



CARBON FINANCE ASSIST

2008 ANNUAL REPORT

CAPACITY BUILDING FOR
LOW-CARBON DEVELOPMENT



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Messages

Warren Evans, Director of Environment

The World Bank is committed to expand the reach and scope of capacity building activities in addressing various aspects of climate change. Capacity building and knowledge management is one of the key pillars for the World Bank Group's evolving strategic framework on climate change and sustainable development. As we engage various stakeholders around the world – policy makers, private sector actors, academic/research institutions, and civil society organizations – to take an active part in our efforts, programs like CF-Assist could play a critical role in ensuring that engagement is as constructive and fruitful as possible. As the contents of this report show, the World Bank Group's capacity building efforts in carbon mitigation – undertaken with strong support from multiple international donors -- have reached a large number of developing countries, and benefited thousands of professionals. The Bank supports the active participation of developing countries at the annual Carbon Expo, where they have the opportunity to showcase their carbon projects at the largest carbon market trade fair in the world. We also focus on capacity building activities in Sub-Saharan countries under the Nairobi Framework partnership.



Joëlle Chassard, Manager, Carbon Finance Unit

The flexible mechanisms under the Kyoto Protocol, especially the Clean Development Mechanism (CDM), have demonstrated how market-based instruments can contribute to carbon emission reductions and provide sustainable development benefits in the developing nations. The World Bank has been at the forefront of the carbon market development since the beginning, and has promoted capacity building in developing countries as an integral part of this pioneering effort. In less than three years of its existence, Carbon Finance Assist (CF-A) has been instrumental in this overall effort of the World Bank by implementing capacity and institutional building programs in nearly 50 countries, and helping identify nearly 200 carbon finance projects. There is a wealth of best practices and lessons learnt from this experience that needs to be shared with countries and partners. As the World Bank embarks on implementing the next generation of carbon finance activities, we anticipate a continued need for capacity building, to deepen and broaden in-country capacity to benefit from carbon finance incentives on a wider scale and in all relevant segments of the economy as countries explore lower-carbon development paths. CF-Assist's valuable experience thus far will be critical to expanding our engagement.



Konrad von Ritter, Sector Manager, Sustainable Development



Carbon Finance Assist (CF-A), the World Bank's

flagship capacity

development program on carbon finance implemented by the World Bank Institute (WBI) is less than three years old. It has been made possible by the generous contributions from Spain, Switzerland, France, Denmark and Australia. In this relatively short period, CF-A has established itself as one of the largest capacity development programs of its kind, and made considerable progress in extending its programs across different regions of the world and different sectors and aspects of carbon mitigation. Country-level capacity development in nearly 50 countries, identification of over 200 carbon finance projects, creation and/or strengthening of national regulatory institutions, and facilitation of host country participation in market development platforms such as global Carbon Expo and regional carbon forums are some of the key accomplishments of CF-A. In this process, the program benefited thousands of professionals and scores of local organizations. By the same token, the program benefited from the enthusiastic contributions from these participants and partner organizations, who added their practical experience to the body of knowledge which CF-A is sharing with others. The progress has been particularly rapid during 2007-08 – the period covered in this report – with key initiatives such as Nairobi Framework in Sub-Saharan Africa, addressing the knowledge needs of the mainstream financial sector, developing local/regional partners for capacity building, and launching of the multimedia knowledge management package that aims to deliver learning through virtual means so as to reach a large number and types of stakeholders.

Nevertheless, there are many challenges that CF-A needs to tackle in the immediate future with rapid developments

taking place internally and externally. First of all, as the First Commitment Period under Kyoto Protocol has unrolled at the beginning of this year and moves towards its closure in 2012, the nature of carbon mitigation activities including carbon finance is undergoing change. Programmatic approaches, sector-specific programs, issues related to carbon credit registration and issuance are becoming prominent. Treating mitigation as an integral part of promoting low-carbon development at the national level is gaining currency as an approach. As all these developments create new sets of stakeholders, they raise new demand for capacity building. While CF-A has begun to address some of these issues during this year, it is clear that much more needs to be done and in an accelerated manner. Looking forward, the goal has to be to bring capacity development in the mitigation area into the strategic framework on climate change and development that the World Bank is developing early on. This will allow us to capture the good practice of the early movers and make this practical knowledge available to other. Over the next two years, CF-A is committed to tackle these challenges in close cooperation with internal and external partners.

Program Highlights 2007-08

- During 2007-08, CF-Assist's coverage has crossed 50 countries, with 05 new countries being added this year alone. Special focus was on Sub-Saharan Africa where several programs have been established.
- Regarding that as a priority, CF-Assist worked on project portfolio development, and helped identify over 260 CDM projects (PDD, PIN and Concepts) in 16 countries, and facilitated their participation in the carbon market.
- CF-Assist has facilitated the participation of over 45 host countries to Carbon Expo 2007, to provide a unique platform where they could learn about the latest developments in the market, and the buyers, sellers and service providers could interact in a trade fair setting.
- CF-Assist has delivered a number of successful regional carbon forums, notably Latin America Carbon Forum in Peru, Central Asia Carbon Forum in Uzbekistan, and Carbon Conclave in India.
- Putting special focus on financial sector, CF-Assist hosted two highly successful Carbon Investment Forums in South Africa and Senegal, covering Southern Africa and West Africa regions, respectively.
- Over 5000 people benefited from training and exposure provided by CF-Assist events including training programs, global and regional events.
- CF-Assist helped establish three new DNAs (Botswana, The Gambia and Syria); and provided institutional support in another 10 countries. CF-Assist also built capacities of financial intermediaries in 08 countries.
- CF-Assist has continued to promote innovative market instruments such as the CDM Fund in China. The Sellers Funds in Argentina and Mexico have become operational during this year. Cambodia also developed a framework to set up a Carbon Fund under a CF-Assist program.
- In the transportation sector, CF-Assist developed three new methodologies (Mexico, China and the Philippines), which are under process by CDM EB
- CF-Assist played a prominent role in Nairobi Framework partnership and helped develop a joint proposal for future activities, and also held a consultation at Bali COP/MOP, and is actively participating in the organization of Africa Carbon Forum scheduled for September, 2008.
- CF-Assist has launched the development of a comprehensive knowledge management package using multimedia tools, which will be used in e-courses, virtual training programs, online interactions, etc. The first product of the package would be demonstrated at Carbon Expo 2008. CF-Assist also collaborated with IADB to build a Spanish Platform for Knowledge management.
- CF-Assist is actively pursuing partnerships internally (ESMAP) and externally (UNIDO, USEPA, etc.) to tackle focused capacity building in specific sectors such as renewable energy and energy efficiency.

1.0 Introduction

1.1 Carbon Finance Program at the World Bank

The World Bank has been a leader in promoting the carbon market since the early days of Kyoto Protocol in late 1990s. Over the last decade, the World Bank has utilized over \$2 billion – mobilized from the governments and industries in Annex I countries – to purchase emission reductions from clean projects in developing countries, and helped generate several billions of dollars of capital investment in these projects. During 2007-08, as the world community moves towards developing a new post-Kyoto regime, the World Bank has launched the second generation market initiatives – the Carbon Partnership Facility and the Forest Carbon Partnership Facility – which aim to help market continuity and extend the reach of carbon trading as an important tool to address the challenge of climate change mitigation.

Lilian Portillo, Co Chair DNA Forum

"Carbon Finance Assist program has strongly contributed to the consolidation of the DNAs and helped the dialog on CDM opportunities for small developing countries (like my country Paraguay). This support has brought the carbon market mechanism into the national sustainable development process."

evolving and they need to be tackled in a systematic manner.

Carbon Finance Assist is the principal program of the World Bank to address the capacity issues and provide technical assistance to the developing countries and the economies in transition. This report provides a description of various activities implemented during 2007-08, and the work plans and priorities for the next two years (2008-10).

1.2 Role of Capacity Building

In the early stage of the carbon market, lack of capacity in most developing (non-Annex I) countries and economies in transition was a key issue in expanding the carbon market to ensure their effective participation. Several capacity building programs – including the Carbon Finance Assist of the World Bank – focused on strengthening regulatory institutions, helping put procedures in place and assisting in project portfolio development. A lot of this work still continues, and several countries, especially in regions like Sub-Saharan Africa and Central Asia continue to need the basic level capacity building. However, with the changing parameters of the debate on the global regulatory regime for climate Change, and the emerging approaches and instruments in the carbon market, capacity needs are also



2.0 Carbon Finance Assist

2.1 Program Objectives

Carbon Finance Assist (CF-A) is a multi-donor trust fund set up as a capacity building and technical assistance program in complement to World Bank's carbon funds. CFA was originally proposed in 2004 and formally opened for subscription in March 2005, and the program received its first contribution in July 2005. In addition to direct contributions from donors, CF-A also administers the former PCF *plus* program, funded by the interest income from the Prototype Carbon Fund.

CF-A's basic objective is *to ensure that developing countries and the economies in transition are able to fully participate in the flexible mechanisms defined under the Kyoto Protocol*. In order to achieve this objective, CF-A would work with countries to:

- Build their human and infrastructural capacity;
- Facilitate sustainable development gains associated with carbon mitigation projects;
- Help create and manage carbon assets in the form of mitigation projects; and
- Help reduce costs of participation in the carbon market.

CF-A endeavors to create an enabling environment in which local institutions gain capacity to prepare and review projects for approval, the project proponents can identify opportunities and bring them to market, and the financial sector can use carbon finance as a tool to reduce project risks. CF-A functions in World Bank client countries to build capacity at national and local levels, disseminate lessons learned from carbon business operations, and generate a broad pipeline of carbon mitigation projects that meet sustainable development objectives.

2.2 Program Management

CF-A is implemented using a distributed structure involving a number of internal and external partners. The overall management of CF-A rests with the Sustainable Development division of the World Bank Institute (WBI) (Chart 1). The program implementation is done in collaboration with teams from World Bank's six operational regions: Sub-Saharan Africa (AFR), Middle East and North Africa (MNA), Europe and Central Asia (ECA), East Asia and Pacific (EAP), South Asia (SAR), and Latin America and the Caribbean (LAC).

CF-Assist has work program agreements (WPA) with all the six regions to implement the country programs, with the anchor team in WBI providing technical inputs and monitoring. Carbon Finance Unit (CFU) provides technical and operational inputs to CF-A. Within the regional teams, a task team leader is responsible for each country program.

In addition, CF-A has a large number of external partners who collaborate in organizing events, delivering training programs and provide technical services such as sector assessments.

In terms of governance, CF-A has two external committees, which provide program monitoring and endorse work programs: i) Host Country Committee (HCC), representing over 50 developing countries, which convenes twice a year; and ii) Donor Committee, representing all CF-A contributors. Internally, CF-A has an Advisory Group comprising regional coordinators, CFU and IFC representatives and other subject experts, who meet every quarter.

CF-A has a resource envelop of about \$13.4 million, with contributions from multiple sources -- direct donor funds,

income from WB's carbon fund management, and contributions from partners to specific activities. In addition, CF-Assist has leveraged resources of about \$6m from PHRD (Policy and Human Resource Development) – a

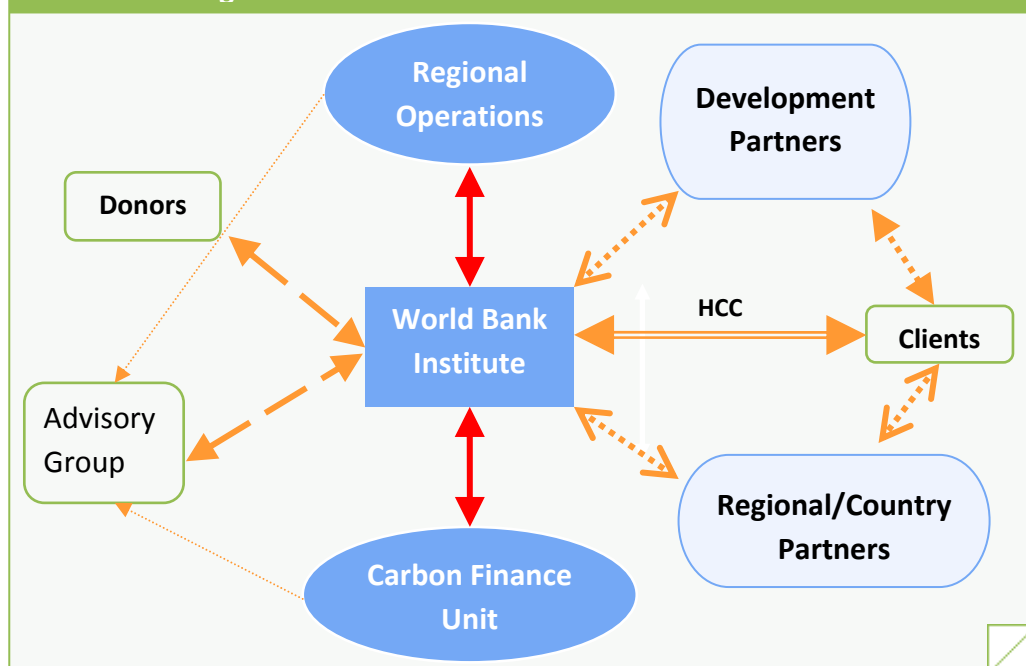
(i) Capacity Building at Country/Regional Level

CF-A's capacity building activity includes three activities:

training, institutional strengthening and project portfolio development.

