



# Commonwealth Consultative Group on Environment

Dubai, 6 February 2006

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Provisional Agenda Item 4

CCGE(06)2

## **Adaptation to Climate Change: Technical Assistance to Highly Vulnerable Commonwealth Countries**

### **Issues for Ministers**

1. In response to successive mandates from Commonwealth Heads of Government, the Commonwealth Secretariat, in collaboration with the Commonwealth Foundation and other groups, is planning work on adaptation to climate change in highly vulnerable member states. This paper is intended to stimulate debate by Commonwealth Environment Ministers on the best focus for technical assistance and capacity building on adaptation, and a Commonwealth input to the UN Commission on Sustainable Development in 2007.

2. The work will build on Commonwealth strengths to add value, and identify and fill critical gaps, and not to duplicate the efforts of others. The Commonwealth will build partnerships with relevant institutions, particularly at the regional level, and orient its work towards national implementation of the UN Convention on Climate Change. The objective is to establish a focused programme of work that will mobilise Commonwealth mechanisms and networks, and which can attract funding support from a range of sources. It is intended that a programme will be launched in time for the 2007 Commonwealth Heads of Government meeting in Kampala, Uganda.

3. As a first step, the Commonwealth Secretariat held a consultation on 5<sup>th</sup> December 2005 in the wings of the first meeting of the Kyoto Protocol and eleventh session of the Conference of the Parties to the UN Framework Convention on Climate Change (COP 11 and COP/MOP 1) in Montreal. These discussions, and the views of Commonwealth Environment Ministers will inform the development of the Commonwealth's programme. With this in mind, Ministers may wish to:

- Note the initiation of planning for a Commonwealth programme on adaptation to climate change.
- Comment on the proposed principles and areas where the Commonwealth should focus its efforts in putting together a targeted programme of work by the Commonwealth on adaptation to climate change.
- Give their views on the format and objective of a Commonwealth input to the 2007 session of the UN Commission on Sustainable Development.

## **Climate Change and the Commonwealth**

4. In 2007, the Kampala CHOGM will mark the 20<sup>th</sup> anniversary of the first discussion of climate change by Commonwealth Heads of Government. In 1987 in Vancouver, President Gayoom of the Maldives described how unprecedented waves had caused great destruction in his country, a concern which found an eerie echo in the December 2004 tsunami. Heads “expressed serious concern at the possible implications of man-made climatic change, especially for low-lying and marginal agricultural areas” and called on the Secretary-General to examine the implications of rises in the sea-level and other natural disasters, including flooding. This led to the establishment of a Commonwealth Expert Group under the chairmanship of Dr Martin Holdgate, a report entitled ‘Climate Change: Meeting the Challenge’ which came out of a Commonwealth conference in Male in November 1989, and the publication in 1990 of “The Rising Seas” by Martin Ince. The Expert Group reported to the 1989 CHOGM in Malaysia, which adopted the Langkawi Declaration on Environment. This, and successive mandates on climate change and sustainable development, continue to guide Commonwealth programmes.

5. The early political work on climate change has been elaborated with calls for concrete capacity and technical assistance to help vulnerable member states to adapt. In Abuja in 2003, Commonwealth Heads of Government, stressed that climate change is one of the greatest challenges facing Commonwealth member states and the wider international community. They reaffirmed Commonwealth support through technical assistance to address the adaptation concerns of small island and other states that are particularly vulnerable to global warming and sea level rise. They also supported the efforts under the Convention to Combat Desertification and the Johannesburg Plan of Implementation to address climate and drought concerns, particularly in Africa.

6. There were three relevant outcomes from the Commonwealth Heads of Government Meeting in Malta (25-27 November 2005). (1) Heads “noted with concern the adverse immediate and long term effects of climate change, biodiversity loss, water management issues, deforestation and sea-level rise on small island and other states that are particularly vulnerable to the impacts of global warming and sea level rise”. They “called for co-operation and continued international efforts to address the specific challenges posed by climate change, in accordance with the principle of common but differentiated responsibilities and adaptation, including capacity building, and saw a role for the Commonwealth in progressing this agenda”. They also called for international co-operation in addressing issues related to the transfer of affordable technologies and the management and promotion of renewable energy resources. (2) Heads called for action to increase capacity for disaster preparedness, early warning systems, risk mitigation and post-disaster recovery and reconstruction. These areas have significant links to adaptation to climate change. (3) Heads agreed a *Gozo Statement on Vulnerable Small States*, which among other things, recognises small states’ particular concerns with natural disasters and the impacts of global climate change, and urges practical action to implement the Mauritius Strategy.

