

Regional Energy Programme for Poverty Reduction UNDP Regional Centre in Bangkok in cooperation with IGES

- Consultative Workshop - *Developing a Regional Strategy for the CDM in the Asia Pacific Region*

Bangkok, 30-31 March 2006

Meeting Report

Consultative Workshop on Developing a Regional Strategy for the CDM in the Asia Pacific Region, 30-31 March 2006

The UNDP Regional Centre Bangkok (RCB), in cooperation with the International Institute for Global Environmental Strategies (IGES/Japan)¹, hosted a two-day consultative workshop on the "*Development of a Regional Strategy on Clean Development Mechanisms (CDM)*". The workshop was organized in light of increasing strategic UNDP engagement in carbon financing, including the recently launched UNDP MDG Carbon Facility. The workshop participants encompassed UNDP Country Office (CO) CDM Focal points as well as Government CDM focal points/representatives, several UNDP Lead consultants including Mr. Ram Babu, Associate Director, PriceWaterHouseCoopers, Ms. Kayo Ikeda and Mr. Kazuhisa Koakutsu (IGES) and the UNDP RCB Energy Team. *(For a complete list of participants please refer to the participants list).*

Workshop Objectives

The principal objective of the workshop was the identification and discussion of elements for the development of a new UNDP Asia-Pacific Regional Strategy on CDM. To achieve this, the workshop was structured in a way as to improve knowledge, promote knowledge-sharing and update countries on the CDM by *taking stock and reviewing*:

- (1) the most recent decisions and developments on CDM procedures & modalities;
- (2) the emerging environmental commodity markets & carbon financing and UNDP's specific services in the regard as well as introducing the new UNDP MDG Carbon Facility;
- (3) UNDP (COs) Capacities and CDM activities (*Survey*); and
- (4) Sixteen country experiences with CDM and poverty linkages to date.

¹ **Workshop Co-Organizer:** *International Institute for Global Environmental Strategies (IGES):* The International Institute for Global Environmental Strategies (IGES) is based in Japan and one of the region's leading environmental policy research institutes. IGES's overall work programme follows a three-tier approach by focusing on (1) needs-oriented, practical and interdisciplinary strategic policy research; (2) a specific focus on Asia-Pacific, and (3) outreach for policy-making by delivering research input into regional and international policy areas. The Institute's major research theme is Climate Change with particular focus on (a) domestic climate change policies; (b) Operationalization of Kyoto protocol; (c) Adaptation; and (4) Future climate change regime. IGES has recently organized several dialogues on the legacy of the Kyoto protocol across the Asia region in order to raise awareness for specific Asian concerns regarding the further development and operationalization of the Kyoto protocol mechanisms. Further activities will concentrate in particular on the larger Asian countries India and China as well as the Russian Federation.

Acronyms

CBO	Community based organizations
CDM	Clean Development Mechanism
CER	Certified Emissions Reduction Units
COP	Conference of the Parties
DNA	Designated National Authority
DOE	Designated Operating Entity
EB	CDM Executive Board
EE	Energy Efficiency
EEG	UNDP Energy and Environment Group
EIA	Environmental Impact Assessment
FDI	Foreign Direct Investment
GEF	Global Environment Facility
GHG	Greenhouse Gases
IGES	International Institute for Global Environmental Strategies
JI	Joint Implementation
KP	Kyoto Protocol
LDCs	Least Developed Countries
MDG	Millennium Development Goals
MOP	Meeting of the Parties
MOU	Memorandum of Understanding
MP	Montreal Protocol
MSI	Mutual Support Initiative
NGO	Non-Governmental Organization
ODA	Official Development Assistance
PDD	Project Design Document
PIN	Project Idea Note
RB	UNDP Regional Bureau
RE	Renewable Energy
SWOT	Strength-Weakness-Opportunity-Threat analysis
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
VER	Voluntary Emissions Reductions

Welcome address

Elizabeth Fong, Regional Manager, RCB, welcomed all participants on behalf of UNDP and expressed the hope that the workshop would contribute to *'unravel the mystery of what the CDM is about'*. She emphasized that the development of a regional UNDP strategy on CDM would be the major outcome of the workshop. Concluding her remarks, Ms. Fong highlighted the UNDP partnership with IGES for this two-day meeting and emphasized the importance of combining the strength of different institutions to facilitate such comprehensive knowledge-sharing.

Workshop Introduction

Nandita Mongia, Chief for the Regional Energy Program for Poverty Reduction (REP-PoR), RCB, introduced the workshop programme and outlined the RCB's main rationale for organizing the Workshop. The overall programme structure for the two-day CDM Workshop had been divided into two parts: the first day was assigned to provide a comprehensive and detailed overview about the current status of CDM experiences at global, regional and national levels, the second workshop day was dedicated to interactive working groups on developing components of a regional CDM strategy.

She highlighted that the Carbon market so far has only witnessed 'the picking of low-hanging fruits' and has not delivered any remarkable project impacts for sustainable development. In addition, major CDM experiences to date are concentrated in a few, relatively developed developing countries (India, China, Philippines), and there has not been any generation of sustainable development benefits in least developed countries (LDCs). However, despite a disappointingly slow take off, the CDM represents nevertheless an enormous untapped potential for sustainable development. One of the main reasons for its 'underdevelopment' is still insufficient knowledge at all levels among all potential players (Governments, private sector, and civil society). The UNDP RCB has identified an important area of activity here for further UNDP engagement. In addition, UNDP is seen as particularly suited to promote a pro-poor, MDG relevant operationalization and implementation of CDM as the organization's overall philosophy is based on a holistic view of sustainable development.

Workshop Course

The first day morning session started with a presentation by Ram Babu, Associate Director, PricewaterHouseCoopers, who introduced participants to a thorough review of current *CDM modalities and procedures* and associated bottlenecks. Nandita Mongia, UNDP RCB, elaborated in her presentation on *Financing Sustainable Development: Environmental Commodity Markets* in particular on UNDP's current activities and experiences in this field and introduced and discussed the concept of the new UNDP MDG Carbon Facility. Kayo Ikeda, Country Officer, CDM/JI Programme/IGES, added a specific perspective on potential CDM priority sectors by presenting the findings of a comparative analysis on CDM and Foreign Direct Investments flows. The poverty reduction potential of CDM projects was showcased by Kazuhisa Koakutsu, Country Officer, CDM Programme/IGES, who discussed two CDM case study examples (biogas and solar cooker). A presentation by two UNDP Country office CDM Focal Points on the results and findings of a recent CDM Country Office Survey on overall UNDP capacities and experiences complemented the morning session. The afternoon session featured individual country presentations (by China, Bangladesh, Philippines, Bhutan, Cambodia, Pakistan, Papua New Guinea, Sri Lanka, Fiji, Malaysia, Samoa, Viet Nam, Maldives, Nepal), which discussed and presented national CDM experiences and challenges to date.

The second day was dedicated to interactive group work and intense open discussions of future elements of a UNDP Asia-Pacific Regional Strategy on CDM, including its objectives, focus, sectors, strategic components and possible partnership approaches. The workshop concluded with a wrap-up session by

Ram Babu, who briefly discussed major findings, concerns and impressions of the workshop and outlined first elements of a UNDP Asia-Pacific Regional Strategy on CDM.