- CF-A provides training focusing on four basic modules:
 - Establishing effective designated national authorities (DNA)
 - Carbon finance project formulation
 - Baseline and monitoring methodologies
 - Negotiating fair and equitable emission reductions purchase agreements

Chart 1: Management Structure of CF-Assist



World Bank internal program financed by Japan to implement specific country capacity building activities.

2.3 Work Components

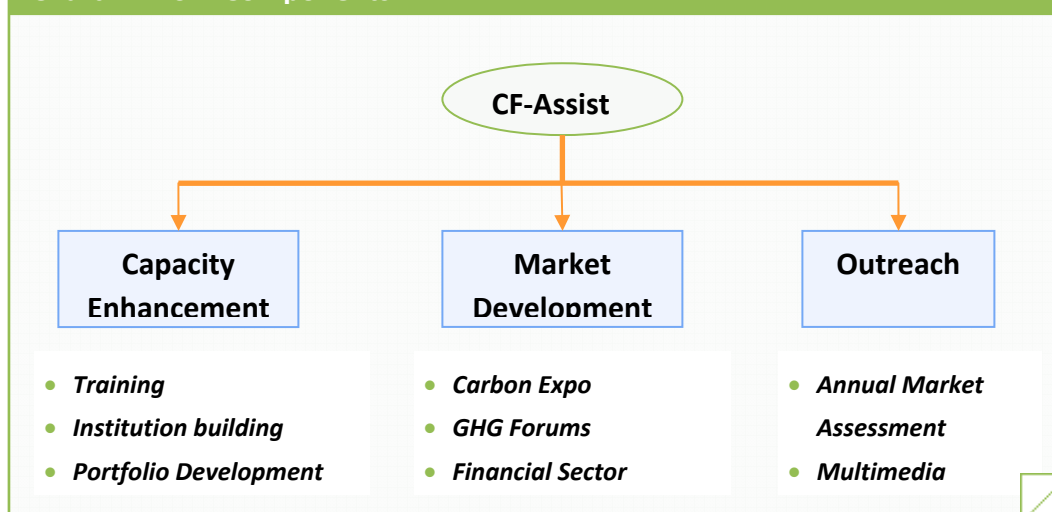
CF-Assist's work program includes three main components (Chart 2):

The training programs are customized to specific country needs, and the modules are regularly updated with new information and real life case studies. One of the key outcomes of these training programs is identification and development of actual carbon finance projects.

Apart from national programs, CF-A also organizes

regional workshops (e.g. Francophone Africa, Southern Africa, Latin America, etc.) to bring together stakeholders from different countries to exchange experiences and best practices in carbon market development.

Chart 2: Work Components



- Under institutional assistance activity, CF-A works with country governments, and other national institutions to

enhance their capacity including establishing and strengthening DNAs, developing procedures for project approvals and monitoring, promoting clear rules for the transfer of certified emission reductions, assisting local groups and consultants to become trainers, etc.

- For project portfolio development, CF-A works with local intermediaries or partners to identify potential carbon finance projects, in particular to open up specific sectors to the opportunity of carbon finance. This is done as part of the training programs or, when necessary, as a distinct activity.

(ii) Market Development Facilitation

CF-A implements a number of activities to facilitate development of the carbon market such as global and regional events, analytical work to address barriers, and increased participation of the financial sector in carbon finance.

- CF-A, on behalf of the World Bank, organizes a number of events that bring together key market stakeholders not only to discuss the latest market developments, but promote actual project transactions. These include the Global Carbon Expo, and regional carbon forums, conducted in collaboration with external partners.
- CF-A targets specific sectors to address and remove entry barriers, e.g. transportation sector, which contributes a significant portion of greenhouse gases in the atmosphere, but has been under-represented in the early carbon market.
- CF-A has special focus on capacity building for the financial sector, since lack of underlying finance is the key barrier for most of the carbon finance projects in developing countries. Activities are targeted at promoting means to monetize emission reduction purchase agreements, demonstrating how carbon finance reduces investment risks, and developing and disseminating tools to promote increased participation of the traditional financial sector in the carbon market.

(iii) Outreach

- CF-A brings out an annual State of the Carbon Market report (released at the Carbon Expo every year) that provides latest information on status, outlook and trends in the carbon market.
- CF-A also supports development of outreach publications on topics such as project preparation, validation and verification, legal framework, etc.
- CF-A, in order to enhance the scope and reach of its capacity building programs, is developing a comprehensive multimedia package for knowledge management in carbon finance. This package contains different types of products (audiovisual presentations, case studies, simulation games, interactive guides, etc. and can be delivered through various modes (face-to-face, online, distance learning, etc.)

2.4 Implementation Strategy

CF-A has been designed to be largely a demand-driven program, which responds to client needs in a customized fashion. Some of the key characteristics of the strategy are:

Phased Approach: Right from its inception, CF-A has consciously differentiated between short term and long term capacity needs of the countries and its implementation was designed in a phased manner, with increasing depth and intensity of capacity building through different phases.

Objective Facilitation: As the carbon business grows internationally, CF-A plays an objective role to enable the full engagement of developing countries and economies in transition in the carbon market, and to provide comprehensive upstream assistance to strengthen the carbon market liquidity in the long term and broaden its scale and impact in the developing world. In this regard, CF-A pursues a conscious strategy to enable country participation in the broad carbon market, and not promote or develop CDM projects for just the World Bank's carbon business (except as a 'buyer of last resort'). This is also reflected in the approach that involves different market players as resources to deliver capacity

building programs rather than depending solely on World Bank staff.

Strategic Partnerships: In order to ensure effective implementation of the various components of the work program, CF-A has partnerships with various global, regional and national organizations, both public and private. These partners provide a variety of inputs and services including joint organization of market forums, participation in capacity building, logistical support for in-country events, and implementation of technical assistance activities as local players. Annex 2 of the report provides a list of CF-A partners as of April 2008.

■ Country Programs

Capacity building programs at the national level is the principal activity of CF-A. As mentioned earlier, the country programs are implemented in a phased manner, and designed to be modular in delivery approach. Typically, countries with no past capacity building activity will go through three phases, with measurable indicators (see Section 2.5) to trigger the undertaking of each subsequent phase. It is possible that some countries have already had programs completing early phases in which case, advanced capacity building modules will be implemented.

Host countries interested in receiving support from CF-A would endorse their request to the Program Manager. The CF-A team then assesses the capacity building needs of a specific country in consultation with Bank regional staff. Very often, CF-A also holds an in-country stakeholder consultation to assess the needs. For the purpose of determining the phase of capacity building in a particular country, CF-A has developed a baseline matrix (Appendix) using four primary criteria: current state of governance (functioning of DNA, regulatory framework, etc.); level of involvement of priority sectors (private sector, financial institutions, etc.); CDM project deal flow; and level of knowledge management (outreach). This determination will enable design of appropriate programs covering the four themes discussed in Section 2.1.

In order to avail the assistance, countries need to fulfill some of the following conditions: i) the country has ratified the Kyoto Protocol; the government has demonstrated support to participate in the carbon market; there is willingness to devote some resources to the participation in the carbon market including contributions in kind; the country is a borrowing World Bank member; the Bank has a comparative advantage to undertake the proposed activities, and, the country has potential to deliver a relatively significant volume of high quality emission reductions to the carbon market.

In the initial phases of the program, World Bank (through its regional teams) implements the programs. But as work progresses and countries become progressively strengthened, the grants increasingly become recipient-executed, with oversight and expert staff support being provided by CF-A.

■ Regional Activities

In addition to country level programs, CF-A undertakes regional level activities to: i) facilitate exchange among countries (e.g. Central America); focus on a specific sector involving multiple countries (e.g. West Africa Carbon Fund for Renewable Energy and Biofuels); and target a specific stakeholder group (e.g. Banking sector in Southern and Western Africa).

■ Market Development Facilitation

Annual Carbon Expo is the major highlight of CF-A's market development activities. Expo brings all the key stakeholders together to provide a platform for project transactions and other activities. CF-A, in addition to providing designing and technical inputs (along with CFU) in its organization, supports and facilitates the participation of host countries, who are able to bring project ideas to market them to potential carbon buyers at the Expo.

In addition, CF-A also hosts a number of regional events in different parts of the world to facilitate exchange and transactions focusing on particular regions. CF-A partners

with local and regional organizations in conducting these events.

■ Outreach

In the initial stages of the program, CF-A delivered training programs mostly in a face-to-face format, and outreach activities have been largely through print media. However, with rapid expansion of program coverage and evolving need to reach larger and more diverse groups of stakeholders, CF-A had, during 2007, embarked on utilizing multimedia tools to develop different knowledge products and deliver them virtually through online and distance learning programs.

2.5 Impact Indicators

As discussed earlier, CF-A implements the country programs in a phased manner, and the most important indicator of impact in this regard is the progress from one phase to another. Chart 3 illustrates the indicators used to demonstrate such movement.



Chart 3. Impact Indicators

<i>Phase I (1 year)</i>	<i>Phase II (1 year)</i>	<i>Phase III (2-3 years)</i>
Theme 1 : CDM/JI Governance		
<ul style="list-style-type: none"> DNA/Focal Point w/criteria and procedures established 	<ul style="list-style-type: none"> Supportive regulatory framework developed Efficient procedures for project review and approval established 	<ul style="list-style-type: none"> Proactive development and marketing of national portfolio DNA established sustainable financing plan
Theme 2: Financial/Industry Engagement		
<ul style="list-style-type: none"> Key financial experts trained 	<ul style="list-style-type: none"> Financial industry understands 'Rules of the Game' and instruments to hedge risks 	<ul style="list-style-type: none"> CF integrated into commercial investments and in concessional lending planning/decisions
Theme 3: Project Deal Flow		
<ul style="list-style-type: none"> Key players in sector fully aware of CF, and some have established systems to assess potential project At least one PDD completed Stakeholders have identified and quantified assets in key sectors. 	<ul style="list-style-type: none"> At least one industry association or intermediary engaged in CF Potential projects continue to be identified autonomously At least one PDD validated, marketed, and ERPA negotiated Participation at Carbon Expo 	<ul style="list-style-type: none"> At least two projects annually producing ERs Self-sustaining deal flow Intermediaries engaged in CF on sustainable basis Carbon Expo participation with partial or no subsidy
Theme 4: Knowledge Management		
<ul style="list-style-type: none"> CDM/JI information, approval procedures and project opportunities disseminated Key local experts trained to design and market projects with/to international experts 	<ul style="list-style-type: none"> At least one national workshop covering all CF topics in depth, including PIN development Knowledge sustained by web or long-distance learning National and regional networks established 	<ul style="list-style-type: none"> Local and regional experts transferring knowledge to other countries/regions Durable mechanisms for knowledge management (e.g. certification, accredited DOE, etc.).

