

## 8. REST OF ASIA-PACIFIC

The previous chapters (2-7) summarised the findings of our consultations held in China, India, Indonesia, Japan, Republic of Korea and Viet Nam. As we could not organise such consultations in each of the rest of Asia-Pacific countries due to resource limitations, we organised a region-wide consultation in conjunction with the 14th Asia-Pacific Seminar on Climate Change held in Yokohama, Japan. This chapter summarises the outcomes of the region-wide consultation with special focus on countries that were not covered in previous chapters.

### 8.1 Introduction

For the convenience of the readers, key statistics of selected countries representing ASEAN, Least Developed Countries (LDCs) and Pacific Island Countries (PIC) groups in the region were presented in Table 8.1. In most countries, poverty alleviation and economic

development are main priorities, as significant proportion of population in several countries is below the poverty line. Most of the countries do not emit much GHG (Figure 8.1), but their emissions are expected to grow in the near future (e.g., by 9.0% in Mongolia, 9.8% in the Philippines, 32% in Thailand between 1990 and 2020 (ALGAS 1998). The unprecedented economic and population growth rates in several countries, especially in South-east Asia, over the past two decades contributed significantly to the increases in energy use and GHG emissions (Mendelsohn 2003).

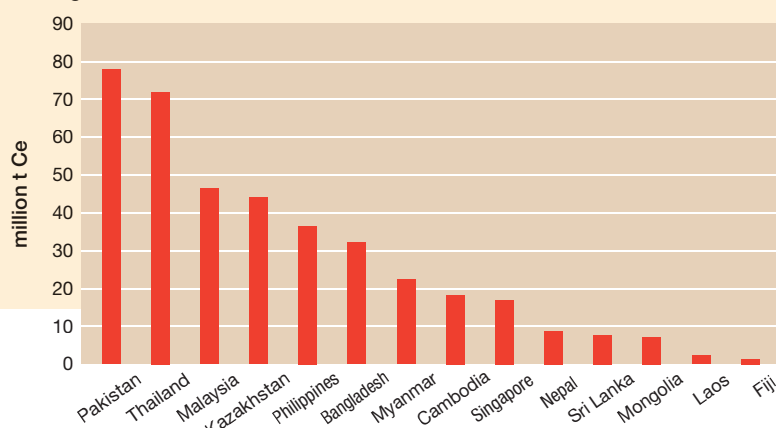
**Table 8.1 Key statistics in selected countries**

Country	Population (million) (2004)	Poverty rate below \$2 a day (%)	GDP growth rate (2004)	CO <sub>2</sub> emissions (million MtCO <sub>2</sub> ) (2000)	CO <sub>2</sub> emissions (kg per 2000 PPP \$ of GDP)(2002)	Energy use per capita (kgoe)(2002)
<b>ASEAN</b>						
Malaysia	25.2	9.3	7.1	144.4	0.69	2,129
Philippines	83.0	47.5	6.2	77.5	0.25	525
Thailand	62.4	32.5	6.1	198.6	0.52	1,353
<b>LDCs</b>						
Bangladesh	140.5	82.8	5.5	29.3	0.15	155
Cambodia	13.6	77.7	6.0	0.5	0.02	–
Nepal	25.2	80.9	3.7	3.4	0.11	353
<b>PIC</b>						
Cook Islands	0.017	–	3.4	0.0	–	–
Fiji	0.8	–	3.8	0.7	0.18	573 (2001)
Solomon Islands	0.5	–	3.8	0.2	0.21	127 (2001)

Sources: World Bank (2005), WRI (2005), UNFCCC (2005g), UNDP (2005a)

Note: Data of poverty rate below \$2 a day refers to most recent year available during 1990-2003.

**Figure 8.1 Total GHG emissions in selected countries**



Source: WRI (2005)

Note: HFC & SF<sub>6</sub> data of Fiji is not available.

## 8.2 Domestic Climate Policies and International Contributions

Table 8.2 shows major domestic climate policies on mitigation and adaptation in selected countries. Economic instruments seem to play a major role compared with regulatory measures.