## **Context**

7. The Third Assessment Report of the United Nation’s Inter-governmental Panel on Climate Change (IPCC), concluded in 2001 that an increasing body of observations gives a collective picture of a warming world and other changes in the climate system. The fourth

assessment is currently underway and will be published in 2006. Findings in 2001 included the following:

- The global average surface temperature has increased over the 20th century by about 0.6°C.
- Globally, it is very likely that the 1990s was the warmest decade, and that 1998 was the warmest year in the instrumental record since 1861. Indeed, the increase in temperature in the 20th century is likely to have been the largest of any century during the past 1,000 years.
- Snow cover and ice extent have decreased. Satellite data suggests a decrease of about 10 per cent in the extent of snow cover since the late 1960s. Ground-based observations show a likely reduction of about two weeks in the annual duration of lake and river ice cover in the mid- and high latitudes of the Northern Hemisphere, over the 20th century.
- There has been a widespread retreat of mountain glaciers in non-polar regions during the 20th century. Northern Hemisphere spring and summer sea-ice extent has decreased by about 10 to 15 per cent since the 1950s. It is likely that there has been about a 40 per cent decline in Arctic sea-ice thickness during late summer to early autumn in recent decades and a considerably slower decline in winter sea-ice thickness.
- Global average sea level has risen and ocean heat content has increased. Tide gauge data show that global average sea level rose between 0.1 and 0.2 metres during the 20th century.

8. The IPCC concluded that (taking into account the remaining uncertainties), most of the observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations. Furthermore, it is very likely that the 20th century warming has contributed significantly to the observed sea level rise, through thermal expansion of sea water and widespread loss of land ice.

### **Responses to Climate Change**

9. There are two inter-linked responses to climate change. The first is the prevention of climate change (mitigation) by measures to reduce the emission of greenhouse gases such as carbon dioxide; and secondly, efforts to prepare for, and respond to, the impacts of climate change (adaptation). Mitigation measures have been the focus of lengthy and difficult international negotiations under the UN Framework Convention on Climate Change (UNFCCC). The progress to date suggests that anthropogenic climate change will persist for many years and that Commonwealth member states are predicted to face significant impacts from climate change over the coming decades.

10. At a meeting of climate change scientists held in 2005 at the Hadley Centre for Climate Change Prediction and Research, Dr Rajendra Pachauri, the Chairman of the UN's Intergovernmental Panel on Climate Change told delegates that sea level rises and agricultural changes could result in an estimated 150 million environmental refugees by 2050. He noted that some nations would be more significantly affected than others. For example, Bangladesh stands to lose 17 per cent of its territory within 45 years. The conference concluded that in the absence of an extraordinary reversal of greenhouse gas volumes, the world was "committed to a temperature rise of between 0.5 and 2.0 degrees Celsius by 2050".

11. Reports from the Inter-governmental Panel on Climate Change indicate that climate change is likely to have the most significant impact on societies with the lowest capacity to cope, especially developing countries and the poorest people in all countries. The principal concerns are impacts on agriculture, food security and water resources, resulting from more frequent droughts, floods and other extreme weather events. In Africa and Asia, areas that will be most adversely affected are those that are already most vulnerable to food insecurity. For low-lying and small island developing states there are also major concerns with respect to sea level rise, increased incidence of sea surges and encroachment. For all, there is an increased risk from more extreme and more frequent adverse weather events that could lead to natural disasters. All of these impacts are a significant challenge to attainment of the MDGs on poverty and hunger, water and sanitation, health, and environmental sustainability.

