



CDCF Making an Impact

Carbon Finance Delivers
Benefits for the Poor

May 2013



Since its creation in 2003, the World Bank Community Development Carbon Fund (CDCF) pioneers small-scale projects that both mitigate climate change and benefit communities. The Fund, a public/private initiative administered by the World Bank, aims to contribute to a more equitable regional distribution of carbon finance resources by focusing mostly on the poorest countries of the world.

CDCF: Making an Impact

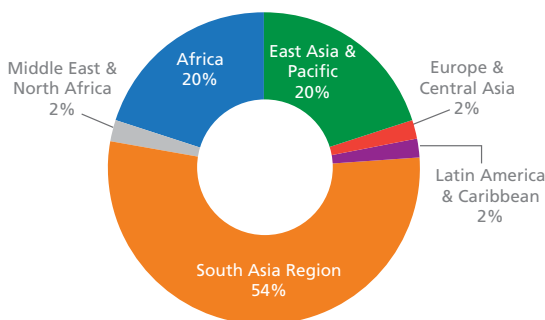
THE FUND ORIGINATED A NUMBER OF 'FIRSTS':

- The first registered Program of Activities (PoA) in Africa;
- The first activity registered in Nepal, Rwanda, Uganda and Senegal;
- The first household efficient lighting project worldwide;
- The first brick-kiln project in the Clean Development Mechanism (CDM);
- The first Certified Emission Reduction (CER) issuance in Nepal—the largest issuance in an Least Developed Country (LDC); and
- The first issuance applying the complex ACM0010 methodology, CDM wide.

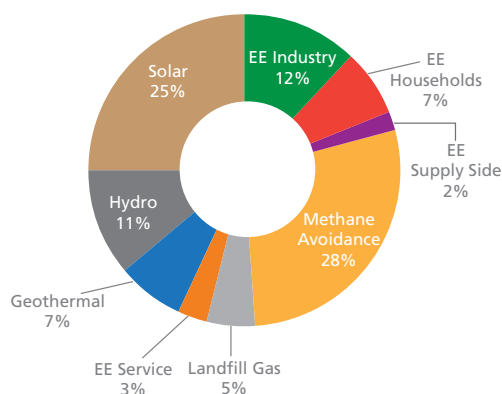
DID YOU KNOW THE CDCF HELPED

- Develop 10 CDM approved methodologies, 7 of which are small scale and 2 for rural electrification (on grid and off grid)
- Establish “suppressed demand” accounting standards
- Support poor countries’ Designated National Authorities; including helping establish Rwanda’s DNA
- Register 31 PDDs and 3 PoAs to date, 11 of which are located in LDCs.
- Contribute proposals and inputs to further improve and extend the CDM to the poorest countries

Regional Distribution, Nominal Value (\$)



Technology Distribution, Nominal Value (\$)



BOX 1: FUND OBJECTIVES

- Achieve “Development plus Carbon Credits” by promoting projects that generate both CDM compliant emission reductions and measurable social, environmental and economic benefits for local poor communities.
- Expand the reach of the carbon market by financing small-scale, clean technology projects in the poorest countries and supporting local partners (private sector, municipalities, banks, micro-credit organizations and NGOs).
- Provide learning-by-doing by developing methodologies for small CDM projects to expand the geographical reach and extend the benefits of CDM activities to poor or isolated areas that typically have been excluded from carbon finance.

