URC)	UNDP-UNEP CDM Capacity Building Programme (UCCBP)	Capacity building	See overview of program in "general activities and regional". Activities in Ethiopia included a High-Level Ministerial briefing and more than 10 awareness creation and technical training workshops for Ethiopian private and public sector organisations. (...)A link between CDM and National Appropriate Mitigation Actions (NAMAs) in Ethiopia established; A regional Workshop was held in May 2008 and targeted a broad range of stakeholders (private sector, government, NGO and academic) to provide a broad introduction to carbon finance and the CDM.	2008-2009	USD 1.5 million for all the participating countries

Austrian Minister of Agriculture and Forestry, Environment & Water Management	Kommunalkredit Public Consulting (KPC) with Energy Changes consultancy	CDM in Africa Initiative	Capacity building, Finance, Technology	See overview of program in "general activities and regional". In Ethiopia, Austria supported the development of local capacities – in coordination and close cooperation with the respective Designated National Authority (DNA). It also made the first calculations of the country's national grid emission factor. <a href="http://www.ji-cdm-austria.at/blueline/upload/AnnexI_Calculation_tool_CM_Ethiopia.xls">http://www.ji-cdm-austria.at/blueline/upload/AnnexI_Calculation_tool_CM_Ethiopia.xls</a>	2007-2009	EUR 2.5 million
Finland, Sweden, Spain	UNDP/UNEP	Regional capacity building project for sub-Saharan Africa	Capacity building, Finance	"A regional CDM capacity building project aims at facilitating the access of sub-Saharan countries' access to CDM market. The target countries are Democratic Republic of Congo, Ethiopia, Kenya, Mauritius, Mozambique, Tanzania and Zambia. The objective of the project is to enhance public and private sector capacity to access carbon finance, and to overcome barriers impeding the take-off of a carbon project market in sub-Saharan Africa."	2007-2008	
WB - Biocarbon Fund	World Vision Ethiopia and Australia, the Ethiopian Agriculture, Rural Development & Forestry Coordination Office	Humbo Assisted Regeneration	Capacity building, Finance, Technology	The Humbo Assisted Natural Regeneration Project was developed by World Vision in partnership with the World Bank to restore 2,728 hectares of natural forest in the vicinity of the town of Humbo in southwestern Ethiopia. It is not only Ethiopia's first CDM project, but also Africa's first large-scale afforestation/reforestation (A/R) project registered under the UNFCCC. It is expected to sequester over 880,000 metric tonnes of CO <sub>2</sub> e over 30 years. The project, under implementation since 2007, is located on the edge of the Rift Valley, The community-owned land in the project area has been overgrazed and cleared for fuelwood use. This area is also subject to severe erosion and flooding.	•	•
FGEF, AFD, others	World Bank Institute	CF-Assist/Africa Assist	Capacity Building	See overview of program in "general activities and regional". e.g. "Africa Lighting Carbon Finance Training workshop" Addis Ababa, Ethiopia - October 2007	•	FGEF funding: 2,0 M EUR, Total cost: 14 M EUR
World Bank	ESMAP	Lighting Africa seminar	Capacity building	In Oct 2007 in partnership with Lighting Africa and Cf-Assist a workshop and forum was conducted to build technical capacity on efficient lighting businesses and CDM.	Okt 07	



## Annex A.5: Capacity Building Programmes in Malawi

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
BMZ	GIZ	Programmatic Cook Stove CDM Project under ProBEC	Capacity building	"During November and early December, ProBEC undertook a number of key activities to ensure that its partners are able to benefit from carbon credits. Negotiations continued with the Newco, a company selected by ProBEC following a detailed proposal process in the first half of 2010. NewCo completed its initial due diligence and decided to focus on 3-4 countries initially—Mozambique, Malawi, Tanzania and Zambia. Selection of stove products for these countries will be undertaken during site visits in January 2011. As part of this MoA, ProBEC has agreed to conduct two additional studies on non-renewable biomass in Malawi and Zambia due to be completed by 20 December and will be handed over to NewCo for use in the development of Project Design Documents for the programme.	2009-2010	
European Commission	URC	Capacity Development for the CDM in ACP countries (ACP-CD4CDM)	Capacity building, Technology	See overview in "general activities and regional". Country activities in Malawi include support to the Department of Environment for enhancing institutional capacities to regulate and promote CDM projects. Targeted project development support for demonstration CDM activities. Support for Malawian stakeholders to participate in regional fora such as Carbon Expo and African Carbon Forum. To date two national workshops have been implemented providing an opportunity for stakeholders to understand the CDM project cycle and opportunities in specific priority development sectors.	03/2010-02/2013	
UNCTAD	UNCTAD/Earth Council Institute Geneva (ECIG) Carbon Market Programme	Getting Started with Clean Development Mechanism (CDM) in Least Developed Countries (LDCs)	Capacity Building, Technology	See overview in "general activities and regional". In country activities in Malawi unspecified.	2002-2004/2005	US\$ 50,000 (Tanzania, Uganda, Mozambique, Zambia, Malawi)

Miombo Network			Capacity building, Technology	"Malawi received support in 2005 from the Miombo Network for two delegates to participate in COP 11 in Montreal, Canada, including h) in inputs into the NAPA preparation process through a project funded through the AIACC programme (www.aiaccproject.org, Project Number AF38) i) The Miombo Network also facilitated the establishment of the Clean Development Mechanism (CDM) Designated National Authority (DNA) in Malawi j) Malawi received technical support in 2005 from the EcoSecurities firm in Europe and South-South North of South Africa on the formation of a CDM DNA in the country. A number of concepts that would be considered for further development under the CDM were selected through a national stakeholder workshop."	2005	
SIDA and BMU	UNEP, UNEP Risoec Center, STEM and the African Carbon Asset Development (ACAD) Facility	Regional Workshop - LEGAL AND REGULATORY CAPACITY BUILDING	Capacity Building	"Designed to build capacities on the legal aspects of carbon trading and CDM among African countries. Participants included Legal Advisors and Policy Directors working within CDM Designated National Authorities (DNAs) and other ministries or agencies in charge of justice and governance, planning, environment, energy, finance, trade and investment."	2010	
World Bank		CDM Assist	Capacity building	See overview in "general activities nad regional" tab	•	•

## Annex A.6: Capacity Building Programmes in Mali

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
BMU	UNEP/URC in partnership with Standard Bank	African Carbon Asset Development (ACAD) Facility	Capacity building, Finance, Technology	See overview in "general activites and regional". A green charcoal project in Mali implemented by the SME Katene Kadje is being supported by ACAD.	end 2009 - mid 2011	EUR 1.54
Danish International Development Assistance (Danida)	URC	CDM Green Facility	Capacity Building, Technology	See general program overview in "General activities and Regional". In Mali, the program contributed to the organization of a national workshop on CDM, a sectoral workshop on renewable energy and CDM, and period meetings of the DNA national committee. A total of 3 PINs were developed by a national NGO (Mali Folk Centre) and one PDD by a regional consultant.. A planning mission took place in 2008.	2007-2009	

UNIDO		Demonstration Project for 10/11 African Francophone Countries on the Clean Development Mechanism (CDM)	Capacity building, Finance, Technology	See general program overview in "General activities and Regional".	completed	\$ 249,162
French Global Environment Facility	URC and UNEP, in partnership with the French Agricultural Research Centre for International Development (CIRAD) and the French National Forestry Office	Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation (CASCADE - Africa)	Capacity building, Technology	See general program overview in "General activities and regional". Provision of regulatory development support to DNA and in particular a legal review of forestry carbon framework and CDM. National workshops conducted as per program work plan. CASCADE supported carbon documentation for following projects: (a) improved cook-stove dissemination and manufacturing, (b) ALTERRE reforestation project (c) Planting jatropha curcas for rural energy and carbon sequestration project in South-Eastern Mali (d) plantations and soil degradation prevention project in the Kita area; (e) production and dissemination of green charcoal briquettes based on agricultural residues; (f) production of 'green' household fuels from organic wastes, (g) AJAS project.	2007-2010	
UN Foundation and the CDCF	UNEP Division of Technology, Industry and Economics (DTIE), the UNEP RISOE Centre, and the World Bank's Community Development Carbon Fund (CDCF)	Carbon Finance for Sustainable Energy in Africa (CF-SEA)	Capacity Building, Technology	See overview in "regional ". In Mali, three national workshops on CDM were held presided by the DNA. Additional targeted training sessions with the DNA secretariat and its internal committees were held, in tandem with policy advisory to establish its initial operational procedures. The initial CDM portfolio was developed, and four PINS were developed to a high level of quality. Of these four project, the Felou Hydro Power Project went on to successful validation and registration under the CDM, with an ERPA signed with the World Bank Spanish Carbon Fund.	2005-2007	\$1.2 million, roughly \$200,000 for Mali
FGEF, World Bank, AFD, others	FGEF, World Bank, AFD, Nairobi Framework	Africa Assist	Capacity Building	See general and regional. A small grant was provided to assist the DNA in Mali, and the CF-Assist program complemented funding for technical workshops carried out under the CF-SEA program. e.g. "Africa Assist Workshop on Climate Change and Carbon Finance": "The objective of the workshop was to sensitize and provide hands-on support on Climate Change, with special emphasis on carbon finance (CF) and mitigation. After the workshop, the participants were able to identify CF opportunities based on their project and program portfolio. That will eventually lead to the development of CDM projects and programs of activities."	2007-2008	FGEF funding: 2,0 M EUR, Total cost: 14 M EUR

BMZ & Norway	GIZ	climate protection programme for Developing Countries	Capacity building	<p>See overview in general and regional.</p> <p>In 2009 (and 2010?) additional technical training on PIN development was administered through the GIZ in Mali on behalf of the Norwegian government. The target goal is to develop 10 new and additional PINs over and above those in the initial portfolio developed through the previous programs (Cf-SEA, CF-Assist, CASCADE)</p>	1999-ongoing	
BMZ	GIZ	gtz climate protection program with involvement of URC (scoping phase for Francophone Africa component) and Perspectives cc for implementation , and E+Co for implementation in East Africa	Capacity Building	<p>See overview in "general activities and regional".</p> <p>A CDM capacity needs scoping mission was conducted in Mali from the 31st of March to the 4th of April 2008 in which over a dozen project developers active in the energy sector were interviewed.</p> <p>"In March 2008, three capacity development workshops with participants from Senegal, Mali, Benin, Rwanda and Burkina Faso supported by the GTZ on behalf of German Federal Ministry of Economic cooperation and Development were held in West Africa. The workshops focused on bio-power plants using agricultural residues, wind power and efficient stoves."</p>	2008	
Norway - Ministry of Foreign Affairs and BMZ	Malian Ministry of Environment and GIZ	•	Capacity building	<p>"A workshop on promoting CDM project opportunities in Mali was held the 12-14 July 2009 in Bamako, gathering around 30 participants from the Malian public and private sector. The workshop marked the beginning of a 18-month project, funded by the Norwegian Government and implemented jointly by the Malian Ministry of Environment and GTZ, to train relevant government officials, project developers and consultancy companies in drafting and evaluating CDM project documents. For further information please contact Dr. Rokia Goldmann (rokia.goldmann@gtz.de)."</p>	18 months	

BMU and Sida	Swedish Energy Agency, Africa Carbon Asset Development (ACAD) Facility (a public-private partnership between UNEP, the UNEP Risoe Centre, the German Federal Ministry for the Environment, and Standard Bank)	SEMINAR: Enhancing Financial Sector Engagement in Clean Development and Carbon Trading Activities in Africa	Capacity building, Finance	<p>seminar on enhancing financial sector engagement in CDM and Carbon trading in Africa</p> <p>"The seminar was attended by over 30 senior management representatives and other senior government officials from Kenya, Uganda, Rwanda and Mali. Also present were representatives of the BMU and GTZ."</p>	2010	
WB - BioCarbon Fund	project developer: Déguessi Groupe	Acacia Senegal Plantation Project	Capacity building, Finance, Technology	"The project is reforestation around 6,000 ha of Acacia Senegal, a species endemic to the whole African Sahel, over a 6-year period (2006 – 2011) in the northern region of Nara.	2006-2011	
WB - Spanish Carbon Fund and others	SOGEM	OMVS Felou Regional Hydropower Project	Capacity building, Finance, Technology	"The development site is located on the Senegal River in Mali, 200 km downstream from the Manantali hydroelectric facility and 15 km upstream from the city of Kayes, Kayes Region. The site currently consists of a small-sized concrete wall (maximum 2 m high) spanning the width of the river (approximately 1000 m), a canal approximately 10 meters wide along the river's left bank, as well as a 600 kW hydroelectric station situated directly downstream from the rapids containing a Francis-type turbine. The Project is a run-of-river hydropower facility equipped with 3 Bulb-type turbines for a total installed capacity of 62.3 MW.	•	•
Veolia Environment	Veolia Environment	DNA Capacity Building	Capacity Building	Training activities for the DNA. Further details unknown.	2010	

