

National Perspectives on Climate Regime Beyond 2012

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This chapter examines how stakeholders from various Asian countries perceive climate change and consider the Kyoto Protocol as a driver for national climate policy. It also explores the status of national positions on post-2012 climate regime with a view to identifying crucial elements for building a post-2012 climate regime from the perspective of different countries in the region. The presentations made by representatives of various countries in the “national perspectives” session of different consultations held on a sub-regional basis, as well as around 78 completed questionnaires by participants form the basis of this chapter.

The Asia-Pacific region as a whole is not adequately prepared to cope with adverse impacts of climate change.

2.1 Impacts of and preparedness for climate change

2.1.1 Regional impacts and preparedness of the region as a whole

Empirical research on climate change impacts in the Asia-Pacific region is still limited (Mendelsohn 2006). However, it is now widely accepted that the region is highly vulnerable to climate change especially because national economies in the region are largely dependent on climate-sensitive sectors such as agriculture, forestry, fisheries and tourism, and the region hosts a large number of poor populations with low adaptive capacity. Furthermore, the region has several ecosystems threatened by climate change, which have large implications for social and economic development in many countries of the region (IGES 2005a). The Third Assessment Report of IPCC, for instance, showed that nearly 67% of the glaciers in the Himalayan and Tianshan mountain ranges retreated in the past decade, and that the frequency of forest fires increased, particularly in the Boreal Asia region (IPCC 2001b). Both these factors have significant implications for the development of water and agricultural sectors in many Asian countries. Most of the participants and those who responded to questionnaire surveys (85%) reported that the region as a whole is not adequately prepared to cope with adverse impacts of climate change, despite its high vulnerability.

2.1.2 Impacts on specific countries and preparations to cope with specific impacts

Our earlier report on Asian perspectives of climate regime beyond 2012 identified several adaptation-related changes in countries such as China, India, Indonesia, Viet Nam, and the rest of Asia-Pacific (for details refer to pages 11, 14, 22, 25, 36, 52 and 60) (IGES 2005a). Most of the participants of our consultations and respondents to the questionnaire surveys (90%) reported that serious impacts of climate change are already evident (Figure 2.1) in different sectors and/or ecosystems, with a majority of participants reporting adverse consequences on water and agriculture sectors. The impacts are manifested in the form of increased frequency and intensity of extreme climate events such as floods, droughts, tropical cyclones, tidal surges, and gradual sea level rise leading to salt-water intrusion, salinity and drainage congestion. For example, participants from Bangladesh noted the occurrence of frequent winter droughts, and coastal as well as

riverine flooding with significant impacts on national food security, while those from India reported severe water stress and scarcity leading to reduced rice and wheat yields, and changes in transmission boundaries of diseases such as malaria, dengue, and yellow fever. Nearly 92% of participants of our consultations reported that countries have initiated some policies and measures to cope with such impacts (Table 2.1) but they recognise that such measures are perhaps inadequate to cope with the problem. The measures largely include preparation of policy documents such as National Adaptation Programmes of Action (NAPA), disaster management plans, and enhanced research on adaptation in agriculture and health sectors. A few participants (e.g. Bhutan) reported that efforts to mainstream climate concerns in development planning are in progress. Some participants (e.g. the Philippines) reported that communication of information on impacts of climate change to vulnerable sections of their societies is limited and further proactive support of such efforts is vital.

Preparation of National Adaptation Programmes of Action (NAPAs), disaster management plans and enhanced research on adaptation in agriculture and health sectors are some of the measures currently in progress.