I. CDM Perspectives

Review & bottlenecks of CDM Modalities & Procedures

Ram Babu, PricewaterHouseCoopers, introduced participants to a thorough review of current CDM modalities and procedures, including the significance of validation, registration, monitoring, verification and certification (*see Annex I*), and alerted participants in particular to current CDM process-related problems. He addressed a number of factors which currently hamper a smooth working process with relevance for the participating countries. The current structure of the CDM Executive Board (EB)² features a number of critical bottlenecks, as the EB does not meet often (only 3 times annually) and has a consensus-based decision-making process, which both considerably slows down decision-making processes. Another problem concerns the current review and confirmation process to re-accredit Operational Entities³ through the CDM EB, which currently only takes place every three years, leading to many neglected open cases. He further highlighted one recent decision of the CDM EB to simplify procedures for small-scale CDM projects. While this applies to a number of procedures, the most relevant for UNDP COs activities includes new simplified procedures for small-scale renewable energy projects (with an output capacity of max.15 MW and energy efficiency improvement projects with reduction up to 15 GWH /year equivalent).

The presentation triggered demand for further clarifications and information on consulting and accessing the EB on new procedures, CDM methodologies and impact of transaction costs. It was clarified that the CDM EB can be contacted directly for further consultation on new procedures. The UNFCCC website on methodologies⁴ was recommended for further information on CDM methodologies.

Financing Sustainable Development: Emerging Environmental Commodity Markets & UNDP MDG Carbon Facility

Nandita Mongia, Chief for REP-PoR, RCB, discussed the potential of carbon markets and UNDP's current provisions and activities in this field. She drew attention to estimates indicating a demand for resources addressing poverty-environment –sustainability goals over the next 10 to 15 years ranging from \$60 to 90 billion per year, and possibly \$80 billion more per year to tackle global climate change over the next half century. This gap of resources indicates that other sources of finance need to be explored to address pressing environmental priorities. Considering various financing sources for Climate Change, the carbon market transformation is expected to raise resources 10 times more than what is available through Official Development Assistance (ODA) and could channel over 1,000 times more funds to renewable and clean power technology sectors.

However, she further highlighted that CDM flows to date have been driven largely by market-driven factors, which so far has not been conducive to a majority of UNDP client countries. Against this background, she provided a comprehensive overview about UNDP's on-going and new activities in this area. UNDP Environmental Finance Services currently encompass a broad range of services, ranging from support in developing sustainable national strategies for environment and energy; to identification of

² *Structure of Executive Board:* (a) Ten members (one from each of the 5 UN regional groups; 2 from Annex I countries; 2 from non Annex I countries; and 1 representing the small island developing states); (b) Board elects own Chairperson and Vice-chairperson (1 each from Annex I & non Annex I countries); (c) Board meets at least thrice in a year; (d) at least 2/3 of members to be present for a quorum; (e) Decision by consensus – else ¾ majority of members present & voting.

³ *Accreditation and designation of operational entities:* The Executive Board (a) accredits operational entities which meet the accreditation standards; (b) recommends the designation of OEs to COP/MOP; (c) maintains a publicly available list of all DOEs; (d) reviews and confirms to re-accredit each OE every three years; (e) may recommend to COP/MOP to suspend or withdraw the designation of a DOE.

⁴ <http://cdm.unfccc.int/methodologies>

potential funding sources (ODA, global environment trust funds, such as the Global Environment Facility (GEF), carbon finance, other commodity markets, and environmental fiscal reforms); to the development of capacity for well-functioning environmental commodity markets; and the provision of a one-stop shop for technical assistance in accessing each financial source, including GEF, Montreal Protocol (MP), carbon finance and other environmental commodities markets.

A major recent development has been the launch of the [UNDP MDG Carbon Facility](#)⁵, a new Carbon Fund. Participants were guided through the functionality and design of the Fund and its implications for CDM activities were elaborated. The inherent risks and risk strategies of managing such carbon projects were explained (*Annex IV*), as well as the roles of UNDP staff in this undertaking (*Annex V*).

The UNDP MDG Carbon Facility features off-sets derived from a pool of projects designed to contribute directly to poverty reduction and sustainable development (*Annex VI*). The Facility will have two components. The first component is the Kyoto MDG Carbon component, featuring a portfolio of projects that will generate Kyoto-compliant Certified Emission Reduction Units (CERs) that can be used by Governments, businesses, and other entities to meet their Kyoto compliance commitments. A second component, Voluntary MDG Carbon, will generate Voluntary Emissions Reductions (VERs) and will be launched in 2006. Both components will use a project pooling approach to create balanced portfolios of projects with diverse characteristics.

She elaborated that the comparative advantage of the UNDP MDG Carbon Facility as new innovative financing instrument on the carbon market lies in the fact that through these different trading options, UNDP will be: (a) able to develop innovative projects not eligible to CDM yet (i.e. biological carbon sequestration through integrated land management) and (b) by sequencing and/or combining different funding sources (GEF, MP, CERs/VERs, public transfers, etc.), will address a broader range of climate change needs in developing countries than standard carbon funds. The MDG Carbon Facility will be an all-inclusive provider of project endorsement, pre-validation and verification services at a much lower cost than other market players and the transfer of savings to project developers. The Facility will also provide limited project financing to small scale, MDG-grade projects through a partial guarantee fund.

The period 2006 to 2008 will be considered a *Pilot phase* for the MDG Carbon Facility, with the first batch of projects to focus on renewable energy and biological carbon sequestration. The MDG Carbon Facility has been established as a UNDP headquarter (HQ) based Unit servicing COs, under the supervision of an advisory board including all co-financiers (various internal UNDP Units, and bilateral donors). So far, commitments have been obtained from bilateral donors (Nordic countries) with \$ 2.5 million; another \$ 2.5 million from internal UNDP sources, and World Bank (WB) Carbon Funds in the range of \$20 – 25 million. Depending on the successful development of the first phase, the timeframe from 2009 to 2012 will either be a wrap-up or a scale-up phase for the MDG Carbon Facility.

She announced that the UNDP HQ MDG Carbon Team will soon provide regular certified formal training for UNDP Regional Policy Advisors and UNDP CO CDM focal points to handle carbon financing options. Another help-desk service will soon be available online: a comprehensive Carbon Programming Website is currently under development and it is planned to be launched July 2006. This website will be accessible through the UNDP Intranet Practice Workspace and will provide all relevant information on carbon programming (e-programming manual, knowledge management products, contacts, and project database). Participants were further informed that UNDP is currently preparing a guidance paper on sequencing/combining different funds for the global environment for more clarifications (ODA, GEF, MP, and Carbon).

⁵ <http://www.undp.org/mdgcarbonfacility/>

CDM and FDI: Comparative Analysis

Kayo Ikeda, Country Officer, IGES, provided a comparative analysis of Foreign Direct Investment (FDI) and CDM flows, recommending possible niche areas for CDM investments complementing FDI flows and indicating the sectors and emission types most in need of more targeted CDM investment. The areas of investment among FDI and CDM are different, which might allow CDM to play a complimentary role to FDI investments. She highlighted that by far the largest share of FDI flows into the Asia-Pacific region is allocated to the service sector, followed by manufacturing and comparably few FDI is invested in primary industry, or other sectors such as infrastructure or agriculture. The agricultural sector has received so far little attention both under FDI and CDM. Both sectors, infrastructure and agriculture, may benefit in particular from additional CDM financing. As response to these findings, she recommended to tap the potential for synergies & complementarities between FDI and CDM under a national development plan - according to their roles and contributions to economy and society. CDM funds, available as of 2004, amount to more than \$800 million US\$ and CDM financing could be used to leverage additional investment.