## Annex A.7: Capacity Building Programmes in Mozambique

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Directorate-General for International Co-operation (DGIS) of the Netherlands Ministry of Foreign Affairs	UNEP/URC	Capacity Development for the CDM (CD4CDM)	Capacity building	See overview in "general activities and regional". "Mozambique is receiving technical assistance in several specific areas, including elaboration of its national sustainable development criteria and screening processes, legal and legislative issues	2003-2006 unfccc-source: 2002-2008	\$15 million unfccc-source: \$12.5 million
UNDP and UNEP Risoe	UNDP-UNEP	CDM Capacity Building in Sub Saharan Africa - Phase I	Capacity building, finance	See overview in "general activities and regional". "Mozambique is receiving technical assistance in several specific areas, including elaboration of its national sustainable development criteria and screening processes, legal and legislative issues associated with project approval processes, project screening and due diligence procedures, and the update of CDM websites, public information and private sector engagement activities. Assistance is also needed in translating the technical assistance received to date into actual CDM project pipelines.	2008-2009	USD 1.5 million for all the participating countries
Norway Ministry of Foreign Affairs	Econ Pöyry		Capacity building	local company training, concept development programme	•	•
GIZ		ProBEC Programmatic CDM Project	Capacity building	"During November and early December, ProBEC undertook a number of key activities to ensure that its partners are able to benefit from carbon credits. Negotiations continued with the Newco. This company was selected by ProBEC following a detailed proposal process in the first half of 2010. An official announcement of the Newco's name and partners will take place in January 2011. Emissions Reduction Purchase Agreements with the selected partners.		
BMZ	GIZ	ProBEC's Country Assistance across SADC	Capacity building	"For the past 10 years, ProBEC has pursued activities in SADC that demonstrate its commitment to poverty reduction and to providing access to modern energy for the poor. This is achieved by increasing energy security and the sustainable use of energy by opening access to affordable, safe modern energy technologies and sources within the context of the Regional Indicative Strategic Development Plan (RISDP)."	•	•

BMZ	GIZ	climate protection programme for Developing Countries	Capacity building	See overview in "general activities and regional". Mozambique activities unspecified.	1999-2010	
UN Foundation and the CDCF	UNEP Division of Technology, Industry and Economics (DTIE), the UNEP RISOE Centre, and the World Bank's Community Development Carbon Fund (CDCF)	Carbon Finance for Sustainable Energy in Africa (CF-SEA)	Capacity Building, Technology	See overview in "general activities and regional". In Mozambique, a total of 7 PINs of a high quality were developed under the program. These concern three hydropower projects, a biofuel program, an energy efficiency project, and a fuel switch in industry activity. The "Cimentos do Mozambique – Matola Gas Company Fuel Switch Project") was developed to a draft PDD stage under subsequent programs and with commercial support from Carbon Limits, but the project has ultimately been rejected at the registration stage by the CDM EB. It is undergoing a revision process for resubmission.	2005-2009	\$1.2 million
UNCTAD	UNCTAD/Earth Council Institute Geneva (ECIG) Carbon Market Programme	Getting Started with CDM in Least Developed Countries (LDCs)	Capacity Building, Technology	See overview in "general activities and regional".	2002-2004/2005	US\$ 50,000 (Tanzania, Uganda, Mozambique, Zambia, Malawi)
World Bank/IFC	Econ Analysis (now Econ Pöyry), with support from Matola Gas Company	•	Capacity Building, Technology, Finance	study "to examine the potential for investments in natural gas use in Mozambique to qualify for CDM funding. This study (...) analysed fuel switching from coal to natural gas and gas fired power generation. This study also included a short capacity building workshop for stakeholders from government and industry."	2004	
Norway	World Bank Mozambique Country Office, AustralCowi and Palmer Development Group	The CDM as an Institutional Catalyst for Carbon Emissions Reduction	Capacity building	The World Bank undertook a study to scope out the institutional conditions underpinning current efforts to reduce carbon emissions within developing countries. It did this scoping by focusing on recent efforts to participate in the CDM within a few countries in sub-Saharan Africa (Kenya, Mozambique and South Africa) – highlighting what works well; what works less well; and what are the opportunities for improvement."	2008	



Japan	World Bank Institute	Carbon Finance Assist (CF-Assist)	Capacity Building, Technology	<p>See overview in "general activities and regional".</p> <ol style="list-style-type: none"> <li>1. Support for DNA to set up a portfolio of carbon offset projects through provision of technical advisory services and workshops; Key output/Status: Institutional framework developed; Legal guidelines; Project approval procedures</li> <li>2. Capacity and partnership building (private business and investors, local communities, civil society and public institutions); Key output/Status: Focus and tailored workshops and training programs</li> <li>3. Development of a CDM project portfolio and associated documents (baseline methodologies); Key output/Status: CDM projects developed in the most promising sectors"</li> </ol>	2007-2008	
EU	various	CDM for Sustainable Africa: Capacity Building for Clean Development Mechanism in Sub-Saharan African Countries	Capacity building	<p>The main objectives of the project "CDM for Sustainable Africa" were, inter alia:</p> <ul style="list-style-type: none"> <li>- Evaluate Sub-Saharan African countries' potential to contribute to the Kyoto objectives and to the promotion and co-operation enhancement through dialogues between target region stakeholders and selected European market actors and decision makers;</li> <li>- Identify an appropriate framework enabling CDM-linked investment flow to the Sub-Saharan African countries;</li> <li>- Create a methodology to assess social and economic impact of CDM-linked projects and to check benefits' consistency with sustainable development priorities of the Sub-Saharan countries and investor interests;</li> </ul>	06/2003-12/2004	
Finland, Sweden, Spain	UNDP/UNEP	Regional capacity building project for sub-Saharan Africa	Capacity building, Finance	"A regional CDM capacity building project aims at facilitating the access of sub-Saharan countries' access to CDM market. The target countries are Democratic Republic of Congo, Ethiopia, Kenya, Mauritius, Mozambique, Tanzania and Zambia. The objective of the project is to enhance public and private sector capacity to access carbon finance, and to overcome barriers impeding the take-off of a carbon project market in sub-Saharan Africa."	2007-2008	
The Netherlands		SouthSouthNorth Project	Capacity building	<p>Recipient(s): Brazil, South Africa, Tanzania, Mozambique, Bangladesh and Indonesia</p> <p>"The goal of this project is to alleviate poverty through capacity building among private and public stakeholders to deal effectively with CDM in seven southern countries. It intends to create the framework for self-developed southern driven CDM projects, provides funds, professional services and tools for stakeholders to identify, design, and implement projects by themselves."</p>	2002-2009	

REEEP, co-funding from SouthSouthNorth, Gold Standard, UNDP MDG Carbon Facility	SouthSouthNorth	Securing financing for renewable energy and energy efficiency projects in Southern Africa through Gold Standard CDM	Capacity building	"To facilitate the financing of smaller renewable energy and energy efficiency CDM projects in South Africa using the Gold Standard as leverage. Includes capacity building workshops in Mozambique and Tanzania. Toward achievement of at least one Gold Standard renewable energy/energy efficiency carbon case study project in each country." Main activities and outputs <ul style="list-style-type: none"> <li>* Develop and disseminate carbon financing and transaction guides;</li> <li>* Organise two capacity building workshops;</li> <li>* Develop network and relationships between local and international financial institutions, government, project developers and NGOs;</li> <li>* Facilitate financial closure of two renewable and energy efficiency projects."</li> </ul>	2006-2007	EUR 390,756
CTI, REEP, USAID, Japan	PPL international	CTI Private Financing Advisory Network (CTI PFAN)	Finance	See overview in "general activities and regional". Mozambique projects participated in regional clean energy forum	2009-2010	

### Annex A.8: Capacity Building Programmes in Rwanda

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
BMU	UNEP/URC in partnership with Standard Bank	African Carbon Asset Development (ACAD) Facility	Capacity building, Finance, Technology	See overview in "general activities and regional". An LED dissemination project in Rwanda implemented by NURU Lights is being supported by ACAD.	end 2009 - mid 2011	EUR 1.54
UNDP		Support for Clean Development Mechanism (CDM) project development	Capacity building	"Support CDM project development for private sector and to enhance capacity for the Government of Rwanda with regard to CDM application. Main thrust include funding a full-time seconded international carbon market expert and support for a national CDM expert embedded in the Rwanda Environmental Management Agency (head agency for DNA). Roughly half of the amount will be spent on hiring experts to assist the DNA and roughly half will be spent on training for both DNA members and the private sector.	2009-2011	Source of funding: USD 300,0001 (Japan) 4,000 (GOR) 300,000 (UNDP) Total Budget: USD 604,000

UN Foundation, Fortis Bank,	UNDP	MDG Carbon Facility - Phase I	Finance, Capacity Building	In Rwanda the MDG Carbon Fund has developed a CDM project involving water purification using solar energy displacing formerly fossil fuel sources. The CERs will be onsold to the Swedish Energy Agency via a government procurement program.	2008-2010	
European Commission	URC and REMA	Capacity Development for the CDM in ACP countries (ACP-CD4CDM)	Capacity building, Technology	See overview in "general activities and regional". "The expected results of the ACP-CD4CDM Project in Rwanda are as follows: * Contribution to the establishment of an operational DNA in each participating country; * Building the technical capacity of national experts and consultants in CDM project identification, design, and implementation; * Contribution to the creation of CDM-friendly regulatory and business environments; * Promotion of the host country as a CDM destination through producing a national portfolio of potential CDM projects; and, * Identification and promotion of pilot CDM project opportunities among potential buyers from Annex I countries,	03/2010-02/2013	
World Bank	REMA	Carbon Finance Assist (CF-Assist) / sub-program Africa Assist	Capacity Building, Technology	See overview in "General activities and regional". According to 2008 annual report, a country program was started in Rwanda in 2008. The project assisted the DNA (REMA) with developing guidelines and technical advisory. WB held consultation meetings with different ministerial departments where issues related to CDM project cycle, CF's impact on project finances, and how DNA could operationalize the process to close project deals were explained. In the context of a World Bank funding program with Electrogaz on CFL distribution, additional training and capacity building was provided to build expert capacity within the organization to develop CDM documentation.	2005-2008	
Germany	GIZ	climate protection programme for Developing Countries	Capacity building	In Rwanda GIZ support has mainly focused on commercial energy sector interventions in the biogas and micro-hydro development arena, and looking for CDM possibilities therein, especially partnerships with other donors including the Germany-Netherlands partnership on energy.	1999-2010	
SIDA and BMU	UNEP, UNEP Risoe Center, STEM and the African Carbon Asset Development (ACAD) Facility	Regional Workshop - Legal and Regulatory Capacity Building for Carbon Trading and Investment	Capacity Building	Regional workshop in Nairobi with participants from Benin, Botswana, Burundi, Cote D'Ivoire, Kenya, Malawi, Nigeria, Rwanda, Sao Tomé und Principe, Tanzania, Uganda, Zimbabwe. Case study Zambia Regional seminar on enhancing financial sector engagement in CDM and Carbon trading in Africa "The seminar was attended by over 30 senior management representatives and other senior government officials from Kenya, Uganda, Rwanda and Mali. Also present were representatives of the German Federal Ministry for the Environment and GTZ."	Sep. 2010	

BMZ	GIZ		Capacity Building	<p>See overview in "general activities and regional".</p> <p>"In early March, three capacity development workshops with participants from Senegal, Mali, Benin, Rwanda and Burkina Faso supported by the GTZ were held in West Africa. The workshops focused on biopower plants using agricultural residues, wind power and efficient stoves."</p>	2008	
WB - Community Development Carbon Fund	•	Electrogaz Compact Fluorescent Lamp Distribution Project	Capacity building, Finance, Technology	<p>"The purpose of the Rwanda Electrogaz Compact Fluorescent Lamp (CFL) Distribution Project is to expand the use of high-efficiency lighting technology in Rwanda's residential sector through the distribution of high-quality Compact Fluorescent Lamps, starting with the units already connected to the grid (Component 1) and also considering the units that will be connected as part of the national electrification program (Component 2). This is a Country wide project that will be primarily located in urban areas, which are or will be covered by Electrogaz. The light bulb distribution will take place through the decentralised distribution outlets run by Electrogaz.</p>	2007-2010	
IEPF	Econoler International	CDM Capacity Building in Selected Francophone African countries	Capacity building	<p>A three day workshop for DNA members on CDM concepts</p>	2007	
African Development Bank	MININFRA	CDM Scoping	Capacity building	<p>Through AfDB funding, MININFRA contracted a consultant to support CDM project identification within the government's priority investment project portfolio. This also included support on capacity building for legal issues surrounding carbon project tendering, ERPA negotiations, etc. The work was overseen by a GIZ energy expert secondee to the MININFRA</p>	early 2009	
Belgium Technical Cooperation	BTC	Microhydro development	Capacity building	<p>Support for feasibility studies for a bundle of microhydro power projects developed under a turnkey agreement with MININFRA. With assistance from IT Power and other consultancies, some of these are being developed as potential CDM opportunities.</p>		

## Annex A.9: Capacity Building Programmes in Senegal

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
French Global Environment Facility	URC and UNEP, in partnership with the French Agricultural Research Centre for International Development (CIRAD) and the French National Forestry Office	Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation (CASCADE - Africa)	Capacity building, Technology	See general program overview in "General activities and regional". Provision of regulatory development support to DNA and in particular a legal review of forestry carbon framework and CDM. National workshops conducted as per program work plan. CASCADE supported PIN documentation for five projects and PDD carbon documentation for following projects in Senegal: (a) green charcoal production project in the region of Saint Louis; and (b) MOZDEN jatropha oil utilisation project in the region of Kolda. Additional support provided to DNA for institutional capacity building including legal review of forestry carbon framework and support for national definition of forest under UNFCCC CDM requirements.	2007-2010	
UNIDO		Developing national capacity to implement CDM projects in a selected number of countries in Africa: Preparatory assistance	Technology	"This project was established to develop an 'enabling environment' that allows industry to participate in CDM by addressing and removing barriers to the introduction and transfer of climate-friendly technologies. The countries involved are Ghana, Kenya, Nigeria, Senegal, Zambia and Zimbabwe."		
European Commission - DG Development,	IER University of Stuttgart, ENDA (Senegal)	CDM Susac - Start-up Clean Development Mechanism in ACP Countries	Capacity building, Finance, Technology	"It will take fast action in the building of local capacity and transparent identification, verification and monitoring procedures for ACP countries to not only be at the front of the queue for CDM investment, but actually lead the developing world. The CDM Susac project aims specifically to put in place all the necessary mechanisms for this to occur and it adopts a learning-by-doing, fast track approach over its two year life."	2000-2002	
World Bank	DEEC under Ministry of Environment through a Japanese-funded PHRD (Planning and Human Resource Development) grant	World Bank-Japan PHRD CDM Capacity Building Program	Capacity Building, Technology	<p>(a) Training workshops on implementation of CDM for various national stakeholders</p> <p>(b) Training workshop on methodological and technical aspects of CDM projects in two sectors: Forestry and Energy"</p> <p>17 initial PINs developed of various quality</p> <p>Support for kick starting of the DNA including period meetings of various technical and policy subcommittees.</p>	2005-	