Figure 2.1 Perceptions of questionnaire respondents on severity of impacts of climate change in the Asia-Pacific region

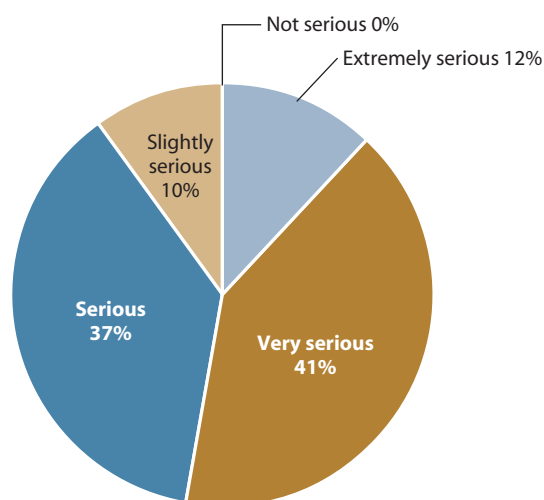


Table 2.1 Measures to cope with impacts of climate change in selected Asia-Pacific countries

Bangladesh	Preparation of NAPA; construction of flood and cyclone shelters, coastal embankments, rainwater harvesting, saline tolerant crops; drainage control
Bhutan	NAPA 2006 highlighting actions such as artificial lowering of Thorthomi lake, early warning systems, rainwater harvesting, landslide and flood control; mainstreaming climate change adaptation in national planning
Cambodia	Completion of NAPA and identification of additional adaptation programmes of action
Indonesia	Setting up of a special division on adaptation within the ministry and a working group on adaptation
Maldives	Integrating adaptation in infrastructure development; relocation of people from vulnerable islands to less vulnerable area; protection of coastal areas including airport
Mongolia	Phase 3 of National Action Plan on Climate Change listing various adaptation measures
Nepal	Water resources development plan
Philippines	Early warning systems and provision of seasonal climate advisories; public awareness activities; risk management framework including national hazard planning and stakeholder consultations; integrated impact and vulnerability assessment in most vulnerable regions; hazard mapping
Sri Lanka	Development of drought resistant and flood-tolerant crops and changing cropping patterns; sector-based adaptation plans; rainwater harvesting; rehabilitation of irrigation infrastructure
Thailand	Emergency response measures to cope with droughts and floods
Viet Nam	Vulnerability and adaptation assessments in selected sites; assessment of technology needs for adaptation; disaster management plans and adaptation framework

Participants noted that the success of the Kyoto Protocol in either reducing GHG emissions worldwide or improving the coping capacity of vulnerable populations in Asia has been limited to date.

2.1.3. Impacts on specific ecosystems and efforts to cope with such impacts

Article 2 of the UNFCCC refers to prevention of dangerous anthropogenic interference with the climate system within a timeframe sufficient to allow ecosystems to adapt naturally to climate change. Most participants (83%) reported that forest, coastal, and mountain ecosystems in their countries are facing severe impacts of climate change. For example, participants reported bleaching of coral reefs in the Maldives and erosion of beaches in Sri Lanka with widespread negative impacts on the tourism industry, while participants from China, Bhutan and Nepal reported increasing glacier melting and retreat, and occurrence of Glacial Lake Outburst Floods (GLOF). Respondents to the questionnaire (64%), however, noted that very few actions were taken specifically to enhance the coping capacity of natural ecosystems. Many countries have biodiversity conservation plans and participants noted the need for mainstreaming climate concerns in such efforts.

2.2 Assessment of the Kyoto Protocol as a driving force for national climate policy and to achieve sustainable development

2.2.1 Assessment of the Kyoto Protocol versus other multilateral environmental agreements at the international level

Interviews with experienced international negotiators from the region revealed that the Montreal Protocol was largely successful in implementing the measures to eliminate the production and use of ozone-depleting chemicals internationally, while the Kyoto Protocol spurred only modest steps toward stabilising GHG emissions. They identified that the lack of willingness of the USA to participate in the latter was the major factor behind such disparity. Sunstein (2006) noted that the very different payoff structures of the two agreements and the radically different self-interested judgments of the USA were major factors. However, nearly all participants confirmed that the Kyoto Protocol represents a very important first step towards stabilisation of global climate, despite its very small immediate impact on the climate, simply because of the very short timescale and relatively modest GHG emission reduction targets. Participants also agreed that further improvements are possible to enhance its effectiveness. Some participants (e.g. India) noted that any alternative agreement to the current regime acceptable to the USA would be less ambitious than the Protocol, while others (e.g. Sri Lanka) noted the need for building synergies among multilateral environmental agreements for climate change, biodiversity and desertification.