### **The UNFCCC and Adaptation to Climate Change**

12. In the past couple of years there has been progress in identifying climate change adaptation priorities and strategies. A number of National Adaptation Programme of Actions (NAPAs) have been prepared by Least Developed Countries (LDCs) under the UNFCCC. Adaptation concerns and projects have also been identified by others in National Communications under the Convention, and through the work of regional GEF-funded programmes in the Pacific and Caribbean. While this work has produced a considerable number of studies, there is still some way to go in translating these studies into concrete support for vulnerable countries.

13. The adaptation agenda under the UNFCCC was first addressed in a major way at COP-8 in Delhi, and again at COP-10, which agreed the Buenos Aires Programme of Work on Adaptation and Response Measures. Montreal achieved further developments to support action on adaptation. Parties to the Convention agreed a 5-year programme of work on impacts, vulnerability and adaptation to climate change, to: help countries to improve their understanding of impacts, vulnerability and adaptation; and help them make informed decisions on practical adaptation actions. As NAPAs come on stream, it can be expected that the Convention's *Least Developed Countries (LDC) Fund* will increasingly focus on NAPA implementation.

14. In Montreal, Parties to the Kyoto Protocol formally adopted the Marrakesh Accords which brings the Protocol's flexibility mechanisms into being. These include the Clean Development Mechanism (CDM) which allows Parties with binding greenhouse gas commitments to use certified emission reductions generated by projects that reduce emissions in developing countries. A levy charged on CDM projects will go towards an *Adaptation Fund* to support adaptation projects. Details concerning the Protocol's *Special Climate Change Fund (SCCF)* and the *Adaptation Fund* will be considered at the next meetings of the subsidiary bodies.

15. The wide range of side events in Montreal demonstrated a strong engagement by many institutions and different levels of governments on adaptation. There was also a real concern by many in Montreal to make a start and forge ahead with practical adaptation measures on adaptation to climate change.

### **Commonwealth Comparative Advantages**

16. Climate change is a concern of all Commonwealth states, but especially small island states, low-lying countries and least developed countries, as they are likely to experience

some of the most severe impacts of global warming and the greatest constraints in implementing adaptation measures. All Commonwealth members, but one, are signatories to the UN Framework Convention on Climate Change, and as of August 2005, 46 had acceded to, or ratified, the Kyoto Protocol.

17. Commonwealth member states have the potential to be an important source of mutual support in addressing adaptation to climate change. The Commonwealth's strengths in facilitating this co-operation are derived from fundamental characteristics of the association. They include an equal voice for all members – enabling the Commonwealth to act as a trusted partner – and the fact that member states share similar political, legal, administrative and education systems, and a common working language. These factors give the Commonwealth its ability to work effectively in advocacy, consensus building, and technical co-operation, especially in areas related to law, policy making, and governance. In particular, the Commonwealth has built strengths in the areas of youth engagement, gender equity and the delivery of legal frameworks to support sustainable development.

18. As a series of networks, the Commonwealth can also provide a useful asset-base for technical assistance. These systems operate at all levels of governance, from the inter-governmental network (represented by the Commonwealth Secretariat), local government (represented by the Commonwealth Local Government Forum), and professional and civil society organisations (represented by the Commonwealth Foundation), to business (represented by the Commonwealth Business Council).

19. The Commonwealth's professional groupings represent a particularly valuable resource. They include Commonwealth meteorologists, foresters, planners and architects. The Commonwealth's associations – which facilitate a mixture of inter-governmental and professional interactions – can be readily galvanised to deliver technical assistance on adaptation to climate change, especially since climate has been the focus of discussion by many of these groups in recent years.

20. The Commonwealth Secretariat also has a strong relationship with many of the regional organisations of member states and has often worked through regional institutions to deliver technical assistance. This is demonstrated by the Commonwealth's technical assistance programme on trade policy known as Hub-and-Spokes, and in its close working relationship with the inter-governmental organisations of small states in the Caribbean, Indian Ocean and Pacific.

### **Action So Far on Developing a Commonwealth Programme**

21. The *Commonwealth Secretariat* organized a short consultation on 5<sup>th</sup> December 2005 with Commonwealth officials and invited experts in the wings of the Montreal UNFCCC COP/MOP to help to identify gaps and areas where the Commonwealth could add value to existing initiatives.