AfD/FFEM	World Bank Institute, CEFEB	Carbon Finance Assist (CF-Assist) / Africa Assist	Capacity Building	<p>See overview in "General activities and regional".</p> <p>Senegalese activities involve: a workshop "CDM &amp; Carbon Finance Opportunities in the Rural Electrification Sector in Africa" (Burkina Faso, Congo RDC, Mali, Senegal among others); "Side event at the Africa Carbon Forum for the French speaking CDM community" Dakar, Senegal; September 2008, "Regional Training Workshop on CDM Project Validation" Dakar, Senegal - April 2008, "A regional workshop on the practical issues related to the validation process of CDM projects was jointly organised in Dakar with UNEP, CEFEB, and GIZ . Over 55 participants from 12 West African countries participated and the focus was on small-scale project methodologies and the validation process. West Africa Bankers Carbon Finance Forum", Dakar, Senegal - February 2008. A three-day forum focusing on financial sector in West Africa in collaboration with UNEP, CEFEB, IEPF and Government of Senegal. Over 100 participants attended from 15 countries.</p>	2007-2009	FGEF funding: 2,0 M EUR, Total cost: 14 M EUR
BMZ	GIZ	climate protection programme for Developing Countries	Capacity building	<p>See overview in "General activities and regional". Senegalese activities involve: a workshop "CDM &amp; Carbon Finance Opportunities in the Rural Electrification Sector in Africa" (Burkina Faso, Congo RDC, Mali, Senegal among others) and Regional CDM Validation workshop (see above)</p>	2007-2009	
EU (EC, Ireland, Denmark), Switzerland	UNITAR	C3D - Climate Change Capacity Development	Capacity building	<p>"Irish Aid has supported this programme since 2003 and in 2006 signed a 3 year until the end of 2008. Irish Aid's contribution is focused on;</p> <p>a) Customising climate change tools for specific local settings, disseminating adapted versions of training modules and producing new tools and training materials as required; and</p> <p>b) Providing climate change training to targeted beneficiaries in developing countries.</p> <p>The main beneficiaries are decision makers in developing countries from a range of sectors including energy, environment, agriculture, water resource management, health and infrastructure.</p> <p>The focus of the training and capacity development for adaptation and mitigation with particular tools and training provided to enable developing countries to engage with CDM."</p>	3 years	
BMZ	gtz climate protection program with involvement of URC (scoping phase) and Perspectives cc for implementation phase	CDM Capacity Development for Sub-Saharan Africa	Capacity Building	<p>Senegal, Mali, Benin, Rwanda and Burkina Faso</p> <p>2008:</p> <p>"In early March, three capacity development workshops with participants from Senegal, Mali, Benin, Rwanda and Burkina Faso supported by the GTZ on behalf of German Federal Ministry of Economic cooperation and Development were held in West Africa. The workshops focused on biopower plants using agricultural residues, wind power and efficient stoves."</p>	2008	

WB - Community Development Carbon Fund	Senegalese Rural Electrification Agency (ASER)	Lighting Energy Efficiency in Rural Electrification	Capacity Building, Finance, Technology	"The Senegalese Efficient Lighting in Rural Areas Program will distribute about 1.5 million Compact Fluorescent Light bulbs (CFL) in newly electrified rural communities across twelve geographically distinct concessions in Senegal. The utilization of CFLs instead of Incandescent Light Bulbs (ILBs) reduce carbon dioxide emissions associated with the combustion of fossil fuel at grid connected power plants. The CFL program is undertaken in connection with a nation-wide rural electrification plan that aims to increase electricity access in Senegal's rural areas from 16% to 50% by 2012.	2009-2013	
World Bank		CDM Assist	Capacity Building	See overview in "general activities and regional".	•	•

## Annex A.10: Capacity Building Programmes in Tanzania

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
BMU	KfW Carbon Fund	POA workshop	Capacity building	Training workshop on formulation and implementation of CDM POAs in Tanzania	2011	
SIDA and BMU	UNEP, UNEP Risoe Center, STEM and the African Carbon Asset Development (ACAD) Facility	Africa Regional Workshop - LEGAL AND REGULATORY CAPACITY BUILDING FOR CARBON TRADING & CDM INVESTMENT	Capacity Building	See overview in general activities and regional. Regional workshop in Nairobi with participants from Benin, Botswana, Burundi, Cote D'Ivoire, Kenya, Malawi, Nigeria, Rwanda, Sao Tomé und Principe, Tanzania, Uganda, Zimbabwe. Case study Zambia	2010	
Austrian Minister of Agriculture and Forestry, Environment & Water Management	Kommunalkredit Public Consulting (KPC); CAMCO International; Energy for Sustainable Development (ESD)	CDM in Africa Initiative	Capacity building, Finance, Technology	Building local capacities in coordination and close cooperation with the respective Designated National Authority (DNA). Camco was contracted to help build the capacity of Tanzania to develop CDM projects. Among the outputs of this assignment was a calculation of a grid emission factor (GEF) for Tanzania followed by a training of relevant Tanzanians on how to calculate this factor under different circumstances.	2007-2009	EUR 2.5 million (Tanzania budget unclear)



UNDP/UNEP with funding from Governments of Finland and Spain	UNEP Risoe Center in partnership with VPO	Regional capacity building project for sub-Saharan Africa (phase 1)	Capacity building, Finance	"Work in Tanzania is focused around two main objectives: 1. Enhancing the capacity of stakeholders (public, private, civil society, funding agencies and academia) to understand and engage with the CDM; and 2. Identification and development of CDM projects.	2007-2009	USD 1 million, country budget approximately \$100k
Norway Development Cooperation		Capacity building: PDD development	Capacity building	The Norwegian support to Green Resources AS was for a project called 'Development of two Project Design Documents (PDDs) for CDM projects in Tanzania'. The goal of this project was to assess the feasibility and social and environmental impact of developing a Combined Heat Power (CHP) project, and a sawdust briquette project into CDM projects. Both these projects will, if materialised, be utilizing the massive amounts of biomass waste (from sawmills, off-cuts, harvesting waste, thinning etc) available in the surrounding areas to Sao Hill (Southern Highlands). This will lead to production of clean energy, and improved access to electricity in the Mafinga/Mufindi area. scheme etc. "		
GIZ		ProBEC Programmatic CDM Project	Capacity building	"During November and early December, ProBEC undertook a number of key activities to ensure that its partners are able to benefit from carbon credits. Negotiations continued with the Newco. This company was selected by ProBEC following a detailed proposal process in the first half of 2010. An official announcement of the Newco's name and partners will take place in January 2011.	•	•
Directorate-General for International Co-operation (DGIS) of the Netherlands Ministry of Foreign Affairs	UNEP/URC in partnership with Dept of Environment of the VPO, CEEST and EPMS	Capacity Development for the CDM (CD4CDM)	Capacity building	<p>"Project Objectives</p> <ul style="list-style-type: none"> <li>v Improving Tanzania's institutional preparedness for hosting CDM projects, including kickstarting Designated National Authority (DNA) ability to efficiently approve CDM projects consistent with the country's sustainable development priorities.</li> <li>v Building the capacity of local experts in key sectors in the identification, design, and implementation of CDM projects.</li> <li>v Building the capacity of relevant institutions in appraising, funding, and promoting CDM and carbon offset investments.</li> <li>v Promoting Tanzania as a CDM investment destination.</li> <li>v Supporting the development of a pipeline of actual CDM projects</li> </ul>	2003-2006 unfccc-source: 2002-2008 norad-source: 2007-2008, 2007-2010	\$12.5 million global budget, \$250k country budget
UNDP with FAO, IFAD, UNEP, UNESCO, and UNIDO	URC	One UN: Building capacity for CDM	Capacity building	Activities are focused mainly on institutional support and investment facilitation	expected start mid 2011	USD \$200,000 for 18 months
UNDP supported by GEF with	•	PV solar energy	Capacity building	PV solar energy. CDM project related	2004-2008	USD 3.5 million

Ministry of Energy and TaTEDO						
UNDP with the Ministry of Energy and NGO participation	•	Biogas energy in prisons	Capacity building	Biogas energy in prisons. CDM project related	ongoing	USD 150,000
UNDP supported by GEF, with Ministry of Energy	•	Transformation of the rural market for PV energy in Tanzania	Capacity building	Transformation of the rural market for PV energy in Tanzania. CDM project development related	ongoing	USD 250,000
UNDP	VPO,	Regional capacity building project for sub-Saharan Africa (phase 2)	Capacity building	Capacity building for CDM. Expedited financing for interim measures for capacity building for CDM in priority areas (Phase II)	2010 - present	USD 200,000
UNIDO		Best practices in energy management in the industrial sector	Capacity building	Best practices in energy management in the industrial sector with private sector participants. CDM project development related		
UNIDO	International Network on Small Hydro Power (INSHP), The Ministry of Energy and Minerals, TANESCO and TaTEDO	Rural Micro-Hydropower Development	Capacity building	Rural Micro-Hydropower Development. Objective: to identify potential sites for the development of small and micro hydropower schemes. in CDM project development related	ongoing	
UN-habitat		Promoting Energy Efficiency in Building in East Africa	Capacity building	Promoting Energy Efficiency in Building in East Africa. CDM capacity building	ongoing	USD 231,000
EU programme on renewable energy		Renewable energy	Capacity building	Renewable energy. CDM project development related	2007-2009	EUR 2.5 million

SIDA	Swedish Energy Agency in collaboration with National Environmental Management Authority of Kenya, Ministry of Energy and Minerals of Tanzania, and Ministry of Water and Environment in Uganda. Consultants: Cornland International and Baker & McKenzie	Capacity Development for CDM in East Africa	Capacity Building, Technology	The programme is financed by Sida and implemented by the Swedish Energy Agency in collaboration with counterparts in Kenya, Tanzania and Uganda. See overview in "general activities and regional". Activities in Tanzania focused on working with the Ministry of Mines and Energy on identification of a portfolio of potential CDM projects in the energy sector including small-scale IPP hydro power projects. Documentation was prepared with assistance of CEEST foundation. In addition, the program worked with Tanesco, VPO and other agencies to develop a systematic approach to updating, validating and publishing the national grid emission factor initially calculated under the UNEP CD4CDM program.	2008-2010. Some additional activities ongoing	US\$ 1.95 million for 3 countries
SIDA and World Bank/CF-Assist	Rural Energy Agency	Institutional Capacity building in REA and build up REF.	Capacity building	Institutional Capacity building in REA and build up REF. Within REA several micro and mini-hydro projects are located that might be pursued as CDM projects under a normal programmatic approach	ongoing	
Norad (Norway)	Econ (Pöyry Group)	Capacity Building for CDM in Tanzania	Capacity Building	support to development of projects	•	•
REEEP (United Kingdom, Ireland, Germany, Ireland, European Commission, Austria, Netherlands)	SouthSouthNorth	Securing financing for renewable energy and energy efficiency projects in Southern Africa through Gold Standard CDM	Capacity building	"To facilitate the financing of smaller renewable energy and energy efficiency CDM projects in South Africa using the Gold Standard as leverage. Includes capacity building workshops in Mozambique and Tanzania. Toward achievement of at least one Gold Standard renewable energy/energy efficiency carbon case study project in each country."	2006-2007	EUR 390,756
World Bank	ESMAP	Lighting Africa seminar	Capacity building	In March 2008 in partnership with Lighting Africa and Cf-Assist a workshop and forum was conducted to build technical capacity on efficient lighting businesses and CDM. About 70 entrepreneurs participated.	March 2008	

Netherlands	South South-North and EPMS Ltd	South South North Collaboration	Capacity building	"The goal of this project is to alleviate poverty through capacity building among private and public stakeholders to deal effectively with CDM in seven southern countries. It intends to create the framework for self-developed southern driven CDM projects, provides funds, professional services and tools for stakeholders to identify, design, and implement projects by themselves." Activities in Tanzania included scoping work on Capacity building in Coastal Communes	2002 -2009	EUR 35,000
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### Annex A.11: Capacity Building Programmes in Uganda

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
BMU	UNEP/URC in partnership with Standard Bank	African Carbon Asset Development (ACAD) Facility	Capacity building, Finance, Technology	See overview in "general activities and regional". A bagasse cogen project in Uganda implemented by Kakira Sugar is being supported by ACAD.	end 2009 - mid 2011	EUR 1.54
SIDA and BMU	UNEP, UNEP Risoe Center, STEM and the ACAD Facility	Africa Regional Workshop	Capacity Building	See overview in "general activities and regional". Regional workshop in Nairobi with participants from Benin, Botswana, Burundi, Cote D'Ivoire, Kenya, Malawi, Nigeria, Rwanda, Sao Tomé und Principe, Tanzania, Uganda, Zimbabwe. Case study Zambia Presentations by commercial lawyers from Uganda and involvement of legal counsel from East African Development Bank and Standard Chartered Bank, Kampala.	2010	
SIDA and BMU	UNEP, UNEP Risoe Center, STEM and the ACAD Facility	SEMINAR: Enhancing Financial Sector Engagement in Clean Development and Carbon Trading Activities in Africa	Capacity building, Finance	See overview in "general activities and regional". Seminar on enhancing financial sector engagement in CDM and Carbon trading in Africa "The seminar was attended by over 30 senior management representatives and other senior government officials from Kenya, Uganda, Rwanda and Mali. Also present were representatives of the German Federal Ministry for the Environment and GTZ."	2010	