**Table 8.2 Domestic climate policies in selected countries of the Asia-Pacific region**

	Issue	Policies and Measures
M I T I G A T I O N	Energy efficiency improvement	<ul style="list-style-type: none"> <li>• Voluntary green labelling scheme for electric appliances (Singapore)</li> <li>• Technical assistance and financial grants to adopt energy-efficient technologies and equipments (Singapore)</li> <li>• Promotion of more efficient use of energy (Thailand)</li> </ul>
	Promotion of renewable energy	<ul style="list-style-type: none"> <li>• Mini-hydropower and photovoltaic solar systems (Mongolia)</li> <li>• Tax duty redemption or reduction, investment, and commitment to the Green IPPs (1999-2008) (Philippines)</li> <li>• Use of 1% coco-biodiesel for all government vehicles (Philippines)</li> <li>• Energy conservation law of 1992 mandates renewable energy Small Power Producers' Programme with power purchase, price assurances and subsidies (Thailand)</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Additional registration fee/ Electronic Road Pricing (ERP) (Singapore)</li> </ul>
	Carbon sequestration	<ul style="list-style-type: none"> <li>• Forestry Law in 2002 and Draft Community Forestry Sub-Decree in 2003 (Cambodia)</li> </ul>
	Technology initiatives	<ul style="list-style-type: none"> <li>• Dissemination of energy conservation technologies (Thailand)</li> </ul>
A D A P T A T I O N	Natural resources management	<ul style="list-style-type: none"> <li>• Subsidy for the revival of traditional agriculture to strengthen adaptation capacity (Kiribati)</li> <li>• Soil and water conservation programmes (Philippines, Pakistan)</li> <li>• Afforestation to prevent landslides and conserve water (Nepal)</li> </ul>
	Infrastructure management	<ul style="list-style-type: none"> <li>• National Adaptation Program (Kiribati)</li> <li>• Ban on commercial exploitation of mangroves (Micronesia)</li> <li>• Construction of cyclone shelters and embankments (Bangladesh)</li> </ul>
	Others	<ul style="list-style-type: none"> <li>• Cyclone Warning System (Cook Islands)</li> </ul>

Sources: UNFCCC (2005g), OECC (2004)

Despite their keen interest in contributing to international negotiations, most PIC, ASEAN and LDCs in the region did not play a leading role largely due to the lack of domestic capacity to send enough negotiators to the COPs. The number of NGOs in Asia that can support international negotiations is also limited. Out of 591 NGOs with observer status at the UNFCCC, there are only three from Malaysia, two from Bangladesh, and one each from Thailand, and Pakistan (UNFCCC 2005a).

*Most countries in the region have not played a leading role in international negotiations.*

## 8.3 Assessment of the Current Climate Regime

A wide diversity of interests can be noted in the region, and such interests reflect upon their perceptions on the current climate regime. In general, ASEAN member states are interested in international competitiveness, LDCs in poverty alleviation, and PIC in adaptation.

*Participants from Thailand, Cambodia and the Philippines positively assessed the support from Annex I countries in capacity-building for the CDM and noted that such efforts could also lead to good governance in developing countries.*

### **8.3.1 Progress achieved to date**

The entry into force of the Kyoto Protocol and the establishment of market-based mechanisms were considered to be the main achievements of the current regime. As of October 2005, most countries, except Singapore, either ratified or were about to ratify the Kyoto Protocol (UNFCCC 2005e). Several participants noted that preparation of National Communications, including GHG inventories, was a positive feature of the current regime. However, it was emphasised that international support for the preparation of the National Communications and implementation of actions thereafter was far from satisfactory. Participants from Thailand, Cambodia and the Philippines positively assessed the support from Annex I countries in capacity-building for the CDM and noted that such efforts could also lead to good governance in developing countries. Although the progress of the CDM is quite slow, many countries have begun making national strategies to implement the CDM. As of October 2005, most countries in Asia, except Myanmar, established their DNAs. In the Pacific sub-region, however, most countries except Fiji did not establish a DNA yet, reflecting their low interest in the CDM (UNFCCC 2005c).

### **8.3.2 Challenges for the future**

The participants noted that GHG mitigation is a challenge for all countries and especially for developing countries. Further engagement of civil society and the business community in climate initiatives remains a big challenge, although several countries include NGOs in their DNA membership to ensure that the proposed CDM projects adequately accommodate the genuine concerns of the stakeholders. Promoting public awareness of climate change at the local level was also emphasised as a challenge. The implementation of the CDM to realise sustainable development, facilitation and implementation of adaptation strategies, and address equity issues based on the principle of "common but differentiated responsibilities" are other challenges. Some participants (e.g., Malaysia) noted that the identification of mechanisms to enable technology transfer, such as the CDM, are another future challenge .

## **8.4 Major Concerns on Current and Future Climate Regime**

*In most countries of the region, integration of climate change concerns into social and economic policies is still at an embryonic stage.*

Most participants recognised that the current climate change regime does not reflect the major concerns of developing countries in the region, since international negotiations have been largely initiated by developed countries. In addition, participants felt that no particular efforts were made yet to find out the specific concerns and interests of each developing country.

