

About the ACP MEAs UNEP-Risoe Programme

The capacity building initiative on the Multilateral Environmental Agreements (MEA) in African, Caribbean and Pacific (ACP) countries is a programme supported by the European Union (EU) and the United Nations Environment Programme Risoe Centre (UNEP-Risoe). The Programme is implemented with national partners in each country/region, through a core project implementation team. The UNEP Risoe Centre manages implementation of the subprogramme on CDM and carbon markets and provides direct technical and institutional support involving relevant regional experts and centres of excellence.



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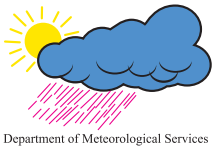
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*Capacity building for
Clean Development Mechanism*

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Objectives

The project aims at assisting selected ACP countries to participate in the global carbon market. At the end of the project, Botswana should be able to identify, design, approve, finance, implement and monitor CDM projects that both address its sustainable development priorities as well as offer a costeffective option for carbon credit buyers to comply with their obligations under the Kyoto Protocol. The proposed activities will facilitate development of a national CDM portfolio of projects that could be marketed in international carbon events such as the Carbon Expo through a 'learning by doing' exercise. At the end of the exercise the developed projects will be posted on Botswana's Designated National Authority (DNA) website.



Power generation

Expected Results:

- An operational DNA capable of approving projects consistent with Botswana's sustainable development priorities.
- Technical capacity of national experts and consultants in CDM project identification, design and implementation built
- An improved CDM regulatory and investment environment through awareness raising and policy advisory activities for government.
- CDM project appraisal skills and capacity of local financial institutions built
- Host country promoted as a CDM destination through producing a national portfolio of potential CDM projects.
- A national website exists to share CDM experiences and knowledge.

Background information on CDM

The Clean Development Mechanism (CDM) is a financial mechanism under the Kyoto Protocol that assists developing countries to achieve sustainable development and industrialized countries to reduce their greenhouse gas emissions by investing in projects in developing countries. Through the CDM, industrialized countries can meet their emission reduction targets under the Kyoto Protocol (KP) by acquiring certified emission reductions (CERs) accrued from project activities implemented under the partnership between developed and developing countries. The CDM has been very successful in generating projects and currently there are more than 2700 project registered globally. Being a market based mechanism CDM activities reflect the general attractiveness for private capital, which means there is an unequal regional distribution of projects. Africa accounts for only 2.7% of all CDM projects in the pipeline, however, interest is growing and with it the number of projects and hosting countries.

CDM opportunities in Botswana

In Botswana the climate change effect of greenhouse gases are 52% due to carbon dioxide (CO2), 33% due to methane (CH4,) and 16% due to nitrous oxide (NOx) according to the Initial National Communication to the UNFCCC in 2001.

Botswana developed an inventory for greenhouse gas (GHG) emissions in 1994 and most emissions were mainly from the following sectors: 55% agriculture, 19% electrical power generation, 11% mining and industry, 9% transport, 4% heating and cooking and 1% government.

Energy demand in Botswana is increasing in response to a growing population a rapidly growing economy, which is diversifying from diamond mining into several other commodities and industrial products. Energy demand is projected to increase at a rate of 5.6% and 4.6% for the commerce and transport sectors respectively, but less than 2% for the other sectors.

Potential CDM project activities in Botswana

Sector	Activity	Description
Energy	Biogas	Biogas from cattle slaughters and waste water treatment plants to generate electricity. Use of cattle dung in biogas plants for cooking, lighting, water heating.
	Landfill gas capturing	Use of CH4 from landfills as energy source (for electricity generation).
	Solar energy	Renewable energy – generating electricity using solar energy.
	Energy efficiency	Replacement of incandescent bulbs by compact fluorescent lamp (CFL)
	Cook stoves	Replacement of open fires with fuelwood stoves to improve fuel use efficiency.
Land-Use & Forestry	Veld fire guarding	Reduce emissions from veld fires.
	Reforestation projects	Replacement of depleted fuelwood reserves
	Forest management	Reduction emissions from land degradation and deforestation,forest conservation to maintain existing carbon stock.
Transport sector	Modal shift	Restructuring of urban transport to introduce bigger buses in cities.
	Fuel switching	Use renewable energy such as biodiesel.
Agriculture	Agricultural practices	Reduce methane and carbon emissions through better fertilizer application.
	Livestock husbandry	Better breeding and feeding practices.



Part of Botswana's forests