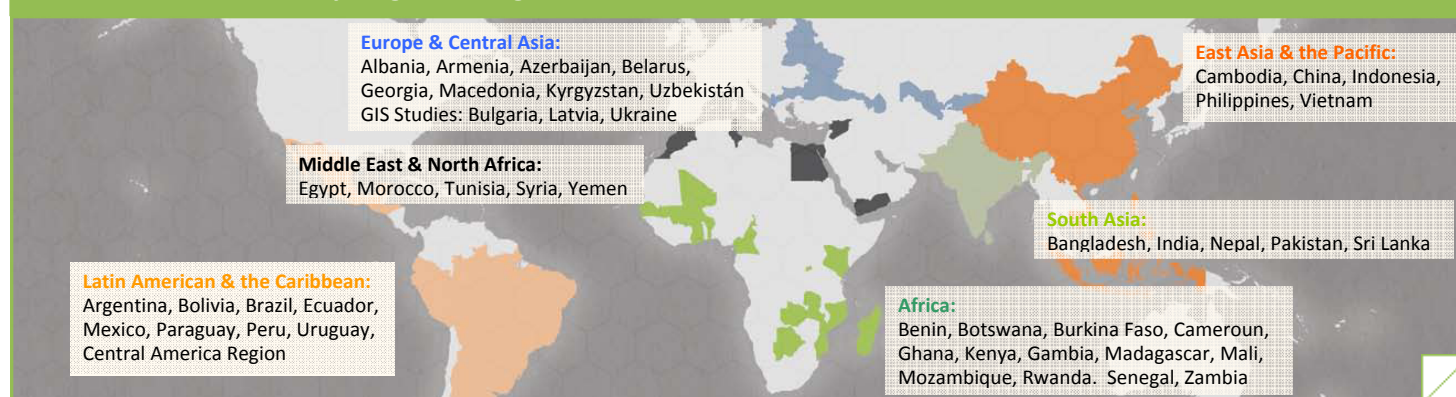
3.0 Activity Report 2005-06

3.1 Capacity Building Programs

The number of countries where CF-A has provided support to capacity building programs touched 50 during 2007-08, including five new countries in this year (Chart 4). Some countries where the programs have

the carbon market to less than 3%. During 2007-08, CF-A initiated new programs in Benin, The Gambia, Burkina Faso and Rwanda. Country programs have continued in Madagascar and Senegal, while discussions have been initiated in Sierra Leone, Liberia and Angola. There has also been considerable

Chart 5. CF-Assist Country/Regional Programs



been planned could not be started due to prevailing conditions (e.g. Kenya and Lebanon) while others due to scheduling issues (e.g. Mongolia). This section describes specific activities initiated and implemented in different regions during 2007-08.

3.1.1 Sub-African Region (AFR)

CF-A launched a sub-program in 2006 – Africa Assist - to address the specific challenges faced by Sub-Saharan countries, which have limited their share in

focus on regional activities, and specific sectors. Many of these activities have been done in collaboration with partners under the Nairobi Framework (Box 1).

In **Benin**, a workshop was held in Cotonou on the role and functions of DNA attended by around 20 members from relevant government organizations. CF Assist also supported Benin in finalizing the Decree on the establishment of DNA, as well as national CDM approval procedures and Sustainable Development Criteria. It was followed by a CDM

Box 1: Nairobi Framework

Nairobi Framework (NF) is a UN initiative aimed at helping the carbon market development in Sub-Saharan Africa, through coordinated capacity building activities by the World Bank, UNDP, UNEP, AfDB, and UNECA with UNFCCC acting as the Secretariat for the partnership. Under this umbrella partnership, CF-A has implemented a number of activities during 2007-08:

- Prepared a carbon potential assessment study in Sub-Saharan countries;
- Co-organized with UNEP two highly successful regional forums for financial institutions on CDM project development, in Southern and Western Africa, respectively;
- Contributed to a new program proposal for the NF partners to take up new activities in addition to their ongoing activities

CF-A is also part of the organizing committee for the upcoming Africa Carbon Forum to be held in September in Senegal.

capacity building workshop to raise awareness among stakeholders and enhance knowledge on CDM and the benefits that could be generated.

In **Rwanda**, DNA received technical advisory services. WB's Africa regional team 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 **Burkina Faso**, a training workshop was organized in Ougadougou in collaboration with WB-ESMAP's SME Program. This program aims to assist Burkina in adopting clear policies and procedures governing the establishment, operation, and expansion of energy sector SMEs. 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.

Botswana, with CF-A support, has constituted its Designated National Authority (DNA) and informed the CDM secretariat at UNFCCC. CF-A also supported a DNA delegation to participate in the Regional Carbon Market Forum in November '07 in Cape Town, and interact with South African DNA, project developers and potential carbon buyers to learn from their experiences.

In **Kenya**, the DNA launched a national survey to receive public feedback on sustainable development criteria in the context of CDM as an input to the finalization of national procedures for CDM project evaluation and approval, which will eventually be adopted by the national cabinet of Kenya. Though

two workshops were scheduled for stakeholder consultations, they could not take place due to the political instability. They will now be held in mid-2008.

Box 2: Capacity Building in Senegal

Senegal ratified Kyoto Protocol in 2001 and established the DNA within the "Direction de l'Environnement et des Etablissements Classees." Senegal benefited from World Bank capacity building support, through the PHRD Grant in late 2004 and CF-A program in 2006. This support enabled the DNA to institute the approval procedures and sustainability criteria for the assessment of CDM projects and to reach out to the public and private sectors through the organization of six training programs designed for project developers and CDM consultants. A significant result of these capacity development activities is the identification and processing of a large portfolio of CDM projects.

"With the help of World Bank Capacity building programs, Senegal has made considerable progress in its objective of actively participating in the carbon market. More than 22 projects were developed with two of them at validation stage and others under negotiation. It has been a learning-by-doing process to develop national expertise, and today several Senegalese consultants have the competence to intervene in CDM at national and regional levels and thus keep the transaction costs low in the region."

Cheikh Ndiaye Sylla, Directeur de l'Environnement et des Etablissements Classes, CDM-DNA Sénégal

Government of Botswana

"Through CF-Assist's technical support and capacity building initiatives, Botswana's DNA was established and organized (operational guidelines prepared). Another major milestone was the identification of the most promising CDM sectors and mobilization of private and public entrepreneurs mainly from the mining and energy industries. The government of Botswana is looking forward to developing this cooperation further in terms of CDM project development."

In **The Gambia**, the process of establishing a DNA was launched with a national workshop focusing on the host country's institutional and legal requirements under the Kyoto Protocol. The Department of State for Forestry and Environment (DSFE) would host the DNA. Along with this decision, it was agreed to strengthen the constitution of the DNA and the development of a project portfolio through regional technical assistance, to be provided by CF-A.

Senegal has been one of the active countries in West Africa in promoting CDM (Box 2, previous page). CF-A launched, in collaboration with CEFEB, the development of three case studies of CDM projects,

which would outline the steps required for PDD development and validation process as well as the issues and constraints that project developer faced while developing the PDD and submitting for validation. The case studies would be developed in both English and French to be shared with countries in the region.

CF-A also launched the development of PDD for a specific CDM project (“Bundling of 8 SOGAS methane recovery projects in Senegal”) with the aim to build local capacities on bundling issues and simplified procedures for small scale CDM projects.

CF-A helped Senegalese DNA develop a brochure on CDM prospects as part of the preparation for their participation in Carbon Expo in May 2008.

Madagascar was

among the first under CF-A to benefit from a national technical assistance program in early 2006 that aimed to support and strengthen national capacities for CDM project implementation. The country program ended

in April 2008. During this period, several activities have been implemented including:

- Strengthening of DNA capacity and support to the development of a legal structure regarding CER ownership with regard to CDM forestry projects;
- Raising awareness on the benefits of CDM among local stakeholders in different regions of the country;

Focal point of UNFCCC and CDM DNA, Ministère de l'Environnement des Eaux et Forêts et du Tourisme

“Madagascar has an efficient DNA that has already approved 10 projects in different sectors: Solid waste, forestry, Biofuels, and Hydro. With CF Assist support, we have been able to organize several workshops to raise awareness among different stakeholders regarding CDM benefits at environmental, social and economic levels. We also organized four training programs on legal, technical and methodological aspects of CDM that benefited more than 120 participants and consultants. Indeed, carbon finance was a new area for us where we needed to develop our national capacities. We hope after these significant efforts with CF-A support, the CDM market would grow in Madagascar.”

- Building national capacities through organization of a number of training events and workshops;
- Identifying a CDM portfolio of 06 projects in different sectors that are ready to be brought to the carbon market; and
- Facilitating the participation of Madagascar in Carbon Expo to promote their projects.

A final training workshop was organized in April 2008 in Antananarivo to complete the country program activities and review the program accomplishments and detail the next steps. The training included in-depth discussion on methodological and financial aspects of CDM. It was also an opportunity for the six project developers to present their PINs to new CDM stakeholders. Specifically, the experience of the HYDELEC project presented to the participants was well appreciated as the developer explained how the 15MW hydropower project went through different steps of CDM.

Ashok Sarkar, Lighting Africa Initiative, ESMAP, World Bank

“Energy Sector Management Assistance Program (ESMAP)’s collaboration with Carbon Finance Assist of WBI in the past year, particularly in the Lighting Africa initiative, has proven to be effective and fruitful. The capacity building workshops organized by CF-A in Addis Ababa and Dar Es Salaam in FY08 have helped our local partners in Africa to enhance their knowledge of the practical approaches of tapping into the potential synergies between energy efficiency, CDM, and carbon markets. We look forward to continue working with CF-A in this coming year on our broad-based efforts to scale up World Bank-wide energy efficiency operations.....”

At the **regional level**, CF-A conducted two important events focusing on financial sector (Box 3), which helped create awareness among bankers and other relevant

stakeholders regarding the benefits of CDM. Further, CF-A has also initiated technical assistance to set up a carbon fund in West Africa for CDM project development and financing.

CF-A also joined hands with ESMAP/WB in organizing CDM training workshops for private entrepreneurs in lighting and energy efficiency sectors in Sub-Saharan Africa. Two workshops – in Addis Ababa, Ethiopia and Dar es Salaam, Tanzania – were conducted in

October '07 and March '08 respectively and attended by nearly 70 participants from over 15 countries. Several of these entrepreneurs have undertaken to add CDM component to their existing projects, which is a welcome step for carbon market development in Africa.

Box 3: Focus on Financial Sector in Sub-Saharan Africa

Lack of underlying finance is one of the biggest barriers for promoting CDM projects in clean technology sectors. Mainstream financiers consider these technologies risky and are reluctant to provide lending. In order to create awareness regarding the potential of carbon finance in improving the project viability, CF-A joined UNEP-RISO to conduct two regional forums – in Johannesburg, South Africa and Dakar, Senegal – focused on the banking sector in Southern Africa and West Africa. Nearly 300 participants attended these forums, which provided a good platform to discuss issues related to clean project financing.

CF-A is also providing technical assistance in a partnership with ECOWAS Bank and UNCTAD to establish an Africa Carbon Fund for Biofuels and Renewable Energy (FABER), which is expected to raise a capital of \$500million to develop carbon mitigation projects in the region.



Middle East and North Africa (MNA)

Country work programs in Morocco, Tunisia and Egypt are amongst the earliest launched under CF Assist in MNA Region. In Yemen, a focused country program was launched and completed during 2007. Technical assistance has been initiated in Syria focusing on the establishment of DNA and CDM portfolio development. A country program has been negotiated and agreed on with the carbon finance focal point in Lebanon but activities are on hold for now.

In **Morocco** and **Egypt**, CF-A's focus is mainly on the financial sector. Two institutions have been chosen as intermediaries – National Bank of Egypt (NBE) and Fonds Communal de l'Equipement (FEC) of Morocco - - as they have considerable priority needs to enhance their understanding on CDM as well as mainstream carbon finance in their portfolio of projects.

An MOU was discussed and agreed on with NBE to carry out activities such as providing technical

assistance to identify and develop CDM programs, and organizing training on CDM programmatic approach (pCDM) as well as supporting the organization of a carbon finance unit within NBE to be in charge of CDM.

The technical assistance to FEC is focused on support to mainstreaming the programmatic approach for carbon finance into the National Solid Waste Management Program.

In **Tunisia**, a CDM Portfolio of six projects has been developed in the sectors of transport, solid waste and Energy.

Abdul Rahman F. Al-Eryani,
Minister of Water and Environment
and Chair of DNA Board

"Yemen was the first host country of the Arabian Peninsula to exhibit at the Global Carbon Expo held from May 2-4, 2007 in Cologne, Germany, thanks to the technical assistance from World Bank's CF-Assist program".

In **Yemen**, a CDM training workshop and project clinic was organized for over 30 local consultants and potential project developers on topics covering CDM cycle, PIN and PDD development, project methodologies, additionality concept, etc. Two working group sessions were held for interactive exercises on PIN development.