BMZ	GIZ	CaPP	Capacity building, Finance, Technology	"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."	•	•
Belgium Technical Cooperation	TBD based on international tender	CDM Capacity Development & Project Support	Capacity Building	Project identified in 2009, but only starting in mid-2011. Embedded long-term international consultant (CDM expert) and national carbon market expert to build institutional capacity within the Climate Change Unit of the Ministry of Water and Environment and the Ugandan Investment Authority. Scope of program to include: <ul style="list-style-type: none"> <li>· hands-on training for development of CDM projects and/or POAs in Uganda,</li> <li>· Preparing of project documentation (PIN, PDD), incl. the development of new methodologies, if necessary,</li> <li>· Securing financing for the CDM Projects and/or Programme of Activities, <ul style="list-style-type: none"> <li>· Negotiation of Emission Reduction Purchase Agreements (ERPAs),</li> <li>· Support to project implementation and monitoring,</li> </ul> </li> <li>· Organizing capacity building activities in Uganda. The project focuses on reducing the identified barriers, particularly strengthening technical capacity and creating awareness among private sector institutions. The target sectors are energy generation, energy efficiency, agriculture, municipal waste and forestry."</li> </ul>	2011 - 2014	EUR 2.0 million
Austrian Ministry of Agriculture and Forestry, Environment & Water Management	Kommunalkredit Public Consulting (KPC)	CDM in Africa Initiative	Capacity building	Supported development of local capacities in coordination and close cooperation with the respective Designated National Authority (DNA)." Calculation of grid emission factor.	2007-2009	EUR 2.5 million
Norad (Norway)	Econ (Pöyry Group)	Capacity Building for CDM in Uganda	Capacity Building	support to development of projects	•	•

World Bank	Department of Meteorology	Carbon Finance Assist (CF-Assist) / Africa Assist	Capacity Building, Technology	<p>Through a Japanese funded grant, CF-Assist undertook the following activities in Uganda:</p> <p>1- Support DNA for developing a portfolio of carbon offsets projects; Key output/Status: • Set of procedures for CDM project selection and approval • Theme-based workshops and guidelines to build understanding of the requirements and issues for carbon finance project development • Targeted Technical Assistance to DNA</p> <p>2- Partnership building with private sector and communities; Key output/Status (2007): • Under finalization</p> <p>3- Project development through support of up stream project preparation; Key output/Status (2007): • Under finalization"</p>	2004–2007; completed	\$500k
Royal Danish Embassy			Capacity Building, Technology	<p>"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 (a). Further, in July 2008 GoU and RDE signed an agreement on 5 million DKK in support of establishment of a Climate Change Unit (b). In December 2008, GoU and RDE signed two agreements: One on Support to mainstreaming of climate change adaptation (4 million DKK 2009-2012) (c) and one on Support to preparation of Uganda's participation in the COP15 (2009-2010) (d)."</p>	<p>(a) around 5 million DKK          (b) 5 million DKK          (c) 4 million DKK          (d) ?</p>	<p>(a) 4 years          (b) 2008          (c) 2008          (d) 2008</p>
World Bank	National Environmental Management Authority (NEMA)	Municipal Waste Composting POA	Capacity building	"Capacity Building linked to Africa's first CDM POA- an 18 district composting initiative with the National Environmental Management Authority"	•	•
SIDA	Swedish Energy Agency in collaboration with National Environmental Management Authority of Kenya, Ministry of Energy and Minerals of Tanzania, and Ministry of Water and Environment in Uganda. Consultants: Cornland International	CDM Capacity Building Programme for Tanzania, Kenya and Uganda	Capacity Building, Technology	<p>"In 1996 the Swedish government passed a bill emphasizing efforts to support CDM in LDCs. The bill also contains a call for enhanced collaboration between Sida and STEM Following the bill a programme for capacity building in East Africa was initiated. The programme is financed by Sida and implemented by STEM in collaboration with counterparts in Kenya, Tanzania and Uganda.</p> <p>The programme has a regional character and follows two parallel tracks: (i) institutional capacity building to build awareness and knowledge about CDM among different categories of stakeholders, e.g., project owners, financial and legal institutions and governmental agencies. Information about the aim and implementation of CDM projects is disseminated through for example workshops and seminars. (ii) hands-on work with CDM Project Design Documents (PDD) and its project cycle through "learning by doing" The aim is to register and validate the projects according to the CDM rules and subsequently carry out the project in practice."</p>	2008 - 2010	

	and Baker & McKenzie					
WB - BioCarbon Fund	National Forest Authority (NFA) Rwoho Environmental Conservation and Protection Association (RECPA)	Nile Basin Reforestation	Capacity building, Finance, Technology	"The proposed tree planting project will serve to meet the objective of expansion of the wood resources of Uganda. This expansion is crucial for the country to meet the growing national demand of wood resources and to reduce the pressure on the remaining natural forests in the region. Currently only a few thousand hectares of timber plantations remain in Uganda. The project will establish a plantation of pine and mixed native species in grassland areas within Rwoho Central Forest Reserve. The project area of around 2,137 ha will be covered with 75% Pinus caribaea, which has been already introduced and tested in the area.	•	•
WB - Community Development Fund;	Government of Uganda	Kampala Landfill Gas Project	Capacity building, Finance, Technology	The small scale project is a landfill gas flaring scheme and involves the introduction of measures to capture and combust methane from a landfill used for disposal of residues from human activity, predominantly municipal solid waste. The purpose of the project activity is to develop and implement a landfill gas extraction and flaring scheme at the Mpererwe landfill, that currently has no form of landfill gas management in place. The project represents an opportunity to introduce basic but proven landfill gas technology into the country and will provide environmental betterment both on and in the immediate vicinity of the site. "		
WB - Community Development Carbon Fund	•	Municipal Waste Compost Project	Capacity building, Finance, Technology	"The CDM Uganda Municipal Waste Compost Program aims to recover the organic matter from municipal solid waste as compost for soil conditioning and plant growth and avoid methane emission while using the organic matter in wastes as humus. The project would result in greenhouse gas emissions (GHG) reductions and community benefits, namely generate local employment and help the country develop in an environmentally friendly and sustainable way.	•	•
FGEF, AFD, others	World Bank Institute	Africa Assist	Capacity Building	See overview in general activities and regional. e.g. "Carbon Finance Day / Partnership for Clean Indoor Air 2009" Kampala, Uganda; March 2009	•	FGEF funding: 2,0 M EUR, Total cost: 14 M EUR
World Bank		CDM Assist	Capacity Building	See overview in general activities and regional.	•	•



## Annex A.12: Capacity Building Programmes in Zambia

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
	UNEP, UNEP Riso Center, STEM and the African Carbon Asset Development (ACAD) Facility	Regional Workshop - Legal and Regulatory Capacity Building for Carbon Trading and Investment	Capacity Building	Regional workshop in Nairobi with participants from Benin, Botswana, Burundi, Cote D'Ivoire, Kenya, Malawi, Nigeria, Rwanda, Sao Tomé und Principe, Tanzania, Uganda, Zimbabwe. Case study Zambia	Sep. 2010	
gtz	GIZ	ProBEC's Country Assistance across SADC	Capacity building	<p>See overview in "general activities and regional tab".</p> <p>"Since ProBEC's office was established in 2005 at the GTZ head office in Lusaka, activities have taken place including stakeholders' workshops, conducting baseline studies, sensitisation workshops for partners, publicity through exhibitions at national events, training in household stove production and use, institutional and rocket barn production, training in stove/fuel use as well as cooking demonstrations.</p> <p>ProBEC Zambia conducted a series of impact assessment surveys in 2009 to ascertain the progress towards its goals."</p>	•	•
Danish International Development Assistance (Danida)	URC	CDM Green Facility	Capacity Building, Technology	See overview of program in "General activities and regional". Zambian activities included workshops, hands-on training of national experts, identification of potential CDM projects and technical advice. Technical advice provided with the aim of implementing relevant CDM projects in different sectors of the economy such as energy, waste management, industry and others. In Zambia a total of 5 PINs or draft PDDs were completed by a national NGO (CEEEZ). These include a jatropa biodiesel project, a landfill gas project in Kitwe, a biomethanisation program, two biomass based rural electrification projects, and a 1 MW hydro power project.	2007-2009	US\$ 0.54 Million for 5 countries
UNDP – UNEP Partnership on Climate Change	UNDP Zambia implementation is coordinated with the URC, Ministry of Tourism,	UNDP-UNEP CDM Capacity Building Programme-Regional Project	Capacity building	The programme builds on experiences from the CD4CDM, continuing with the PIN's developed in the first programme. The main focus is on enhancement of public and private sector capacity to identify, design, approve and implement CDM projects. This will strengthen local capacity to develop CDM project proposals and establish an operational CDM framework in which public institutions can interact with private sector and jointly implement CDM projects."	11/2007 to 12/2009	USD 1.5 million for all the participating countries Expenditure US\$ 76 000 (2008)

						US\$ 37 500 (2009)
UN Foundation and the CDCF	UNEP Division of Technology, Industry and Economics (DTIE), and others	Carbon Finance for Sustainable Energy in Africa (CF-SEA)	Capacity Building, Technology	See overview in "regional". For each selected country, the consultants are working with local project sponsors and project developers to assess the potential for projects including such technologies as landfill gas, biomass-valorisation, mini-hydro, energy efficiency, etc. The consultants are helping developers gather all information needed for a PIN and a CFD and are making suggestions as to how the project may be adjusted. The consultants are also looking at how projects can be bundled if they are too small by themselves and provide help on other critical issues such as financial analysis and financing gaps to be filled."	2005-2007	\$1.2 million
UNIDO	•	Developing national capacity to implement CDM projects in a selected number of countries in Africa: Preparatory assistance	Technology	"This project was established to develop an 'enabling environment' that allows industry to participate in CDM by addressing and removing barriers to the introduction and transfer of climate-friendly technologies. The countries involved are Ghana, Kenya, Nigeria, Senegal, Zambia and Zimbabwe."	•	•
World Bank		CDM Assist	Capacity building	See overview in "general activities and regional tab". Zambian activities unclear.		

