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Item 4 (b) of the provisional agenda National communications from Parties not included in Annex I to the Convention Compilation and synthesis of initial national communications

# Sixth compilation and synthesis of initial national communications from Parties not included in Annex I to the Convention

Note by the secretariat\*

#### Addendum

# Education, training and public awareness

Summary

This note compiles and summarizes information from Parties on education, training and public awareness. It contains information on Parties' financial and technical needs, and examples of their efforts to implement education, training and public awareness programmes.

<sup>\*</sup> This document is submitted after the due date because all the necessary information was not available on time.

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#### I. Introduction

- 1. The Convention highlights the need for education, training and public awareness relating to climate change and encourages all Parties to promote and cooperate in these activities through the widest participation, including that of non-governmental organizations (Article 4.1(i)). Education, training and public awareness are an important foundation in the development and implementation of policies and programmes to address climate change. In this context, all Parties not included in Annex I to the Convention (non-Annex I Parties) reported that these activities are a priority in implementing the Convention.
- 2. The annex to decision 10/CP.2¹ contains guidelines that outline the information to be provided by non-Annex I Parties in initial national communications. The guidelines call for information on programmes relating, inter alia, to education, training and public awareness.
- 3. As provided for in decision 12/CP.4, <sup>2</sup> the aim of the compilation and synthesis is to report on the problems encountered in the use of guidelines for the preparation of initial communications by non-Annex I Parties, and on other issues communicated by non-Annex I Parties, with a view, among other things, to further enhancing the comparability and focus of the national communications.
- 4. The information contained in this document was drawn from the 122 reporting Parties as of 1 April 2005. It includes information submitted by Parties over the past eight years (1997–2005) as part of each Party's initial national communication. Added attention is given here to 23 national communications that were submitted since 31 March 2003, as these had not been included in the previous compilation and synthesis reports.
- 5. In recognizing the country- and/or region-specific information provided by Parties, examples of national programmes and activities relating to education, training and public awareness are, wherever possible, cited here to illustrate specific efforts of Parties at country and regional levels.

# II. Reporting

- 6. For most Parties, the preparation of national communications and climate-related projects supported by the Global Environment Facility (GEF) and other bilateral and multilateral organizations provides the impetus in launching public education and information campaigns. Although substantial progress has been achieved in raising public awareness, this should be complemented by education and training programmes. Non-Annex I Parties share a common concern about the lack of such education and training programmes at national and regional levels.
- 7. All the initial national communications contained information relating to education, training and public awareness. About half of the reporting Parties dedicated a separate chapter or section to them. Although other Parties did not have a separate chapter, they included information on education and public awareness activities in other chapters of their national communications.
- 8. The information varies widely, with only half of the reporting Parties providing details and examples of their programmes and activities. Other Parties provide general and, in some instances, sparse information about their programmes and activities. There are also differences in the information provided in terms of type, scope and goal of activities, due to the country-driven nature of the activities and differing national circumstances. Differences in the types of information reported are also evident in such areas as target sectors (e.g. civil society, academia, youths and students, women, government

<sup>&</sup>lt;sup>1</sup> FCCC/CP/1996/15/Add.1.

<sup>&</sup>lt;sup>2</sup> FCCC/CP/1998/16/Add.1.

officials), availability of centres relating to climate change, and plans and strategies (see table 1).

Table 1: Information reported by Parties on education, training and public awareness activities

Dedicated separate chapter or section	Detailed plans and strategies	Institutional arrangements	Information about target sectors
ALB, ATG, AZE, BDI, BRA, BTN, BWA, CAF, CHN, COK, COM, CRI, CUB, DOM, EGY, ERI, ETH, GHA, GIN, GRD, GUY, IND, KAZ, KEN, KGZ, KHM, KIR, LCA, MAR, MDA, MEX, MKD, MLT, MNG, MOK, MRT, MWI, MYS, NIC, NIU, NPL, PAK, PER, PHL, PNG, PRK, SLB, TCD, TGO, THA, TJK, TTO, TZA, UGA, COM, CAF, CAF, CAF, CAF, CAF, CAF, CAF, CAF	BRA, CHN, DZA, COK, GMB, GHA, GUY, IND, NPL, PHL, KGZ, MYS, MDA, MNG, PAK, PNG, KOR, MDV, UGA, VNM, ZMB, EGY, URY	ALB, ARM, AZE, BRB, BRA, CHN, EGY, GEO, GHA, IND, JOR, KIR, KOR, MAR, NIC, NIU, NPL, NRU, PAK, PHL, PRK, KHM, CAF, ERI, VNM, ZMB, NAM	ALB, AZE, BRA, CAF, CHN, COK, COM, DZA, GHA, GMB, GUY, IND, MRT, NAM, NPL, MDA, MYS, PHL, KGZ, MDV, MWI, MNG, MUS, PAK, PNG, KOR, SYC, ZMB, AZE