As to which sectors should be targeted under CDM, the following sectors were recommended to be of particular importance to achieve GHG emission reductions: energy, industrial processes, agriculture, and waste. An analysis of emission types and actual focus of emission reduction under CDM projects has shown a current unbalance in the Asia-Pacific region. Most GHG emissions are concentrated in the energy sector (69%), followed by agriculture (20%), industrial processes (7%) and waste (4%). Broken down, the GHG emissions consists of 71 % = CO₂; 23%=CH₄; and 6%=N₂O. Within this calculation frame, the energy sector and CO₂ would require the most attention in terms of magnitude of emissions to be reduced. However, the actual GHG reductions under CDM projects to date have concentrated on HFC, CH₄ and N₂O, and were not targeting CO₂.

She also advocated for more targeted CDM investment for sustainable development. An analysis of CDM investment flows to date has shown that CDM so far has had a minimum impact on socio-economic conditions in Asia-Pacific countries, and it was suggested to evaluate more carefully CDM project contributions in terms of sustainable development goals of the host countries.

Poverty Reduction and CDM linkages

Kazuhisa Koakutsu, Country Officer, IGES, illustrated the potential of linking CDM projects with/to poverty reduction measures, based on a SWOT-analysis and discussion of two practical real-life examples of recently registered CDM projects, a biogas digester project in Nepal and a solar cooker project in Indonesia (*for a detailed discussion of the two projects, please refer to Annex II.*). The SWOT analysis looked at pros and cons of poverty reduction linkages with CDM projects. The strength of a poverty reduction focus of CDM projects lays in the promotion of transparency in project implementation and monitoring; and CERs revenue for project realization. Also, the potential project pool for MDG relevant CDM projects is quite large given that any project qualifies as CDM project as long as it reduces GHGs and contributes to sustainable development in the host country. Further, CDM is very flexible and able to accommodate a variety of different project situations. On the weak side, there are high transaction costs especially for monitoring and potential conflicts with environmental management (i.e. forest). Furthermore technical baselines exist, but no corresponding poverty baselines have been developed. This remains a difficult and open question, as poverty reduction impacts are difficult to quantify. In addition threats are seen in time constraints for overall realization due to the uncertainty of the CDM framework beyond 2012. The further elaboration and fine-tuning of CDM polices and programmes and the replicability to other countries, however, are opportunities. He alerted participants that it is particular important to realize *how to visualize such poverty-linkages for policy makers*, as in many cases, they are indirectly connected.

II. UNDP CDM Capacities

The results and findings of a recently conducted CDM Country Office Survey in preparation for this workshop were presented by Usha Rao and He Ping, UNDP India/China. The Survey included an overview of UNDP CO CDM capacities, experiences and future thinking & strategizing (*for a detailed overview, please see Annex III*).

So far, 12 countries in the Asia Pacific region (Bangladesh, Bhutan, China, Fiji, India, Indonesia, Malaysia, Nepal, Papua New Guinea, Philippines, Sri Lanka, and Viet Nam) have facilitated CDM projects. The project range is quite diversified, includes large-scale and small-scale projects and ranges from landfill projects to HFCs, to renewable energy and energy efficiency. Only few CO are running full-fledged CDM programmes: Bangladesh, China (largest so far), India and Philippines.

A self-assessment of COs identified an average level of knowledge and understanding of CDM. A large majority of COs classified themselves as having a medium level of knowledge. The CDM Capacity Status throughout the region revealed a mixed picture with a comparably advanced status at institutional and policy level and few supporting policy instruments and low advisory capacities. Plans by COs to support CDM concentrate on overall programming/policy and institutional capacity-building efforts, and few on financing or methodological and legal aspects.

In terms of capacity needs at CO level, UNDP COs expressed interest in regional knowledge-sharing and in particular on CDM success stories. Interest was expressed in featuring/documenting UNDP COs which are/have been involved in the whole CDM project cycle process – UNDP Bangladesh was cited as an interesting example to look at. Further information requests focused on practical, hands-on guidance on development of the required project documents for various sectors; standard baselines, methodologies and procedures; as well as training for managing CDM Project Cycle and direct exposure and hands-on training on CDM projects; and technical assistance to facilitate country and donor coordination on CDM decisions.

III. Country CDM Capacities

Sixteen individual Country presentations⁶, addressed the CDM achievements to date including: existing CDM institutional set up and country-specific CDM approval processes and bottlenecks encountered in implementing desired projects; priority sectors; estimated CDM investment flows and next steps for improve CDM policies and strategies; linkages to national development plans and the envisioned role of CDM projects at national level to address poverty issues. The role of UNDP to date in each country CDM development process was explored as well (*for details, please see Annex VII*).

The depiction of national CDM institutional structures showed a generally uniform picture of institutional settings, with few notable differences. The national Ministry of Environment, or in few cases, a separate special national Commission or Committee on Climate Change, is Designated National Authority (DNA). In almost all cases, a separate CDM Secretariat, mostly located in the Ministry, has been established in support of daily operational duties. As for additional necessary technical guidance and substantial input, most CDM Secretariats are supported by various sectoral technical committees (i.e. on energy, waste, afforestation etc.), which provide technical assessment and review services. In terms of governance of CDM activities, a majority of countries has also established an overall national CDM Steering Committee, which usually includes a wide range of stakeholders (additional ministerial and government agencies, private sector, NGOs, academia & research). This committee structure ensures inter-ministerial

⁶ China, Bangladesh, Philippines, Bhutan, Cambodia, Pakistan, Papua New Guinea, Sri Lanka, Fiji, Malaysia, Samoa, Solomon Islands, Viet Nam, Maldives, Indonesia, Nepal

coordination, allows for diverse participation and provides general political guidance. Final decision-making power for project approval and endorsement stays usually either with the National Steering Committee (or a similar appointed Board) or the DNA. Sri Lanka and Bangladesh were cited as examples of successful national institutional coordination. Sri Lanka has been able to establish a comprehensive inter-ministerial coordination mechanism for CDM bringing together a broad range of ministries and has also established two independent CDM study centers at Universities. Bangladesh's Steering Committee is chaired by the Principal Secretary to the Prime Minister, which allows for a strong political backing and high-level attention.

The national CDM approval process, while showing some variations in terms of duration, complexity, inclusion of technical assessments and degree of stakeholder consultations etc., is designed in most countries in a similar fashion. Project developers submit Project Idea Notes (PINs) and/or Project Design Documents (PDDs) to the DNA and/or CDM Secretariat for an initial screening whether the project complies with national CDM criteria. If accepted, it will undergo an in-depth technical assessment and evaluation undertaken by the appropriate technical advisory committee, and an assessment report will be submitted to the decision-making entity for final endorsement. Variations occur, for example, at which point technical advisory services are used, to which extent, and to which entity they report, and how many check-and balances are involved by having one up to three different entities with approval/rejection competencies (Secretariat, DNA, and Steering Committee/Board). The duration of approvals ranges usually from 1-3 months. Pakistan is an example of a country which has consciously adopted a simplified approval model, granting approval usually within a month time.