2.2.2 Assessment of the Kyoto Protocol versus other multilateral environmental agreements at the national level

Nearly all governments of the Asia-Pacific region ratified, accepted, acceded or approved the Kyoto Protocol. Most of the participants and respondents to the questionnaire survey (96%) reported that Kyoto Protocol ratification was an indicator of their country's seriousness on climate change. However, many participants (82%) qualified the statement by noting that the success of the Kyoto Protocol in either reducing GHG emissions or improving the coping capacity of vulnerable populations in respective countries has been limited to date. Some participants (e.g. Cambodia) noted that ratification of the protocol is one of the major ways to promote private investment in renewable energy,

energy efficiency, afforestation/reforestation activities and appropriate technologies. Several participants noted that actions to implement the Montreal Protocol were relatively straightforward and involved decision making by a few institutions at the national level, while policies and measures envisioned under the Kyoto Protocol need quite extensive cooperation of several ministries and stakeholders.

2.2.3 Assertion of national concerns in UNFCCC and Kyoto Protocol discussions

Most of the respondents of the questionnaire survey (95%) noted that Asian governments were serious or very serious about addressing climate change domestically because of strong negative implications of climate change on sustainable development efforts. However, many participants (around 70%) noted that Asian countries, in general, failed to assert their national developmental concerns in international climate discussions to date. This conclusion corroborates last year's findings that Asian negotiators remained largely on the sidelines of international climate negotiations and that Asian interests and developmental aspirations were largely ignored in international climate negotiations. Participants highlighted the need to raise such concerns and priorities at the international level far more effectively than before.

2.2.4 Initiatives taken by selected countries before and after ratification of the Kyoto Protocol

Despite the fact that climate change policies per se are not yet a high priority in most of the Asian developing countries, the ratification of the Kyoto Protocol seemed to have had a positive effect, as nearly 73% respondents noted that the Protocol served as a major driving force of their national climate and energy policies (Table 2.2). Some participants, however, noted that the Kyoto Protocol is at most only one of the several driving forces of national policy (e.g. Thailand). Several countries established institutions and promulgated new regulations to deal with climate change. The creation of inter-ministerial committees on climate change (e.g. Cambodia, Sri Lanka, the Philippines), establishment of Designated National Authority (DNA) in almost all countries, development of national CDM implementation strategies including establishment of CDM study centres (e.g. Sri Lanka) and formulation of NAPAs in LDCs (e.g. Bangladesh, Bhutan, Cambodia, Maldives, Mongolia) have been the most evident. Several countries reported policies and measures to improve energy efficiency (e.g. energy intensity standards and targets in China, establishment of Bureau of Energy Efficiency in India) and promote renewable sources of energy (e.g. China, India, the Philippines, Indonesia, Sri Lanka, Thailand) including alternate fuels (CNG, biogas, biofuels). In some countries, efforts to integrate climate concerns in development planning are also evident. National energy policies of Sri Lanka and Viet Nam, for example, integrated CDM potential in the planning of various sectors.

The Kyoto Protocol served as a major driving force of the national climate and energy policies in the Asia-Pacific region.