*Note*: See the annex for a list of Parties and their corresponding three-letter country codes.

9. Climate change cuts across different issues, so the information provided by most Parties on education, training and public awareness activities is in the context of broader environmental and sustainable development plans and strategies. In some cases, it is difficult to distinguish whether activities are ongoing or are yet to be implemented, as Parties did not provide details.

#### III. Overview of information

- 10. Education, training and public awareness are important in implementing climate change projects and programmes. Although the specific objectives and priorities for public education differ according to the needs of the target sector, the overall goal is still to ensure that every person understands the problems associated with climate change and assumes some responsibility to address these problems (see box 1). Recognizing that climate change affects the lives of every individual, Parties reported activities that targeted the following stakeholders: children, youth, students, teachers, researchers, policy makers, parliamentarians, local government officials, non-governmental organizations (NGOs), community-based organizations, media, the private sector and industry. Some Parties emphasized the need for more focused education campaigns aimed at specific, vulnerable stakeholders or sectors such as women, farmers and fishermen.
- 11. Parties reported that training and public awareness programmes are often a component of projects funded by the GEF through its enabling activities and through regular projects on climate change. Most Parties also reported undertaking education, training and public awareness activities on climate change in cooperation with bilateral and multilateral agencies and other organizations. Table 2 provides examples of projects and programmes cited by Parties in their national communications.
- 12. All reporting Parties emphasized the need for education, training and public awareness in order to pursue various projects and programmes on climate change. They acknowledged the difficulties encountered in implementing education, training and public awareness projects due to limited financial and human resources. In spite of these challenges, Parties reported that they are aggressively pursuing education, training and public awareness activities at the national, sub-regional and regional levels. Table 3 summarizes the plans reported by non-Annex I Parties on education, training and public awareness targeting specific sectors identified in paragraph 8 above.

#### Box 1. Examples of reported objectives in education, training and public awareness campaigns

- To educate the public on the causes and effects of climate change
- To build and/or strengthen institutions involved in project implementation and coordination, such as national communications
- To mobilize communities/public to implement projects, e.g. renewable energy, energy efficiency and forest and coastal resource management
- To train educators to develop and integrate climate change into the school curricula at primary, secondary and tertiary levels
- To raise the level of awareness of policy and decision makers on climate change, such as parliamentarians and government officials
- To build and/or enhance the skills and knowledge of local experts
- To disseminate information on national communications
- To strengthen national capacity to develop and implement climate change action plans

#### A. Education

- 13. The shortage of experts and professionals working on climate change issues was cited by most countries as a barrier in implementing projects relating to climate change. Education plays an important role in ensuring the development of a critical mass of experts on climate change. Most Parties reported that governmental efforts and initiatives from the academic sector are under way to mainstream climate change into the different school curricula and to address the lack of education on this issue.
  - 1. Integration of climate change into basic education
- 14. Some countries have developed national policies to ensure the continuity of environmental education programmes, sometimes including climate change. These policies are aimed at integrating environmental issues and climate change into basic subjects in education. Examples include the National Environmental Education Policy (Brazil), Guidance on Environmental Education in Primary and Secondary Education (China), and the National Strategy on Environmental Education (Cuba).
- 15. Although most Parties continue to face the challenge of integrating climate change into different levels of education, some Parties, such as Albania and Niue, reported progress in this area. By 1996, Uruguay had disseminated climate change materials to 38 per cent of primary schools, 82 per cent of high schools and 51 per cent of technical schools. Also, with support from the Swiss Government, Pakistan plans to integrate environmental issues, including climate change, into relevant textbooks of grades 1 to 12 through the Environmental Education Promotion at School and College Level project.
- 16. Some Parties identified lack of instructional materials and teachers qualified to instruct on climate change issues as barriers to the implementation of educational programmes. Several Parties plan to address, or have addressed, these barriers through the development of climate change materials and training of teachers. For example, the Ministry of Education in Kenya, in cooperation with various agencies, plans to develop instructional modules on climate change. In another example, teachers in Nauru underwent training for the development of Science Curriculum Modules on Climate Change and Sea Level for the Pacific.