Also, a consultation on CDM project portfolio development was completed. Four PINs were finalized in Energy and Solid Waste Management sectors.

Syria has had limited engagement with CDM so far. CF-A has extended support to Syria's General Commission of the Environmental Affairs (GCEA) to finalize the modalities and procedures to establish the DNA and facilitate the CDM approval process as required under UNFCCC rules. A workshop was organized in collaboration with DNA in November '07 to familiarize the audience with carbon market

Mahmoud Shidiwah, Chairman of
Environment Protection Authority
and Vice Chair of DNA Board

"Carbon Expo 2007 was an outstanding opportunity for the Yemeni Government and for Yemeni companies to promote CDM opportunities. We presented a pipeline of relevant projects and also publicized the national approval and evaluation procedures. The Yemeni exhibition space supported by CF-Assist generated an enormous amount of interest from the investors' side,"

concepts, project development opportunities in the country, and regulatory requirements. More than 40 people attended the event from public and private sectors,

consultants and key members of the DNA. A portfolio of CDM projects is under development.

3.1.2 East Asia (EAP)

Box 4: Cambodia Country Program

The main focus of the CF-A country program in Cambodia has been on biomass energy, which is the most prominent mitigation sector in the country. The program helped develop a PDD on promoting improved biomass cooking stoves. However, given the methodological problems such projects have had under CDM, the program also explored opportunities in the voluntary market. CF-A also supported the establishment of a Cambodian Carbon Facility (CCF), under the aegis of the DNA, which will provide a number of services related to carbon finance project development. The business plan for CCF was completed in 2007 and accepted by the government of Cambodia, which is now in the process of mobilizing resources to sustain this institutional mechanism.

Country programs in East Asia are amongst the earliest launched under CF-A covering Cambodia, China, Indonesia and the Philippines. In Papua New Guinea, the program has been awaiting country clearance for some time. New programs have been launched in Mongolia and Vietnam.

Box 5: China CDM Fund

China set up the CDM Fund to promote sustainable development activities, financed by a tax on carbon revenues from industrial gas projects. CF-Assist has been supporting the establishment of this Fund and development of the action plan. A critical function of the Fund will be its support to the China National Climate Change Program through promotion of climate change related science and technology research and capacity enhancement in mitigation and adaptation. The action plan will implement activities through 2009-10 in the current Five Year Plan, and beyond. CF-A's resources will not only contribute to the completion of the Action Plan, but also support the working groups set up by the CDM Fund Center focusing on mitigation, adaptation, carbon trading, capacity building and awareness, and financial instruments. In addition, CF-A is also supporting the development of the report on *CDM in China: Taking a Proactive, Sustainable and Value-Added Approach*, which takes a comprehensive view of the CDM programs in China so far, and its future potential. Given the high level of success China has enjoyed, this report will provide valuable lessons and best practice to be shared with other developing countries.

Cambodia CF-A program was completed at the end of 2007 with a business plan for a Carbon Facility (CCF) and methodology development in biomass energy sector (Box 4).

In **China**, the primary focus of CF-A support is to help operationalize the CDM Fund announced in 2006. Efforts are also on to help develop new project methodologies in energy efficiency and power generation technologies. During 2007-08, an international expert team has worked with the Chinese government to develop a status report on CDM to be completed in mid-2008 (Box 5).

In **the Philippines**, the focus of CF-A program has been on project portfolio development through financial intermediaries. The program identified five such intermediaries and helped build their capacity and facilitated project identification, resulting in over 75 project concepts (see Box).

Box 6: CF-A in the Philippines

In the Philippines, CF-A identified five potential CDM intermediaries, which can facilitate project development. A report was prepared to identify and analyze the merits and demerits of different business models for business intermediaries. The identified organizations are:

- Land Bank of the Philippines (LBP);
- Development Bank of the Philippines (DBP);
- Department of Social Welfare and Development (DSWD);
- Foundation for the Philippine Environment (FPE); and
- Department of Environment and Natural Resources (DENR)

Under the CF-A initiative, a number of training programs were conducted, and working with the first two organizations from this list, CF-A program identified about 75 potential CDM projects (29 for LBP and 46 for DBP) for development.

3.1.3 South Asia (SAR)

The key highlight of CF-A program in South Asia region during 2007-08 has been the enormous success of the first India Carbon Conclave held in New Delhi, which was the largest event of its kind in India with nearly 600 participants. While India has been highly successful in accessing the carbon market so far, this Conclave helped focus on emerging topics such as programmatic CDM and sectoral approaches, which could help large scale programs.

In **India**, the transportation sector development work supported by CF-A has also begun during this year, which is expected to develop new methodologies and unlock huge potential for carbon mitigation in this important sector.

Sri Lanka completed their country program under CF-A in early 2008 after strong results in project identification, institutional strengthening and strategy formulation (Box 7).

Box 7: Sri Lanka CDM Program

CF-A program in Sri Lanka began in early 2006 and was completed in March 2008. In this two years period, Sri Lanka has had several accomplishments in promoting clean technologies for sustainable development:

- i) A national CDM strategy has been developed with specific policy recommendations;
- ii) Potential assessments were carried out in energy and forestry sectors;
- iii) DNA has been strengthened with approval procedures and other regulations;
- iv) Three training workshops were conducted benefiting nearly 200 professionals; and
- v) A CDM portfolio of 15 projects has been developed and is under process by DNA

In **Nepal**, negotiations were held with DNA and other stakeholders to launch a country capacity building program focusing on forestry and rural technology sectors. However, the program has been on hold due

to political transition, and will be taken up in 2008-09.



3.1.4 Europe and Central Asia (ECA)

The regional work program in ECA has taken into account the incipient development of carbon market in many countries, and thus focused on (i) catalyzation of domestic CDM policy dialogue, (ii) strengthening key CDM institutional arrangements, and (iii) fostering development of CDM project pipeline. The chief outcomes of CF-A work in ECA during 2007-08 are:

Box 8: Uzbekistan – A Success Story

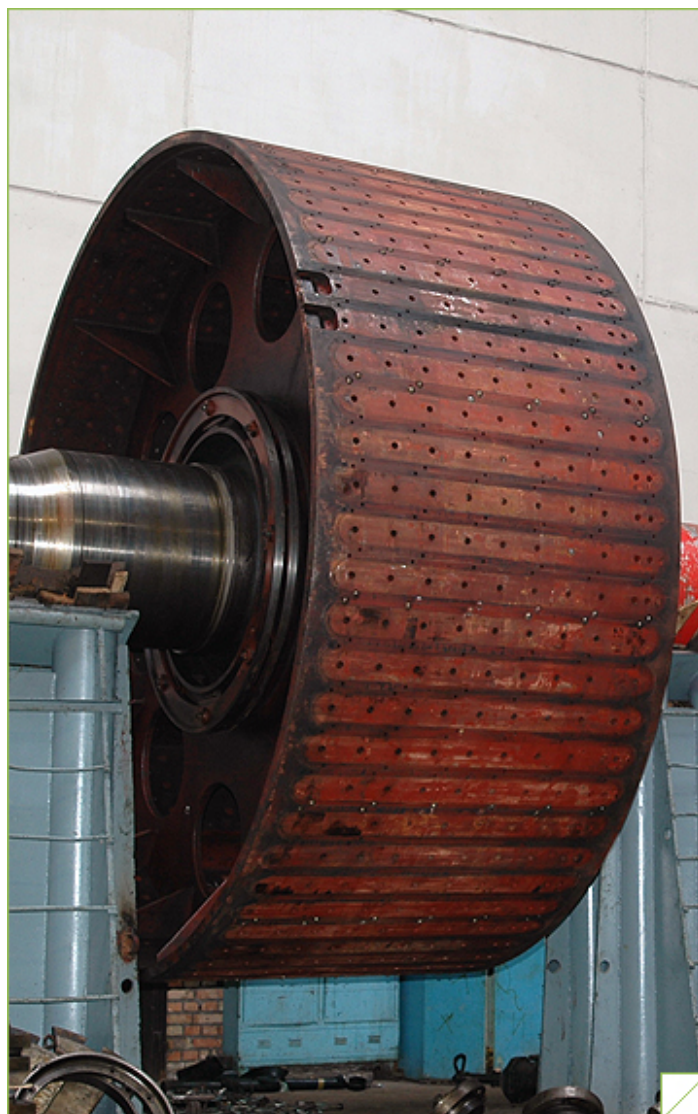
When WB conducted the first CF-A training workshop in Tashkent in January 2007 at the request of the government, there was hardly a CDM project in Uzbekistan. However, with the interest generated from this workshop, and committed support provided by the DNA and the Ministry of Economy, a number of sectors have developed projects, and over 60 PINs were brought to the Carbon Finance Forum held in late October 2007 with support from CF-A, UNDP and Japan. Thus, in a short span of 10 months, Uzbekistan has become the most active CDM country in Central Asia. The identified projects are in various stages of development with six of the at validation stage with CDM EB.

In **Uzbekistan**, CF-A co-sponsored a regional carbon forum in Tashkent in October '07, which was attended by 160 people including 17 representatives of carbon buyers from Europe and Japan. This forum also helped generate interest among other Central Asian countries such as Kazakhstan and Tajikistan. The success of CDM development work in Uzbekistan can be a model for other countries in the region (Box 8).

In the **Russian Federation**, following the government clearance of the JI regulatory framework, World Bank's country office has organized a CF-A supported national carbon forum in April 2008 with over 250 participants.

CF-A held a workshop in **Kyrgyzstan** in early 2007 resulting in identification of two concrete CF projects. The reforestation project received investment support from GEF and IFAD. The other CF project is

the Bishkek Landfill Gas project, which is currently in documentation phase.



3.1.5 Latin America and Caribbean (LAC)

Box 9: Sellers' Carbon Facilities in Latin America

With the support of CF-Assist, two Carbon Facilities have emerged in Latin America as the key business framework for development of CDM projects. During 2007, both Facilities completed their design stage and the components dealing with project origination and development support became operational..

Mexican Carbon Facility (FOMECAR) has been established as a result of the joint efforts from Bancomex and SEMARNAT in order to provide private and public sector entities with financial and technical support to identify and develop CDM projects. The main function of FOMECAR is to explore and assess potential for carbon finance revenues, assess overall feasibility of project implementation in upcoming investments and assist the companies through the registration process. To this end, FOMECAR would screen the projects submitted, conduct financial review and due diligence, and help in reviewing, preparing, and improving the project documentation (PIN and PDD). FOMECAR also supports i) training on CDM projects, ii) seminars and workshops to elaborate PINs, iii) financial consultancy related to CDM projects. It is expected that FOMECAR will develop a second phase of assistance related to financing of the initial project investments.

Argentine Carbon Facility (FAC) is an initiative of the Government to facilitate the development of new investment projects with CDM potential and to contribute to sustainable development. FAC provides various services including: i) technical guidance and assistance to projects with regard to the conditions of resource utilization, submission of requests, and other aspects of project execution, ii) capacity building for different projects, iii) coordinate and carry out studies at the national level to identify potential projects and aid their development, iv) assist decision-makers in the public and private sectors with regard to strategies and mitigation policies, and v) identify portfolios of CDM projects eligible for the finance.

During 2007-08, work programs have continued in six partner countries: Argentina, Bolivia, Brazil, Mexico, Peru and Uruguay, while new work programs were finalized in Ecuador and Paraguay. Two ongoing programs in Brazil and Bolivia are a blend between a PHRD grant and CF-A.

In terms of institutional strengthening, focus has been to enhance capacities and streamline

processes at already established DNAs in **Argentina, Ecuador, Mexico, Paraguay and Uruguay**, including:

- Facilitation of coordination mechanisms among relevant sector entities involved in DNA decision-making processes; review of DNA approval requisites, criteria and procedures, and further development of corresponding DNA tools.
- Support the technical tasks derived from DNA core operations, including evaluation of submitted PDDs and facilitation of local stakeholder consultations.
- Identification and ongoing review of specific domestic legal issues, with a view to enhance the local environment for CDM investments and CER transactions.

CF-A has supported the design of carbon facilities in **Argentina** (*Fondo Argentino de Carbono* - FAC) and **Mexico** (*Fondo Mexicano de Carbono* - FOMECAR). The project development branches of these facilities became operational during 2007-08, providing technical assistance for project development and portfolio promotion, and seek to serve as a national project aggregator platform (Box 9).