22. The meeting was chaired by Professor Rajendra K. Pachauri, Director General of the Tata Energy Research Institute, India (TERI), and Chair of the Intergovernmental Panel on Climate Change.

23. There were four background papers, covering the following areas:
- (a) a note by the Commonwealth Secretariat setting out the mandates for the work, and areas where the Commonwealth is particularly well placed to play a role in supporting actions on adaptation to climate change;
  - (b) Small Island Developing States, by Ulric O'D Trotz (Caribbean Community Climate Change Centre);
  - (c) Africa and Asia, by Saleemul Huq (International Institute for Environment and Development); and
  - (d) current international processes, by Tom Mitchell & Farhana Yamin (Institute for Development Studies at the University of Sussex)

These papers are available at: [www.thecommonwealth.org](http://www.thecommonwealth.org), following the links to 'What We Do', 'Environmentally Sustainable Development', and 'Climate Change'.

24. In the discussion, there was strong support for a Commonwealth role in public education programmes and stakeholder engagement (youth, parliamentarians, professional associations, and women) on adaptation, as well as education and training of experts including the meteorological community. There was an interest in innovative areas of work, such as the cities agenda on adaptation to climate change and adaptation within the tourism sector. There were also calls for the Commonwealth to support a more integrated approach to disaster risk management, and to forge ahead with some pilot programmes on adaptation to climate change. This reflected a strong sense amongst member states that practical action on adaptation needed to be taken sooner rather than later. The Secretariat emphasised that the most important thing will be to formulate a clearly defined and well targeted programme that can attract funding from a wide range of sources and make the best use of those resources.

25. The *Commonwealth Foundation* is examining the role of professional bodies and civil society in addressing climate change concerns. In collaboration with the Conference of Commonwealth Meteorologists and Action for a Global Climate Community, it organised a one-day seminar during the Commonwealth People's Forum in Malta (held immediately ahead of CHOGM). Speakers included David Griggs of the Hadley Centre for Climate Prediction and Research (Met Office, UK), Andy Deacon of UK-DEFRA, Peter Luff (Action for a Global Climate Community), Joshua Wairoto of the Kenya Met Office and Dr Suresh Prabhu M.P. of Globe (India). The event produced a concise statement of concerns and priorities for action, which was forwarded to Foreign Ministers and CHOGM.

26. There have also been substantive debates on both climate change issues and disaster risk reduction by the *Commonwealth Meteorologists Conference* (UK, June 2005), and the *Commonwealth Forestry Conference* (Sri Lanka, March 2005). Given that these groups are already galvanised and co-ordinated on climate concerns, and disaster risk reduction, they represent a resource that gives the Commonwealth an advantage in taking forward work in these areas. Meteorologists produced a strong statement on the role of National Meteorological and Hydrological Services (NMHSs) in forecasting and alerting citizens to hydro-meteorological events that impact on the safety of life, property and livelihood. For Met Services themselves, there are concerns around institutional arrangements and capacities, if they are to play an effective role in disaster risk management systems, and in sectors such as health, agriculture and tourism which have significant weather information needs. Their success depends not only on strategic partners like local media and academia, but also on the network of other NMHSs. The Commonwealth Forestry Conference emphasised a readiness to take practical action and called for specific actions in the forest sector on disaster risk

management and mitigation, poverty reduction and enabling the poorest in society to adapt to socio-economic, environment and climate change.

27. All of these consultations have revealed a number of guiding principles (see box) and areas where the Commonwealth has particular strengths in delivering technical assistance on adaptation to climate change, which are outlined in the annex to this paper. While not all areas may be developed at this stage, or prove to be a niche Commonwealth competency, they will form the basis of further planning work over the next 12 months.

#### **Guiding Principles for a Commonwealth Programme**

- Focuses on capacity building and technical assistance to support practical adaptation measures by highly vulnerable member states (especially small states and LDCs prone to drought and/or with low-lying coastal areas)
- Does not duplicate existing efforts, but focuses on niche areas
- Uses Commonwealth strengths to add value, and identify and fill gaps
- Develops partnerships with relevant institutions, particularly at regional level
- Supports national-level capacity building and technical assistance
- Draws on a range of Commonwealth institutions and networks
- Has clear links to implementation of the UNFCCC

#### **Proposed Timetable for Elaborating a Commonwealth Programme**

28. The table overleaf outlines a possible pathway towards a Commonwealth programme on adaptation to climate change, for consideration by the Kampala CHOGM in 2007. Three outcomes will be sought from this planning process:

- a clear statement of needs of vulnerable Commonwealth member states for technical assistance and capacity building to support their adaptation to climate change.
- a view of what the Commonwealth can do to address these needs; and
- a fully elaborated programme of work attracting funding from a wide range of sources, for consideration by the Kampala CHOGM.