## ANNEX B: FURTHER ANNEX I SUPPORT ACTIVITIES RELATED INDIRECTLY TO CDM OR DIRECTLY TO CLIMATE CHANGE

### Annex B.1: Further Regional Annex I Support Activities

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
DFID and SIDA	OneWorld Consortium	Regional Climate Change Programme (RCCP)	Capacity building, Technology, Finance	<p>"Key objectives of the RCCP are to:</p> <ul style="list-style-type: none"> <li>• Examine the possible climate change responses and build the evidence base.</li> <li>• Strengthen the region's ability to access climate finance and to establish regional and national sources of finance.</li> <li>• Facilitate the strengthening of the region's voice, through regional integration, in the international climate change platforms.</li> <li>• Strengthen the region's ability to domesticate international negotiation outcomes, to ensure that these outcomes are integrated into regional development policies, strategies and related activities."</li> </ul>	2009-2013	
European Commission	UNEP and URC	Multilateral Environmental Agreements (MEAs) in African, Caribbean and Pacific (ACP) Countries - The African Hub	Capacity building	"the African Hub will first carry out needs prioritization workshops and consultations with participating countries and partners. The outcomes from the needs prioritization will define the scope and nature of the specific project activities that will be developed to meet those identified needs."	4 years	23 million EUR
DFID and IDRC	IDRC with local and regional partners	Climate Change Adapt Program in Africa	Capacity Building	The CCAA program supports adaptation activities in both rural and urban areas with focus on the most vulnerable groups and undertakes research and knowledge sharing activities designed to improve and strengthen the capacity of African organizations decision makers to contribute strongly in adaptation to climate change. A number of planning integration climate mainstreaming activities have been supported in African LDCs.	2007-2010	\$1.6 million
DFID and IDRC	African Centre for Technology Studies (ACTS) in Kenya	Community Based Adaptation in Africa	Capacity Building, Finance, Technology	Supporting community based small-scale adaptation programs in Sudan, Uganda , Tanzania , Zimbabwe , Kenya , South Africa , Zambia and Malawi.	2008-2010	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Japan	UNDP	UNDP Africa Adaptation Program	Capacity Building, Finance, Technology	A regional program that will target 21 countries in Africa and assist them to put into place enabling environments and acquire necessary skills to design, finance and implement as well as monitor long term and cost effective adaptation plans, policies and strategies.	2010-ongoing	\$91 million
Ireland	REEEP and local partners	REEEP (Renewable energy and Energy Efficiency Programme)	Capacity Building	"The Renewable Energy & Energy Efficiency Partnership's (REEEP) goal is to accelerate the global market for sustainable energy by acting as an international and regional enabler, multiplier and catalyst to change and develop sustainable energy systems. it has provided small grants to projects located in the following African countries : Uganda, Ghana, Mali, Senegal, Tanzania and Zambia. Ireland supported two REEP programmes in Africa. The first designs and implements financial risk management instruments that support financing of small-scale projects, especially small scale energy equipment and service delivery. The second involved promoting solar water heating in Uganda."	2005-	
EU			Capacity building	"Support to Dutch Meteorological office (KNMI) to map out changes in extreme weather in Africa. This initiatives aims at providing better scenarios/ trends in heat waves, droughts etc"		
EU		ACP-EC Energy Facility	Capacity building, Technology	"A key result of the EUEI is the ACP-EC Energy Facility. Created in June 2005, it aims to facilitate access to sustainable energy services for poor rural populations in sub-Saharan Africa, the Caribbean and the Pacific. The Facility also contributes to projects supporting better governance and management in the energy sector, and to facilitating investments in cross-border electricity interconnections - in line with the priorities of the African Union's New Partnership for Africa's Development (NEPAD) and the Africa-Europe Partnership on Infrastructure. A first open call for project proposals under the Energy Facility was launched in June 2006. Sustainability, including projects' impact on climate change, is one of the five selection criteria."	2005-	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
EU		The Global Energy Efficiency and Renewable Energy Fund (GEEREF)	Finance	"The European Commission has proposed on 6th October 2006 creating a global risk capital fund to mobilise private investment in energy efficiency and renewable energy projects in developing countries and economies in transition. The Global Energy Efficiency and Renewable Energy Fund (GEEREF) will accelerate the transfer, development and deployment of environmentally sound technologies and thereby help to bring secure energy supplies to people in poorer regions of the world. These projects will also combat climate change and air pollution."	2006-	
United States		The Central African Regional Program for the Environment (CARPE)	Capacity building	"CARPE is a USG initiative aimed at promoting sustainable natural resource management in the Congo Basin through multiple objectives. The Congo Basin forest is the second largest contiguous moist tropical forest in the world and plays a key role in securing the livelihoods of Central African citizens. The forest also provides critical habitat for biodiversity conservation and supplies vital regional and worldwide ecological services. In recognition of the important role of the Congo Basin forest and amidst the increasing pressures facing the Congo Basin forest, CARPE works to reduce the rate of forest degradation and loss of biodiversity by supporting increased local, national, and regional natural resource management capacity, thereby sequestering carbon and addressing climate change."		
Ireland		Support to the International Institute for Environment and Development (IIED) for activities related to Climate Change and the Least Developed Countries	Capacity building	"This programme of activities aims to build capacity to address climate change in the Least Developed Countries (LDCs) in Africa and South East Asia as well as some Small Island Developing States (SIDS). The focus is on a) building capacity to negotiate in the UNFCCC process, particularly on post 2012 issues and b) building capacity to address climate change adaptation and mitigation) in the activities of each of the stakeholder groups in LDCS (government officials, politicians, media, sectoral professionals, development workers, NGOs, researchers and academics, local government and vulnerable communities). Irish Aid support is also used to address the impacts of climate change in arid environments particularly with pastoralists and dry land farmers. Finally, the programme has an activity in East Africa working to empower women to participate in international and national climate change policy making focused on both adaptation and mitigation needs. Partners in this programme are FIELD, EcoWatch Africa (Uganda, Tanzania and Kenya) and other local partners."	3 years	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Climate Technology Initiative (CTI), Renewable Energy & Energy Efficiency Partnership (REEEP), US Agency for International Development (USAID), International Center for Environmental Technology Transfer (ICETT) of Japan	PPL international	CTI Private Financing Advisory Network (CTI PFAN)	Finance	"The Private Financing Advisory Network (PFAN) is a multilateral, public-private partnership initiated by the Climate Technology Initiative (CTI) in cooperation with the UNFCCC Expert Group on Technology Transfer. PFAN operates to bridge the gap between investments and clean energy businesses."	2009-2010	
Canada, E.U., Switzerland, U.S.A, UNFCCC, UNEP, GEO, GIZ	UNFCCC, Colorado State University, US Environmental Protection Agency, GIZ and Global Earth Observation (GEO)	Regional capacity building for sustainable national greenhouse gas Inventories	Capacity Building	Participating Countries include host countries Tanzania, Malawi, Botswana, South Africa, Zambia, Mauritius, Rwanda and Namibia	2011-2014	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
Denmark - Ministry of Foreign Affairs	UNDP and UNEP	CC Dare	Capacity Building, Finance, Technology	The aim of the program is to support participating countries and others to remove barriers and create opportunities for integrating climate adaptation into national planning and decision making processes to enhance climate change resilience of the most vulnerable communities through a country driven process. The project is being implemented in eleven Sub Saharan countries including: Benin, Ethiopia, Ghana, Malawi, Mozambique, Rwanda, Senegal, Seychelles, Tanzania, Togo, and Uganda. More than 45 adaptation projects are under implementation in the partner countries. In 2011, successful projects with direct positive impacts on the communities and mainstreaming processes will be scaled-up and replicated.	2008 - 2011	\$150,000 per country
Finland - Ministry of Foreign Affairs (major funder), Austrian Ministry of Development Cooperation	DBSA	Energy and Environment Partnership Programme with Southern and Eastern Africa - Phase I	Capacity Building, Finance	The EEP seeks to support the development of demonstration projects in the renewable energy sector through the provision of grant funding for feasibility studies. It is particularly interested in rural energy activities. Other supporting activities include workshops and knowledge sharing around renewable energy technologies and commercial project implementation. The program also seeks to establish linkages between project developers, service providers and financing institutions. Although the program is not specifically focused on carbon asset development, preliminary analysis of GHG mitigation potential could be incorporated in feasibility study aspects. The methodology for systematic integration of emission reduction benefits into project development is unclear, however. Two calls for proposals have already been implemented and projects have been supported in various renewable energy technologies.	2009-2012	EUR 8.5 million
Finland - Ministry of Foreign Affairs	SADC Secretariat	Renewable Energy Master Plan	Capacity Building	Support for developing an integrated strategic plan for the development of the renewable energy sector in SADC region. At the recent meeting of the SADC Energy Ministers in Maputo in May 2009 the SADC Energy Secretariat was requested to develop a Renewable Energy Policy and Action Plan for the region.	2011	
Austrian Ministry of Development Cooperation		The Southern African Solar Thermal Training and Demonstrative Initiative (SOLTRAIN)	Capacity Building	Will link up with EEP-SEA	2009-ongoing	

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
DBSA	DBSA	Energy Efficiency Partnership for Southern and East Africa	Capacity building	DBSA is developing integrated programmes and mobilising resources to initiate the transition to a low carbon and green economy in partnership with several national government departments. Powering development through sustainable energy is a major cornerstone of the DBSA response strategy - dedicated funding lines are available for both South Africa and the rest of SADC for investment projects in sustainable energy accessible to municipalities and private developers. Project development assistance is available through the Bank and the agency programmes it administers such as the EE partnership	ongoing	
DFID	LTS, together with our regional partner OneWorld	feasibility study Regional Climate Change programme (RCCP)	Capacity building, Technology	"Southern Africa is particularly vulnerable to climate related challenges. As part of an ongoing effort to help minimize the risks associated with climate change, DFID has been supporting adaptation efforts in the region. In 2007/08 LTS, together with our regional partner OneWorld, conducted a 5-country feasibility study to clarify the role DFID should play to help southern Africa respond to the challenge of climate change... Subsequently, DFID approved funding a Regional Climate Change programme designed "to enable transboundary adaptation to climate change, with equitable access to climate funding, in southern Africa". This programme, with funds managed by OneWorld and technical assistance supported by LTS and a number of South African Partners, will promote capacity building and advisory support to the SADC region, as well as promoting stakeholder engagement, public awareness and lesson learning."	2007	



## Annex B.2: Further Annex I Support Activities in Burkina Faso

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
USaid	AGRHYMET Center, in collaboration with the African Center of Meteorological Applications for Development (ACMAD)	Capacity building for CILSS	Capacity building	"The United States is supporting the AGRHYMET Center and twelve West African countries (Benin, Burkina Faso, Cape Verde, Chad, Gambia, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal and Togo) in collecting meteorological, hydrological, and climatological data on a systematic basis. The AGRHYMET Center, in collaboration with the African Center of Meteorological Applications for Development (ACMAD), is holding workshops and special meetings on methodologies for a Regional Seasonal Outlook for West Africa and a Multidisciplinary Analysis of the African Monsoon (MAAM)."	•	•
EU	Coordinator: CIRAD	COOPENER, Strengthening local energy expertise in developing countries	Capacity building	"Objective: Establishing perennials training platforms for biomass-energy technologies in AFRICA Benefits: Strengthening local energy expertise and Developing energy production capacity in Africa"	01/2005-12/2007	EUR 530,755 (EU contribution: 45.93%)
EU	Coordinator: Research Group on Energy and Sustainable Development, Instituto Superior Tecnico, Portugal	COOPENER, Cooperation with Developing Countries - Energy for Poverty Alleviation in Sahel (IE4Sahel)	Capacity building	"Objective: Create and strengthen a Regional Reference Centre for Energy and Poverty in Sahel. Benefits: A well established centre for capacity building of local human resources can ensure long-lasting effects."	4/2005-4/2007	EUR 738,295 (EU contribution: 50%)
EU	Coordinator: ADEME, France	COOPENER - Mainstreaming Energy for Poverty Reduction and Economic Development (MEPRED)	Capacity building	"Objective: Mainstream access to energy into national development policies and strategies Benefits: Increase support from public authorities, North and South, to energy access programmes aimed at poverty reduction and sustainable development."	4/2005-4/2008	2,227,000 EUR (EU contribution: 41%)
EU	Co-ordinator: Fondation Énergies pour le Monde (France)	COOPENER, Dissemination of good practices - Proven in rural Africa (PROVEN)	Capacity building	"Objective: Promote best practice approaches of off-grid rural electrification using renewable energies Benefits: Develop know-how of institutions and local operators"	4/2005-4/2007	395,888 EUR (EU contribution: 50%)

EU	Coordinator: IED, France	COOPENER, main key action - Improving the economic and social impact of rural electrification (IMPROVES-RE)	Capacity building	"Objective: Reinforce the impact of rural electrification programmes on sustainable development and poverty reduction Benefits: integrated planning approach that takes into account synergies between social services and rural electrification"	4/2005-3/2007	1,042,303 EUR (EU contribution: 50%)
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### Annex B.3: Further Annex I Support Activities in DR Congo

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
EU	Coordinator: CIRAD (French Agricultural Research Centre for International Development);	COOPENER, Strengthening local energy expertise in developing countries - Biomass Energy Platforms Implementation for Training in Africa (BEPITA)	Capacity building	"Objective: Establishing perennials training platforms for biomass-energy technologies in AFRICA Benefits: Strengthening local energy expertise and Developing energy production capacity in Africa"	01/2005-12/2007	EUR 530,755 (EU contribution: 45.93%)

## Annex B.4: Further Annex I Support Activities in Ethiopia

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
EU	Coordinator: UNEP Risoe Centre, Partners: IED (France), AFREPREN/FWD (Kenya), EATTA (Kenya)	COOPENER, Community cooperation with developing countries - Poverty Alleviation through Cleaner Energy from Agro-industries in Africa (PACEAA)	Capacity building	"Objectives: (a) to identify policy, commercial and regulatory barriers currently restricting the uptake of cogeneration and renewable energy systems from agro- industries, and to propose ways of overcoming these barriers; (b) to develop detailed policy and regulatory guidelines and incentives for incorporation of cleaner energy from agro-industries into rural electrification programmes and plans; (c) to enhance local and regional capacity of public institutions, private sector for the effective utilisation of cogeneration and other cleaner energy systems from agro-industries in the rural electrification process."	5/2007-4/2010	EUR 1,267,245 (EU contribution 50%)
The Netherlands		The Netherlands Climate Assistance Programme (NCAP)	Capacity building	"NCAP aims to increase capacity in 14 developing countries to prepare, formulate and implement national climate change policies. Recently three risk screening analyses were done of programmes supported by the Netherlands in Bangladesh, Bolivia and Ethiopia, in order to set priorities for adaptation to climate change in vulnerable sectors."	2003-2007	
UK, Netherlands, the Switzerland, World Bank	•	Economics of Adaptation	Capacity building	"Economics of Adaptation (UK, the Netherlands and the Switzerland) are co-funding a research study with the World Bank to better understand the benefits and costs of adaptation in developing countries. The study will undertake urgently needed country-specific work to understand the additional costs of implementing climate resilient development at a national level (the current cost estimates are aggregated among all developing countries). The study will focus on 8 developing countries, including Ghana, Mozambique, Ethiopia, Bangladesh, Vietnam, Bolivia and 2 SIDs (to be determined)."	•	•
EU			Capacity building	"Three quick scans (portfolio screenings) in Bolivia, Bangladesh and Ethiopia . Quick and cost efficient way to set priorities in managing climate risks in a specific national or sectoral context. www.nlcap.net"	•	•

## Annex B.5: Further Annex I Support Activities in Malawi

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
DFID		Regional Climate Change Programme for SADC	Capacity building	Regional Climate Change Programme for SADC (Malawi, Mozambique, Tanzania, Zambia, Zimbabwe, Angola), Climate Change Fellowship Programme for doctoral and post-doctoral studies in 12 African "Centres of Excellence"	ongoing	USD 2 million
EU	Coordinator: UNEP Risoe Centre Partners: IED, France AFREPREN/FWD, Kenya EATTA, Kenya	COOPENER, Community cooperation with developing countries - Poverty Alleviation through Cleaner Energy from Agro-industries in Africa (PACEAA)	Capacity building	"Objectives: (a) to identify policy, commercial and regulatory barriers currently restricting the uptake of cogeneration and renewable energy systems from agro- industries, and to propose ways of overcoming these barriers; (b) to develop detailed policy and regulatory guidelines and incentives for incorporation of cleaner energy from agro-industries into rural electrification programmes and plans; (c) to enhance local and regional capacity of public institutions, private sector for the effective utilisation of cogeneration and other cleaner energy systems from agro-industries in the rural electrification process. Benefits: Increased access to electricity in rural areas, based on clean and locally available energy resources, contributing to poverty alleviation Cogeneration for Africa"	5/2007- 4/2010	EUR 1,267,245 (EU contribution 50%)
EU	Coordinator: Practical Action Southern Africa, Zimbabwe	COOPENER - (E- MINDSET)	Capacity building	"Objective: E-Mindset aims at bridging the gap between national and local energy planning, allowing a cross-sectoral integration of energy.	1/2007- 12/2009	EUR 869,308 (EU contribution : 50%)
GEF			Capacity building, Technology, Finance	"a) GEF/UNFCCC Support on capacity building to prepare First National Communication b) GHG Inventories prepared based on 1990 and 1994 years c) V & A Assessments report d) Mitigation/Abatement report e) Technology Transfer and Needs Assessments (This report prioritised renewable energy technologies in the country)		
GEF	UNEP in partnership with AFRIPREN, IIED, and Kenya Tea Development Agency	Greening the Tea Industry in East Africa	Capacity building	The Project "Greening the Tea Industry in East Africa (GTIEA)" ( <a href="http://greeningtea.unep.org/">http://greeningtea.unep.org/</a> ) implemented by the East Africa Tea Trade Association (EATTA) will support the development of small hydropower for the tea factories as a substitute for expensive and unreliable electricity from the grid and diesel backup power. As part of the project a number of micro-hydro sites in Malawi were investigated in a feasibility study, including carbon calculations.	2008-2010	