### **8.4.1 Developmental and economic concerns**

Low policy priority of climate change and lack of integration of climate change in national development plans were identified as major concerns by participants from several countries (e.g., Cambodia and the Philippines). The process of integrating climate change concerns into social and economic policies and plans is still at an embryonic stage (UNFCCC 2005g). How to meet the growing energy demands to sustain economic development without adverse impacts on the environment is a major concern of several countries (e.g., the Philippines and Malaysia). In most countries, policies for promotion of

alternate sources of energy (e.g., renewable sources) exist but current energy demands cannot be met by such alternate sources. The relatively low levels of energy efficiency were also a point of concern for most countries in the region. For example, the Philippines, Singapore and Thailand, are often cited as the three most inefficient energy users among the East Asian export-oriented economies (Lian 2005). The lack of attention to climate change at the sub-regional level was also a point of concern. Despite the presence of the ASEAN Climate Change Secretariat (in Jakarta), no substantial progress in discussions on climate change was made among ASEAN countries.

#### **8.4.2 Equity concerns**

Most participants recognised that equity issues were not adequately reflected in the current regime. Indeed, along with poverty, equity is one of the most important human concerns which interact with both sustainable development and climate change in a complex way (Munasinghe 2002). Some participants (e.g., Malaysia) emphasised that the principle of “common but differentiated responsibilities” should continue to be the basis of future regime discussions. There is also a concern on burden-sharing of GHG mitigation and the lack of demonstrable progress by Annex I countries. Participants noted that developed countries, which possess greater capacity to respond to climate change, should bear a larger share of the burden (Banuri and Spanger 2002) and lead in mitigation efforts.

#### **8.4.3 Technology development and transfer-related concerns**

Many participants (e.g., the Philippines, Malaysia, Pakistan, Cook Islands) noted that the implementation of technology transfer under the current regime was not satisfactory in meeting the development demands and needs of developing countries (Shrestha 2004). Even after the introduction of some technologies, several restrictions were imposed on such technologies. For example, out of total 523 technologies introduced into Thailand, 53.5% had restrictions on transferred technologies (Chantanokome 2003). Concerns about the lack of wide and appropriate dissemination means for energy efficiency technologies, the lack of access to the right technologies at an affordable price, IPR restrictions related to publicly-owned technologies, and the lack of necessary funding to acquire technologies were also mentioned. In PIC (e.g., Cook Islands), it was pointed out that technology transfer in renewable energy and energy efficiency areas was done on a small-scale basis, but it was not disseminated widely. The lack of suitability and applicability of transferred technologies and high cost of renewable energy technologies were also identified as the major concerns.

#### **8.4.4 CDM-related concerns**

All participants considered that the CDM is a useful concept, but there were a number of institutional, technical, financial and legal barriers to implement the CDM in developing countries (Shrestha 2004, Philibert 2004). Participants felt that the original goal of promoting sustainable development through the CDM is not yet realised due to such barriers. Furthermore, there was also a concern about the poor geographic representation of current CDM (Lecocq and Capoor 2005). For example, out of total thirty-three registered CDM projects as of 5 November 2005, there were no projects from the entire ASEAN sub-region. Likewise, out of thirteen Asian LDCs, only two projects (one each from

*Participants expressed concerns about burden-sharing of GHG mitigation and the lack of demonstrable progress by Annex I countries.*

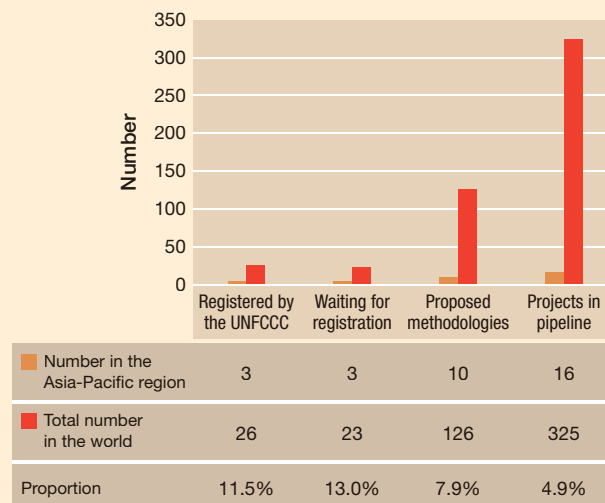
*The lack of suitability and applicability of transferred technologies, and high cost of renewable energy technologies are major barriers in many countries of the region.*

**Current CDM is favouring largely low-cost projects without much benefit in terms of sustainable development.**

Bangladesh and Bhutan) were registered. Only one project from the entire Pacific region (from Fiji) was registered. It must be noted, however, that among the 325 projects in the pipeline, there are six from the Philippines, four from Malaysia, three from Thailand, two from Nepal, and one from Cambodia (Figure 8.2).

