

## *Resume*

### **Adopting Clean Development Mechanism for Effective Sustainable Development and Economic growth in Bangladesh**

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#### **1. Introduction:**

Bangladesh is a low carbon dioxide emitting country. For instance the per capita carbon dioxide emission is estimated at 0.2 ton/year, while the average for developing countries is 1.6 ton/year. The low Green House Gas (GHG) emission status however provides no relief from the effects of global warming because 1.5 meter rise in sea level would inundate an area of 22,000 sq. km of Bangladesh, affecting 17 million people (IPCC Report 2007). Obviously Bangladesh is likely to be one of the worst sufferers of global warming. The other impacts global warming would be on: agriculture, bio-diversity and forestry, human health, fisheries, drainage and fresh water.

The United Nations Framework Convention on Climate Change (UNFCCC) adopted an international framework to address global climate change. Parties to the convention agreed to stabilize GHG concentrations in the earth's atmosphere. In 1997, Bangladesh along with 160 other countries, completed negotiations at the third session of the conference of parties (COP3) at Kyoto Japan to finalize a protocol subsequently known as the Kyoto protocol. This protocol includes reduction targets and timetable for six green house gases.

The Clean Development Mechanism under the Kyoto protocol to the UNFCCC has the potential to be an effective tool in international law to encourage investment in renewable energy projects in developing countries. The CDM is intended to be, *inter alia*, a vehicle for investment and technology transfer into developing countries, such as Bangladesh to achieve "sustainable development" by enabling necessary economic growth whilst also reducing GHG emission on global level. The research makes an attempt to understand the CDM and find out its opportunities in Bangladesh to achieve sustainable development.

#### **2. Objective of the study:**

Clean Development Mechanism (CDM) is one of the three market based emissions trading mechanisms established by the Kyoto Protocol (KP) regime. This mechanism has been designed to monetize environmental values using market mechanism to contribute to the sustainable development of the host country and to encourage cleaner technology transfer from developed countries. As of June 20, 2008, a

total of 1,084 CDM projects have been registered with the CDM Registration Board. Out of these registered projects, India is the host country for 35% of the projects followed by China (14.4%) and Brazil (13.6%). Compared to these numbers, Bangladesh has so far been successful in registering only 2 projects constituting 0.18 % share of the CDM projects. Such a share is highly disproportionate considering Bangladesh's population, geographical location and economic condition.

In order to attract CDM projects in Bangladesh it is advantageous to have a strategy for CDM. The goal of the CDM strategy is to promote and attract climate friendly investment in Bangladesh. The objective of this study is:

- to enhance awareness of stakeholders regarding CDM;
- to identify economic opportunities in sectors that will be beneficial to the country for CDM projects;
- to Identify and implement achievable and practical actions that can be undertaken immediately, as well as longer-term actions which will result in future easy identification, design and implementation of CDM projects.

### **3. Clean Development Mechanism and how it works:**

CDM is an important component of the Kyoto protocol (Article 12) which allows 39 industrialized countries to achieve part of their GHG emission reduction target through investment in projects in developing countries that reduce GHG emission from the atmosphere. CDM allows developing country entrepreneurs and others to get investment fund for doing projects and the two things are important in CDM namely, the project proponent from developing country must prove that the GHG reduction would not have occurred in the absence of the project and the project must promote sustainable development. The salient feature of CDM is:

- Industrialized (Annex-B) countries' state or private companies can invest in projects in developing (Non-Annex B) countries that contribute to reduction of GHG emission.
- Developing (Non-Annex B) countries' state or private companies are allowed to implement such projects.
- Through CDM projects industries in developing countries can be technologically upgraded and made environment friendly thus contributing to global climate protection as well as promoting sustainable development in the host country.

- The industrialized countries' investing entities can earn credit for emission reductions achieved its investment in developing country towards its own emission commitment.

#### 4. CDM and Sustainable Development:

Under the Marrakech Accords, the goal of sustainable development is mandatory for CDM projects. However, it is left up to individual Designated National Authority (DNAs) to determine the sustainable development criteria and to approve or deny projects based on these criteria. One innovative approach is to create a domestic regulatory environment in which the sale of Certified Emission Reductions (CERs) from project with lower development benefits are taxed at a higher rate than those with larger benefits. The revenue created can then be invested in a fund that would be used to advance sustainable development goals. The following are some possible perspectives which can be taken for regarding sustainable development in the CDM: [3]

- From the global investment perspective
- From the host country's perspective
- From the individual project's perspective
- From a development agency's perspective
- From possible dimensions of sustainable development criteria

For potential CDM projects the following may be useful matrix to follow:

Dimension	Global	National	Local (Project)
Economic	GDP GDP/capita	Trade Taxes	Employment
Environmental	GHG emissions Biodiversity	Biodiversity Air quality Water quality	Local air quality Local water quality
Social	HDI	Employment Poverty reduction	Health /Capacity Building Community Participation

#### 5. How Can CDM Help Private Sector in Bangladesh:

Developing countries including Bangladesh in the process of achieving fast economic growth often have to settle for inferior technologies. Through CDM therefore an entrepreneur can

- Opt for a better technology resulting in cost savings;
- Be able to comply with the relevant regulations;
- Have a safer and cleaner plant; and
- Contribute to national sustainable development and to global environmental protection.

#### **6. The approach and Methodologies:**

- Selection and analysis of pilot projects;
- Analysis of energy efficient use, technologies and practices effectiveness: selection of local initiatives, surveys realizations and analysis of results and lessons learned;
- Selection of internationally recognized indicators, development and testing of measurement methods and elaboration of strategies for successful implementation;
- Wide dissemination of the results.

#### **7. Discussion and Conclusion:**

This study investigates the CDM opportunity in Bangladesh and in order to attract CDM projects in Bangladesh it is advantageous to have a strategy for CDM. The goal of the CDM strategy is to promote and attract climate friendly investment in Bangladesh. So my goal through this research is to enhance awareness of stakeholders regarding CDM and identify economic opportunities in sectors that will be beneficial to the country for CDM projects. Along with these my another objective is to identify and implement achievable and practical actions that can be undertaken immediately, as well as longer-term actions which will result in future easy identification, design and implementation of CDM projects. This study will also investigate the Bilateral Offsite Credit Mechanism (BOCM) opportunity that is going to offer by Japan to facilitate the bilateral cooperation in the field of climate change in such a way that best suits each country's national circumstances.

#### **References:**

[1] Clean Development Mechanism (CDM) Guidebook, September 2011, DoE, Ministry of Environment and Forest, Government of Bangladesh.

[2] [http://unfccc.int/kyoto\\_protocol/mechanisms/clean\\_development\\_mechanism](http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism) 24.08.2012

[3] Haque Saleemul, Dr. Applying Sustainable Development Criteria to CDM Projects: PCF Experience, PCF Plus Report 10, Washington DC, April 2002: (9-12) Clean Development Mechanism (CDM) Guidebook, September 2011, DoE, Ministry of Environment and Forest, Government of Bangladesh.

[4] Clean Development Mechanism (CDM) Guidebook, September 2011, DoE, Ministry of Environment and Forest, Government of Bangladesh: pp 06

[5] <http://wasteconcern.org> 24.08.2012