In **Mexico**, Centro Mario Molina (CMM) with support from CF-A has increased awareness and knowledge about CDM project development among key sectors such as oil, energy, chemical and cement, and solid waste management. In **Peru**, biofuels, renewable energy, waste water treatment, and gas recovery in the oil industry have been targeted, while in **Ecuador**, the targeted sectors include renewable energy and biomass, and solid waste and waste water management.

Sebastian Galbusera, Argentina DNA

"The CF-Assist program is a tool that has guided and supported [our] local efforts aimed at [fostering the use of carbon finance] as a feasible and real mechanism to promote [clean] projects in Argentina"

In **Central America** (Honduras, Guatemala and El Salvador), CF-A is supporting a learning-by-doing program through use of real pilot projects to develop case studies.

The success in **Mexico** is a good

example of a recipient-executed program where local organizations like CMM can implement activities directly and control the resources (Box 10). Peru and Central America programs, which are just taking off, also use this mode of recipient execution.

Box 10: Mexico Country Program – Executed by Local Organizations

CF-A launched its country program in Mexico in early 2006 as an example of a recipient-executed program (as opposed to World Bank direct execution) considering that Mexico has significant local capacity in addition to huge potential to deliver a large number of carbon assets to the market during the first commitment period under Kyoto Protocol. The Centro Mario Molina Foundation (CMM) -- local executing agency -- has conducted sectoral analyses and identified potential CDM projects in sectors such as electricity, oil and gas, cement and chemicals, and solid waste management. In parallel, the Mexican Carbon Fund (FOMECAR) has been established to assist financial aspects of CDM project preparation. These two complementary efforts have greatly helped develop a large project portfolio in Mexico.

CMM helped raise awareness and knowledge regarding CDM projects through numerous workshops and meetings with potential developers such as Federal Electricity Commission, Mexican Petroleum, Titan Hydro Power, Univex S.A., Earth Tech Mexico, etc. These activities motivated the industries to identify opportunities and develop projects for reduction of GHG emissions and to establish commitments to analyze existing and future projects with CDM potential. As a result, draft PDDs were developed in each of the sectors, which are currently under review. CMM also developed the legal framework necessary for Mexican projects to participate in bilateral agreements for carbon trading.



3.2 Global/Regional Activities

3.2.1 Global Carbon Expo

The fourth edition of the annual Carbon Expo was held in Cologne, Germany on 2-4 May, 2007 in cooperation with IETA and Koelnmesse. Expo is a unique business platform for bringing together buyers and sellers, and other stakeholders in the emerging carbon market. Building on the previous year's success, and dramatically growing scale and experience in the marketplace, the Expo had over 2450 participants from 106 countries. There were 220 exhibitors including buyers, sellers, traders and service providers, presenting their work modalities, methods and technologies for reducing carbon emissions and promoting trading in emissions rights and certificates. Scores of business deals for the purchase of carbon emission reductions from the developing countries and economies in transition were transacted during the event. During this Expo, CF-A on behalf of World Bank committed to extend the current Expo agreement (which ends in 2008) by another two years.

Jean-Pierre SANCHIS, Directeur Général, Hydelec Madagascar



Hydelec Madagascar is implementing a 15MW hydro power project with the support of MIGA to cover the political risk and with the support of CF-Assist to prepare CDM documentation.

We greatly appreciate this support that has enabled us to understand the CDM process, how it works, and especially the technical assistance made available to us to prepare the PIN. Today, the project is at the validation stage and we have already received several interesting offers to purchase the 24,000 TCO2 generated by the project per year.

delegates participated, including financial sector stakeholders from 17 African countries. The main aims of the event were: i) to deepen the level of engagement of local banks and financial institutions in the emerging market, ii) to enhance local capacities for understanding how carbon revenue could improve the profitability and creditworthiness of various investments, and iii) to facilitate financing of previously identified emission reduction project activities in Africa. The Forum was organized

as an intensive one-day training seminar, followed by one and half days of plenary sessions mixed with parallel clinics and an investment platform that allowed project developers to interact with financiers.

(ii) Latin American Carbon Forum; September '07, Peru

The second Latin American Carbon Forum (LACF) was held in Lima in partnership with the Latin American Energy Organization (OLADE),

UNEP/RISO Centre and IETA with FONAM as national hosts. LACF brought together over 520 various stakeholders that are active in the (regional) carbon market – project owners and developers, National CDM Offices and Investment Promotion Agencies, CDM governance bodies, as well as carbon market intermediaries and service providers. Representatives included 19 Latin American CDM Offices and 20 carbon market agencies

3.2.2 Regional Forums

(i) African Bankers Carbon Finance Investment Forum; May '07, South Africa

CF-Assist joined UNEP and UNEP/Risoe Center, to jointly organize the African Bankers Carbon Finance Investment Forum in Johannesburg, South Africa. About 170

hosting information desks during the interactions.

(iii) Africa Lighting Sector CDM Training; October '07, Ethiopia

Under the aegis of the WB/ESMAP's Africa Lighting initiative, CF-Assist organized a regional training workshop "Lighting Africa Carbon Finance: Exploring Carbon Market opportunities" in Addis Ababa, which aimed at raising awareness and building technical capacities to understand how carbon finance could help overcome barriers in promoting efficient lighting technologies.

Participants included 34 people from 10 African nations, the US and Europe, with representatives from African government agencies, the private sector, bilateral donors, and NGOs.

(iv) Central Asia Carbon Forum; October '07, Uzbekistan

This first regional Carbon Forum for CDM host countries in Central Asia was jointly organized by the Uzbek Government, WB, UNDP and Mitsubishi of Japan in Tashkent.

The Forum brought together over 160 participants from private sector proponents and government officials from Uzbekistan, Kazakhstan, Tajikistan, Armenia and Turkmenistan, as well as demand side agents and donors involved in carbon market expansion in the region.

(v) India Carbon Conclave; November '07; New Delhi, India

CF-A joined in partnership with FICCI, IETA

and Government of India to conduct the India Carbon Market Conclave in New Delhi. It was India's first all-inclusive international forum for carbon market stakeholders and featured an expo of Indian and Asian projects and carbon financing options from national and international investors. It also provided a forum for knowledge sharing on the current trends, progress and emerging scenario of the global carbon market. The Conclave was attended by more than 580 participants from India, South Asia region and international carbon market stakeholders.

(vi) West Africa CDM Project Development Workshop; November '07, Togo

A three-day training event was held in Lome for CDM project developers, attended by 54 participants from 10 countries. CF A collaborated with CEFEB in organizing the event, which focused on identifying projects in the sectors of energy, biomass and waste

management. Six PINs were presented as concrete projects while several other ideas were generated for possible projects.

(vii) West Africa Bankers Carbon Finance Forum, February '08, Senegal

A three-day forum focusing on financial sector in West Africa was held in Dakar in collaboration with UNEP, IEPF and Government of Senegal. Over 100

Amah Edoh d'Almeida, West African Development Bank

We would like to express our great satisfaction for the organization of the regional CDM training workshop in October 2007 in Lome (Togo) and the West Africa Carbon Finance Investment Forum in Dakar (Senegal) in February 2008.

The extremely appreciable level of the transmitted lessons and the quality of the debates which followed allowed a reinforcement of capacities in the identification and development of eligible projects to the carbon funds.

We are convinced that this good initiative of the World Bank's Carbon Finance Assist will lead in the months coming to a stronger participation from the Western and Central Africa regions in the Carbon Market.

participants attended from 15 countries in the region.

(viii) Lighting Africa Regional Carbon Finance Training Program, March '08, Tanzania

More than 35 participants from 10 countries attended the Lighting Africa carbon finance training workshop held in Dar es Salaam, focusing on the clean energy and energy efficiency sectors. The participants, who are all competing with their projects in the Development Market Place of ESMAP, were provided with complete technical and operational details of developing carbon projects, and real case studies were used to demonstrate various aspects of carbon finance.

(ix) Regional Training Workshop on CDM Project Validation, April '08, Senegal

A regional workshop on the practical issues related to the validation process of CDM projects was jointly organized in Dakar by CF-A, CEFEB, GTZ and UNEP-RISO. Over 55 participants from 12 West African countries participated in the workshop which provided guidance on developing PDDs while avoiding common mistakes and pitfalls developers typically fall into. The workshop particularly focused on the small scale project methodologies given that most African countries have small projects. Three project case studies were developed prior to the workshop which formed the basis for analysis and discussion.

In order to identify potential and promote CDM project activities in specific sectors, CF-Assist has been supporting sectoral assessment at global, regional and national level. Currently, a global assessment is under way for transportation sector.

(i) Transportation Sector

The objective of this study is to bring transport sector projects to the carbon market. In addressing some of the current bottle-necks and difficulties with CDM projects in this sector, the study has the following objectives:

- to enhance opportunities for transport sector projects by developing a diversified portfolio of applicable methodologies so that future projects may benefit by applying these new methodologies;
- to document lessons learnt, including barriers related to the baseline, additionality, data collection, leakage, institutional capacity; and means by which barriers were overcome; and
- to disseminate the lessons learnt and facilitate dialogue amongst experts to discuss opportunities and constraints for the application of different CDM methodologies in the transport sector

Through a multi-step solicitation and evaluation process, an international firm -- Grutter Consulting -- was selected, and started working on the assessment and development of CDM Methodologies for the Transport Sector. The work so far has resulted in three new methodologies under process at CDM EB (Box 11).

3.2.3 Sector Assessment Studies

Box 11: Sustainable Transport Methodologies

In spite of its high contribution to GHG emissions, transportation sector has had a poor track record under CDM with just one methodology being approved. CF-A has commissioned a project in 2006 to analyze the potential and develop new methodologies. This project came out with a report analyzing about 14 methodologies submitted to CDM Executive Board and their results. The report discusses in detail different shortcomings of the projects that were rejected by the CDM EB. Using this feedback, the project has developed and submitted three new project methodologies to EB, which are under process.

- vi) Methodology for Mass Rapid Transit Projects, as exemplified in the Insurgentes Metrobus Project (Mexico),
- vii) Methodology for Transport Efficient Development (TED), as exemplified in the Nanchang Transit Oriented Project (China); and
- viii) Methodology for Improved Occupation Rate of Public Transport Units, as exemplified in the Manila Public Transport Project (Philippines).

(ii) Cement Sector in Africa

The carbon potential assessment for cement sector in Africa was launched in February 2008, with Econolor International, Quebec appointed to carry out the study. The main objective of this assessment is to identify the barriers encountered by project developers in the cement industry and develop recommendations for addressing them. The study will look at all existing project proposals and identify new opportunities in four main areas for CO₂ reduction: energy substitution with renewable energy sources, fuel switch with biomass, energy efficiency, and clinker substitution. It will also develop specific CDM project ideas (and possibly one PDD).



3.3 Knowledge Management

3.3.1 Carbon Market Report

Box 12: Knowledge Management Package on Carbon Finance

In the last three years, CF-A has delivered a number of capacity building programs in nearly 50 countries, accumulating a huge amount of learning materials on various aspects of carbon finance and climate change. In order to expand and improve the standard learning products as well as to integrate new knowledge management concepts, tools and delivery models, CF-A launched in late 2007 the development of a comprehensive multimedia knowledge management package consisting of different knowledge products (audio-visual presentations, case study simulations, how-to-do guides, etc.) and innovative delivery mechanisms (e-courses, distant learning tools, etc.)..

The first product in this series is ready in the form of a CD-ROM that will be demonstrated at Carbon Expo in May 2008. This CD contains a set of audio-visual material covering some aspects of carbon finance. The complete roadmap for development of this multimedia package is provided in Annex 4.

CF-A has supported the preparation of an annual market report entitled “State and Trends of the Carbon Market”. This report – compiled by an internal expert team of the World Bank -- outlines the latest market information on pricing and volumes as well as market trends, and is integrated in training modules regarding price determination. The 2007 market report was released at Carbon Expo, Cologne in May 2007.

3.3.2 Host Country Committee

Host Country Committee (HCC) is an advisory body of over 50 developing countries and economies in transition, which provides structured advice on World Bank's CF Funds and capacity building programs. CF-A hosts two annual meetings of HCC, one at the Carbon Expo and the second at the Conference of Parties (COP/MOP). These meetings not only serve as a mechanism to receive feedback and advice on CF-A activities, but also as a

knowledge-sharing event, where lessons learnt are discussed. In 2007, the first HCC meeting was held at Cologne, Germany on April 30 – May 01 with over 60 delegates, where the progress report of CF-A was presented and its work program discussed. Another HCC meeting was held in December 2007 at Bali where 22 host countries attended.