The majority of countries reported about on-going or projects under development targeting the following two sectors in particular: *energy* with a focus on renewable energy (biomass/biogas and SHS) and to a lesser extent energy efficiency; and *solid waste management* projects, notably landfill projects. Afforestation/reforestation, transportation and industrial sectors such as the brick and cement industry were other sectors. Differences of focus were obvious with regard to the energy sector, where larger and economically more advanced countries tend to have more on-going energy efficiency CDM projects, while smaller and less developed countries had a stronger focus on small-scale renewable energy projects. As for CDM priority sectors, many governments expressed particular interest in CDM eligible afforestation projects, which currently are not eligible.

A few countries (i.e. Bangladesh, Sri Lanka, Philippines, Pakistan) have put great emphasis on ensuring that CDM projects will be contributing to sustainable development by developing either specific sustainable development criteria as part of the approval process or linking the CDM project design and approval process to existing national environmental legislation (i.e. Environmental Impact Assessment (EIA)).

As the majority of countries face similar technical and political constraints with regard to CDM, envisioned next steps for improving CDM policies and strategies across the region overall are similar and include: capacity-building measures at institutional level and technical level for all involved stakeholders; improved CDM planning and policy development, including the formulation of national CDM strategies; and a particular interest in improving CDM project bundling capacities.

Most CDM projects to date are still largely pushed for by bi-and multilateral organizations, i.e. the role of the private sector is comparably limited. The role UNDP has played so far in support of national CDM processes throughout the region varies widely from country to country. While some countries reported that they received crucial support from UNDP in particular for initiating the overall institutional CDM set up (e.g. Bangladesh and Philippines), others indicated that they have partnered with UNDP at a later stage (e.g. China), seeking support for specific capacity-building needs and some countries had only sporadic contact with UNDP on CDM issues (e.g. Malaysia, Indonesia and others). In general, the support provided by UNDP to date consisted of capacity-building, training, stakeholder dialogues and knowledge-sharing, including the institutional set up of DNAs, building partnerships with investors, and in some few

cases specific policy advisory services on financing aspects. Most countries, however, expressed interest in partnering with UNDP on CDM issues and in particular on UNDP's standard CDM advisory services.

In terms of innovative strategies applied by COs, UNDP China described its approach to CDM as 'working outside the box'. The UNDP CO has created an internal interdisciplinary energy-poverty Team and is proactively looking at building partnerships with other climate change projects, including EU and Chicago trading partners. In addition, the UNDP CO is making use of a diversified budget including seed money, UNDP Energy & Environment Group Trust Fund money and others.

IV. Working Group Recommendations

The second day was dedicated to interactive working groups which discussed future elements of a UNDP Asia-Pacific Regional Strategy on CDM, defining its objectives, focus, sectors, strategic components and possible partnership approaches.

(I) Leverage CDM to accelerate effort towards alleviating poverty and sustainable development in the Asia Pacific region⁷

The Working Group suggested adopting a two-tier approach, which would include different focuses and strategies for large-scale CDM projects on one hand, and small-scale CDM projects on the other:

- It was agreed upon that CDM can be leveraged as one of several poverty reduction tools and that UNDP can play a role in facilitating and promoting CDM - poverty reduction linkages.
- **Two-tier approach:** The separation of large and small-scale CDM projects was deemed necessary as large scale projects often do not necessarily involve a clear poverty reduction impact and/or focus and this may require different service deliverables/approaches on the part of UNDP. *As for large-scale CDM projects*, where private sector partners will be participating, UNDP should seek to influence policies to that effect that: (a) Partners may use part of the CDM revenue as funds committed to poverty reduction efforts; and (b) Host countries will apply the sustainable development criteria used for CDM project evaluation. It was suggested that UNDP should develop and make available best practices on private sector engagement with CDM projects as an appropriate strategy to create interest and commitment. *As for small-scale CDM projects*, with a potential for strong poverty reduction links, UNDP should be engaged in: developing projects for empowering communities through strengthening local NGOs; linking them to financial institutions; providing capacity-building to help identifying CDM projects; help preparing PDDs; provide advise on bundling CDM projects; and linking them to international market (e.g. the MDG Carbon Facility).

(II) Integrating CDM into poverty reduction strategies⁸

The Working Group recommended that successful integration of CDM into poverty reduction strategies requires the systematic inclusion of CDM into various government policies, planning processes and budgets as well as clarity on which sectors are priority sectors:

Entry points & measures:

- Establishment of institutional framework (DNA, etc.):
 - Within the government, UNDP should facilitate process to sign Kyoto Protocol (KP);
 - Cost and benefit analysis of signing KP;
- Improvement of approval process;
- Facilitation of stakeholder discussions (by government and stakeholders in each sector);
- Capacity building including:
 - Finance (including insurance, guarantor);
 - Development of strategies how to promote marketing; and,
 - Provision of on-going advisory services to government and community level stakeholders (funded by UN agencies).
- Country Assessment:
 - Identification of priorities and projects related to poverty reduction (PIN/PDDs: Project Design); and

⁷ Working Group I: Bangladesh, Pakistan, Cambodia, Mongolia, Iran, and Papua New Guinea

⁸ Working Group II: Malaysia, Timor-Leste, Fiji, and Lao PDR

- Pre-investment by UNDP.
- Promotion and awareness raising for Poverty related CDM;
- Pilot projects funded by UNDP/UN Agencies;
- Strengthening of Evaluation and Monitoring systems (including poverty reduction indicators).

Priority sectors with strong poverty reduction benefits:

- Energy RE/EE + Electricity
- Construction/infrastructure
- Transportation
- Afforestation/Reforestation
- Agriculture
- Waste Management
- Awareness on CDM

Specific Priorities in Sectors:

- Energy: renewable energy; replacement of diesel; biomass; hydro (small scale); solar (PV); wind; and Compressed natural Gas (CNG);
- Construction: housing, roads and bridges;
- Transportation: public transports (rail, efficient buses); water transportation (boat-ferry); and bicycle in cities;
- Afforestation/reforestation: using unused lands to increasing productivity; sustainable forestry management; plantation; community forest based management. In these areas support: (a) raising awareness and (b) create a system to support community forest based management;
- Income generation: handicraft; tourism; value added products; illegal logging; awareness; and the government roles;
- Agriculture: shifting agriculture: providing alternative job; diversification plantation: other livelihood, Value added livelihood, skills marketing, agriculture products;
- Waste Management: waste to money; no standards; waste treatment; land fill gas; incineration (burning waste to reduce waste and produce power); 3 R = Reduce, Reuse and Recycle; Reuse (Value added); no infrastructure for proper disposal; community waste management; fertilizer (composting to produce fertilizer).

(III) Barriers to use CDM as tool for poverty reduction⁹

The Working Group suggested taking into account four different types of barriers: institutional, financial, technical and legal, which hamper the integration of poverty reduction agenda/benefits into CDM projects:

- **Institutional barriers** currently include a lack of coordination among DNA and MDG/poverty committees in connection with a general lack of an enabling environment for poverty-energy linkages; an unfavorable environment for the local private sector to participate in the carbon market; an obvious disparity of development objectives between host country and CERs buyers; and the complexity of bundling, which brings high administrative burdens and risks to keep together so many partners (band wagon behavior).
- **Technical barriers** range from low local capacities and expertise for the preparation of PDD, to low capacity to evaluate MDG criteria on CDM investments and to the need for more liberal methodology and monitoring schemes for MDG carbon type projects to reduce transaction costs.
- **Legal barriers** consist in particular in open questions regarding loan guarantee issues, as investments into MDG-Carbon projects yield high risks for investor without good guarantees available. UNDP's role in providing risk guarantees was unclear. The lack of an enabling environment

⁹ Working Group III: Philippines, China, Viet Nam, Maldives, and the Solomon Islands

for decentralized renewable energy development and missing related legislation was also considered a barrier. Within the context of existing technical barriers, it was recommended that UNDP could draw the attention of the CDM Executive Board to the fact that certain impacts are not monetized yet (through the CDM EB) –this could be one possible area of intervention for UNDP in order to push for an increased pro-poor related CDM project identification.