The Challenge

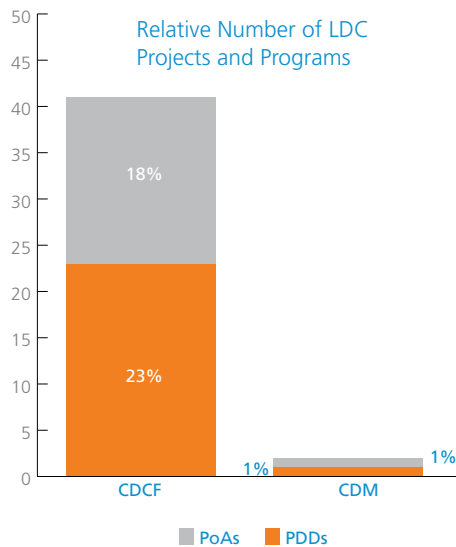
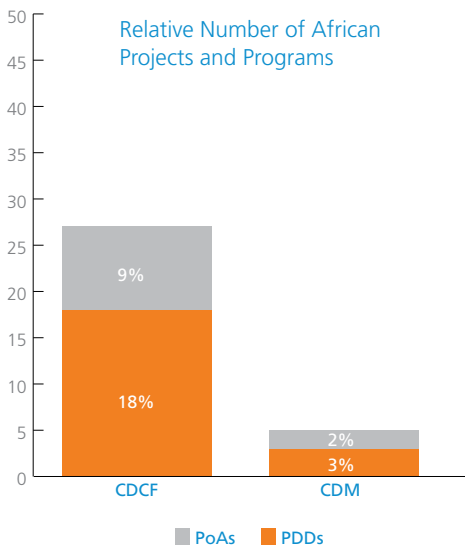
The Kyoto Protocol's flexible mechanisms were developed with the aim of tackling global climate change while at the same time contributing to sustainable development in host countries. The CDM portfolio is dominated by larger scale industrial projects for which contribution towards sustainable development are often framed in terms of technology transfer and general contribution towards economic growth. Relatively few projects across the CDM portfolio offer local livelihood benefits.

Poor countries are among the most vulnerable to climate change but there remains a clear disparity in the regional distribution of carbon finance flows. CDM projects in Africa account for a meager 4% of all active CDM pipeline projects and programs and LDCs account for only 2%. This reflects the difficulty of attracting private finance in the African and LDC context in part

due to the investment risk and also because of the existing low levels of emissions emanating from these countries.

Transaction costs associated with preparing and implementing small-scale projects have widely been acknowledged as another key reason for the regional disparity. In response to this, important regulatory decisions have recently been taken, such as simplified modalities and procedures for additionality demonstration, a framework for developing standardized baselines for key technologies, and guidelines for the consideration of suppressed-demand that accounts for poor countries' need for growth in energy services. The World Bank has been supporting these various improvements for many years and recently suggested that additional measures should be taken to further simplify the CDM project cycle.

COMPARING CDM AND CDCF PORTFOLIOS



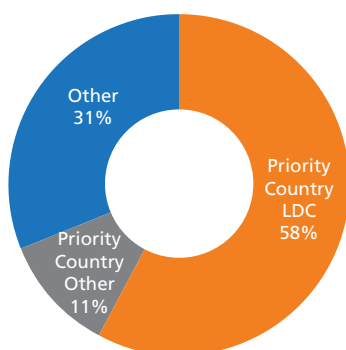
Note: Active CDM pipeline projects based on UNEP RISOE data. This does not include rejected, withdrawn, terminated or replaced CDM activities.

Poor Country Focus

The CDCF strives to expand the reach of the market and extend the benefits of carbon finance to the poorest countries and poor communities that may otherwise find it difficult to attract carbon finance. The CDCF successfully promotes a co-benefits approach to climate

CDCF POOR COUNTRY FOCUS

Portfolio Priority Country Distribution,
Nominal Value (\$)



change by linking carbon finance to tangible poverty reduction and sustainable development outcomes. CDCF projects provide multiple benefits to poor and remote communities in developing countries and promote new and improved technologies. The CDCF experience also demonstrates that more effort and innovation is required to fully harness the benefits of carbon finance for the poorest communities.

With this in mind, the CDCF mandate is to invest at least 25% of Fund resources in projects located in priority countries—countries designated as LDCs by the United Nations, or which are eligible for World Bank International Development Association loans. As of May 2013, 69% of the Fund's capital is allocated to the world's poorest countries, including 58% to projects located in LDCs and 11% in other poor countries, over-shooting the mandate by 44%.