Table 2. Examples of projects and programmes that supported education, training and public awareness activities

Programmes/ projects	Implementing organizations/ funding sources	Objectives	Activities	Participating countries
Asia Least-Cost Greenhouse Gas Abatement Strategy (ALGAS) (1995– 2000)	Asian Development Bank with funding support from the GEF	<ul> <li>To meet the commitments under the UNFCCC</li> <li>To prepare national inventories of greenhouse gas emissions, and formulate national greenhouse gas abatement strategies</li> <li>To raise awareness about climate change</li> <li>To develop country portfolios of investment projects</li> </ul>	<ul> <li>Technical workshops</li> <li>Public consultations</li> <li>Public awareness campaigns</li> <li>Publications</li> </ul>	175 experts from Bangladesh, China, Democratic People's Republic of Korea, India, Indonesia, Mongolia, Myanmar, Pakistan, Philippines, Republic of Korea, Thailand, Viet Nam
South Pacific Sea-Level Monitoring Programme	The National Tidal Facility of The Flinders University of South Australia with funding support from the Government of Australia	<ul> <li>To assist Pacific island countries to understand the threats and implications of changing sea levels and climate</li> <li>To monitor rising sea levels</li> </ul>	<ul> <li>Establishment of observatories to measure sea level</li> <li>Community education</li> <li>General public awareness campaigns</li> <li>Production of teaching materials on sea level and climate change issues</li> <li>Workshop on curriculum development.</li> <li>Technical training</li> </ul>	Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu,Vanuatu
Caribbean Planning for Adaptation to Climate Change	World Bank, the Organization of American States, with funding support from the GEF	<ul> <li>To support Caribbean countries in preparing to cope with the adverse effects of global climate change</li> <li>To strengthen the regional capability for monitoring and analysing climate and sea level</li> <li>To identify areas particularly vulnerable to the adverse effects of climate change and sealevel rise</li> <li>To develop an integrated management and planning framework for cost-effective response and adaptation to the impacts of climate change on coastal and marine areas</li> <li>To enhance regional and national capabilities through institutional strengthening and human resource development</li> </ul>	<ul> <li>Vulnerability assessment, adaptation planning</li> <li>Upgrading the skills of technicians and officials from participating countries</li> <li>Public awareness campaigns</li> <li>Workshops</li> <li>Support for preparation of national communications</li> <li>Implementation of pilot studies</li> </ul>	Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago

		<ul> <li>To identify and assess policy options and instruments that may help initiate the implementation of a long-term programme of adaptation</li> </ul>	•	
National Communications Support Programme	United Nations Development Programme, United Nations Environment Programme	<ul> <li>To promote the quality, comprehensiveness, and timeliness of national communications</li> <li>To sustain capacity-building efforts through technical and policy support, knowledge management, and communications and outreach</li> </ul>	<ul> <li>Conduct training workshop on GHG inventories, vulnerability and adaptation assessments, mitigation assessments and technology needs assessments</li> <li>Dissemination of information materials</li> <li>Technical and policy support</li> <li>Facilitate South–South exchange of experiences</li> </ul>	130 Parties to the UNFCCC from West and Central Africa, South and East Africa, the Arab States, Europe and the Commonwealth of Independent States, Asia, the Pacific, the Caribbean, and Central and South America
	South Pacific Regional Environmental Programme, United Nations Development Programme, United Nations Institute for Training and Research with funding from the GEF	To assist Pacific Island countries that signed and ratified UNFCCC with their reporting, training, capacity-building under the Convention	<ul> <li>Training workshop on national GHG inventories</li> <li>Postgraduate certificate in climate change vulnerability and adaptation assessment</li> </ul>	Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Samoa, Solomon Islands, Tuvalu, Vanuatu
Regional Technical Assistance Programme for Awareness and Information on the Protection of the Environment (PACIPE)	European Union	<ul> <li>To increase the level of awareness on environmental challenges for the people to be able to identify more with objectives for protecting the environment</li> <li>To fill the communication vacuum which has hindered the initiatives of sustainable development for protection of the environment</li> </ul>	<ul> <li>Produce radio programmes, most notably in rural areas, which are designed with special attention to local languages</li> <li>Target decision makers, entrepreneurs, grassroots communities in rural and urban areas, students and other social groups, for example, women and youths</li> </ul>	West African countries: Benin, Cote d'Ivoire, Ghana, Guinea, Guinea- Bissau, Togo