- **Financial barriers** are seen in necessary up-front local investment in project development to ensure local ownership and country driven PDDs; unclear rules for benefit-sharing among investor and small-scale local CER suppliers; a lack of clear national and local CER tax revenue system to benefit poverty reduction goals and low prices and uncertainty from MDG Carbon credits.

(IV) Partnership strategy to engage the participation of all the stakeholders including south-south cooperation¹⁰

The Working Group's recommendations concentrated on partnership-building with beneficiaries and south-south cooperation:

- **Partnership strategy:** It was proposed to focus partnership-building on the beneficiaries as primary partners. Such partnership strategy should involve the development of benefit-sharing mechanisms that specify and define CER credit allocations to both developers and buyers (to be included in PDD). In addition, NGO/CBOs/Academia should be engaged into partnership arrangements as primary partners for project impact assessments.
- **South-South Cooperation:** It was recommended to enhance and use south-south cooperation, respectively, to build up expertise by facilitating targeted knowledge-sharing among DNAs and project developers. The support of Designated Operating Entity (DOEs) from the South should be sought. Another area of potential cooperation was seen in 'bundling of CDM projects' among countries (to be submitted by one DNA), which could ideally be based on a MOU specifying benefit-sharing and appropriate methodologies to be developed. The use of the UNDP Country Office Mutual Support Initiative (MSI) was suggested as an additional tool for UNDP internal mutual knowledge-sharing and partnership-building across the region. It was further proposed to share the experiences of Nepal, which had been able to ensure stakeholder interaction & cooperation.
- **Potential partners at all stages of the project cycle:**
 - **Project Identification:** Target beneficiaries; DNA; Project developers; Consultants; Local government; NGO/CBOs.
 - **Legal and Institutional Arrangements:** Legal: Parliament; Cabinet; Relevant Government Ministries (for acts and regulations); Constitutional bodies – attorney general. Institutional: DNA; Project developers; Local government; and local level bodies representing the target beneficiaries.
 - **Methodology approval:** DNA; CDM-EB; Expert committee; Buyers.
 - **Validation/Registration:** Validation: Designated Operating Entity (DOE) – accredited CDM validators; Project developers; Registration: CDM – EB; Project Developer; Buyer/third party (facilitator).
 - **Verification:** Buyers; DOE – accredited CDM verifier; CDM-EB – issuance ER certificate.
 - **Monitoring:** Project developer; DOE; DNA; Representative of target beneficiaries; NGO/Academia (assessing impacts);
 - **Transaction/Selling of CERs:** Buyers; Project developers; DOE – verifier; CDM-EB – Issuance of ER certificate

¹⁰ Working Group IV: Samoa, Sri Lanka, Bhutan, and Nepal

V. Major discussion points

Agreements/Suggestions

- **Priority sectors:** The identification of priority sectors, as put forward by Working Group II, was generally agreed upon. Agriculture was identified as a particular difficult sector to work with, impacted by many problematic governance issues, including a strong dominance of special interests. Particular strong interest emerged with regard to further development of methodologies and inclusion of afforestation/reforestation projects. One participant suggested focusing on only one sector (i.e. energy) at regional level.
- **Partnership strategies:** The active involvement of beneficiaries, in particular local stakeholders (e.g. NGOs and Communities) as one strategic partnership approach was widely welcomed and agreed upon. It was suggested to disseminate information on successful cases (e.g. Nepal), which showcase successful partnership-building.
- **Quantification of poverty reduction benefits/poverty baseline:** A recurrent discussion addressed the difficulty to measure poverty reduction benefits and approaches for quantification. It was suggested to consider the possibility to develop and include targets on poverty baselines.
- **Sustainable Development Indicators:** The lack of specific Sustainable Development indicators and related guidance tools was continuously underscored throughout the workshop, which leaves CDM projects currently without a proper sustainable development framework. (While it was initially planned by the UNFCCC/COP to provide Sustainable Development Indicators as guidance, this has never materialized.) Participants agreed that it would be beneficial and necessary to have sustainable development indicators at hand to plan and monitor more thoroughly CDM projects, which would also allow for keeping a better balance between profit orientation and environmental impacts.
- **Role of UNDP:** Taking into account that sustainable development has been the overall goal of the UNFCCC, it was argued that current existing UNFCCC COP/MOP rules and regulations do not fully correspond to its original targets. The future role of UNDP for interventions in this respect was discussed, as rules & regulations could be changed if they prove to be too complex and ill-fitting. In response to this, it was suggested that UNDP should follow a two-tier approach by “working within the box” and also “shake the box” at the same time.

It was further recommended that UNDP should also specifically target and partner with Government officials directly responsible for poverty alleviation efforts (contacts/responsible agencies may vary from country to country) as well as the ones engaged in UNFCCC COP negotiations in order to increase awareness of and communication flows on CDM-poverty linkages. Current CDM rules and regulations were not necessarily negotiated and developed by Government representatives with a strong understanding of poverty alleviation linkages, and one potential future role for UNDP lays in sensitizing and awareness-raising among those country negotiators.

- **Poverty-conflict linkages:** Several post-conflict countries highlighted the special conditions under which they were working, and expressed interest in linking CDM projects in particular with poverty-conflict reduction benefits. The baseline for post-conflict countries was questioned.

Concerns

- **CDM transaction costs:** Several participants repeatedly cautioned that the overall expectations towards potential CDM benefits tend to be too high and that CDM is only one complementary tool as part of a larger GHG reduction toolkit. This was underlined in particular with regard to transaction

costs. It was emphasized that the transactions costs of CDM are usually high compared to its actual benefits and the measurement of such impacts were often difficult to quantify.

- **Role of private sector:** Another prominent concern focused on the role of the private sector, who considers CDM to be a business and it was questioned by several participants whether the private sector would be interested in buying poverty reduction 'by-products' or investing into poverty reduction efforts, respectively. A majority of participants assumed that investors would not be interested in poverty reduction impacts of its CDM business, and China was cited as an example where this attitude could be studied.
- **Risk-guarantees:** Many questions targeted the issues of risk-guarantee provision for poverty reduction related CDM projects in general and the current status of risk provision of the UNDP MDG Carbon Facility in particular and the potential role of UNDP in this context. Other questions referred to the types of risks which would be covered by risk-guarantees. It was stressed that UNDP is not in the position to provide for commercial risks. As with regard to the status of the UNDP MDG Carbon Facility, it was clarified that loan guarantees will be given, but that no upfront investments are necessary, as buyers are supposed to pre-commit themselves. However, it was also highlighted that the buyers are not seeing the risks, as the MDG Carbon Facility represents a pooling programme, which is not comparable to other commercial risk projects.
- **Bundling of projects:** The topic of bundling received considerable attention. The possibility that each country/partner can choose to be a partner in a bundling project or not (focus can be a corporate structure or even private sector partner) was rated positively. However, it was also cautioned that bundling should be approached carefully, as it will be subjected to different baseline and crediting criteria. Constraints with bundling projects were observed in particular with regard to credibility rankings: The same credibility is applied to each partner of a bundling project, but the implementation rates of such bundling projects will vary from country to country and the slowest one will basically determine the credibility of the whole bundling exercise. A huge demand for background information on bundling emerged during the discussions, including questions on: existing methodologies for bundling; UNEP's role; if least developed countries (LDCs) could be part of bundling projects; the standard facilitator of bundling projects (role for UNDP); how to set baseline for bundling; and who will be the standard project developer for bundling.
- **ODA for CDM:** It was pointed out that co-financing CDM projects with ODA remains a grey area and still raises many questions. UNFCCC COP documents feature a compromise language on modalities and procedures for a clean development mechanism. In practice, it is widely interpreted as meaning that using ODA to purchase Certified Emission Credits is not allowed, while using ODA to develop the capacity of DNAs is acceptable. Responses revealed that this topic, despite official guidelines, seems to leave space for certain 'grey zones'. Several exemptions had been observed so far, with German and Dutch official development institutions approving the use of ODA finance for CDM projects in a few countries (e.g. Morocco). It was further noted that ODA could be used through indirect channels and still benefit CDM projects, i.e. for CDM related capacity-building activities.