29. It is proposed that the first two of these elements be elaborated as a Commonwealth contribution to the 2007 policy session of the UN Commission on Sustainable Development.



| <b><u>CHOGM 2005 – MALTA (November 2005)</u></b> |  |
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| <b><i>Year 1</i></b>                             |  |
| <i>Aug-Dec 2005</i>                              | <i>Preliminary consultations on needs and Commonwealth strengths.</i>  |
| <i>6 February 2006</i>                           | <i>CCGE, Dubai<br/>Environment Ministers comment on proposed areas of focus and Commonwealth input to CSD 2007</i>   |
| <i>May-December 2006</i>                         | <i>Dedicated meeting(s) to elaborate a Commonwealth programme in detail. Consultations could be held in the wings of the UNFCCC's subsidiary bodies (May/June), and/ or the COP/MOP (Nov/Dec).</i> |
| <b><i>Year 2</i></b>                             |  |
|  | <i>Political consultations to prepare input to CCGE/CSD</i>  |
| <i>February 2007</i>                             | <i>CCGE to finalise input to CSD</i>   |
| <i>April 2007</i>                                | <i>Commonwealth input to CSD tabled by CCGE Chair</i>  |
| <i>May-August 2007</i>                           | <i>Proposals and funding finalised</i>   |
| <i>October 2007</i>                              | <i>Committee of the Whole</i>  |
| <b><u>CHOGM 2007 – UGANDA (late 2007)</u></b>    |  |

## **Conclusions**

30. The Commonwealth Secretariat and the Commonwealth Foundation are planning a programme of work on adaptation to climate change, focusing on capacity building and technical assistance in highly vulnerable member states, especially small states and LDCs. The objective is to have a fully elaborated and funded programme by the 2007 Kampala CHOGM. The programme will involve a wide range of Commonwealth institutions and stakeholders, ensuring an integrated and multidisciplinary approach that uses the Commonwealth's strengths to add value, and to identify and address gaps.

31. The development of this work is also an opportunity for the Commonwealth to play an advocacy role in the work of the UN Commission on Sustainable Development (CSD) during its 2006/07 cycle, which will address the related themes of: energy for sustainable development; industrial development; air pollution/atmosphere; and climate change. Comments are sought from Commonwealth Environment Ministers on the focus of the Commonwealth's work programme on adaptation to climate change, and the format and focus of a Commonwealth input to the CSD.

## For Discussion: Potential Areas for Commonwealth Action

### 1. Climate Monitoring, Modelling and Scenario Building

Understanding the likely impacts of climate change is critical to the development of effective adaptation strategies. In the Commonwealth, there is a range of world class expertise in climate modelling, scenario building and risk mapping in institutions such as the Hadley Centre, Tyndall Centre, Canadian Climate Change Centre, and CSIRO Australian Greenhouse Office. There is a value in establishing collaborations between modelling centres in different Commonwealth regions, based on on-going collaborations such as those between India and the Hadley Centre in the UK.

As stated, scientific and technical institutions across the Commonwealth would have an important role to play in this area, as do Commonwealth Meteorologists and the World Meteorological Organisation. Action in this area could be closely integrated into initiatives to building and link institutions, and deliver technical assistance through training and attachments. Areas of focus could include:

- ***Climate modelling:*** Capacity building in climate modelling and scenario building, and downscaling outputs from global climate models to enable more site-specific climate predictions. Regional models frequently used in the Commonwealth are: PRECIS (Hadley Centre); MAGICCEN (University of the South Pacific); Australian; and Canadian models. Statistical downscaling capacity is also resident in many Commonwealth institutions, including the Canadian Climate Change Centre in Vancouver. A Commonwealth programme could help to link Commonwealth expertise and resources with developing country practitioners and expand the number of successful exchanges of this kind that exist.
- ***Climate scenarios and impact studies:*** tailoring generic global storylines to more site specific national and national scenarios. Capacity is needed in the use of appropriate sectoral models (e.g. hydrology and crop models), and to incorporate the outputs of impact studies into the policies of relevant sectors (water, agriculture, tourism, health).
- ***Climate Proofing of National Development Plans.*** There is a need for technical assistance from countries with relatively more experience of carrying out climate risk assessment. A good place to start this process would be an evaluation of lessons learned from the National Adaptation Programmes of Action that a number of LDCs in Asia and Africa have undertaken, and to examine which lessons can be spread to other countries. Another critical area is the upstream integration of adaptation within national development plans, including PRSPs and strategies for attainment of the MDGs.
- ***Cost/benefit analysis.*** Little is known about the potential costs of climate change impacts and of adaptation needs. Much of this knowledge has to be generated in-country by experts from each country. However, tools and

techniques for such assessments can be shared amongst Commonwealth countries to make reasonable costs estimates for both climate change impacts as well as adaptation needs.

- ***Climate monitoring:*** The Commonwealth can play an advocacy role on strengthening site-specific national climate monitoring systems. Also, on the need to extend monitoring facilities beyond their traditional aviation-focus, to information for agro- and hydro-meteorological purposes. Other needs include digitization of climate data held in national Met Offices and other entities, and the repatriation of climate data.

## **2. Public Awareness and Engagement of Stakeholders**

There is still a great deal of awareness raising to be done about the impacts of climate change and likely risks, and such work would support Article 6 of the UNFCCC. A number of specific groups could be targeted in a Commonwealth programme of work, including:

- Women, including the role they can play in adaptation especially at a community level;
- Youth, as the future generation that will be affected climate change impacts;
- Parliamentarians, through the Commonwealth Parliamentary Association; and
- Journalists, who are key players in raising awareness amongst publics in Commonwealth countries;
- Civil Society/NGOs through the Commonwealth Foundation; and the
- Private Sector.

## **3. Co-ordination, Networking and Sharing Between Developing Countries**

Drawing on experiences of the UK Department for International Development and the European Capacity Building Initiatives, could the Commonwealth help to building '***regional centres for climate adaptation***' based on an association of affiliates, creating effective networking of researchers and practitioners, bringing together different disciplines and supporting South-South exchanges in particular. Such 'centres' could focus on co-ordination, networking and a clearinghouse role, e.g. through:

- a web-based exchanges of ***climate adaptation studies and methodologies*** conducted in developing countries;
- ***exchanges of climate adaptation experts*** between developing countries;
- ***side events*** at UNFCCC and other meetings;
- development of an intervention agenda based derived from ***NAPAs***;
- work with the ***private sector*** to examine how business will be effected by climate change and can be partners in adaptation work
- research on ***legal frameworks and organisational structures*** that support adaptation to climate change

The Commonwealth has worked effectively for many years through regional institutions to support capacity building and skills development. There may be a potential for Commonwealth support in generating regional networks of practitioners (for example, in Southern Africa and South East Asia), or by supporting exchanges across SIDS-regions (Caribbean, Pacific and Indian Ocean).

#### **4. Training and Education**

Capacity building through training and education is a traditional Commonwealth strength. The Commonwealth Meteorologists Conference recognised that the climate data system is only as strong as its weakest links, and that there is an urgent need for training and education in the meteorological sciences.

Approaches could include a *scholarship programme*, or work with regional training institutions to develop a suite of *training courses* aimed at capacity building for climate change adaptation, e.g. in carrying out vulnerability assessments, statistical methods for trend analysis, economic valuation of natural resources, coasting adaptation options, statistical downscaling, development of short-term climate forecasts, and climate impacts modelling.

The Commonwealth could also help to facilitate linkages and exchanges between existing training programmes delivered by *universities* in the Commonwealth. This would help to make training and experience in adaptation from different regions, available across the Commonwealth as a whole. This work could be facilitated through existing university exchange arrangements, Commonwealth mechanisms, and distance learning programmes. Discussions on this matter will also be initiated with the SIDS University Consortium, launched at the Mauritius Summit in January 2005, to explore whether this is an area for collaboration with the Commonwealth.