Activities

Participating countries

Objectives

Implementing organizations/ funding sources

Programmes/ projects

Programmes/ projects	Implementing organizations/ funding sources	Objectives	Activities	Participating countries
United States Country Studies Program (USCSP)/ Support for National Action Plans (SNAP)	Government of the United States of America	<ul> <li>The objectives of the USCSP are to assist countries as they:</li> <li>Establish a process for developing and implementing national policies and measures, including formulation of national communications</li> <li>Develop information to further national and international discussions</li> <li>Support principles and objective of the UNFCCC</li> </ul>	<ul> <li>Develop inventories of anthropogenic emissions of GHGs</li> <li>Assess vulnerabilities to climate change</li> <li>Evaluate response strategies for mitigating and adapting to climate change</li> <li>Formulate national climate change action plans</li> <li>Perform technology assessments.</li> <li>Develop and publish training materials</li> </ul>	USCSP: 56 countries
		<ul> <li>The objectives of the SNAP phase are:</li> <li>To assist countries in preparing climate change action plans that may form the basis for their national communications</li> <li>To promote diffusion of mitigation and adaptation technologies by assisting countries with assessments of needs and opportunities for technology exchange and diffusion</li> <li>To enhance support for the objectives and principles of the UNFCCC</li> </ul>	<ul> <li>Develop action plans for implementing a portfolio of mitigation and adaptation measures</li> <li>Training workshop on the preparation of national climate change action plan</li> </ul>	SNAP: 18 countries

Table 3. Summary of plans on education, training and public awareness

Target groups	Objectives	Activities	Expected outcomes
Policy/decision makers	<ul> <li>To legislate climate-friendly policies</li> <li>To promote the development of sustainable energy policies, e.g. renewable energy, energy efficiency and sustainable transport</li> </ul>	<ul> <li>Workshops/briefings for policy makers and legislators</li> <li>Training workshops for legislative staff, staff of government agencies (e.g. environment, energy, health, agriculture and forest) and development planning officers</li> <li>Participation of senior officials and technical staff in COPs and subsidiary body sessions</li> </ul>	<ul> <li>Development of local government action plans.</li> <li>Passage of laws and policies</li> <li>Implementation of projects on mitigation and adaptation to impacts of climate change</li> </ul>
<ul> <li>Civil society groups</li> <li>Non-governmental organizations</li> <li>Community organizations</li> <li>Grassroots organizations</li> </ul>	<ul> <li>To support/influence the development of policies</li> <li>To facilitate dialogue between policy and decision makers and stakeholders</li> <li>To encourage the participation of civil society in the implementation of measures to address climate change</li> </ul>	<ul> <li>Information campaigns</li> <li>Community/village dialogues</li> <li>Training workshops for project implementation, e.g. coastal management, renewable energy</li> </ul>	<ul> <li>The civil society groups take an active role in the development and implementation of policies</li> <li>More projects are implemented</li> </ul>
Youths and students	<ul> <li>To raise the level of understanding on climate change issues</li> <li>To engage the youth and students in information campaigns on climate change</li> </ul>	<ul> <li>Youth/student assemblies</li> <li>School information drives</li> <li>School competitions (e.g. poetry/essay writing, painting/drawing)</li> <li>Projects, e.g. tree planting, energy conservation</li> </ul>	<ul> <li>More students take climate- related courses</li> <li>Active participation of youths/students in raising public awareness on climate change issues</li> </ul>
General public	<ul> <li>To change behavioural patterns that contribute to the problem of climate change</li> <li>To mobilize the general public in supporting climate-related policies</li> </ul>	<ul> <li>Set-up climate change web sites</li> <li>Establish libraries and information centres</li> <li>Disseminate brochures, pamphlets, posters, stickers</li> <li>Sponsor TV, print and radio commercials</li> <li>Public seminars</li> </ul>	<ul> <li>Support measures to address climate change, e.g. energy conservation, sustainable transport</li> </ul>
Mass media (TV, print and radio)	<ul> <li>To disseminate climate change information to the general public</li> <li>To encourage the mass media to provide broader coverage on climate change issues</li> </ul>	<ul> <li>Media briefings, training and press conferences</li> <li>Produce documentary and other audio-visual materials</li> <li>Photo competition</li> </ul>	<ul> <li>Climate change is regularly featured in print and on radio and TV</li> <li>A more in-depth understanding and analysis of climate change issues</li> </ul>