A Pioneering Fund

The CDCF was the first carbon fund established worldwide to focus on channeling carbon finance towards small-scale carbon finance initiatives, with a focus on poor countries. It has also been a pioneer in developing small-scale approaches, such as bundled Project Design Documents (PDDs) and Programs of Activities (PoAs). Currently 17 out of the 22 portfolio projects are classified as small-scale projects.

CDCF has also helped build capacity and developed tools and methodologies so that least developed countries, especially in Sub-Saharan Africa, receive a greater and fairer share of carbon finance that results in high development benefits and that avoids carbon emissions.

A Unique Fund

THE CDCF AND COMMUNITY CO-BENEFITS

"All projects facilitated by the fund will benefit local communities, either directly or indirectly"

CDCF is unique in that its projects measurably contribute to local community welfare through the provision of demonstrable co-benefits. CDCF projects help poor communities in developing countries to bridge deficits in infrastructure, services, employment and livelihoods.

Such co-benefits are typically meant to arise from the project itself ("[direct co-benefits](#)") and



The construction and rehabilitation of roads, water wells, and water pipelines has helped local women and children reduce the time and physical strain of collecting water.

include contributions to local employment and household health. When there are limited or no identifiable benefits integral to the project, a separate [Community Benefits Plan](#) (CBP) is prepared in consultation with the beneficiary communities and funded out of a premium on carbon credit prices ("[indirect co-benefits](#)"). The CDCF portfolio currently has 9 projects that provide direct community benefits and 13 projects that generate indirect benefits.

Community Benefit Key Categories

1. [Improving local infrastructure](#), including construction of sewage facilities, potable water connections, local roads, parks and community centers and renovations of local schools and health clinics, etc. These benefits are typically provided as part of an additional CBP.
2. [Improving access to clean energy for heating and cooking](#), such as providing poor rural households with cleaner and more affordable energy solutions which also decrease the negative impact on health of firewood or inefficient heating systems.
3. [Improving livelihood and employment opportunities](#) by enhancing sector productivity, job security and increasing incomes through year-long employment and equal pay for men and women. CDCF activities can also create local employment through construction, operation and maintenance of projects.
4. [Improving access to electricity and energy-efficient lighting](#) through rural and household level renewable energy projects and energy efficient lighting programs. These can lower energy bills and increase economic activity, thanks to reliable and brighter lighting.

LIVELIHOOD BENEFITS: KENYA OLKARIA II GEOTHERMAL EXPANSION PROJECT

This project generates additional renewable electricity at the existing geothermal power plant, displacing fossil-fuel generated electricity and reducing global warming emissions by 149,632 tCO₂e per year. CDCF will purchase the project's carbon credits and part of the revenue will be used for the construction and improvement of local infrastructure such as a water pan and pipeline, six new school classrooms and road repairs, as well as youth employment programs that will benefit the Maasai, Luo and Kikuyu tribes—some of the poorest communities in the vicinity of the existing geothermal plant.

REACHING THE POOR: NEPAL BIOGAS PROGRAM

This program helps 225,000 low-income, rural families in Nepal install easy-to-operate, small-sized biogas plants in their backyards, converting human waste and livestock dung to methane for cooking, heating and hot water. These projects are expected to generate about 170,000 carbon credits per year, which is equivalent to avoiding emissions from approximately 60,000 cars every year. The program reduces the time spent collecting firewood, fire hazards and indoor smoke from traditional cooking methods—dramatically improving the health and safety of women and their children. Biogas plants also produce a high-quality organic fertilizer that boosts agricultural yields. Rural villagers achieve economic benefits thanks to the supply of free, continuous, and sustainable biogas for cooking and organic fertilizer from the residual bio-slurry for agriculture.



Rural Nepalese woman cooking with free, cleaner, and safer biogas at home.

