## Summary

The Ministry of Environment (MoE) in collaboration with the Institute for Global Environmental Strategies (IGES) of Japan and under the project on Integrated Capacity Strengthening for the Clean Development Mechanism (ICS-CDM) had, on February 04, 2005, organised a National Meeting of Lessons Learnt and Perspectives. Over fifty people from concerned government agencies, academic and research institutions, non-governmental organisations and private sector had attended the meeting, which was held at Cambodiana Hotel, Phnom Penh.

The Meeting aimed to strengthen capacity of stakeholders in Cambodia in identifying eligible Clean Development Mechanism (CDM) projects, to identify activities for follow-up capacity development in the country, and to present the CDM country guide to participants. The meeting entails presentations to provide some information related to CDM project preparation, followed with question and answer session, and a panel discussion to identify immediate needs and to explore options for the relevant capacity building in the country.

In the welcome remarks, Mr. Shinichi Iioka, CDM Program Manager of the Institute for Global Environmental Strategies (IGES) noted that for the Fiscal Year 2003, CDM project had implemented practical and hand-on activities through process of learning by doing. Most notable activities included core-member meetings and training workshops on Development of Project Identification Note (PIN) and Baseline Calculation and on Project Design Document (PDD). Strong support from MoE, H.E. Prach Sun, Dr. Tin Ponlok and Mr. Sum Thy, was particular stimulant for the success of the meetings and training workshops. He asserted that a CDM country guide would be produced; with that in Khmer would be the first to be published. He pointed to this national meeting as important step before the next CDM meeting to be held in March 5, 2005 in Japan, in which national representatives from each country participated in ICS-CDM would discuss the project outputs and future CDM training activities.

In the opening remarks, H.E. Prach Sun, Secretary of State of the Ministry of Environment (MoE), welcomed all the participants and thanked IGES for its continued support for implementing ICS-CDM project in Cambodia. He noted that the Kyoto Protocol would enter into force on February 16, 2005 and developed countries would be required to reduce their GHGs emission in appropriate manner. In this regard, he emphasised CDM as one of mechanisms that developed countries could use to meet their targets. It also assisted developing countries like Cambodia to achieve its sustainable development through environmental improvement and protection, increased income, technology transfer, and other economic benefits. He asserted that national capacity in Cambodia with respect CDM remained limited, thus further work was required to ensure sufficient strength to host and promote CDM projects in the country.

Mr. Yuji Mizuno, Pacific Consultants Co., in his presentation elaborated the CDM latest development in Asia, latest development in small-scale CDM projects, and the post-PDD development procedure. He then went on detailed steps to registration of CDM project

and proposed new methodologies. According to him, as of 26 January 2005, 85 methodologies had been submitted, 19 of them reformatted and approved, and 65 projects were under validation process. Finally, he pointed out to the post-PDD development procedure, in which approval letters from both host country and Annex I country, validation by Design Operational Entity (DOE), registration by CDM Executive Board (EB), monitoring by project participants, and verification and certification by DOE were required.

Mr. Ouk Navann, MoE's Climate Change Office, presented the Cambodian Perspective on CDM Designated National Authority (DNA). He highlighted requirements for participating in CDM, including country ratification of the Kyoto Protocol, voluntary participation, and establishment of a DNA. He thus elaborated on Cambodia's draft DNA structure, its composition and current status, and role and responsibilities. The latest progress with the CDM procedure in the country included draft sustainable development criteria, approval process for proposed CDM projects, and sub-decree on establishment of a National Climate Change Committee (NCCC). He finally noted the needs for development of key legal instruments in support of DNA operation in future activities.

In his presentation on Perspectives of the Government of Japan, Mr. Shinichi Iioka, CDM Programme Manager of IGES, asserted that CDM/JI (Joint Implementation) Mechanism was important and cost-effective tool. It could be used by developing countries to attain their sustainable development and by developed countries to fulfill their commitment under the Kyoto Protocol. He explained Japanese system to promote CDM/JI projects consisted of a liaison committee of Kyoto Mechanism and guideline for approval and Japanese administration for climate change policy chaired by Prime Minister. He then elaborated the country's challenges ahead of Kyoto target, the breakdown targets and gaps to be filled, Japan's MoE's JI/CDM promotion programs, CDM/JI feasibility studies, capacity building in host countries and provision of information service. At the end, he characterised Japan's subsidies for CDM/JI projects, which were set up in 2003 and the collaboration of related organizations.