VI. Conclusions

The Facilitator, Ram Babu, conveyed a positive picture emerging with regard to the usefulness of a pro-poor UNDP Asia-Pacific Regional CDM Strategy. The poverty-CDM linkage was generally welcome by countries, and the MDG Carbon Facility was considered a promising and innovative mechanism to use for MDG relevant CDM projects. Overall, UNDP's commitment to and proposal of re-focusing CDM benefits towards poverty alleviation and ultimately, sustainable development, was considered straightforward looking and would prove the organization's strong committed to participatory and MDG relevant interventions. Given that current CDM rules and regulations have already partly proved to be ill-fitting,

complex and administrative-wise burdensome, the idea of engaging UNDP into lobbying for improved CDM rules and regulations was also welcome and considered very timely.

It was highlighted that the workshop provided a wealth of suggestions and recommendations for future UNDP engagement and activities within the framework of a regional strategy, which will be carefully reviewed by the Regional Centre Team. The workshop was concluded with information on further processing of the workshop outcomes. Ram Babu, PriceWaterHouseCoopers, will be formulating a first draft for a UNDP Asia-Pacific Regional CDM Strategy, which will be open for comments from Country Offices. The Country presentations will be compiled and made available in publishing form (CDs).

Annex I. Validation, registration, monitoring, verification and certification

- **Validation** refers to an independent evaluation of a CDM project by a DOE against requirements of CDM based on the project design document.
- **Registration** is the formal acceptance by the CDM Executive Board of a validated project. It is a prerequisite for verification, certification and issuance of CER.
- **Monitoring** is to be based on approved methodologies (*else new methodology needs to get approved*).
- **Verification** stands for a periodic independent review by DOE of emissions of GHG that occurred as a result of registered CDM project.
- **Certification** is a written assurance by the DOE that during a specified time period, a project activity achieved the reductions in emissions by sources as verified.

- **Validation - Rules and requirements:** It was emphasized that for an acceptable validation, the following requirements should be checked: (a) Participation requirements are met; (b) Comments of stakeholders – collected and addressed; (c) EIA undertaken; (d) Project meets additionality requirements; (e) Baseline is established; (f) Appropriate methodologies for CER calculation and monitoring are selected. If required, new methodologies are suggested in required formats; (g) New methodologies get approved before validating the projects using them; (h) Take written approval of the voluntary participation from the designated national authority. It was further suggested to ensure that the following requirements are met when carrying out a validation: (a) Make PDD available to public and consider their comment before validation; (b) Inform project participants on: Confirmation of validation and date of submission or explanation of reasons for non acceptance; (c) Submit request for registration to EB; and (d) Make validation report publicly available.

- **Monitoring- Rules and requirements:** For proper monitoring, a PDD has to include a monitoring plan for: (a) Collection & archiving of relevant data for baseline and for emissions after project is implemented for the credit period within the project boundary and outside the project boundary for calculation of leakage; (b) Quality assurance and control procedures for monitoring; and (c) Procedure for periodic calculation of emissions.

- **Verification - Rules and requirements:** The DOE carries out the following: (a) Verifies project documentations are as per requirements; (b) conducts site audits and collect outside data to determine reductions in emissions; (c) identifies and inform the project participants of any concerns related to conformity. In addition, the DOE provides a verification report to the project participants & EB and made publicly available. The DOE then certifies in writing the CERs for the specified time period.

- **Issuance of CERs:** The Certification report constitutes request for issuance to CDM EB; Issuance is considered final 15 days after the date of receipt of request unless a party or 3 members of board request a review; the CDM EB takes up in next meeting and approves the CERs requests for review. A review is to be done within 30 days of review decision. CDM registry administrator issues the CER as instructed by CDM Executive Board.

Annex II. Poverty Reduction and CDM - Case studies on biogas and solar cooker

Example 1: The biogas support programme in Nepal qualified as CDM project and was recently registered by the CDM Executive Board (December 2005). This project is part of a larger national biogas support programme (200,000 installation of small biogas digesters), initiated by the Government of Nepal, in cooperation with two donors (Germany/KfW and Netherlands/SNV). The objective of the project is to improve the energy access for poor rural communities by selling 6,500 biogas digesters to households located primarily in rural areas in order to displace conventionally used fuel sources for cooking (fuel wood and kerosene).

- Expected **environmental benefits** (baseline scenario) include an average reduction of 7t-CO₂/yr per digester, and 46,990 t-CO₂ reduction savings annually.
- The **poverty reduction linkages** of this biogas project comprise multiple elements, ranging from anticipated new alternative source of energy for cooking; reduction in spending income for fuel wood and surplus in income; improvement in indoor pollution/health situation; access to efficient cooking stove; improved time management for women and children to environmental education and training.
- The '**additionality**', which qualified this project as CDM project consists of (a) overcoming investment barriers at national level (without CDM, the biogas sector in Nepal would diminish as the donor support will be gradually shrinking; and additional US\$ 5.6 million will need to be covered from extra funding out of total cost: US\$ 25.3 million) and local level (biogas digesters are not affordable for rural households without subsidies) as well as (b) overcoming technical barriers at local level (poor quality of biogas systems). Against this background, the project qualified as CDM project.
- The **monitoring methodology** for this biogas CDM project is based on (a) verification of at least 15% of all systems sold in a year over a period of three years and (b) the performance ratio (calculated as percentage of sold biogas digesters that are still operating).

Example II: The Solar Cooker Project in Aceh/Indonesia qualified as CDM project and was only recently registered by the CDM Executive Board (February 2006). The project consists of the dissemination of 1000 solar cookers and heat retaining containers with the objective to reduce the use of non-sustainable harvested fuel wood.

- Expected **environmental benefits** (baseline scenario) include an average reduction of 3.5 tCO₂/yr per one solar cooker (baseline scenario) and 3,500t CO₂ reduction annually.
- The **poverty reduction linkages** of the solar cooker project range from alternative source of energy for cooking; reduction in spending income for fuel wood and surplus in income i.e. by preserving the quality of fish before further processing and saving expenses; improvement in food processing and spare more time other than cooking; access to modern technology for cooking and direct employment (10 people for assembling solar cookers); environmental education and training.
- The **Additionality** of the project contributes to overcoming of investment barriers by pre-financing the returns of CERs by an investor (without CDM credit, the entire project will not be self supporting). It is anticipated that the consolidation of project participants will make the project attractive for further investment. Against this background, the project qualified as CDM project.
- The **monitoring methodology** for this solar cooker CDM project is based on (a) recording annually the number of system operating by using "monitoring card"; (b) estimating the annual hours of operation of an average system; and (c) training of monitoring personnel.