Table 2.2 Institutional arrangements, and implemented policies and measures by selected Asian countries coinciding with the ratification of the Kyoto Protocol

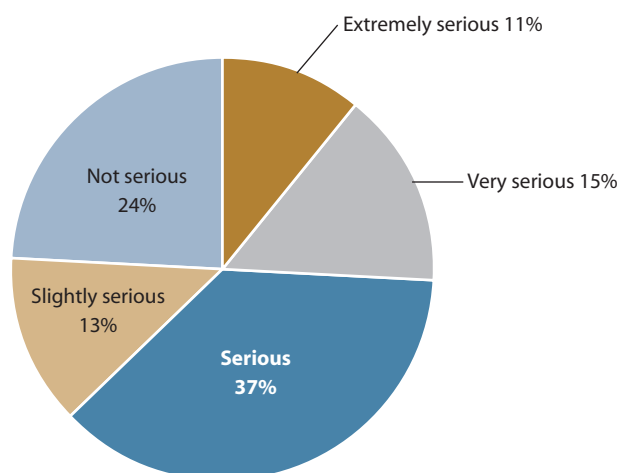
Cambodia	Creation of national climate change committee; completion of NAPA
China	Mandatory energy efficiency standards for building construction through promulgation of the Designing Standard for Energy Conservation in Civil Building (Jan. 2006)
Indonesia	Issuance of regulations regarding national energy mix, energy efficiency, biofuels, etc.
India	Establishment of Bureau of Energy Efficiency; renewable energy targets
Japan	Establishment of Laws to promote global warming prevention activities to achieve the Kyoto targets including 3-stage approach
Lao PDR	Establishment of Climate Change Steering Committee, DNA for CDM
Malaysia	Clean coal technology for coal plants; renewable energy targets, and tax incentives for energy efficiency; mainstreaming energy efficiency in development plans
Maldives	Creation of Ministry of Environment, Energy and Water; establishment of National Energy Authority to undertake energy resource assessment to estimate the potential of renewable energy
Mongolia	National programme on renewable energy (June 2005)
Myanmar	Establishment of National Commission for Environmental Affairs; promotion of the use of CNG, biogas and biofuels; implementation of greening projects in 13 sub-divisions of the country
Philippines	Policy frameworks on renewable energy and energy efficiency and development of alternate fuels
Republic of Korea	Third National Action Plan specifying 90 tasks for GHG mitigation
Singapore	National climate change strategy (in progress); co-funding of energy audits for industries; building efficiency standards, labels, and green vehicle rebates
Sri Lanka	Establishment of DNA and development of national CDM policy framework; integration of CDM potential in National Energy Policy; setting a target that at least 10% of new energy should be from renewable sources
Thailand	Energy strategy plan of 2005; establishment of Greenhouse Gas Management organization, Promotion of renewable energy development under CDM

Abandonment of the Kyoto Protocol would seriously affect national climate policy and carbon trading, including implementation of market mechanisms such as CDM.

2.3 Implications of the abandonment of the Kyoto Protocol on national climate policy and evolution of market mechanisms in the region

Several participants of our consultations noted that abandonment of the Kyoto Protocol at this stage would be a tragedy for the international efforts to address climate change, as considerable resources have been invested in the process to date. Many participants observed that the necessary momentum to develop market mechanisms has just picked up as evidenced by registration of 421 CDM projects with a total of 680 million CERs (Certified Emission Reductions) by 2012, and issuance of 21.5 million CERs by the CDM Executive Board as of November 2006 (UNFCCC 2006b). Naydenova (2006) reported that aborting the CDM would indeed be a waste of initial investments, as the legal, methodological, technical and institutional infrastructure is already in place and the carbon market is a fact. The CDM market has gained momentum in the Asia-Pacific region too, as can be seen by the host-country approval of as many as 164 CDM projects in China as of 9 November 2006 (<http://cdm.ccchina.gov.cn/english/NewsInfo.asp?NewsId=1323>), worth a potential 89 million CERs a year, and 400 projects in India by Sep. 2006. A high number of participants (84%) noted that the future climate regime must be built on such strong elements of the protocol while removing the existing weaknesses. Nearly three-fourths of the respondents to the questionnaire reported that abandonment of the Kyoto Protocol would seriously affect national climate policy and carbon trading, including implementation of market mechanisms such as CDM (Figure 2.2). Participants from countries such as Viet Nam reported that it would adversely affect national policy for renewable energy and energy efficiency while those from the Maldives noted that it might have extremely serious consequences on their national adaptation policy.