CFassit.org – New and improved website

The World Bank Carbon Finance Assist - The World Bank

The primary developmental objective of CF-Assist is to ensure that developing countries and economies in transition are able to fully participate in the flexible mechanisms defined under the Kyoto Protocol, and benefit from the sustainable development gains associated with such projects.

CF-Assist helps developing countries and economies-in-transition to:

- facilitate creation and management of carbon assets,
- reduce the costs of participation, and
- help client countries achieve their sustainable development goals while contributing to global environmental benefits.

The objectives of CF-Assist as such are consistent with Bank priorities and sectoral strategies, and also with the Millennium Development Goals (MDGs).

Feature Events

How to get CDM projects through the validation process, 21-23 April 2008

The World Bank Institute (WBI), in coordination with Centre d'Etudes Financières Économiques et Bancaires (CEFEBS) - the training arm of the Agence Française de Développement (AFD) - and the German Technical Co-operation (GTZ) on behalf of the German Ministry of Development and Economic Co-operation, are organizing a CDM regional training workshop "How to get CDM projects through the validation process", on 21-23 April 2008 in Dakar, Senegal.

Carbon Expo
May 7th-9th, 2008

The world's leading platform for the carbon market, CARBON EXPO is the foremost meeting point for learning, sharing experience and knowledge, as well as business matching opportunities on emissions trading, carbon abatement solutions and new technologies. It is used not only by project developers, carbon traders and the financial sector, but also by leading decision makers and experts from the worlds of business, policy, science and NGOs.

Poll of the Month

Approximately, how large do you think the world's carbon trading was in 2007?

☐ US\$5bn
☐ US\$10bn
☐ US\$60bn
☐ US\$200bn

Vote

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3.3.3 Outreach

CF-Assist has a dedicated website (www.CFassist.org), which carries all the relevant information (including upcoming events), contacts, and important documents related to the program. During 2007-08, the website was revamped with better structure and ease of navigation. Uploading of information, from the vast database of CF-A, is ongoing, and the website is expected to be fully operational by June 2008.

In keeping with the growing demand for capacity building in different parts of the world, which could no longer be handled effectively by just face-to-face learning programs, CF-A has launched the development of a multimedia learning package (Box 12).



4.0 Performance and Impact

The first commitment period under the Kyoto Protocol has begun in 2008 and will last till 2012 during which all the registered carbon credits would need to be delivered to be counted against the emission reduction targets. Thus, it is important to develop and implement the CDM projects as soon as possible to benefit from this ever-narrowing window of opportunity. To this end, CF-A has concentrated during 2007-08 largely on promoting project portfolios in different countries rather than providing general capacity building. This emphasis has resulted in a strong performance in supporting project identification and development. At the same time, several events at global, regional and national levels (Annex 1) continued to provide exposure on various aspects of carbon finance.

4.1 Stakeholder Participation

During 2007-08, over 5000 professionals took part in CF-A programs with slightly over half of them benefiting from regional events and country training programs (Chart 4). Further, nearly 1000 professionals directly benefited from various training programs conducted under CF-A (Chart 5 provides a regional distribution of trainees). As seen, a major proportion of the training programs have been conducted in Sub-Saharan Africa in view of the continuing lack of capacity hindering carbon market development in the region.

4.2 Institutional Strengthening

CF-A worked with a number of DNAs and other local institutions in strengthening their capacities, and

Chart 4: Event Participation

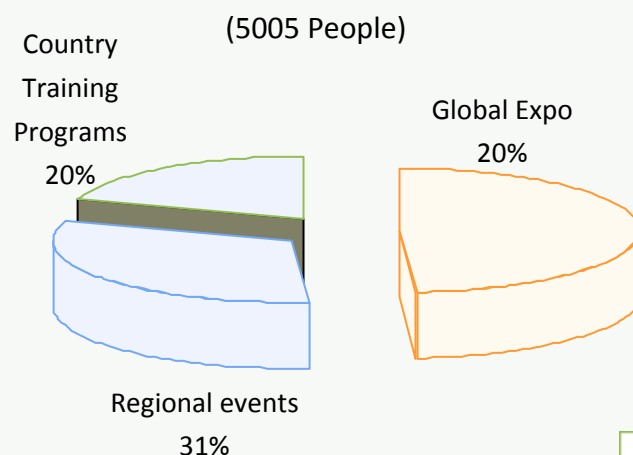
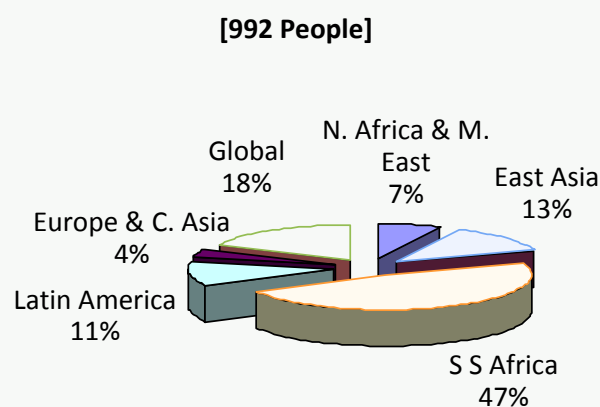


Chart 5: Regional Distribution of Training



helping put in place approval procedures, sustainable development criteria, etc.

- CF-A was instrumental in establishing three new DNAs in Botswana, The Gambia and Syria.
- Countries which received institutional support include Benin, Rwanda, Madagascar, Sri Lanka, Argentina, Ecuador, Mexico, Paraguay and Uruguay.
- In China, CF-A supported the establishment of the CDM Fund Center in the Ministry of Economy.

- In the Philippines, financial intermediaries received institutional support.

4.3 Project Development Support

As already mentioned, focus on portfolio development resulted in identification of over 260 projects in more than 15 countries (Chart 6.1) covering a variety of technology sectors (Chart 6.2). Most of the projects are at PIN stage while a few have developed PDDs and others are at the concept or feasibility stage (Chart 6.3).

Chart 6.2: Projects by Sector

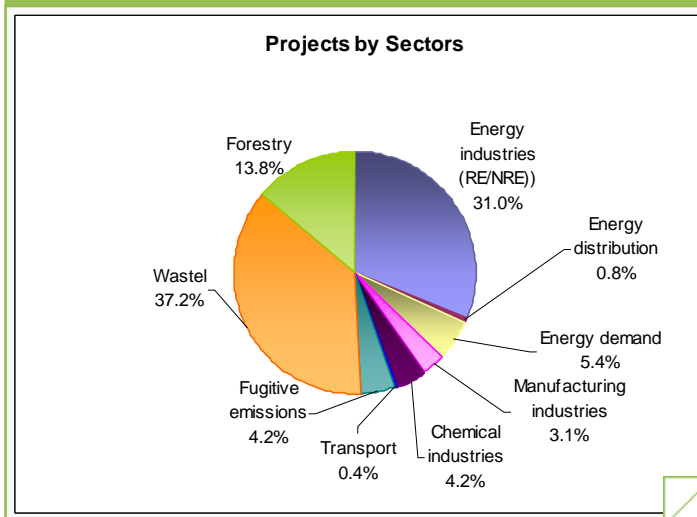


Chart 6.1: Projects by Country

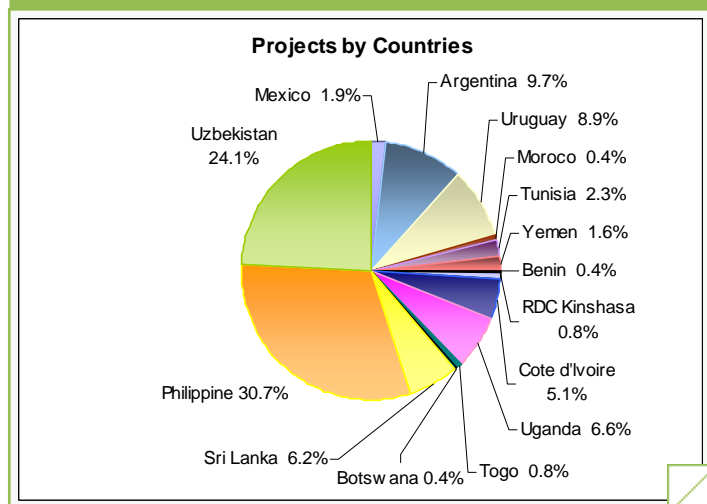


Chart 6.3: Projects by Status

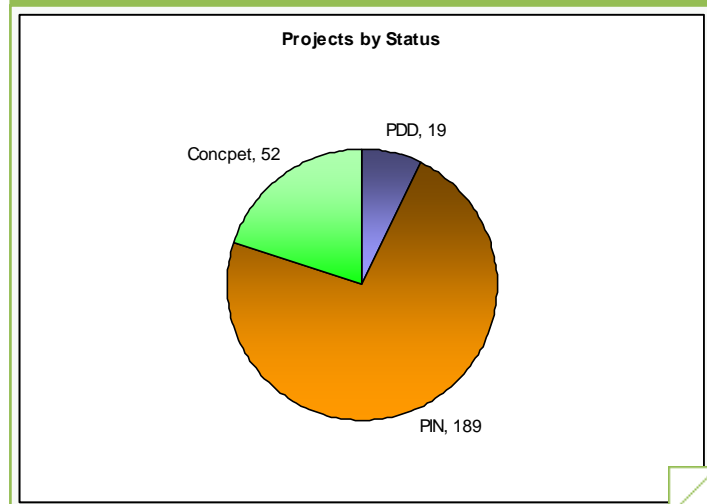


Chart 7: Expected Deliverables and Actual Results (2007-08)

Outcomes of the CF-A	Expected Deliverables 2007-08	Actual Results
1. Extending coverage of CF-A programs within all regions including ECA, LAC, Asia and MENA	<ul style="list-style-type: none"> 10-15 countries will have completed Phase II of CF-A CF-A programs initiated in additional 5-10 countries 	<ul style="list-style-type: none"> 8 Countries in II 2 Countries in III 4 Countries in I
2. Enabling Africa to fully participate in the carbon market	<ul style="list-style-type: none"> Regional/sectoral assessment of CF opportunities completed for African continent 5 African countries have completed Phase II of CF-A; Carbon buyers found for projects in these countries 	<ul style="list-style-type: none"> Assessment done 2 countries in II 3 Countries in I 2 Regional Forums held; buyers participated; projects transacted
3. Pioneering tools to enable developing countries and economies-in-transition to bring a portfolio of projects to market	<ul style="list-style-type: none"> Country Funds launched in two countries GIS launched in two economies-in-transition Portfolio of projects resulting from CF-A capacity building activities offered to the market 	<ul style="list-style-type: none"> Sellers Funds established in Argentina, Mexico, Cambodia Country portfolios developed Scores of projects brought to Expo 2007
4. Expanding CF to sectors that have yet to contribute a significant quantity of emission reductions, but have a high potential (e.g. Transportation, EE at household level, measures to replace biomass from non-sustainable resources, LULUCF.)	<ul style="list-style-type: none"> Background study on methodological issues in the transportation sector completed; At least three Project Design Documents completed in the transportation sector and offered to the market 	<ul style="list-style-type: none"> Report completed Three methodologies submitted to CDM EB
5. CF-A contributes to the development of capacity at the national level to engage in the carbon market	<ul style="list-style-type: none"> CF-A works with institutions and national experts to deliver on all activities; CF-A partners with key market players to coordinate efforts; Partnerships initiated and maintained with at least 3 financial intermediaries 	<ul style="list-style-type: none"> MOU with CEFEB Nairobi Framework Several financial intermediaries in Philippines, Morocco and West Africa
6. CF-A disseminates lessons learned on the carbon market through regional and national training events	<ul style="list-style-type: none"> Two Carbon Expos are organized and delivered; At least two GHG Forums are held in mature carbon markets to disseminate lessons learned; Training modules are developed and maintained to capture lessons learned from the Bank CF experience 	<ul style="list-style-type: none"> Carbon Expo held in May 2007 Regional Forums in LAC, AFR, ECA Several modules developed with WB case studies
7. HCC advises the Bank on its capacity building programs concerning carbon finance, and its role in the market, including any role concerning market continuity beyond 2012	<ul style="list-style-type: none"> One full meeting of the Host Country Committee will be held 	<ul style="list-style-type: none"> Two meetings held (Cologne and Bali)
8. CF-A donor committee fully engaged in providing guidance for an effective CF-A program	<ul style="list-style-type: none"> One annual meeting for donors to review progress and work program, Two progress reports submitted 	<ul style="list-style-type: none"> Held in May 2007 Annual report 2006-07 Semi-Annual report 2007-08

A combination of different activities supported by CF-A has helped many countries improve their capacity from one phase to the next phase, where more advanced capacity building activities could be taken up. Chart 6 lists the countries, which have moved to the next phase of capacity building. This is perhaps the most important indicator of the impact CF-A programs have had in host countries.