Annex III. Overview of UNDP CDM Survey: activities and experience

Level of CDM understanding at CO level

A self-assessment of Countries Offices revealed an average level of knowledge and understanding of CDM with the large majority of countries classifying themselves as having a medium level of knowledge (Bangladesh, Pakistan, Cambodia, Papua New Guinea, Nepal, Philippines, Malaysia, Sri Lanka, Bhutan). Only two countries (India/China) assessed themselves as having an advanced degree of knowledge, and one as high (Samoa). On the other side of the spectrum, three countries indicated a low level of understanding (Fiji, Maldives, Laos PDR) and one a very low level (Timor-Leste) (*the following countries were not included in this survey: Afghanistan, Iran, Thailand, Mongolia*).

CDM Project experience

So far, 10 countries in the Asia Pacific region (Bangladesh, Bhutan, China, Fiji, India, Indonesia, Malaysia, Nepal, Philippines, Sri Lanka, and Vietnam) have facilitated CDM projects. The project range is quite diversified, includes large-scale and small-scale projects and ranges from landfill projects to HFCs, to renewable energy (wind, solar, hydro, biogas, etc.), to energy efficiency. CDM projects in Bangladesh, China, India, Philippines are particularly advanced.

Experience in CDM Implementation

The following factors were identified as success factors and failures, respectively:

- **Success Factors:** Efficient institutional framework and working DNA; Public and Private sector involvement; Capacity building of the stakeholders including government, academic institutions, financial institutions, consulting firms, enterprise etc.; Simplified procedures of the CDM project cycle; Active CDM consultants; Time bound approval process; multi-sectoral involvement; transparency; UNDP's ability to access international finance to overcome CDM project transaction cost for which private sector was not always forthcoming.
- **Issues in Failures:** Changing CDM rules and procedures which affects the understanding of the mechanism; Lack of awareness in the public and private sectors; Vested interest groups within country whose interest may run counter to the CDM project interest; Lack of capacity to prepare the qualified PINs and PDD; Transaction cost of the CDM projects; Complex procedure of host country approval; Loosely defined sustainable development criteria; Lack of methodologies to develop MDG-grade small scale bundled CDM; Lack of funding availability to take the projects to registration stage; Too many "unilateral" projects and passive Annex 1 participation; Vague technology transfer.

CDM Capacity Status

The CDM Capacity Status throughout the region revealed a mixed picture with a comparably advanced status at institutional and policy level, and few supporting policy instruments and low advisory capacities. Countries assessed the national CDM capacity status according to a number of criteria, with the following results: **Functional DNAs** exist in Bangladesh, Pakistan, Cambodia, PNG, Nepal, China, India, Bhutan, Sri Lanka, Vietnam, Indonesia, Philippines, Malaysia and Laos and **National Strategies** have been formulated in over half of the countries in the region, including Bangladesh, Pakistan, PNG, China, India, Malaysia, Indonesia, Vietnam, Sri Lanka and Philippines. Supporting **Market Studies** were conducted to date only in Malaysia, India and China. Existing **institutional mechanisms /financing for CDM projects** are limited as well as capacities for **project development, legal & technical issues**, which also suffer from low awareness. The use of **National / International consultants** seems limited which indicates low national capacities and limited international CDM engagement. **Ownership** was characterized as diverse except in a few countries (e.g. China). As **Priority sectors** emerged renewable energy and forestry. Only few **CO programmes** are running full-fledged CDM programmes including Bangladesh, China (largest so far), India and Philippines.

Capacity needs at CO Level

Country offices expressed interest in regional knowledge-sharing, and in particular on CDM success stories. Further information requests focused on practical, hands-on guidance on (a) development of project documents for various sectors; (b) Standard baselines, methodologies and procedures; as well as (b) training for managing CDM Project Cycle and direct exposure and hands-on training on CDM projects; and (d) technical assistance to facilitate country and donor coordination on CDM decisions. Additional interest was expressed with regard to a clear strategy and action plan on implementation of funding sources like the MDG Carbon Facility. Information on future availability of resources was required as well (human and financial resources).

Areas for CDM Capacity Development

As for CDM Capacity Development , Country offices indicated a clear preference for (a) CDM programme/project development (*Cambodia, Papua New Guinea, Bangladesh, Nepal, China, Bhutan, Indonesia, Fiji, Samoa, Sri Lanka, Vietnam, Pakistan, Timor-Leste, Maldives, Malaysia, Philippines*); followed by (b) basic CDM concept and application (*Cambodia, Papua New Guinea, Bangladesh, Nepal, Indonesia, Fiji, Samoa, Malaysia, Laos PDR, Timor-Leste, Maldives*); (c) issues of COP negotiation (*Bangladesh, Indonesia, Fiji, Philippines, Bhutan, Cambodia*); and (d) information related to legal and institutional instruments; and some others (*Papua New Guinea, Timor-Leste, Fiji, Nepal*).

Envisaged CO Support to CDM

Plans by Country Offices to support CDM concentrate largely on overall programming/policy and institutional capacity-building efforts, and few on financing or methodological and legal aspects. Planned activities include so far: (a) **financial support** through facilitating greater access to CDM Funds (Bangladesh); (b) **programming / project development support** (China, Pakistan, Timor-Leste, India, Nepal, Bhutan, Sri Lanka, Indonesia); (c) **Institutional Capacity Building support + Awareness-raising** (Samoa, Maldives, China, Philippines, Indonesia); (d) **technical services & support for methodological and legal issues** (China, India) and (e) **policy support** (Papua New Guinea, China, Philippines)

Potential UNDP Interventions

Country Offices considered the following entry points for UNDP interventions:

- National and Regional level policy consultation (Bangladesh, Papua New Guinea, Fiji, Laos-PDR, Vietnam)
- Support to DNA (Pakistan, Papua New Guinea, Fiji, Samoa, Nepal)
- Establishment of Project Development Facility (Technical & Financial assistance to PDD development) (Bangladesh, Fiji, Samoa, China, India, Malaysia)
- Commissioning Baseline Studies (Pakistan, Cambodia, Timor-Leste, India, Vietnam)
- National Strategy Development (Cambodia, Papua New Guinea, Nepal, China, Laos)
- Information Dissemination (Pakistan, Timor-Leste, Nepal, Laos)
- Buying credits / arranging buyers (China, India, Malaysia)
- Capacity building for bundling of projects (Pakistan, Cambodia, Samoa, Malaysia, Vietnam)

Generic Challenges in CDM – A role for UNDP

Country offices recommended that UNDP, due to its role as development facilitators, should be engaged in (a) supporting the simplification of the CDM mechanism; (b) ensuring adequate incorporation of MDG relevant project priorities into CDM projects, in particular forest-related projects (c) operationalizing the MDG Carbon Facility and establishing a small quality portfolio that delivers easily quantifiable MDGs benefits; (d) making the mechanism more easily accessible and understandable for CO through targeted capacity-building including the establishment of a CDM unit at CO level (e) mobilization of funds from donors; initial financing; (f) identifying partners to develop CDM Projects.