Figure 2.2 Perceptions by respondents of questionnaire on severity of impacts of abandonment of the Kyoto Protocol on national policy and market mechanisms in the Asia-Pacific region



A significant number (~24%) of participants noted, however, that abandonment of the protocol might not adversely influence national climate policy. They observed that new carbon markets would develop with or without the Kyoto Protocol, due to the existence of several carbon funds initiated by the multi-lateral institutions such as the World Bank and the linkage directive of the European Union’s Emissions Trading Scheme (EU-ETS) to CDM activities in developing countries. Further, some participants argued that, since the actual Kyoto Protocol in force now is so far removed from its original design, due to non-participation by the USA and Australia, and limited environmental effectiveness, a re-assessment of the actual impacts of the protocol on national climate policies and market mechanisms would be prudent. Participants from Bhutan, for example, noted that abandonment of the Kyoto Protocol would not seriously affect their national climate policy, as the country is a net sequester with about 70% of geographical area under forests, and is committed to conserve forests and use hydropower for its energy needs even without the Kyoto Protocol in place. Likewise, participants from the Philippines noted that the country is committed to the Philippines Clean Air Act, which stipulated participation in emissions trading.

2.4 Status of the development of national positions on post-2012 climate regime

2.4.1 Marginal role of the Asia-Pacific region in influencing international climate discussions

The consultations revealed a general concern among participants (78%) that the Asia-Pacific region is not playing its due role in influencing the outcomes of international climate negotiations. Some participants observed that deep divisions within the G77+China, along different interest groups, partly contributed to the lack of a sound regional policy for a post-2012 climate regime. The consultations revealed that most countries in the region, including large developing countries such as China and India or Annex I countries such as Japan, have yet to declare a specific national position on post-2012 climate regime, although 25 out of 76 respondents noted that some efforts along these lines are in progress. For instance, participants from Cambodia reported initiation of discussions at the technical and policy levels, while Indonesian

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representatives reported the establishment of a special working group to consider post-2012 issues. Most countries in the region have thus appeared to adopt a “wait and see” approach. There is a widespread informal consensus, however, that efforts to mitigate and adapt to climate change should be more pronounced than in the current regime.

2.4.2 Major barriers identified in developing a specific national position on post-2012 climate regime

The consultations revealed that uncertainty of the positions of various Annex 1 parties, and the lack of adequate and capable staff members and funding in concerned ministries of most developing countries were major reasons for the slow progress in formulating a national position on a post-2012 climate regime. Some participants (e.g. Cambodia, Mongolia) reported that the lack of a regional platform for developing a common position among Asian countries and poor policy coordination among various ministries, and between government and other stakeholders within each country were major barriers. Other barriers include the lack of attaching high priority to climate policy issues, lack of awareness of global negotiation issues among both policy makers and the private sector, limited attention by the national media on implications of post-2012 regime discussions on national policy, and lack of technical capacity. Participants from some countries (e.g. the Philippines and Cook Islands) reported that lack of sufficient funds for addressing climate change issues and concerns, including those attending negotiations, have dampened intensive discussions on future climate regime at the national level.

2.4.3 Efforts of countries to involve key stakeholders in developing a national position

Participants noted that formal discussions to develop a national consensus on a post-2012 regime were not initiated in most countries but efforts to engage key stakeholders in informal discussions were evident. The NGOs and academic institutions in various countries have largely coordinated such efforts to date, often with indirect support from advisory panels to the national governments. Participants reported that informal discussions with businesses and industries are ongoing on a limited scale in some countries (e.g. India, Japan, Malaysia, Thailand). Inter-ministerial meetings at the governmental level, which are usually held in connection with CDM approval processes at DNA, seemed to have facilitated a degree of understanding on post-2012 issues in countries such as China, Indonesia, India, Republic of Korea, the Philippines and Viet Nam. Participants noted that discussions with key stakeholders on post-2012 climate regime issues have yet to begin, however, in countries such as Bangladesh, Bhutan, Cambodia, Lao PDR, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Singapore, and Sri Lanka.