Performance Indicators

Chart 8: Capacity Improvements in Phases			
Country	CF-A Base Year	Phase in Base Year	Current Phase
Benin	2007	0	I
Botswana	2006	0	I
The Gambia	2007	0	I
Madagascar	2005	I	II
Syria	2007	0	I
Yemen	2007	I	II
Philippines	2006	I	II
Cambodia	2006	I	II
Sri Lanka	2006	I	II
Argentina	2006	II	III
Mexico	2006	II	III
Paraguay	2007	I	II
Uruguay	2005	I	II
Uzbekistan	2006	0	II

4.4 Lessons from CF-A Experience

Based on the capacity building experience under CF-A, some key lessons can be drawn as the program goes forward in the next two years:

Targeted capacity building

Although the carbon market has expanded quite rapidly in just three years since Kyoto came into force, there continues to be a huge imbalance in distribution of the market benefits. While some of this imbalance is natural (e.g. due to large size of the fast-developing countries), many small, low-income countries lag behind for a variety of reasons including lack of access to underlying finance,

lack of regulatory frameworks and local technical capacity, etc. Thus even though CF-A has focused mainly on project clinics and portfolio development, it has also carried out a considerable amount of institutional strengthening work. One key lesson that emerges from this experience is to customize the capacity building package through a proper understanding of the specific needs.

Access to investment finance

As mentioned, lack of underlying finance has been a major factor in many countries in Africa and elsewhere being unable to benefit from carbon finance. In many countries, mainstream financial institutions still do not recognize carbon finance as a valid source of revenue and consider the projects as risky. CF-A has begun to carry out activities with specific focus in this sector, but a lot more needs to be done, especially in Sub-Saharan Africa

Knowledge Management

The landscape of carbon market is changing rapidly in terms of size as well as complexity, influenced by increased involvement of different stakeholders and the ongoing negotiations regarding a post-2012 climate action regime. Increased and more diverse needs for capacity building will be one of the consequences of this process, and there is a need to gear up to meet these enhanced requirements through improved learning programs using direct and virtual means and delivery mechanisms. This would mean working through a distributed network of local partners, and using multimedia techniques to deliver the capacity building programs.

5.0 Work Program 2008-10

5.1 Program Priorities

As CF-A moves into 2008-09, there are a number of priority areas the program plans to tackle. Some of these have already been started, while others need to be put in place.

(i) **Balanced Geographical Coverage**

CF-Assist will continue to strive for a more even distribution of CDM activities by strengthening the current programs in areas like Sub-Saharan Africa, Central and West Asia and South East Europe. Further, as Joint Implementation (JI) gains momentum in economies-in-transition, attention will be given to JI countries which need specific assistance.

(ii) **Regional Partnerships**

Developing and sustaining partnerships at the local and regional level is going to be critical to effectively meet the increasing capacity building needs. CF-A has developed a number of such partners, which will be further strengthened with specific work programs and activities.

The partnership under Nairobi Framework will continue to be a top priority for CF-A as more and more SSA countries strive to enter and benefit from the carbon market. A key emphasis will be to coordinate programs with other members like UNEP and UNDP to avoid duplication and ensure optimal use of resources.

(iii) **Focus on Programs and Specific Sectors**

As the rules and regulations (from UNFCCC) begin to be put in place to help market transition towards large scale programs (POA), many countries express the wish to develop programmatic CDM activities at sector-specific

and/or geographical units (provinces, districts, etc.). CF-A will develop programs and capacity modules to assist countries in these new areas. CF-A is developing internal (ESMAP) and external (UNIDO, USEPA) partnerships targeting specific sectors like energy efficiency, renewable energy and rural biomass.

(iv) **Financial Sector Intermediation**

Building on the success seen in 2007-08, CF-A will continue its efforts to engage the financial sector with the aim to mainstream carbon finance, especially in Africa. Investment forums, specialized carbon funds, innovative tools like auctioning platforms will continue to be emphasized in the future activities.

5.2 Planned Activities

CF-A will strive to play an important role in addressing the emerging priorities in developing the carbon market in a learning-by-doing approach. The summary of existing commitments and proposed new activities are described in Chart 9. A matrix of events planned and scheduled so far is provided in Annex 4.

Chart 9: Work Program Elements (2008-10)

Program	Ongoing	Proposed
Sub-Saharan Africa	<ul style="list-style-type: none"> Country programs in Burkina Faso, Kenya, Benin, The Gambia West Africa regional program Southern Africa regional program Cement Industry Sector Development Africa Carbon Forum 	<ul style="list-style-type: none"> New programs in Mauritania, Angola, Sierra Leone, Liberia (Nairobi Framework) Learning Program through Pilots (energy efficient lighting)
Middle East and North Africa	<ul style="list-style-type: none"> Country programs in Egypt, Morocco, Tunisia, Syria 	<ul style="list-style-type: none"> Country programs in Lebanon, Jordan
South Asia	<ul style="list-style-type: none"> Nepal country program India transportation program India Carbon Conclave 	<ul style="list-style-type: none"> New activities in Bangladesh, Pakistan
East Asia and Pacific	<ul style="list-style-type: none"> Country programs in the Philippines, China, Vietnam 	<ul style="list-style-type: none"> New programs in Mongolia, Papua New Guinea
Latin America and Caribbean	<ul style="list-style-type: none"> Country programs in Central America, Ecuador, Argentina, Brazil, Mexico, Paraguay, Peru, Uruguay Spanish Knowledge Platform (with IADB) 	<ul style="list-style-type: none"> Central America II
Europe and Central Asia	<ul style="list-style-type: none"> Moldova (pCDM) Poland (regional GIS Forum) 	<ul style="list-style-type: none"> Country programs in Croatia, Kazakhstan
Global Program	<ul style="list-style-type: none"> Transportation Sector Study 	<ul style="list-style-type: none">
Market Facilitation	<ul style="list-style-type: none"> Carbon Expo Barcelona 2009 Carbon Expo Cologne 2010 Latin America Carbon Forum 	<ul style="list-style-type: none"> Africa Carbon Forum '08 North Africa and Middle East Forum '08
Knowledge Management and Outreach	<ul style="list-style-type: none"> E-Training Tools and Modules CF-A Website 	<ul style="list-style-type: none"> Regional Journalist Training(s) Development of Regional Hubs and Intermediaries

5.3 Expected Deliverables

Chart 10 below provides the expected deliverables contributing to specific outcomes. Some of the deliverables may undergo change during the course of the year due to changed client priorities, additional requirements, emergence of new priority areas, etc.

Chart 10: Expected Deliverables for CF-Assist (2008-09)

Outcomes	Expected Deliverables
1. Extending coverage of CF-Assist programs within all regions including ECA, LAC, Asia and MENA	At least 20 countries will have completed Phase II of CF-A; Phase III initiated in several of them
2. Enabling Africa to fully participate in the carbon market	At least 08 African countries complete Phase II of CF-A; at least three financial intermediaries are fully involved in carbon finance
3. Pioneering tools to enable developing countries and economies-in-transition to bring a portfolio of projects to market	Experts from developing countries and economies in transition have tools in hand to deliver a portfolio of projects, including Country Funds, auctioning, and other instruments that monetize and secure ERPAs
4. Expanding CF to sectors that have yet to contribute a significant quantity of emission reductions, but have a high potential (e.g., transportation sector, EE at household level, biomass from non-sustainable resources, renewable energy, biofuels, etc.)	Implementation of action plan to remove barriers for a significant contribution by the various potential sectors to the carbon market in consultation with key stakeholders. Help develop pCDM projects in at least five countries
5. CF-A contributes to the development of capacity at the national level to engage in the carbon market	At least 05 countries have recipient-executed programs, indicating that host countries have capacity to manage their own programs
6. CF-A disseminates lessons learned on the carbon market through regional and national events	CF-A conducts at least 3 regional events, and 10 national events
7. HCC advises to the World Bank on its carbon finance, operations including CF-A	One full meeting of the Host Country Committee
8. CF-A donor committee fully engaged in providing guidance for an effective program	One annual meeting for donors to review progress and work program, progress reports submitted twice a year

Annex 1. CF-Assist Events 2007-08

Month	Event	City, Country	Participant	Days
May 07	Global Carbon Expo 2007	Cologne, Germany	2450	2.5
May 07	Annual HCC Workshop & Meeting	Cologne, Germany	60	1.5
May 07	National CDM Awareness Raising Workshop	Sana'a, Yemen	35	1
May 07	Nation Workshop on Carbon Finance Opportunities	Phnom Penh, Cambodia	97	1
June 07	CDM DNA Workshop	Gaborone, Botswana	25	1
June 07	African Bankers Carbon Finance Investment Forum	Johannesburg, South Africa	173	3
August 07	Journalist Training on Kyoto Regime & Carbon Market	Vienna, Austria	40	2
Sept. 07	Latin American Carbon Forum	Lima, Peru	520	3
Sept 07	PIN Workshop on Improved Cook stoves Projects	Phnom Penh, Cambodia	20	5
October 07	Regional Central Asia Carbon Forum	Tashkent, Uzbekistan	160	2
October 07	Africa Lighting Carbon Finance Training workshop	Addis Ababa, Ethiopia	35	2
October 07	National CDM Awareness Raising Workshops	Cotonou, Benin	62	1+1
October 07	West Africa CDM Project Development Regional Workshop	Lome, Togo	54	3
Nov. 07	India Carbon Market Conclave	New Delhi, India	582	2
Nov. 07	National CDM Awareness Raising Workshops	Damascus, Syria	40	1
Nov. 07	National CDM Awareness Raising Workshops	Banjul, The Gambia	40	1+1
Nov. 07	National workshop on CDM & Energy Policy	Ouagadougou, Burkina Faso	114	1 + 1
Dec 07	HCC Semi-Annual Meeting at CoP/MoP-3	Bali, Indonesia	22	0.5
Dec 07	Nairobi Framework Technical Session at CoP/MoP-3	Bali, Indonesia	70	0.5
Jan. 08	Workshop on Approaching Carbon Finance	Dai Lai, Vietnam	30	1
Jan. 08	Workshop on Strategy to Improve Effectiveness of Carbon Finance in Sustainable Transport	Washington DC, USA	23	1
Feb. 08	West Africa Bankers Carbon Finance Forum	Dakar, Senegal	103	3
Mar. 08	CDM Project Development Workshop	Asuncion, Paraguay	70	3
Mar. 08	National CDM Awareness Raising Workshop(s)	Asuncion, Paraguay	40	2
Mar. 08	Lighting Africa Regional Training Workshop on Carbon Finance	Dar es Salaam, Tanzania	35	2
Apr. 08	Carbon Finance Workshop	Antananarivo, Madagascar	50	2
Apr. 08	Regional Training Workshop on CDM Project Validation	Dakar, Senegal	55	3
Total			5005	--