A concern was also expressed that the current CDM was favouring largely low-cost projects without many benefits in terms of sustainable development. For example, twelve large-scale CDM projects, such as HFC23 and landfill gas recovery, generate nearly 95% of CERs (UNFCCC 2005b). Rigid institutional structure of the CDM-EB and lack of streamlined procedures were also identified as a major concern. Many countries (e.g., Malaysia, Thailand, and the Philippines) expressed concern regarding uncertainty in continuity of the CDM beyond 2012. Participants noted that such uncertainty and lack of consensus about the post-2012 process could be a major barrier for the promotion of national strategies to implement the CDM. The low price of CERs of 4-6 Euros as against about 20-25 Euros for EAU under EU ETS (Lecocq and Capoor 2005) was also a point of concern. PIC expressed concern that their geographic isolation is a major barrier in attracting CDM investors to the region.

**Figure 8.2 Status of the CDM activities in the Asa-Pacific region (except China, India, Indonesia, Republic of Korea and Viet Nam) as of 20 October 2005**



Source: UNFCCC (2005b)

#### 8.4.5 Negotiation-related concerns

Several countries in the region (e.g., Cambodia, Malaysia and Cook Islands) expressed a concern regarding the low number of negotiators sent from their countries to the UNFCCC. The Cook Islands, for example, recently reduced the number of negotiators from two to one due to reduced support by the UNFCCC for participation. In order to overcome such limitations as well as their limited negotiation capacity, many developing countries in the region tried to maximise their influence through groups such as "G77+China" or "Alliance of Small Island States (AOSIS)" (Mwandosya 2000). However, integrating diverse opinions of countries in the group and make a single position is a concern, since LDCs and PIC are often marginalised in the decision-making process of "G77+China" (Grubb et al 1999). The capacity of negotiators and lack of information on negotiation were also identified as points of concern.

#### **8.4.6 Adaptation-related concerns**

The participants noted that very limited attention was paid to adaptation in the current regime, even though there is clear evidence that poorer nations and disadvantaged groups within nations are especially vulnerable to climate change (UNDP 2003). Inadequate attention to adaptation in national development plans was also a concern expressed by several countries (e.g., Cambodia). Frustration about the slow progress in discussions on adaptation was widely echoed by the participants. Some participants expressed a concern that adaptation might not attract the interest of Annex I countries due to several uncertainties associated with the vulnerability and adaptation assessment.

*Frustration about the slow progress in international discussions on adaptation was widely echoed by participants.*

#### **8.4.7 Financing-related concerns**

Inadequate funding and lack of progress by Annex I countries in implementing their financial commitments was noted as a major concern. For instance, only 13.5% of total pledge to GEF has been met in 2005 (GEF 2002). Concern was also expressed on the functioning of the GEF as guidelines for accessing GEF funds were often complicated and sometimes confusing (Murdiyarsa 2004). The performance of funding mechanisms, such as Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF), was considered unsatisfactory. The decreasing trend of ODA as a share of the GNI from 0.5% in 1960 to 0.22% in 1997 (UNDP 2005a) was also identified as a concern, especially for LDCs and PIC which depend much on ODA for their development. There was a diversity of views on utilising ODA for CDM. While some participants (e.g., Malaysia, Cook Islands) expressed a concern on possible diversion of ODA to acquire CERs by Annex I parties, others were open to the possibility of using ODA for underlying project finance or enabling environment to implement the CDM. Many participants agreed that the current 2% share of the CDM proceeds to support adaptation is not adequate.

*Participants were concerned about the functioning of the GEF as guidelines for accessing GEF funds were often complicated and sometimes confusing.*

#### **8.4.8 Other concerns**

Participants noted that unsustainable lifestyles of developed countries and raising fuel prices would become a concern for energy security in the Asia-Pacific with widespread implications for GHG emissions from the region.

### **8.5 Priorities for Restructuring Climate Regime**

In our consultations, possible features of a future climate change regime, such as the reform of the CDM, measures to support adaptation, technology development and transfer, financing, capacity-building and other issues (e.g., capacity of negotiators, ODA for the CDM and adaptation) were discussed. A few ideas have been suggested for strengthening the climate regime (Table 8.3).