## Annex B.6: Further Annex I Support Activities in Mali

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
EU	Coordinator: CIRAD	COOPENER, (BEPITA)	Capacity building	"Objective: Establishing perennials training platforms for biomass-energy technologies in AFRICA Benefits: Strengthening local energy expertise and Developing energy production capacity in Africa"	01/2005-12/2007	EUR 530,755 (EU contribution: 45.93%)
EU	Coordinator: Research Group on Energy and Sustainable Development,	COOPENER, (IE4Sahel)	Capacity building	"Objective: Create and strengthen a Regional Reference Centre for Energy and Poverty in Sahel. Benefits: A well established centre for capacity building of local human resources can ensure long-lasting effects."	4/2005-4/2007	EUR 738,295 (EU contribution: 50%)
EU	Coordinator: ADEME, France	COOPENER - (MEPRED)	Capacity building	"Objective: Mainstream access to energy into national development policies and strategies Benefits: Increase support from public authorities, North and South, to energy access programmes aimed at poverty reduction and sustainable development."	4/2005-4/2008	2,227,000 EUR (EU contribution: 41%)
EU	Co-ordinator: Fondation Énergies pour le Monde (France)	COOPENER, (PROVEN)	Capacity building	"Objective: Promote best practice approaches of off-grid rural electrification using renewable energies Benefits: Develop know-how of institutions and local operators"ax 4 new project initiatives"	4/2005-4/2007	395,888 EUR (EU contribution: 50%)
EU	Coordinator: Energy for Development, Risø National Laboratory, Denmark	COOPENER, (DEA)	Capacity building	"Objective: Development and application of a method to assess the development impacts of energy interventions. Benefits: Information obtained will lead to enhance development impacts of future energy projects."	5/2005-10/2007	EUR 0.651 (EU contribution: 50%)
EU	Coordinator: IED, France Partners: ETC, Netherlands RISOE, Denmark	COOPENER, (IMPROVES-RE)	Capacity building	"Objective: Reinforce the impact of rural electrification programmes on sustainable development and poverty reduction Benefits: integrated planning approach that takes into account synergies between social services and rural electrification" vice expansion and cross sectoral synergies, which uses the functionalities of Geographical Information Systems (GIS)"	4/2005-3/2007	1,042,303 EUR (EU contribution: 50%)

EU	Coordinator:ETC Foundation, The Netherlands	COOPENER, (TIE-ENERGIA)	Capacity building	"Objective: Mainstream gender into energy policy, project planning, and programmes as a means of integrating gender and energy into poverty reduction Benefits: Training, Human and institutional capacity building, Equality, Improved livelihoods, Poverty reduction"	1/2005-6/2007	EUR 610,000 (EU contribution: 49%)
The Netherlands		The Netherlands Climate Assistance Programme (NCAP)	Capacity building	"NCAP aims to increase capacity in 14 developing countries to prepare, formulate and implement national climate change policies. Recently three risk screening analyses were done of programmes supported by the Netherlands in Bangladesh, Bolivia and Ethiopia, in order to set priorities for adaptation to climate change in vulnerable sectors."	2003-2007	
United States	AGRHYMET Center, in collaboration with the African Center of Meteorological Applications for Development (ACMAD)	Capacity building for CILSS and its specialised institution AGRHYMET in West Africa	Capacity building	"The United States is supporting the AGRHYMET Center and twelve West African countries (Benin, Burkina Faso, Cape Verde, Chad, Gambia, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal and Togo) in collecting meteorological, hydrological, and climatological data on a systematic basis. "		
USG		Adaptation Pilot Projects/Guidance Manual	Capacity building	This activity consists of three pilot studies using current USG-sponsored projects to assess their vulnerability to climate change, and to identify adaptation options that will make them more resilient to the impacts of climate change. For the first pilot project, the possible impacts of climate change on the development of new municipal water sources was assessed for the city of Polokwane, South Africa. A second pilot project focused on coastal zone management and flooding in La Ceiba, Honduras.	•	•
USG	Ministry of the Environment (MEA)	Building in both public and private sectors, Mali	Capacity building	The USG collaborated with the Malian Ministry of the Environment (MEA) on this project to increase Malian capacity to address environmental issues in development and to utilize environmental impact assessment as a strategic tool for sustainable development, consistent with the declared policy of the government of Mali.	•	•

## Annex B.7: Further Annex I Support Activities in Mozambique

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
DFID		Regional Climate Change Programme for SADC	Capacity building	Regional Climate Change Programme for SADC (Malawi, Mozambique, Tanzania, Zambia, Zimbabwe, Angola), Climate Change Fellowship Programme for doctoral and post-doctoral studies in 12 African "Centres of Excellence"	ongoing	USD 2 million
Ministry of Foreign Affairs of Finland, Unit for International Environmental Policy and IUCN	Forest Conservation Programme	Climate Change and Development project	Capacity building, Technology	<p>The pilot phase had four components:</p> <ul style="list-style-type: none"> <li>* Identifying the vulnerability of different rural stakeholder groups to the impacts of climate change in selected pilot communities</li> <li>* Conducting a preliminary situation analysis on the strength and weaknesses of Zambian institutions to respond to the impacts of climate variability on local production systems</li> <li>* Organizing multi-stakeholder dialogues in order to identify and evaluate options to promote a more resilient agriculture and natural resource sector, and</li> <li>* Designing a full-size project proposal on climate change and development to cover at least two countries in Africa.</li> </ul>	2007-2010	EUR 2.8 million
UKaid from the Department for International Development (DFID)	Save the Children	River of hope: adapting to a changing climate in Mozambique	Capacity building, Technology	"The Zambezi Floodplain Management programme, delivered by Save the Children and funded by UKaid from the Department for International Development (DFID), is helping farming communities in Mozambique adapt to the effects of climate change."	•	•
EU	Coordinator: UNEP Risø Centre, Risø National Laboratory, Denmark Partners: IED, France AFREPREN/FWD, Kenya EATTA, Kenya	COOPENER, (PACEAA)	Capacity building	<p>"Objectives: (a) to identify policy, commercial and regulatory barriers currently restricting the uptake of cogeneration and renewable energy systems from agro- industries, and to propose ways of overcoming these barriers;</p> <p>(b) to develop detailed policy and regulatory guidelines and incentives for incorporation of cleaner energy from agro-industries into rural electrification programmes and plans;</p> <p>(c) to enhance local and regional capacity of public institutions, private sector for the effective utilisation of cogeneration and other cleaner energy systems from agro-industries in the rural electrification process.</p>	5/2007-4/2010	EUR 1,267,245 (EU contribution 50%)

EU	Coordinator: Practical Action Southern Africa, Zimbabwe	COOPENER - (E-MINDSET)	Capacity building	"Objective: E-Mindset aims at bridging the gap between national and local energy planning, allowing a cross-sectoral integration of energy.	1/2007- 12/2009	EUR 869,308 (EU contribution: 50%)
EU	Coordinator: MVV Consulting GmbH, Germany Partners:	COOPENER, local energy expertise - Energy Efficiency Training of Trainers (EETT)	Capacity building	"Objective: To build capacity on energy management by training of trainers on energy management	1/2006- 12/2007	EUR 581,219 (EU contribution: 50%)
EU	Coordinator: ESD, UK	COOPENER - (REEPASA)	Capacity building	"Objective: Increase use of renewable energy technologies and promote the rational use of energy for poverty alleviation Benefits: Productive use and cross-sectoral approaches; less costs and improved service delivery for local authorities; less poverty"	1/2006- 6/2008	EUR 511.763 (EU contribution: 50%)
EU	Coordinator: Instituto Superior Técnico, Portugal	COOPENER - (SURE-AFRICA)	Capacity building	"Objective: To create a network of practical and scientific knowledge between African and European Institutions, in the field of energy-efficient building and sustainable urban design. "	1/2007- 6/2009	EUR 570,544 (EU contribution: 50%)
The Netherlands		The Netherlands Climate Assistance Programme (NCAP)	Capacity building	"NCAP aims to increase capacity in 14 developing countries to prepare, formulate and implement national climate change policies. Recently three risk screening analyses were done of programmes supported by the Netherlands in Bangladesh, Bolivia and Ethiopia, in order to set priorities for adaptation to climate change in vulnerable sectors."	2003-2007	
UK, Netherlands, the Switzerland, World Bank	•	Economics of Adaptation	Capacity building	"Economics of Adaptation (UK, the Netherlands and the Switzerland) are co-funding a research study with the World Bank to better understand the benefits and costs of adaptation in developing countries. The study will undertake urgently needed country-specific work to understand the additional costs of implementing climate resilient development at a national level (the current cost estimates are aggregated among all developing countries). The study will focus on 8 developing countries, including Ghana, Mozambique, Ethiopia, Bangladesh, Vietnam, Bolivia and 2 SIDs (to be determined)."	•	•



## Annex B.8: Further Annex I Support Activities in Rwanda

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
EU	Coordinator: UNEP Risoe Centre, Risø National Laboratory, Denmark Partners: IED (France), AFREPREN/FWD (Kenya), EATTA (Kenya)	COOPENER, (PACEAA)	Capacity building	<p>"Objectives: (a) to identify policy, commercial and regulatory barriers currently restricting the uptake of cogeneration and renewable energy systems from agro- industries, and to propose ways of overcoming these barriers;</p> <p>(b) to develop detailed policy and regulatory guidelines and incentives for incorporation of cleaner energy from agro-industries into rural electrification programmes and plans;</p> <p>(c) to enhance local and regional capacity of public institutions, private sector for the effective utilisation of cogeneration and other cleaner energy systems from agro-industries in the rural electrification process.</p> <p>Benefits: Increased access to electricity in rural areas, based on clean and locally available energy resources, contributing to poverty alleviation Cogen for Africa"</p>	5/2007-4/2010	EUR 1,267,245 (EU contribution 50%)
EU		Understanding the IPCC	Capacity building	<p>"The overall objective is to inject the best available scientific knowledge from the IPCC Climate Change 2007 report and other sources into policy processes and decision-making in the targeted countries and regions (East Africa (Tanzania, Burundi and Rwanda), West Africa (Ghana, Nigeria and Senegal) and South Asia (Bangladesh, Bhutan and Nepal) and also to engage the science and policy communities of the targeted regions and countries to develop a shared vision of research and assessment needed to serve climate change decision-making needs."</p>		
The Netherlands		Various Partnerships	Capacity building	<p>"The government of The Netherlands has allocated 500 mln to promote renewable energy in developing countries..</p> <p>The programme which will be implemented through bilateral and multilateral channels will contain various Capacity Building components. An example is the formulation of an Energy Sector plan in Rwanda."</p>	2008-2011	EUR 500 mln
	African Development Bank	Climate for Development in Africa (ClimDev-Africa) Initiative	Capacity building	<p>"ClimDev-Africa consists of three components. First, building the capacity of African climate institutions to generate and widely disseminate climate information necessary for planning. The goal of this component is to ensure that reliable, useful and useable climate- related data are generated and made widely available to policy- makers, policy support organizations and the general population on the continent. Second, enhancing the capacity of end-users, particularly national development policy-makers, to be able to mainstream climate change into development plans on the continent. Third, implementing adaptation programs and projects that incorporate climate-related information so that we can learn the lessons and define good climate change adaptation practices. "</p>		

GEF	UNEP in partnership with AFRIPREN, IIED, and Kenya Tea Development Agency	Greening the Tea Sector project	Capacity building	As part of this GEF funding regional activity, a number of potential IPP hydropower sites were investigated to pre-feasibility and feasibility study level as a means of mitigating GHG emissions and promoting more sustainable tea production in SSA. One project identified included a fuel switching program for a tea facility in NW Rwanda. Feasibility study includes carbon investment assumptions.	2008-2010	
Denmark	UNDP and UNEP	CC Dare	Capacity building	Supported activity in Rwanda included building capacity and raising awareness for a sensitive community on climate change adaptation (NBDF) and adapting to climate change through land and biodiversity conservation in Gishwati area in the Nyabihu district (RENGOF).	2009-2011	\$150.000
Clinton Foundation	Clinton Foundation	Tree planting	Rural livelihoods	Avoluntary initiative to support tree plantation and corn cultivation for vegetable oil production for households as a contribution to Rwanda's economic development. Possibility to consider carbon offsets as part of project in medium term.	2008-2011	US \$2 million

### Annex B.9: Further Annex I Support Activities in Senegal

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
EU	Coordinator: CIRAD (French Agricultural Research Centre for International Development);	COOPENER, Strengthening local energy expertise in developing countries - Biomass Energy Platforms Implementation for Training in Africa (BEPITA)	Capacity building	"Objective: Establishing perennials training platforms for biomass-energy technologies in AFRICA Benefits: Strengthening local energy expertise and Developing energy production capacity in Africa"	01/2005-12/2007	EUR 530,755 (EU contribution: 45.93%)
EU	Coordinator: Research Group on Energy and Sustainable Development, Instituto Superior Tecnico, Portugal	COOPENER, Cooperation with Developing Countries - Energy for Poverty Alleviation in Sahel (IE4Sahel)	Capacity building	"Objective: Create and strengthen a Regional Reference Centre for Energy and Poverty in Sahel. Benefits: A well established centre for capacity building of local human resources can ensure long-lasting effects."	4/2005-4/2007	EUR 738,295 (EU contribution: 50%)