Annex 2. CF-Assist Partners

Partner	Country/ Region	Program/Event	Comments
Nairobi Framework	Sub-Saharan countries	Capacity building	UNDP, UNEP, UNFCCC, UNECA. AfDB
Center Mario Molina	Mexico	Executing Agency for Mexican CF-Assist	Fully operational
IETA	Worldwide	Carbon Expo	Yearly event until 2010
Koelnmesse	Worldwide	Carbon Expo	Yearly event until 2010
CEFEB	AFR	CF Training Programs in Africa	MOU signed in May 2008
AFD	AFR / MNA	Africa Assist	Provided a Seconded for CF-A
UNEP-Risoe Center	Africa	CF-SEA and CD4CDM	Complementary programs in SSA
METAP	MNA	METAP Carbon Finance Initiative	Capacity building in North Africa
Regional Energy Association	El Salvador, Guatemala and Nicaragua	Central America CF-Assist program	Recipient-executed grant
OLADE	LAC	LA Carbon Forum	Scheduled for October 2008
UNIDO	Global	Clean Energy Sectors	Joint activities
US-EPA	Global	Rural energy and biomass	Joint activities
ECOWAS Bank and UNCTAD	West Africa	Africa Carbon Fund for Renewable Energy and Biofuels	Technical assistance
Financial Intermediaries			
Organization		Country	
Fonds Communal de l'Equipement (FEC) of Morocco		Morocco	
National Bank of Egypt (NBE)		Egypt	
Land Bank of the Philippines (LBP)		The Philippines	
Development Bank of the Philippines (DBP)		The Philippines	
Department of Social Welfare and Development (DSWD)		The Philippines	
Foundation for the Philippine Environment (FPE)		The Philippines	
Department of Environment and Natural Resources (DENR)		The Philippines	
Argentina Carbon Facility		Argentina	
Mexico Carbon Facility		Mexico	
Brazilian Mercantile & Futures Exchange		Brazil	
Cambodia Carbon Facility		Cambodia	
Africa Carbon Fund		West Africa	

Annex 3. Calendar of Events 2008-09

Event	Country/Region	Timing	Partner
Russia Carbon Market Forum	Moscow, Russia	28-29 April, 2008	ECA/WB
Annual Host Country Committee Workshop	Cologne, Germany	5-6 May, 2008	WB Carbon Finance Unit
Global Carbon Expo	Cologne, Germany	7-9 May, 2008	IETA, Koelnmesse
Workshop on pCDM	Chisinau, Moldova	12-14 May, 2008	Govt. of Moldova
Regional CF Training for Youth Groups in East Europe (Video Conference)	Washington DC, USA	16 May, 2008	ECA/WB
Carbon Finance Training Workshop	Ulan Bator, Mongolia	June 2008	PHRD/WB
Regional JI/GIS Forum	Warsaw, Poland	June 2008	Govt. of Poland
Workshop on Carbon Market Opportunities	Lima, Peru	June 2008	National CDM Office
North Africa and Middle East Carbon Forum	Cairo, Egypt	July 2008	CEFEB, IETA
Africa Carbon Forum	Dakar, Senegal	September 2008	Nairobi Framework
Latin America Carbon Forum	Valparaiso	September 2008	OLADE, UNEP, UNDP
India Carbon Conclave	New Delhi, India	October 2008	FICCI

In addition, a number of national level training workshops are being planned in various countries, the schedules of which will be worked out with the respective focal points.

Annex 4. Roadmap for Knowledge Management Multimedia Package

In order to expand the reach and scope of the capacity building activities, CF Assist is developing a comprehensive knowledge management package – Climate Change Mitigation and Carbon Market -- using multimedia tools. This package comprises six basic modules, each covering several core topics. The package is designed to provide an understanding of the fundamentals of climate change and carbon finance as well as specific knowledge and skills to enable effective participation in the carbon market.

The package will consist of different types of products such as audio-visual presentations, real life case studies,

interactive platform for discussions, downloadable resources, instructive gamers and simulations. The package can be delivered using multiple formats such as face-to-face presentations, internet-based modules, video conferencing, etc.

This package is aimed at different stakeholders including carbon sellers (project developers, technology providers), carbon buyers (public/private carbon funds, brokers), national or local government officials, financial institutions and others who wish to be involved in the carbon market from developing countries as well as developed countries.

Module	Objectives	Core topics
Climate Change	<ul style="list-style-type: none"> Raise awareness of climate change and its environmental and economic impact, especially in developing countries Develop an understanding of how policy agencies are addressing climate change 	<ul style="list-style-type: none"> Science and impacts of climate change Climate action: adaptation and mitigation Climate change and sustainable development Global regulatory framework for climate action
Carbon Mitigation	<ul style="list-style-type: none"> To provide a clear understanding on the role of market based mechanisms for supporting cost-effective Greenhouse Gases emission reductions and mobilizing resources for climate-friendly technologies 	<ul style="list-style-type: none"> Instruments for carbon mitigation Kyoto Protocol and market mechanisms Introduction to carbon finance
Carbon Marketplace	<ul style="list-style-type: none"> To foster an appreciation of the growth and dynamics of the carbon market To create new market players and improve participatory efforts and initiatives in the carbon market via market analysis 	<ul style="list-style-type: none"> State and trends of carbon market Carbon market players Voluntary carbon market Pricing carbon credits World Bank carbon funds Capacity building
CDM Rules, Methodologies and Issues	<ul style="list-style-type: none"> To enhance the knowledge and skills on the rules and methodologies for developing CDM projects To provide step-wise procedures to develop CDM projects To discuss various issues related to CDM projects including legal and financial issues 	<ul style="list-style-type: none"> Regulatory framework and institutional architecture CDM project cycle Methodological issues Developing a PDD Validation, monitoring and verification ERPA and legal issues Financial issues in CDM Navigating the official CDM website
CDM Opportunities/ Sectors	<ul style="list-style-type: none"> To discuss the mitigation potential in different technology sectors To discuss methodological and operational issues in developing CDM projects in different sectors To illustrate sector-specific issues in CDM through case studies 	<ul style="list-style-type: none"> Clean energy (renewables, efficiency, fuel switching) Clean industrial processes Sustainable urban development (waste, transportation) LULUCF and agriculture
Programmatic Approach under CDM	<ul style="list-style-type: none"> To offer an understanding about the programmatic approach as CDM projects To help identify the opportunities for program of activities in energy efficiency and other small-scale sectors 	<ul style="list-style-type: none"> Project bundling Programme of Activities Energy Efficiency and POA pCDM in other sectors

Acronyms

List of Acronyms			
AfDB	African Development Bank	GIS	Green Investment Scheme
AFR	Sub-Saharan Africa (WB)	HCC	Host Country Committee
		IEPF	Institut de l'Énergie et de l'Environnement de la Francophonie
		IETA	International Emissions Trading Association
BOAD	Banque Ouest Africaine de Développement	IFAD	International Federation for Agricultural Development
CER	Certified Emissions Reduction	IFC	International Finance Corporation
CEFEF	Centre d'études financiers, économiques et bancaires	JI	Joint Implementation
CCDA	Comisión Centroamericana de Desarrollo y Ambiente	LAC	Latin America and the Caribbean
CCF	Cambodia Carbon Facility	LACF	Latin America Carbon Forum
CDM	Clean Development Mechanism	LULUCF	Land Use, Land Use Change and Forestry
CEFEF	Centre d'études financières, économiques et bancaires	METAP	Mediterranean Environmental Technical Assistance Program
CF	Carbon Finance	MNA	Middle East and North Africa (MENA/WB)
CF-A	Carbon Finance Assist	MOU	Memorandum of Understanding
CFU/ENVCF	Carbon Finance Unit (WB)	OLADE	Latin American Energy Organization
CF-SEA	Sustainable Energy Services in Africa	pCDM	Programmatic CDM
CMM	Centro Mario Molina (Mexico)	PCF	Prototype Carbon Fund
COP/MOP	Conference of Parties/Meeting of Parties to the Kyoto Protocol	PDD	Project Design Document
DNA	Designated National Authority	PHRD	Policy and Human Resource Development
DSFE	Department of State for Forest and Environment	PIN	Project Idea Note
EB	Executive Board (of CDM)	POA	Programme of Activities
EAP	East Asia and the Pacific (WB)	SAR	South Asia (region of World Bank)
ECA	Europe and Central Asia (WB)	TA	Technical Assistance
ECOWAS	Organization for Economic Cooperation in West African States	UNDP	United Nations Development Programme
EE	Energy Efficiency	UNECA	United Nations Economic Commission for Africa
ESMAP	Energy Sector Management Assistance Program	UNEP	United Nations Environment Programme
GCEA	General Commissionate for Environmental Affairs	UNFCCC	United Nations Framework Convention on Climate Change
FAC	Argentine Carbon Fund	UNIDO	United Nations Industrial Development Organization
FICCI	Federation of Indian Chambers of Commerce and Industry	USEPA	United States Environmental Protection Agency
FOMECAR	Fondo Mexicano del Carbono / Mexican Carbon Facility	WB	World Bank
FONAM	Fondo Ambiental Nacional / Peru CDM Promotion Office	WBI	World Bank Institute
GEF	Global Environmental Facility	WPA	Work Program Agreement
GHG	Greenhouse Gas		

Appendix: Country Baseline Matrix

Country Baseline Matrix										
Africa										
Base Year	Country	Domestic CDM Governance		Involvement of Priority Sectors		CDM Project Deal Flow		CDM Knowledge Management		Phase in Base Year
		DNA operations	Enabling environment	Financial sector	Mitigation sectors	CDM Project Pipeline	Domestic Market Drivers	Knowledge Management Tools	Networking	
2007	Benin	1	0	0	0	1	0	0	0	0
2006	Botswana	0	0	0	1	0	0	0	1	0
2007	Burkina Faso	0	0	0	0	1	0	0	0	0
2006	Kenya	1	0	0	1	1	0	1	2	I
2006	Mali	2	1.5	1	2	2	2	1.5	2	II
2005	Madagascar	1	0	0	0	1	0	0	0	I
2006	Senegal	2	2	1	2	2	1	1	2	II
2007	The Gambia	0	0	0	0	0	0	0	0	0
East Asia										
2005	Philippines	2	1	1.5	2	2	1	1	2	I – II
2005	Indonesia	2	1	1.5	2	2	1	1	2	I – II
2005	China	3	2	2	2	3	3	2	3	III
2005	Cambodia	1	0	0	1	1	0	0.5	0.5	I
2006	PNG	0	0	0	1	0	0	0	1	I
2008	Mongolia	0.5	0	0	1	0	0	0	0.5	0
Europe and Central Asia										
2007	Albania	1	0	0	0.5	0.5	0	0	0.5	I
2007	Belarus	1	0	0	0.5	1	0	0	0.5	I (JI)
2007	Macedonia	1	0	0	0.5	0.5	0	0	0.5	I
2007	Kyrgyzstan	1	0	0	0.5	0.5	0	0	0.5	I
2007	Uzbekistan	1	1	0	0	0.5	0.5	0	1	I
2006	Armenia	1	0.5	0	0.5	0.5	0.5	0.5	1	I
2006	Azerbaijan	1	0.5	0	0.5	0.5	0.5	0.5	1	I
2005	Georgia	1	0.5	0	0.5	0.5	0.5	0.5	1	I
Latin America										
2006	Argentina	2	2	1.5	2	2	2	2	2	II
2006	Bolivia	2	2	1	2	1.5	1	2	2	II
2007	Brazil	3	3	2	2	2.5	2.5	3	2	II-III
2006	El Salvador	1	1	1	1	1.5	1	1	1	I
2007	Ecuador	2	2	1	2	2	1	2	2	II
2006	Guatemala	1	1	1	1	2	1	1	1	I
2006	Honduras	1	1	1	1	2	1	1	1	I
2006	Mexico	3	2.5	2	2	2.5	2	2	2	II
2007	Paraguay	1	1	1	2	1	1	1	1	I
2006	Peru	2	2	1	2	2	1	2	2	II
2006	Uruguay	2	1	1	2	1.5	1	1.5	2	I
Middle East and North Africa										
2006	Egypt	2	2	0	2	2	2	1.5	2	II
2006	Morocco	2	2	0	2	2	2	1.5	2	II
2007	Syria	0	0	0	0	0	0	0	0	0
2006	Tunisia	2	2	0	2	2	2	1.5	1	II
2007	Yemen	1	0	0	0	1	0	1	1	I
South Asia										
2005	India	3	3	2	2	3	3	2.5	3	III
2005	Sri Lanka	1	1	0.5	0.5	0.5	0	0.5	1	I
2005	Nepal	1	1	0.5	1	1	0	0.5	1	I
2005	Bangladesh	1	1	0.5	1	0.5	0	0.5	1	I
2006	Pakistan	1	1	0.5	1	0.5	0	0.5	1	I

OUR MISSION IS TO CATALYZE A GLOBAL CARBON MARKET THAT SUPPORTS
SUSTAINABLE DEVELOPMENT, REDUCES TRANSACTION COSTS, AND BENEFITS
THE POOREST COMMUNITIES OF THE DEVELOPING WORLD.

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