#### **5. Urban Adaptation to Climate Change**

Developing a *network of cities to exchange ideas on adaptation to climate change* and meeting the burden of enhanced urbanisation (drawing on ICLEI experiences). Possible focus areas:

- exchange of experiences on urban planning and adaptation to climate change;
- plans for coping with large-scale shifts in population away from areas prone to extreme weather events;
- identification by multidisciplinary team of safe places for displaced populations to live;
- research on 'environmental refugees'.

There are several groups within the Commonwealth that could play a significant role in this area. They include the Commonwealth Local Government Forum, the Commonwealth's multi-stakeholder partnership, ComHabitat, which actively promotes implementation of the Habitat Agenda, and the Commonwealth's professional networks (surveyors, architects and planners).

#### **6. Disaster Risk Reduction and Adaptation**

One of the immediate aspects of climate change impacts is to do with enhanced frequency and magnitude of many climate related disasters such as floods, droughts and cyclones. There are opportunities for the disaster community and climate change community to collaborate more closely to address multiple hazard risks. Areas include capacity building in vulnerability assessment, development of common tools such as hazard maps, addressing vulnerability in post-disaster reconstruction and strengthening the capacity of communities themselves to reduce the risks they face. Work in this area would accord well with initiatives to implement the Mauritius Strategy on the sustainable development of Small Island

Developing States, and the Kobe Conference on World Conference on Disaster Reduction. Drawing on the experience of the UN's Inter-Agency Task Force Working Group on Climate Change and Disaster Reduction, options could include:

- Policy on, and planning of, urban centres to implement adaptation to climate change.
- Commissioning a multi-disciplinary team to compile best practices in integrated disaster risk reduction and disaster management.
- A 'rapid-response' research fund to examine how people cope during climate disasters and what kinds of adaptations they make in the post-disaster phase.
- Research to examine how people's vulnerability to disaster varies over time. This needs commitment to research over a 10-year timeframe.

The Commonwealth Secretariat is currently collaborating with regional organisations of SIDS to examine actions they can take to strengthen early warning systems across international borders. The Commonwealth Secretariat will explore whether adaptation to climate change could form part of this initiative.<sup>1</sup>

Countries such as the UK and Bangladesh have already done much in integrating climate change issues in disaster preparedness and could provide technical assistance to other countries on this issue. There is also potential for collaborative work on insurance through the World Bank/Commonwealth Secretariat Joint Task Force on Small States.

## **7. Other Areas**

At the Montreal consultation there was support for the idea of a Commonwealth programme that implemented, say, 20 practical pilot projects on adaptation to climate change. These would be drawn from NAPAs and National Communications, and would seek to provide early experiences with implementation that could be shared more widely. There were also suggestions that a pilot scheme should focus on key sectors, for example on water resources, agriculture and health. Priority adaptation measures in the water sector include: development of water resources inventories, integrated water resources management (IWRM), integrated watershed management (IWSM), water conservation (demand and supply side management), water desalinization, recycling, recharge of aquifers, water harvesting and drip irrigation in agriculture. The Commonwealth Fund for Technical Co-operation has provided experts in the past in this area.

The feasibility of establishing a pilot project scheme under Commonwealth auspices has to be carefully considered, but there is a great deal of interest from vulnerable member states and this could be a good initiative for regional and inter-regional networks to take up if and when these are established.

Others areas that were raised during the Montreal consultation included capacity building in negotiations; consensus building; and a Commonwealth programme to address energy concerns and the transfer of clean energy technologies, where there could be a role for the Commonwealth Partnership for Technology Management and the Commonwealth Business Council in this area.

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<sup>1</sup> Further details on the initiative of the Secretaries-General of the Commonwealth, Caricom, Indian Ocean Commission and Pacific Islands Forum to examine ways in which they can collectively reduce the future impact of natural disasters by strengthening advance warning networks across international borders, is available at: [www.thecommonwealth.org](http://www.thecommonwealth.org), following links to 'what we do' and 'small states'.