Mr. Adisorn Cheu, Managing Director, Angkor Bio Cogen Co. Ltd. presented Angkor Bio Cogen project in Cambodia. According to him, the project's objectives were to produce electricity and heat for internal use in rice milling. The project proposed 1.5 MW installed capacity of rice husk fired cogeneration plant to replace current diesel generators. The annual Greenhouse gas emission reduction was estimated at 45,000 tons of CO<sub>2</sub> equivalents. He concluded with indicated project timeline including the completion and validation of the PDD by April 2005, formal submission of the PDD to the DNA in May 2005, construction to begin in middle or late 2005, and full operation expected at the beginning of 2007.

In his presentation on Wind and Solar Power Project in Mondulkiri, Mr. Masahiro Matsushita, General Manager, Marubeni Co., briefed about the project's CO<sub>2</sub> emission reduction estimate, requirements of small scale CDM project, advantage of the project and its progress and schedule. He asserted that the project consisted of 115 small-size hybrid systems of wind and solar power generation with total installed capacity 1.4 MW

and estimated annual CO<sub>2</sub> emission reduction 82,770 tons. These hybrid systems would be installed in 21 communes and 90 villages. The submission of PDD to UN CDM executive board was scheduled for 2006.

Mr. Sum Thy, Chief of Climate Change Office then gave a presentation on ICS-CDM Activities in Cambodia. The main output for the fiscal year 2003 had seen project initiation workshop, technical training workshop, CDM provincial workshop, booklet of Climate Change and Clean Development Mechanism and a report on sustainable energy in Cambodia. He also noted Core Member Meetings and training workshops on PIN and Baseline and on PDD development, and the Clean Development Mechanism Country Guide-Cambodia as the major output and activities for the fiscal year 2004. In conclusion, he suggested the next fiscal year activities to include awareness raising and information outreach, strengthening capacity of stakeholders, facilitation for development of CDM projects in priority sectors, promotion of CDM investment activities and training for DNA members on project assessment for national approval.

In his presentation, Mr. Keisuke Iyadomi, CDM Country Officer, IGES, reviewed Lessons Learnt from the Integrated Capacity Clean Development Mechanism (ICS-CDM) in Cambodia. He summarised the framework of ICS-CDM activities, the outputs of ICS-CDM for the fiscal year 2004, difficulties, and key findings from survey and proposed next steps to further capacity development for CDM in Cambodia. The Fiscal year framework of ICS-CDM focused on learning by doing approach to experience actual CDM development for relevant stakeholders, information dissemination on CDM country specifics to expand potential CDM activities for Cambodia and model project including training on PIN, Baseline and PDD. He highlighted the difficulties identified through ICS-CDM activities in general including the institutional set-up, the formulated CDM related procedures, and potential areas for eligible good CDM projects. In conclusion, he emphasised actual experiences of CDM approval process by DNA as important, and validation and registration with CDM EB being critical in full establishment of Cambodia's institutional structure and national CDM policy in the near future.

Six panelists including Mr. Tin Ponlok, Ministry of Environment/DNA, Mr. Keisuke Iyadomi, IGES, Mr. Yuji Mizuno, Pacific Consultants Co., Mr. Masahiro Matsushita, Marubeni Co. (TBC), Mr. Adisorn Chue, Angkor Bio-Cogen project (TBC), and Mr. Minh Cuong LEQUAN, Program Officer, Cambodia Fuelwood Saving Project - GERES, were then invited to express their perspectives and answer to questions raised by participants with regards the four themes as follow: (1) Difficulties in operationalizing CDM projects in Cambodia; (2) The eligible 'good' CDM projects in Cambodia and its technique to expand in the whole country; (3) The next step for capacity building for further CDM project development in Cambodia from the representative perspectives, and (4) Stakeholders' expectation from Capacity Building Program for the CDM.

The session started with a brief introduction by Dr. Tin Ponlok on the progress made in Cambodia since its accession to the Convention on Climate Change in 1996 and the signing on Kyoto protocol in 2002. Main achievement included the establishment of Climate Change Office and the interim DNA in 2002 and 2003 respectively. In the means

time, government had received external funding from various sources including from Japan, UNEP, the Netherlands and European Commission for building country capacity to participate in the Convention and the implementation of CDM. However, the country's institutional and technical capacity remained weak, and the awareness and knowledge among stakeholders and private sector were largely low. MoE have been working with stakeholders to identify a number of projects to initiate national CDM portfolio but needed to work more with private sectors, particularly in drawing private investors into this field.