Target groups	Objectives	Activities	Expected outcomes
Private sector/industry	<ul> <li>To increase the understanding and the role of the private sector in climate change issues</li> <li>To encourage the private sector/industry to participate in climate-related projects</li> </ul>	<ul> <li>Training seminars</li> <li>Dissemination of information materials</li> </ul>	<ul> <li>Support for the establishment of centres of excellence and research on climate change</li> <li>Participation in the implementation of climate- related projects</li> </ul>
Experts/technical staff	<ul> <li>To enhance the skills and knowledge of experts in implementing climate-related projects, e.g. national communications, vulnerability and adaptation and mitigation projects, CDM projects</li> <li>To improve data generation, analysis and management</li> </ul>	<ul> <li>Technical training, e.g. GHG inventories, vulnerability and adaptation assessments, mitigation assessments</li> <li>Short- and long-term training abroad</li> <li>Country visits</li> </ul>	<ul> <li>Shortage of experts to implement projects addressed</li> <li>Quality of project outputs enhanced</li> <li>Quality of data and management of databases improved</li> </ul>
Academia/ educators	<ul> <li>To integrate climate change into existing curricula</li> <li>To establish degrees and courses on climate change</li> </ul>	<ul> <li>Assessment of what can integrated into the curriculum</li> <li>Training of teachers/educators</li> <li>Development and publication of teaching materials</li> <li>Research and publication</li> </ul>	<ul> <li>Curricula</li> <li>More teachers qualified to handle climate change subjects</li> </ul>

#### 2. Integration of climate change into university courses

- 17. Parties reported that climate change is incorporated into university courses, such as geography, forestry and natural resource management, ecology, biology, physics and meteorology. Other Parties reported the establishment of university courses on the environment and revisions of curricula on environment, energy and atmospheric studies to include elements of climate change. Parties also reported a number of universities offering undergraduate and post-graduate programmes and research opportunities on climate change. Climate change is also reported to be covered in some courses in some of the leading management schools in India. The regional breakdown of the number of Parties with universities offering post-graduate courses on climate change is: Africa 13, Latin America and the Caribbean 12, Asia and the Pacific 14, and other 5. In South Africa, five universities undertake climate change research and offer specialized training, such as on implementation of clean development mechanism (CDM) projects.
- 18. Few Parties provided information on the scholarships that governments and/or bilateral and multilateral organizations offer to undertake short- or long-term courses at national or foreign universities. Parties reported that recipients of scholarship programmes include students, researchers, media practitioners and civil servants working in environmental agencies. The National Council for Scientific and Technological Development of Brazil offered 20 scholarships for doctoral and post-doctoral studies. The Government of Pakistan also makes funding available to support local scientists for further education and research in different disciplines, including climate change. South Africa is funding research on climate change through its National Research Foundation.

#### **B.** Training

19. The training programmes and activities reported by Parties were in connection with the preparations for the initial national communications and implementation of various projects involving renewable energy and energy efficiency, vulnerability and adaptation assessments. These programmes were aimed at building and/or enhancing the capacities of national experts and staff involved in operating institutions and government agencies involved in climate change. Some Parties, such as Antigua and Barbuda, Mauritania, and Trinidad and Tobago, reported efforts to strengthen the institutions involved in preparation of national communications and implementation of climate change projects through training of staff on subjects such as greenhouse gas (GHG) inventory preparation, vulnerability and adaptation assessment, and identification of mitigation measures.