EU	Coordinator: ADEME, France	COOPENER - Mainstreaming Energy for Poverty Reduction and Economic Development (MEPRED)	Capacity building	"Objective: Mainstream access to energy into national development policies and strategies Benefits: Increase support from public authorities, North and South, to energy access programmes aimed at poverty reduction and sustainable development."	4/2005- 4/2008	2,227,000 EUR (EU contribution: 41%)
EU	Co-ordinator: Fondation Énergies pour le Monde (France)	COOPENER, Dissemination of good practices - Proven in rural Africa (PROVEN)	Capacity building	"Objective: Promote best practice approaches of off-grid rural electrification using renewable energies Benefits: Develop know-how of institutions and local operators"	4/2005- 4/2007	395,888 EUR (EU contribution: 50%)
EU	Coordinator: Energy for Development, Risø National Laboratory, Denmark	COOPENER, Community cooperation with developing countries - Development and Energy in Africa (DEA)	Capacity building	"Objective: Development and application of a method to assess the development impacts of energy interventions. Benefits: Information obtained will lead to enhance development impacts of future energy projects."	5/2005- 10/2007	EUR 0.651 (EU contribution: 50%)
EU	Coordinator:ETC Foundation, The Netherlands	COOPENER, (TIE-ENERGIA)	Capacity building	"Objective: Mainstream gender into energy policy, project planning, and programmes as a means of integrating gender and energy into poverty reduction Benefits: Training, Human and institutional capacity building, Equality, Improved livelihoods, Poverty reduction"	1/2005- 6/2007	EUR 610,000 (EU contribution: 49%)
EU	Coordinator: IT Power, United Kingdom	COOPENER, (ENABLE)	Capacity building	"Objective: Develop awareness of renewable energy use for poverty reduction in the health, education and water sectors Benefits: Support of the EU Energy Initiative and of Millennium Development Goals in the health, education and water sectors"	1/2005- 6/2007	EUR 1159686 (EU contribution: 50%)
EU	Coordinator: CRA- W, Belgium Partners:	COOPENER, (ENEFIBIO)	Capacity building	"Objective: To develop a favourable framework for bioenergy projects development in SMEs Benefits: Fossil areas"	7/2005- 12/2007	EUR 905,956 (EU contribution: 50%)
EU	Coordinator: ROBOTIKER (Spain)	COOPENER (MICROGRIDS)	Capacity building	Target countries: Senegal "Objective: Promotion and dissemination of the use of micro-grids with high content of renewable energy sources Benefits: Increase awareness of important decision makers in favour of renewables and microgrids for electrification in the rural environment"	1/2006- 12/2007	EUR 627.754 (EU contribution: 50%)
EU	Coordinator: Organisation Internationale de la Francophonie (OIF)	COOPENER, energy policy chain & energy planning - SIE-Afrique Phase II	Capacity building	"Objective: Develop and structure national efforts in setting up energy information system (EIS) in Niger, Senegal, and Togo Benefits: Coherent and structured energy policies whose impacts can be assessed. Transparency of energy markets. Dialogue framework for energy stakeholders"	1/2005- 12/2007	EUR 999,288 (EU contribution: 50%)

The Netherlands		The Netherlands Climate Assistance Programme (NCAP)	Capacity building	"NCAP aims to increase capacity in 14 developing countries to prepare, formulate and implement national climate change policies. Recently three risk screening analyses were done of programmes supported by the Netherlands in Bangladesh, Bolivia and Ethiopia, in order to set priorities for adaptation to climate change in vulnerable sectors."	2003-2007	
United States	AGRHYMET Center, in collaboration with the African Center of Meteorological Applications for Development (ACMAD)	Capacity building for CILSS (Permanent Interstate Committee for Drought Control in the Sahel) and its specialised institution AGRHYMET in West Africa	Capacity building	"The United States is supporting the AGRHYMET Center and twelve West African countries (Benin, Burkina Faso, Cape Verde, Chad, Gambia, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal and Togo) in collecting meteorological, hydrological, and climatological data on a systematic basis. The AGRHYMET Center, in collaboration with the African Center of Meteorological Applications for Development (ACMAD), is holding workshops and special meetings on methodologies for a Regional Seasonal Outlook for West Africa and a Multidisciplinary Analysis of the African Monsoon (MAAM).		
The Netherlands		PROGEDE ñ Programme de gestion durable et participative des energies	Capacity building	"PROGEDE focuses on the sustainable production and marketing of fuel wood in Senegal by organizing and supporting potentially capable local groups. www.nlambassadedakar.nl"		
The Netherlands		University of Twente: TGAL: Think Global Act Local	Capacity building	"Research and capacity building for sustainable forest management carried out in Nepal, Tanzania, Senegal, Mexico and India. Objective is to demonstrate that local communities can make a reliable assessment of the increased sink value of their forest and monitor this over an extended period of time. The aim is also to open ways for local communities to supplement their forest based livelihoods through the scale of carbon in the future and to provide carbon investors with sinks that are socially and ecological sound."	2003-2009	
Ireland		REEEP ñ The Renewable energy and Energy Efficiency Programme	Capacity building	"The Renewable Energy & Energy Efficiency Partnership's (REEEP) goal is to accelerate the global market for sustainable energy by acting as an international and regional enabler, multiplier and catalyst to change and develop sustainable energy systems. Ireland supports two REEP programmes in Africa. The first designs and implements financial risk management instruments that support financing of small-scale projects, especially small scale energy equipment and service delivery. The second promotes solar water heating in Uganda allowing households to save money and to develop local capacity to generate energy."	2005-	

EU		Understanding the IPCC	Capacity building	<p>"The overall objective is to inject the best available scientific knowledge from the IPCC Climate Change 2007 report and other sources into policy processes and decision-making in the targeted countries and regions (East Africa (Tanzania, Burundi and Rwanda), West Africa (Ghana, Nigeria and Senegal) and South Asia (Bangladesh, Bhutan and Nepal) and also to engage the science and policy communities of the targeted regions and countries to develop a shared vision of research and assessment needed to serve climate change decision-making needs."</p>	•	•
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## Annex B.10: Further Annex I Support Activities in Tanzania

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
UNDP in cooperation with fishing communities, the Ministry of Natural Resources and Tourism, Sokoine University of Agriculture, and Kingolwira National Fish Farming Centre			Capacity building	Adaptation Strategies and Challenges Associated with Climate and Ecological Changes to the Lake Victoria Community. Institutional Capacity building on Climate change.	ongoing	USD 69,000
UNEP with support from GEF, implementation in collaboration with the VPO			Capacity building	NAPA priority projects. Will build capacity at DNA/CCU	planning	USD 1.5 - 3 million
UNEP in cooperation with CEEST and VPO funded by Govt of Netherland and ETC			Capacity building	Second National Communication. Related to DNA's commitments under the UNFCCC. Prepare climate change scenarios for Tanzania	2006-2009	USD 405,000

Danida in partnership with DoE			Capacity building	Capacity development on Climate Change, developing the Climate Change unit (DNA) within DoE. Follow-up to NAPA.	2007-2009	USD 1 million
Norway and three Tanzanian universities and the Tanzania Meteorological Agency			Capacity building	Support for climate-change research programme	2009-2013	Up to NOK 20 million annually, 2009-2013
EU		Global Climate Change Alliance	Capacity building	Global Climate Change Alliance	2007-2009	EUR 2.5 million
DFID		Regional Climate Change Programme for SADC	Capacity building	Regional Climate Change Programme for SADC (Malawi, Mozambique, Tanzania, Zambia, Zimbabwe, Angola), Climate Change Fellowship Programme for doctoral and post-doctoral studies in 12 African "Centres of Excellence"	ongoing	USD 2 million
DFID			Capacity building	Bioenergy/clean energy: a regional project	ongoing	500,000 per year for 5 years
EPMS (National NGO), Project in Collaboration with International Institute for Environment and Development, IIED		Strengthening for Climate Change	Capacity building	Strengthening for Climate Change Cap build, CC in health sector	complete	GBP 15,000
ClimateWorks	CEEST (National NGO) & McKenzie International	Project Catalyst on Adaptation Working Group	Capacity building	Policy development and capacity building, designed to facilitate good agreement at Copenhagen for COP-15	2008-2009	
EU and HIVOS	TaTEDO	Up-scaling access to integrated modern energy services for poverty reduction	Capacity building, technology	Up-scaling access to integrated modern energy services for poverty reduction at the Community level. Supporting development of small enterprises in rural areas. Project includes a program to disseminate more efficient stone or brick made cook stoves in Rombo and Hi districts Community level, also focuses on improvement of thermal performance of the wood fuels stoves in rural areas through replacing the tree stone fire places by efficient fuel wood stoves.	ongoing	USD 200,000 pilot activity, then EUR 2.5 million for implementation

Norway	TaTEDO	Integrated modern energy services for sustainable development and poverty reduction (Phase II)	Capacity building, technology	Integrated modern energy services for sustainable development and poverty reduction (Phase II) Community level, Contribute to sustainable development and poverty reduction by enhancing access to modern energy technologies and services for consumptive and productive needs in households, SMEs and social service centres.	ongoing	USD 2.9 million
		Integrated sustainable energy services for poverty reduction and environmental conservation programme (ISES-PRECP Phase II)	Capacity building, technology	Integrated sustainable energy services for poverty reduction and environmental conservation programme (ISES-PRECP Phase II) Community Level Increase income of the rural and urban population through reduced costs and increased efficiency for woodfuels utilization and production by adoption of efficient woodfuels stoves, ovens and charcoal production kilns	ongoing	
EU	Co-ordinator: Fondation Énergies pour le Monde (France)	COOPENER, Dissemination of good practices - Proven in rural Africa (PROVEN)	Capacity building	"PROVEN in rural Africa aims to promote the replication of best practice approaches that have PROVEN their effectiveness in the decentralised rural electrification using renewable energies in target regions in West-Africa and East-Africa, by developing: <ul style="list-style-type: none"> <li>• low threshold, practical information exchange and training material for actors in the provision of access to decentralised rural electricity services</li> <li>• targeted information exchange, "know how-", " know what-", " know when-", " know if-" material for policy makers and stake holders influencing the rural electrification process"</li> </ul>	4/2005-4/2007	395,888 EUR (EU contribution: 50%)
EU	Coordinator: UNEP Risoe Centre, Risø National Laboratory, Denmark	COOPENER, Community cooperation with developing countries - Poverty Alleviation through Cleaner Energy from Agro-industries in Africa (PACEAA)	Capacity building	"Objectives: (a) to identify policy, commercial and regulatory barriers currently restricting the uptake of cogeneration and renewable energy systems from agro- industries, and to propose ways of overcoming these barriers; (b) to develop detailed policy and regulatory guidelines and incentives for incorporation of cleaner energy from agro-industries into rural electrification programmes and plans; (c) to enhance local and regional capacity of public institutions, private sector for the effective utilisation of cogeneration and other cleaner energy systems from agro-industries in the rural electrification process."	5/2007-4/2010	EUR 1,267,245 (EU contribution 50%)

EU	Coordinator: Energy for Development, Risø National Laboratory	COOPENER, Community cooperation with developing countries - Development and Energy in Africa (DEA)	Capacity building	"DEA is developing an Assessment Framework to identify and quantify the outcomes and impacts of energy projects. Working with centres in six Sub-Saharan Africa countries (Botswana, Ghana, Mali, Senegal, Tanzania and Zambia), the project will use the framework in case studies of real energy projects... The Project is aimed at national energy- and development-policy makers, initially in the six participating African countries, but with a view to wider application in Sub-Saharan Africa."	5/2005- 10/2007	EUR 0.651 (EU contribution: 50%)
EU	ETC Foundation, The Netherlands with Eco (UK), Practical Action EA (Kenya), KuSiNi (Netherlands), EAETDN (East African Energy Technology Development Network)	COOPENER, Strengthening local energy expertise in developing countries - Turning Information into Empowerment: Strengthening Gender and Energy networking in Africa (TIE- ENERGIA)	Capacity building	"This project works to ensure that gender is integrated into energy issues in Africa by strengthening the human and institutional capacity within and beyond the Africa Gender and Energy Network, which is part of the ENERGIA International Network on Gender and Sustainable Energy. The main objectives are: <ul style="list-style-type: none"> <li>• to create a critical mass of gender-sensitive women and men who would engage in changing policies, programmes and practices that affect women's energy choices</li> <li>• to increase awareness, knowledge and skills of a selected group of development practitioners to integrate gender and energy concerns into sustainable development and poverty reduction programmes</li> <li>• to identify gender gaps in energy-poverty policies and make gender and energy issues visible to a wide audience"</li> </ul>	1/2005- 6/2007	EUR 610,000 (EU contribution: 49%)
EU	IT Power (UK) with Stockholm Environment Institute (Sweden), Transénergie (France), IT Power East Africa, (Kenya), Tanzania Traditional Energy Development and Environment Organisation (Tanzania), Rural Electrification Agency of Senegal (ASER) (Senegal), QuinTsens	COOPENER, strengthening local energy expertise in developing countries - Building Capacity in Energy in the Health, Education and Water Sectors for Poverty Reduction in sub- Saharan Africa (ENABLE)	Capacity building	"ENABLE supports the governmental sectors of education, water and health in Tanzania, Uganda and Kenya by building policy and planning capacity amongst ministry and local government staff regarding the role that renewable energy technologies can play in meeting sector goals. Capacity building and awareness raising are being delivered through a series of workshops and training activities. First national workshops were completed in late 2005 and a regional workshop in Tanzania in March 2006 produced a wide range of concrete actions that need to be taken to accelerate energy access in East Africa. Other activities of ENABLE include the development of Energy Guidelines and Packages for health, water and education, the development of an Electrification Planning Tool to assist in selection of technologies according to cost and economic benefits, provision of training on the energy guidelines and planning tool and development of a replication package for francophone Africa, initially focusing on Senegal."	1/2005- 6/2007	EUR 1159686 (EU contribution: 50%)



