Adopting Clean Development Mechanism for Sustainable Development and Economic Growth in Bangladesh

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Abstract:

Bangladesh is likely one of the worst sufferers from global warming. The IPCC determined that a 1.5 meter rise in sea level would inundate an area of 22,000 sq. km of Bangladesh and affect 17 million people (IPCC Report, 2007). The UNFCCC adopted an international framework to address global climate change. CDM is one of the tools to combat the climate change. The Clean Development Mechanism (CDM), under the Kyoto protocol to the UNFCCC, has the potential to be an effective tool in international law to encourage investment in waste and renewable energy projects in developing countries. CDM is intended to be, *inter alia*, a vehicle for investment and technology transfers into developing countries to achieve sustainable development by enabling necessary economic growth whilst also reducing GHG emissions on a global level. This mechanism has been designed to monetize environmental values using the market mechanism to contribute to the sustainable development of the host country and to encourage cleaner technology transfers from developed countries. This research makes an attempt to understand the CDM and is especially focused on waste and energy projects to find out its potentiality in Bangladesh.

In the capital city, Dhaka, the waste composition mainly is organic waste at 84.37%. (Source, Waste concern 2005). So there is potentiality to adopt a CDM project by composting the municipal organic waste. The waste sector options will mainly prevent the release of methane through bio-methanation processes. The methane collected can be flared or used to generate electricity. When electricity is generated, a GHG reduction due to fossil fuel replacement can be claimed. Also, when waste is converted to replace chemical fertilizers, GHG reduction can be claimed. The waste sector options for Bangladesh therefore can be realized in the landfill. Currently in Bangladesh there are only two registered CDM projects.

In order to attract more CDM projects to Bangladesh my objective in this study is to enhance the awareness of stakeholders regarding CDM potentials and identify economic opportunities in sectors that will be beneficial to the country for CDM projects form the view point of policy makers.

Keywords: Clean Development Mechanism (CDM), GHG emission, Municipal Solid Waste (MSW), Landfill, Emission trading, Sustainable Development, Organic gas recovery.