2.5 Elements crucial for a successful post-2012 climate regime

2.5.1 Major common elements identified across the region/sub-regions

Most of the participants (95%) reported that consideration of Asian developing country concerns (e.g. sustainable development, energy security, poverty eradication) more proactively than in the current regime, and strengthening the CDM by giving a clear signal for its continuity beyond 2012 are crucial for building a successful post-2012 climate regime. A large majority of participants (76%) noted that the future climate

Consideration of Asian concerns more proactively than in the current regime is crucial for building a successful post-2012 climate regime.

regime should be based on the current regime that embodies the principles outlined in Article 3 (e.g. common but differentiated responsibilities) but it should have stronger compliance mechanisms with Annex I countries committing to deeper reductions and targets that are more credible than in the current regime. Some participants noted that the current regime takes a more *what-to-do* approach, rather than offering the more practical and needed *how-to* elements, and that its efficacy could be greatly enhanced if carbon revenues could provide greater incentives in the future regime. The need for building clear linkages of climate regime with achievement of sustainable development or Millennium Development Goals (MDGs) was also recognised.

Many participants (55%) noted the need for bringing the USA into the future climate regime. Some participants (e.g. India) argued that the best available structure for the future regime is the continuation of the Kyoto-style framework, but complemented by plurilateral agreements engaging the USA (e.g. Asia-Pacific Partnership, G8 agreements). Other participants (e.g. Bhutan), however, preferred to see an inclusive and mandatory climate regime with emission reduction commitments by all Annex I countries, rather than a cluster of voluntary efforts, in view of the risk and non-uniform nature of the latter. Ensuring consistent, stable and predictable funding, and facilitating technology transfer and adaptation through more active commitment were often identified as crucial for the success of the future climate regime. A few participants (16%) noted the desirability of having long-term targets for GHG concentrations or temperature rise either on a global- or ecosystem-basis. A few participants (13%) noted that demonstrating that economic development need not be hindered through GHG mitigation efforts in developing countries would be crucial to make further progress.

Some participants argued that the best available structure for the future climate regime is the continuation of the Kyoto-style framework, but complemented by pluri-lateral agreements engaging the USA (e.g. Asia-Pacific Partnership, G8 agreements).

2.5.2 Country-specific interests on specific elements of the future climate regime

There was widespread interest on ways to strengthen market mechanisms in the future climate regime. Most of the participants (92%) noted the need for extending and strengthening the CDM beyond 2012 by shortening the gestation period of CDM activities, simplifying the CDM approval process, promoting small-scale CDM projects, and reducing transaction costs. Participants from China, India, and Indonesia noted the need for widening the scope of CDM into a programmatic or sector level in the future climate regime, so that resources generated through such CDM activities might be utilised for supporting adaptation efforts. Participants (e.g. India) noted that expansion of the scope of CDM would enable Annex I parties to adopt deeper emission reduction targets at reasonable cost and allow equitable burden sharing among Annex I parties, while promoting greater participation by developing countries. Participants from Singapore, for example, argued for a longer second commitment period to provide certainty to the CDM process, while those from Viet Nam and China sought for more flexibility in CER trading among Annex I and non-Annex I countries. A few participants noted the need for creating stronger incentives for CDM activities with high sustainable development benefits, and ensuring a better geographical distribution of CDM activities. Participants from Cambodia, Lao PDR, Mongolia, Nepal, and Sri Lanka, for example, sought for further simplification of CDM modalities for LDCs and SIDS, including reduction of processing fees and preferential treatment in the project approval process. Representatives from SIDS, however, cautioned against over-simplification of the CDM approval process in order to protect environmental integrity of the concept. Participants from the Philippines cautioned that market mechanisms should not be the principal means for financing or technology transfer.