	(Senegal)					
EU	Coordinator: Energy for Sustainable Development (ESD) Ltd, UK Partners: Ramboll, Denmark	COOPENER - Mitigating Risk and Strengthening Capacity for Rural Electricity Investment in Africa (MIRREIA)	Capacity building	"The MIRREIA project was developed to address some of the key barriers to private sector investment in renewable energy and the rational use of energy with the aim of increasing access to electricity in rural areas. The project is focusing on the policy and regulatory barriers and also the financial barriers. MIRREIA is working in Tanzania, Kenya and Uganda, however the aim is to disseminate the lessons learned to a wider audience as these are issues to be found throughout sub-Saharan Africa and internationally in developing countries."	1/2005-7/2007	EUR 560,770 (EU contribution: 50%)
EU	Universities in Germany, United Kingdom, Greece, France, Uganda, South Africa and Tanzania	COOPENER, local energy expertise - Promoting Renewable Energy in Africa (PREA)	Capacity building	"The aim is to reduce poverty by influencing energy policy and regulations in Africa. Training and capacity-building of energy professionals, regulators, academics and policy- and decision-makers will enhance the necessary skills to implement renewable energy technologies and energy efficiency in buildings in Africa, notably in South Africa, Tanzania and Uganda."	1/2006-12/2008	EUR 784.339 (EU contribution: 50%)
EU	Coordinator: AB Ångpanneföreningen, Sweden	COOPENER, main key action: 12 - Tanzanian Renewable Energy and energy Efficiency project to Sustain Poverty Alleviation (TreeSpa)	Capacity building	"TreeSpa focuses on developing the rural wealth-creating sectors in Tanzania by introducing energy efficient technology with the help of "joint technology purchase" and electricity service agreements for their top prioritised modern energy services. The principle approach is relevant to most Sub-Saharan Africa and results and materials will therefore be communicated to other countries. The project includes: <ul style="list-style-type: none"> <li>• designing aggregated purchasing schemes for energy efficient electrical equipment</li> <li>• designing electricity service agreements</li> <li>• business development support (businesses using energy)"</li> </ul>	12/2006-11/2009	EUR 957,860 (EU contribution: 50%)
The Netherlands		The Netherlands Climate Assistance Programme (NCAP)	Capacity building	"NCAP aims to increase capacity in 14 developing countries to prepare, formulate and implement national climate change policies. Recently three risk screening analyses were done of programmes supported by the Netherlands in Bangladesh, Bolivia and Ethiopia, in order to set priorities for adaptation to climate change in vulnerable sectors."	2003-2007	
The Netherlands		University of Twente: TGAL: Think Global Act Local	Capacity building	"Research and capacity building for sustainable forest management carried out in Nepal, Tanzania, Senegal, Mexico and India. Objective is to demonstrate that local communities can make a reliable assessment of the increased sink value of their forest and monitor this over an extended period of time. The aim is also to open ways for local communities to supplement their forest based livelihoods through the scale of carbon in the future and to provide carbon investors with sinks that are socially and ecological sound."	2003-2009	

EU		Understanding the IPCC	Capacity building	"The overall objective is to inject the best available scientific knowledge from the IPCC Climate Change 2007 report and other sources into policy processes and decision-making in the targeted countries and regions (East Africa (Tanzania, Burundi and Rwanda), West Africa (Ghana, Nigeria and Senegal) and South Asia (Bangladesh, Bhutan and Nepal) and also to engage the science and policy communities of the targeted regions and countries to develop a shared vision of research and assessment needed to serve climate change decision-making needs."		
Irish Aid		Climate Change impact assessment	Capacity building	"Irish Aid support is being used to conduct an assessment of the impacts of climate change on the Tanzanian economy. The work conducted through partners in country introduces new tools and develops capacity to investigate the economic impacts of CC."		
GEF	UNEP in partnership with AFRIPREN, IIED, and Kenya Tea Development Agency	Greening the Tea Industry in East Africa	Capacity building	The Project "Greening the Tea Industry in East Africa (GTIEA)" will support the development of small hydropower for the tea factories as a substitute for expensive and unreliable electricity from the grid and diesel backup power. As part of the project a number of micro-hydro sites in Tanzania were investigated in a feasibility study, including carbon calculations.	2008-2010	

## Annex B.11: Further Annex I Support Activities in Uganda

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
World Bank			Capacity Building	"The Bank is active in other areas in Africa in providing analytical support to climate change and its economic relevance."		
World Bank, together with the UNDP			Capacity Building	"supporting a Sustainable Land Management (SLM) project which has strong linkages to climate change"		
UNDP			Capacity Building	UNDP "are also supporting a US\$ 3.6 million programme around Sustainable Land Management in the Cattle Corridor – which has a considerable emission reduction potential."		US\$ 3.6 million
UNEP	Katoomba Group	REDD Capacity Building	Capacity Building	"UNEP are supporting the Katoomba Group to develop initiatives around REDD"		
UNEP	NEMA	Poverty and Environment	Capacity Building	UNEP "are providing support through the Poverty Environment Initiative to NEMA to integrate climate change into the NDP."		

		Initiative				
Royal Norwegian Embassy			Capacity Building	"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			Capacity Building	"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			Capacity Building	"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)."		
EU	Co-ordinator: Fondation Énergies pour le Monde (France)	COOPENER, (PROVEN)	Capacity building	"Objective: Promote best practice approaches of off-grid rural electrification using renewable energies Benefits: Develop know-how of institutions and local operators"	4/2005-4/2007	395,888 EUR (EU contribution: 50%)
EU	Coordinator: URC	COOPENER, (PACEAA)	Capacity building	The expected results of the PACEAA project may be grouped according to the five principal areas of activity: (i) review of policy and regulatory options for agro-industry-led and -induced rural electrification; (ii) elaboration of organisational and management models; (iii) development of local rural electrification plans; (iv) adoption of rural electrification packages; and (v) training and capacity building to support the planning and implementation of clean energy from agro-industries.	5/2007-4/2010	EUR 1,267,245 (EU contribution 50%)
EU	Coordinator:ETC Foundation, The Netherlands	COOPENER, (TIE-ENERGIA)	Capacity building	"Objective: Mainstream gender into energy policy, project planning, and programmes as a means of integrating gender and energy into poverty reduction Benefits: Training, Human and institutional capacity building, Equality, Improved livelihoods, Poverty reduction"	1/2005-6/2007	EUR 610,000 (EU contribution: 49%)
EU	Coordinator: IT Power, United Kingdom	COOPENER, (ENABLE)	Capacity building	"Objective: Develop awareness of renewable energy use for poverty reduction in the health, education and water sectors Benefits: Support of the EU Energy Initiative and of Millennium Development Goals in the health, education and water sectors"	1/2005-6/2007	EUR 1159686 (EU contribution: 50%)
EU	Coordinator: Energy for Sustainable Development (ESD) Ltd, UK	COOPENER - (MIRREIA)	Capacity building	"Objective: Mitigating barriers to investments in renewable energy and the rational use of energy in the rural electricity sector Benefits: Direct support to developers and investors in the three countries and bringing together key institutional stakeholders."	1/2005-7/2007	EUR 560,770 (EU contribution: 50%)
EU	Coordinator: Chair for Environmental Architecture, University of	COOPENER, local energy expertise - Promoting Renewable	Capacity building	"Objective: To reduce poverty by influencing energy policy, regulation, and implementation in Africa Benefits: Greater wealth with less CO2 emissions and fossil fuel consumption"	1/2006-12/2008	EUR 784.339 (EU contribution: 50%)

	Dortmund, Germany	Energy in Africa (PREA)				
Ireland		REEEP ñ The Renewable energy and Energy Efficiency Programme	Capacity building	"The Renewable Energy & Energy Efficiency Partnership's (REEEP) goal is to accelerate the global market for sustainable energy by acting as an international and regional enabler, multiplier and catalyst to change and develop sustainable energy systems. Ireland supports two REEP programmes in Africa. The first designs and implements financial risk management instruments that support financing of small-scale projects, especially small scale energy equipment and service delivery. The second promotes solar water heating in Uganda allowing households to save money and to develop local capacity to generate energy."	2005-	
Climate Technology Initiative (CTI), the Renewable Energy & Energy Efficiency Partnership (REEEP), and others	PPL International	CTI Private Financing Advisory Network (CTI PFAN)	Finance, Capacity Building	"The Africa network is under development starting with dedicated country networks in Uganda and Mozambique from June / July 2009." Participation of Ugandan project developers at the Africa Forum for Clean Financing (2010). Co-sponsorship by the Rural Electrification Agency of Uganda (REA) and the Private Sector Foundation of Uganda.	2009 - ongoing	

## Annex B.12: Further Annex I Support Activities in Zambia

Donor	Implementing Agency	Name of Activity	Scope	Description	Time	Budget
DFID		Regional Climate Change Programme for SADC	Capacity building	Regional Climate Change Programme for SADC (Malawi, Mozambique, Tanzania, Zambia, Zimbabwe, Angola), Climate Change Fellowship Programme for doctoral and post-doctoral studies in 12 African "Centres of Excellence"	ongoing	USD 2 million

Ministry of Foreign Affairs of Finland, Unit for International Environmental Policy and IUCN/ World Conservation Union - IUCN, Zambia	UCN/ World Conservation Union - IUCN, Zambia	Climate Change and Development project Forest Conservation Programme	Capacity building	<p>The pilot phase had four components, namely:</p> <ul style="list-style-type: none"> <li>* Identifying the vulnerability of different rural stakeholder groups to the impacts of climate change in selected pilot communities</li> <li>* Conducting a preliminary situation analysis on the strength and weaknesses of Zambian institutions to respond to the impacts of climate variability on local production systems</li> <li>* Organizing multi-stakeholder dialogues in order to identify and evaluate options to promote a more resilient agriculture and natural resource sector, and</li> <li>* Designing a full-size project proposal on climate change and development to cover at least two countries in Africa.</li> </ul>	2007-2010	EUR 2.8 million
DFID; Zambian Ministry of Agriculture and Cooperatives	FAO; Zambian Ministry of Agriculture and Cooperatives	Raising the red flag on climate change in Zambia	Capacity building, Technology	<p>The project initially ran in 41 districts, but with the success of the initial surveys the government of Zambia requested additional funding to bring the project to all 72 of the country's districts. To ensure sustainability, the Zambian Ministry of Agriculture and Cooperatives was encouraged to take ownership of the project.</p> <p>The Ministry is now responsible for meeting the operational costs of the project in all districts nationwide. In the budget of each district, funds are set aside specifically for the project's activities. "The project has made the average Zambian farmer more aware of the changing environment," says a spokesman for the Ministry.</p>	2006-2009	£308,000
EU	Coordinator: UNEP Risoe Centre, Risø National Laboratory, Denmark	COOPENER, (PACEAA)	Capacity building	<p>"Objectives: (a) to identify policy, commercial and regulatory barriers currently restricting the uptake of cogeneration and renewable energy systems from agro- industries, and to propose ways of overcoming these barriers;</p> <p>(b) to develop detailed policy and regulatory guidelines and incentives for incorporation of cleaner energy from agro-industries into rural electrification programmes and plans;</p> <p>(c) to enhance local and regional capacity of public institutions, private sector for the effective utilisation of cogeneration and other cleaner energy systems from agro-industries in the rural electrification process.</p>	5/2007-4/2010	EUR 1,267,245 (EU contribution 50%)
EU	Coordinator: Practical Action Southern Africa, Zimbabwe	COOPENER (E-MINDSET)	Capacity building	<p>"Objective: E-Mindset aims at bridging the gap between national and local energy planning, allowing a cross-sectoral integration of energy.</p>	1/2007-12/2009	EUR 869,308 (EU contribution: 50%)

EU	Coordinator: Energy for Development, Risø National Laboratory, Denmark	COOPENER (DEA)	Capacity building	"Objective: Development and application of a method to assess the development impacts of energy interventions. contributes to development"	5/2005- 10/2007	EUR 0.651 (EU contribution: 50%)
EU	Coordinator: ESD, UK	COOPENER (REEPASA)	Capacity building	"Objective: Increase use of renewable energy technologies and promote the rational use of energy for poverty alleviation"	1/2006- 6/2008	EUR 511.763 (EU contribution: 50%)
EU	Coordinator: InWEnt,Germany	COOPENE(IN SABA)	Capacity building	"Objective: Promoting productive use of renewable energy through identification of marketable goods/services and business advice Benefits: Job creation, poverty alleviation, SME support, new markets for advanced adapted technologies"	4/2005- 9/2007	EUR 615,598 (EU contribution: 50%)
Ireland		REEEP - The Renewable energy and Energy Efficiency Programme	Capacity building	"The Renewable Energy & Energy Efficiency Partnership's (REEEP) goal is to accelerate the global market for sustainable energy by acting as an international and regional enabler, multiplier and catalyst to change and develop sustainable energy systems. Ireland supports two REEP programmes in Africa. The first designs and implements financial risk management instruments that support financing of small-scale projects, especially small scale energy equipment and service delivery. The second promotes solar water heating in Uganda allowing households to save money and to develop local capacity to generate energy."	2005-	

## The Project

The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) has commissioned Wuppertal Institute and GFA Envest a research project on suitable supporting activities that contribute to the enhancement of CDM in sub-Saharan African least developed countries. The main aim of the research is to assist BMU in developing its strategy for climate change mitigation activities on the African continent.

The results and findings of the research project will be published and circulated to all project developers, political decision makers, companies, financial institutions and everyone else interested in finding ways of how to best approach the CDM in Africa.

More information on the project, all publications and further resources can be found at [www.jiko-bmu.de/996](http://www.jiko-bmu.de/996)

## The Project Consortium

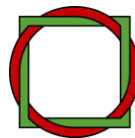
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