*Several priorities for restructuring the future climate regime were proposed.*

**Table 8.3 Priorities for restructuring the future climate regime**

Theme	Options for restructuring
1. Market Mechanisms	<ul style="list-style-type: none"> <li>• Expansion of the demand for post-2012 CER through creation of CER funds</li> <li>• streamlining the additionality requirement for CDM projects</li> <li>• Simplification of CDM-EB procedures</li> <li>• Preferential treatment of projects with sustainable development</li> <li>• Creation of incentives for active involvement of Annex B countries</li> </ul>
2. Adaptation	<ul style="list-style-type: none"> <li>• Increasing the share of CDM proceeds to the Adaptation Fund</li> <li>• Mainstreaming adaptation into national development plans</li> </ul>
3. Technology transfer	<ul style="list-style-type: none"> <li>• Innovative financing options for technology development and transfer</li> <li>• Synergies with other technologies to provide business incentives (co-benefits)</li> <li>• Promotion of private-private partnerships across the countries</li> <li>• Promotion of South-South technology transfer</li> </ul>
4. Financial assistance	<ul style="list-style-type: none"> <li>• More effective use of ODA for climate change activities</li> <li>• Provision of incentives to increase private funds</li> </ul>
5. Capacity-building	<ul style="list-style-type: none"> <li>• Institutional capacity-building for setting up DNA</li> <li>• Practical capacity-building for CDM implementation</li> <li>• Capacity-building for negotiators</li> </ul>

### 8.5.1 Market-based mechanisms

There was a general consensus that CDM reform is one of the most important and urgent issues to be addressed in the climate regime beyond 2012. The complex and time-consuming procedural process of the CDM-EB should be simplified (by strengthening the institutional capacity of EB to hasten the approval process), so that the CDM can gain more professional support (Sugiyama et al 2005). In order to enhance sustainable development benefits of CDM projects, preferential treatment of such projects during review process was considered useful. More substantial funding sources for CDM projects need to be established, since the PCF and other current sources are not sufficient (Michaelowa 2004). In particular, there is a necessity to expand the demand for CER through establishment of a fund to remove the fear of investment risks and concern about non-existence of brokers. It is also important to ensure the continuity of the CDM beyond 2012, which may increase the current low price of CER. Additionality guidelines should be relaxed so that more countries can proactively participate in the CDM. Uneven geographical distribution in the CDM projects could be adjusted by appropriate intervention by the international organisations.

### 8.5.2 Adaptation

Participants suggested that enhancement of funding for adaptation (Murdiyarso 2004), increasing the current 2% share of CDM proceeds for an adaptation fund, mainstreaming adaptation into development plans, establishment of a global insurance mechanism, and options for technology transfer in adaptation should be considered in the future framework. Several participants felt that an adaptation protocol might not be a realistic option to meet their expectations, considering the long time taken for entry into force of the Kyoto Protocol.

### 8.5.3 Technology issues

Participants recommended that future regime discussions must focus on promoting private-private partnerships among various countries, and on designing options for more effective coordination between the public and private sectors. Some participants (e.g., Malaysia) underscored the importance of establishing a long-term structured framework for technology transfer. The future regime discussions should examine prospects for utilising market mechanisms for technology transfer (e.g., technology transfer CDM). The future framework should also focus on the utilisation of technology transfer potential among developing countries, such as through South-South technology transfer (Shukla et al 2004).

***Future regime discussions must focus on promoting public-private partnerships and on establishing a long-term structured framework for technology transfer.***

### 8.5.4 Financial assistance

Participants noted that a more effective use or reallocation of current ODA for both mitigation and adaptation would be necessary in the future to complement the slow progress in operationalisation of the SCCF and LDCF.

### 8.5.5 Capacity-building

Most of the participants argued for additional institutional and human capacity-building to tackle climate change issues in the region. They suggested that the future regime should provide opportunities for enhancing capacity of negotiators from developing countries.

## 8.6 Epilogue

Most of the participants representing ASEAN, LDCs and PIC in the region at our consultations reaffirmed that poverty alleviation and economic development are overriding priorities and that the climate change is not yet a high policy priority. Therefore, it is important to reframe the climate issue as a developmental issue. Indeed a stable climate is a vital component to achieve sustainable development, and sustainable developmental policies are in turn crucial to attain a stable climate.

Our consultations revealed a strong preference for the CDM and technology transfer in South and South-east Asian countries, and for the adaptation in LDCs and PIC. It is thus important for negotiators and policy-makers from those countries to be more proactively involved in discussions on their priority topics at international negotiations on the future climate regime and resolve their concerns in a constructive manner. In addition, all countries should devote themselves to the cause of creating a stable climate by adopting innovative mitigation and adaptation policies domestically.