LEARNING BY DOING: PAKISTAN COMMUNITY-BASED HYDRO POWER

This project is installing 90 micro- and mini-hydropower plants in Northern Areas and Chitral, providing electricity to 51 remote rural communities and 150,000 households in Pakistan, and generating 78,000 carbon credits annually. The mini hydropower plants are constructed, managed, and operated by the communities themselves, backed by the Community Infrastructure Section of the Aga Khan Rural Support Program (AKRSP). The project provides direct community benefits to extremely remote and poor communities that do not have access to basic infrastructure services. It provides access to electricity for domestic uses such as cooking, heating, household appliances and lighting. Routine household chores typically assigned to women are now less labor-intensive and time consuming. Women are using the time saved to make handicrafts and clothes, which they can then sell to increase their household income. This has led to a rise in their status within the household and strengthened their traditional roles. Other benefits include reduced indoor smoke and household monies spent on fossil fuels. Power is also creating opportunities for local economic development through value added to agriculture and forestry products, the local gems industry, and tourism services. Remote communities are involved in all phases of decision making and take responsibility for the project.

CDCF Lessons Learned

In its ten years of operation, the CDCF has gained extensive and unique experience in using carbon finance to support the development priorities of low-income countries and inform the development of new carbon initiatives such as the Carbon Initiative for Development (Ci-Dev). The lessons learned can help bring carbon finance to new geographical areas and strengthen the sustainable development dimension of the CDM. The funds unique co-benefits approach to carbon finance can inform works, such as the voluntary tool to highlight development co-benefits of CDM PDDs and PoAs.

- **Developing ways to front-load carbon revenues can increase the impact of carbon finance**, by providing necessary upfront capital investment, but it requires innovative approaches and public support to mitigate the associated risks.
- Simplification of CDM procedures for small scale and LDC projects has been partially achieved, but **more needs to be done to enhance the efficiency of the CDM and to account for LDC growth in energy services, given the current significant unmet energy demand.**
- **Programmatic approaches have the potential to scale up mitigation actions under the CDM**, but more clarification and simpler rules are needed, as well as support and training of coordinating and managing entities.
- **Capacity-building activities are needed for poor and particularly rural communities.** Supporting policy and institutional frameworks to ensure scale and sustainability need to be developed further.
- **Carbon co-benefits are maximized when the benefits are inherent to the CDM project itself.** Direct benefits in household or rural projects for example, minimize transaction costs, have the potential to produce the strongest development impacts and lower risk by not depending on carbon credit payments.
- **Indirect community benefits**—financed by price premiums—are more effective when **Community Benefit Plans are integrated within the social corporate responsibility arm of the project developer or in broader local development initiatives.** Risk mitigation options should be available in order to manage beneficiary community expectations, carbon credit delivery risk, and fund flows.
- **The Community Benefit Plan participatory approach and monitoring indicators have proven to be very valuable**, both in terms of developing a cooperative and trusting relationship between local communities and the project entities as well as in showcasing the benefits.

BOX 2: FACTS AND FIGURES

Community Development Carbon Fund

Date Operational	March 2003
Number of Participants	24, of which 9 are governments and 15 are private firms
Fund Capitalization	US\$118 million
Average Project Size	255,000 carbon credits (tCO ₂ e)
Total Project Portfolio	5,600,000 carbon credits (tCO ₂ e)
Active Projects	22 portfolio projects of which 4 are PoAs
Geographic Reach	63% of projects are located in the poorest countries, including 9 projects in LDCs

COMMUNITY DEVELOPMENT CARBON FUND PARTICIPANTS

Public Sector



GOVERNMENT OF AUSTRIA
www.ji-cdm-austria.at/en



REGIONAL GOVERNMENT OF BRUSSELS-CAPITAL REGION (BELGIUM)
www.bruxelles.irisnet.be



GOVERNMENT OF THE WALLOON REGION (BELGIUM)
www.wallonie.be/en/



GOVERNMENT OF CANADA
www.cdm-ji.ca



GOVERNMENT OF DENMARK
www.um.dk/en



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www.minambiente.it



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GOVERNMENT OF LUXEMBOURG
www.environnement.public.lu/air_bruit/dossiers



Ministry of Infrastructure and the Environment

GOVERNMENT OF THE NETHERLANDS



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Ministry of Environment, and Rural and Marine Affairs:
www.mma.es/index_en.htm
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