Mr. Iyadomy then gave his impression about the forthcoming capacity development in Cambodia. Local institutional arrangement and building investment environment were seen as the two immediate needs to receive attention in Cambodia. Cambodia was selected for participation in the project as a country with small CER potential. One remarkable finding in Cambodia was that participants were active in running these activities. From self-evaluation, participants were eager to enhance their knowledge on CDM concept and to attend other CDM related training. In relation to other countries, such as India, Cambodia did not have high investment potential. Thus there were large gaps between the learning and investment potentials. Cambodia had lot of external support but there were only little potential for investors to find their way in CDM projects.

Responding to the session themes, Mr. Adisorn Cheu said that PDD for Angkor Bio Cogen project would have never occurred without support from Japan's MoE for feasibility study, as CDM is a new concept and the process involved loath of money. The important factors included the project was proven successful elsewhere and all related information was readily available. CDM business involved lot of law and study for which business and small private sector were not familiar with; in addition profit was the main driving factor. Related stakeholders, such as project developers, people around factory, government agencies, consulting firms, financial institution and host institution, were ready to push the project forward. He expressed his strong hope that the Government passed CDM related legislation soon.

From perspective of an NGO, Mr. Minh Cuong LEQUAN emphasised that his NGO was working to ensure livelihood improvement and sustainable development in Cambodia. CDM was an interesting idea but far from the usual practice. It was an interesting tool for financing renewable energy and energy efficiency projects that his NGO would find way to build in some project pipeline. However, few constrains were obvious. Firstly, the transaction cost that exceeded 45,000 \$, was either too expensive or non-affordable, particularly for small NGOs. Secondly, although simplified methodology was applicable for small-scale projects, they remained complicated particularly for those such as methane capture for which experiences had not yet mature and expensive expertise was required. Finally, marketing CO<sub>2</sub> is a new business for all players and only limited access to information was available, particularly on the customers. It also involved high uncertainty and difficult to forecast and predict income from such business. He finally expressed his eagerness to see guidance and relevant regulation. He also showed his interest in economic intelligence including resource centre on market, prospect for NGOs

and service provider in Cambodia. Investment security was mentioned as needed to ensure as well.

Mr. Masushita of Marubeni linked the level of investment with whether the CDM business was well established. He supported the above argument that the CDM was not yet well established and involved high risk. Profit was a driving force and long term investment is one of the barriers for CDM business. The Maribeni's rubber plantation project in Mondulkiri, for example, started in early 2003 and did not reach even PDD preparation stage until the end of 2004. After receiving approval, it might need few years more before the ground implementation can be started. It involved lot of preparatory works and many people as well as financial resources. Other constrains involved other company doing similar project without due consideration on environmental aspect. Land issues were problematic. Regardless the amount of work and financial resources committed, it remained uncertain if the project would go ahead unless the feasibility study revealed positive results.

In wrapping up the meeting, Mr Iioka asserted that the agenda for the day was so meaningful. He expressed his hope for more ideas about CDM, particularly more eligible good CDM projects in the coming meeting in March in Tokyo. The meeting had heard two promised CDM projects in Cambodia by Marubeni. A panel session with 5 panelists from government, private sector, and NGOs was held fruitfully. For additional information, he noted that UNDP in New York was planning to set up a new large program on poverty alleviation linked with CDM programme. He thus advised that Cambodia to have thought of what was competitive advantage (for the country and for the company in the country) and to identify areas which were superior to other country as a means to enter into this business competition.

In closing remarks, HE Lonh Heal, Director General of MoE, praised the closed collaboration between MoE's Climate Change Office and IGES of Japan for promoting integrated capacity strengthening for CDM in Cambodia. The meeting was cited as successful and provided with an opportune time for promotion of understanding of lessons and perspectives for an improved participation in implementation of CDM in the country. He endorsed the findings in the meetings with regards constrains to effective CDM implementation, i.e., bureaucracy, limited participation by private sector and the lack of financial resources, and emphasised the needs for support to remove the impediment. An expression of thankful remark was also made before he declared the official closing of the meeting.