Resource Mobilization – Approaches & Opportunities

Country offices pointed out in particular the operationalization of the UNDP MDG Carbon Facility as well as the formulation of a clear strategy to set up guiding principles for resources mobilization as opportunities/entry points for improving/enhancing resource mobilization efforts. A resources mobilization strategy should focus on identifying target groups (Kyoto MDG-Carbon pool & Voluntary MDG-Carbon pool); and establish public-and private partnerships, in particular targeting private sector and financial institutions, by providing services in market analysis and opportunities, investor guidelines, sector briefs, trends, application procedures and rules and regulations.

UNDP Regional Centre Bangkok Support to COs

Country Offices indicated strong demand for further assistance from the Regional Centre Bangkok which ranged from a focus on hands-on knowledge products and numerous capacity-building components (training, country CDM workshops, supporting missions etc.) to resource mobilization and also advanced support with CER transactions and support for partnership-building.

- **Capacity building:** information/knowledge sharing; training of national counterparts;; Country Dialogue Workshops for CDM; research fellowships for developing new methodologies; monitoring systems: (*Bangladesh, Pakistan, Timor-Leste, PNG, Fiji, Maldives, China, India, Sri Lanka*)
- **Policy support:** PDF, Missions on CDM programming, PINs/PDDs development, Strategy on CDM, documentation of lessons learnt: (*PNG, Bangladesh, Nepal, China, India*)
- **Advanced support for market participation:** Identification of buyers and securing of emission reduction transactions by convening potential market forces; acting as broker/facilitator (*Bangladesh, Vietnam, China*)
- **Resource mobilization:** (*Fiji, Sri Lanka*)

Annex IV. MDG Carbon – Risks and mitigation strategies

- **Process-related risks** involve (a) DNA refusal to approve the project/change in DNA policy; (b) failure to comply with rules and requirements for validation and registration under the CDM; (c) inaccurate validation/verification by DOEs; (d) failure to correctly monitor ERs.
- **Mitigation approaches** here range from *Due Diligence*: (a) CDM/JI eligibility appraisal by UNDP Carbon Methodology Advisers (MA); (b) Host Country Carbon Appraisal (DNA, legal framework, etc.); and (c) Policy/Capacity Development to DNA; (d) Monitoring and pre-verification of CERS by UNDP COs and MAs to *Established Methodologies*: (a) Reliance on fully developed methodologies during start-up phase; and (b) Partnership with key DOEs.
- **Project-related risks** involve (a) time/cost overrun; (b) miscalculated ER project performance Project operation not up to technical specs; (c) changes to project assumptions making project unviable; (d) facility management; (e) damage to equipment; (f) project proponent default; (g) H interest rate/currency fluctuation; and (i) natural catastrophes.
- **Mitigation Approaches** here range from *Due Diligence*: (a) Project design and Developer Appraisal leveraging UNDP climate change project risk management system; (b) enhanced development benefits; (c) carbon Certification of COs Focal points and Regional Technical Advisors; (d) independent assessment of project performance criteria; and (e) buffer of ERs retained to *Established Methodologies*: (a) Financial Instruments to Standard Insurance.
- **Market-related risks** involve (a) Demand/Price risk – evolution of ER markets; (b) failure to negotiate optimal terms for project participants in an ERPA; (c) failure to pay ERs/breach of contract owing to fall in market prices for ERs; and (d) Post Kyoto risks.
- **Mitigation approaches** here range from *Financial Risk Mgmt*: (a) Framework partnerships with investment grade firms; (b) Utilizing financial products and services to outsource key financial risks; and (c) Partial ER prepayments to *Market and Product Diversification*: (a) Compliance and voluntary markets (market hedge); (b) Basic & premium carbon products uniquely differentiated and appeal to different buyers.
- **Country-related risks** involve (a) Contract enforcement; (b) Currency inconvertibility; (c) Nationalization of assets/host Country Gov. claiming title to ERs; (d) Weak Governance; (e) Host Country non compliance with Kyoto Protocol.
- **Mitigation approaches** range from *Due diligence*: (a) Host Country Investment Appraisal;(b) and Drafting of contracts by UNDP counsel to *UN Country Presence*: (a) Mainstreaming of Carbon Finance into UNDP Country Programming and (b) SBAA to *Insurance Policies*: (a) As required by Financial Partners.

ANNEX V. Role of various stakeholders in MDG Carbon Facility

UNDP Country Offices:

Upon carbon training certification of CO EFPs, COs may provide the following services:

- identify/mainstream carbon project proposals into UNDP country programming;
- carry out project design's pre-appraisal, including MDG impact;
- carry out developer appraisal (legal title to future CERs; track record, etc.);
- assist RTA in PIN/PDD formulation process at the country level; (e) help project developer to understand and navigate the existing regulatory framework to secure DNA endorsement;
- resolve project non-performance issues due to a construction or contractual dispute;
- ensure that project operation data are collected and archived in accordance with monitoring plan, including MDG impact;
- and mobilize/manage ODA to provide policy and technical advisory services to relevant national institutions (DNA, etc.) and project developers.

Regional Service Centers/Regional Bureau:

The RSC & RB will be responsible for:

- incorporate Carbon Finance into Regional Policy Dialogue and Programming;
- develop a regional CDM/JI strategy;
- as required, participate in semi-annual meetings of MDG-Carbon Supervisory Board;
- identify and maintain consultants, experts/buyers' profiles roster to assist in formulating PINs/PDDs;
- as required, organize validation/verification missions of DOEs;
- organize regional carbon training workshops for UNDP programme officers;
- mobilize ODA for carbon finance capacity development at the regional level.

Regional Technical Advisers:

Upon carbon training certification, Regional Advisers will:

- Conduct core appraisal of project design (eligibility, technical feasibility, economic viability, etc.);
- evaluate applicability of existing baseline methodologies to proposed projects;
- manage the PIN/PDD formulation process;
- selection of optimum crediting period depending on non-renewal risk associated with policy change that could negate project's Additionality (watch out for perverse incentives to delay positive policy change);
- advise project proponents on structuring and financing of CDM/JI projects; and
- advise on how to combine/sequence carbon finance with other environment sources (ODA, GEF, MP, TREC, etc.)

Financial partners:

- establish Trust account for CDM/JI and the voluntary trading arm of MDG Carbon;
- develop a global registry system/database for all VERs;
- provide VERs Business Development Services; enter into ERPAs on behalf of the Trust with project proponents;
- when the ERs are delivered into the Trust, deposit the purchase price of ERs into the Trust and pay the project proponent for the appropriate amount of credits; make the necessary transfers within the CDM/JI registries;
- transfer pre-agreed project development and technical advisory fees to MDG Carbon and if required, assist MDG Carbon in providing financing arrangements for project proponents.

Environment Finance Manager:

- Supervise the operations of MDG Carbon, under the authority and guidance of MDG Carbon Supervisory Board, and be fully accountable to the Supervisory Board.
- In this context, the Environment Manager manages trade-offs and develop synergies between UNDP Global Environment Funds (GEF TF, Adaptation Funds; CDM/JI/VER; MP; etc.);
- authorizes issuance of ERPAs to Proponents;
- transmits PDDs to DOEs;
- issues Letters of Delegation of Authority to UNDP RRs to create Awards and start implementation; oversees the work of the MDG Carbon team;
- reports to MDG Carbon Supervisory on Facility performance on a semi-annual basis; and implements Supervisory Board's meeting decisions.

Annex VI MDG Carbon project pooling and CDM/MDG pool attributes