Most countries in the region argued for deeper reduction targets by Annex I parties while ensuring no gap between the commitment periods.

On the role of Annex I countries in the future climate regime, most countries in the region argued for deeper reduction targets by Annex I parties while ensuring no gap between the commitment periods. A few participants (e.g. India) also noted that future efforts towards more equitable sharing of the global commons would build confidence in the climate regime. In terms of the role of developing countries in the future regime, some participants (e.g. China and India) cautioned that non-Annex I parties should not have binding targets in the second commitment period. They emphasized that both the Convention and the Protocol have already appropriately defined the role of developing countries and that there is scope for more proactive implementation. Some participants (e.g. China) cautioned against over-burdening the mandate of the Ad-hoc Working Group of Parties (AWG) by introducing issues (e.g. sustainable development, technology, adaptation, bunker fuels) other than the topics of duration and targets for Annex I parties during the second commitment period, and the necessary amendments to the articles of the Kyoto Protocol to reflect such targets. On the other hand, some participants (e.g. Japan) noted that changing circumstances with respect to economy and GHG emissions since 1990 must be considered in determining the nature and type of commitments or involvement of various parties to the UNFCCC. The Japanese participants called for designing an effective framework to bring about maximum GHG reductions by all major countries in accordance with their own capabilities, and coordinating the discussions among dialogue on long-term cooperative actions, AWG, and review of Article 9 of the Kyoto Protocol. Participants from Bangladesh and Mongolia also stated that major non-Annex I developing countries should take on commitments for emission reduction without compromising their right for development. Participants also recognised the need for supporting voluntary emission reduction efforts in developing countries through creation of additional mechanisms. The need for creating additional incentives for participation of developing countries through appropriate treatment of biomass and bioenergy in the future regime was also noted.

Participants from countries such as Bangladesh, Nepal, Lao PDR, Cambodia, Mongolia, and the Maldives noted the need to strengthen the current mechanisms and explore additional mechanisms for facilitating adaptation in the future climate regime. Some participants (37%) felt it was necessary to design an additional protocol with stronger commitments, while others (34%) felt such efforts would prove frustrating and divert attention from mitigation efforts. Some participants (e.g. the Philippines) argued for increasing the share of proceeds from CDM activities towards supporting adaptation efforts. On technology issues, some participants (e.g. the Philippines) noted the need for active involvement of developing countries in technology development to ensure that it is adapted to local conditions.

The questionnaire surveys also allowed us to collect a few responses from countries outside the Asia-Pacific region. Some respondents saw the desirability of redefining the concept of “developing country,” as some developing countries under current classification are richer with higher per capita emissions than those in some developed countries. They suggested that a regrouping of countries would benefit the low-income developing countries, LDCs and SIDS. A few respondents suggested that all market mechanisms should be extended to all countries willing to take a cap, while some others suggested the need for changing consumption patterns and for discouraging or even halting the funding by multi-lateral financial institutions to support fossil fuel-based industries.

2.6 Concluding remarks

The foregoing discussion showed that most of the countries in the Asia-Pacific region are yet to develop or declare a specific national position on the future climate regime. However, participants in our consultations agreed that the region's imperative for the post-2012 climate change policy should be on establishing a global alliance on a truly common and shared international climate change policy. The discussions emphasised that the future climate regime should focus on a few main elements, such as ways to consider Asian interests in terms of energy security and developmental concerns in the climate regime, and ways to strengthen the CDM, technology development and transfer, and adaptation. The following chapters explore such elements and opportunities for strengthening the future climate regime.

The Asia-Pacific region's imperative for the post-2012 regime should be on establishing a global alliance based on a truly common and shared international climate change policy.