#### 1. Training programmes

- 20. Most Parties reported receiving training assistance to prepare their initial national communications, through the enabling activities of the GEF and through various projects funded by bilateral and multilateral institutions. Parties provided information on the workshops and seminars that were organized relating to the preparation of national communications, specifically on emission factors and activity data, mitigation analysis, adaptation options, predictive computer modelling, technology needs assessments and Intergovernmental Panel on Climate Change methodology. For example, India conducted 27 workshops and seminars in preparation of its initial national communication. The National Climate Change Centre of Azerbaijan trained experts from 18 institutions in the country in various fields of climate change during the period of preparation of its initial national communication. Other Parties also reported organizing workshops to train national experts in identification and evaluation of CDM projects.
- 21. Specialized training and seminars were also provided to government officials and legislators to facilitate the development and implementation of policies relating to climate change. Some Parties mentioned the participation of their experts and senior officials in the sessions of the subsidiary bodies

and the Conference of the Parties (COP) as a means of increasing their knowledge about the Convention and enhancing their skills in negotiations. Other Parties, such as Cambodia, Democratic People's Republic of Korea, India and Paraguay, reported about integration of environment and climate change into the training courses offered for senior and mid-level government officials through their national schools of public administration.

- 22. Local government units play a critical role in the development and implementation of policies and measures to address climate change; so some Parties have established training programmes for local government officials. For example, development planning officers in select coastal provinces in the Philippines were trained on how to prepare local action plans on climate change, and Ghana assisted all its 110 district and metropolitan assemblies to draw up local environmental action plans that contain climate change programmes and projects.
- 23. Most Parties also reported the participation of their experts in various international training workshops on climate change. For example, Ecuador sent experts to 10 workshops abroad, and Maldives sent six experts to attend long-term training programmes. To ensure continuity in building of local capacities, some Parties developed training-of-trainers programmes aimed at creating a pool of trainers and experts. One such trainers training programme is being offered by the College of the Marshall Islands and The University of the South Pacific in Fiji.

#### 2. Centres of excellence and international cooperation

- 24. The establishment of national and regional centres of excellence was identified by Parties as a means to advance the study of various fields relating to climate change. Several Parties mentioned their participation in the activities of the Inter-American Institute for Global Change Research located in Brazil. This regional institute provides training and research on global changes in the Americas.
- 25. Other examples of national and regional centres include the Renewable Energy Centre (Barbados), the National Documents Centre (Burkina Faso), the National Climate Research Centre (Georgia), and the Sea-Level Monitoring Centre (Kiribati). Others are being established, including the Regional Centre of Excellence to provide research facility on climate change impacts to the small island developing States (Trinidad and Tobago) and the Caribbean Climate Change Centre (Antigua and Barbuda).
- 26. Most Parties mentioned a lack of local expertise on various areas of climate change. Some Parties provided information on the technical cooperation activities they undertook with other Parties to address this constraint. For example, Bhutan acknowledged the technical assistance provided by the Tata Energy Research Institute (India) in the preparation of its national communication. Honduras acknowledged the assistance extended by Costa Rica and Mexico in building expert capacity. Experts from Egypt helped build capacity in Jordan and Lebanon in the preparation of their first national communications. The Sino–Canadian climate change programme developed training packs for decision makers, environmental protection agency staff, teachers and entrepreneurs.

#### C. Public awareness

27. The involvement of the public in climate change issues depends in part on the level of their knowledge of those issues. The primary aim of public awareness campaigns is to enable the public to participate in efforts to address climate change. Parties mentioned that the specific objectives of their activities were to inform people about the causes and threats of climate change; to encourage actions through implementation of energy efficiency and other conservation measures; and to solicit feedback regarding national communications and national action plans. The most common means identified were dissemination of printed materials such as brochures, fliers, posters, pamphlets and technical publications and journals (see table 4).

Table 4. Public awareness activities and materials

Newsletters Pamphlets and brochures	Articles and publications	Information kits	Teaching materials	Posters	Expositions	CD-ROM	Internet	Audiovisual materials	Radio	Television	Public talks/ open lectures
RM, ALB, AZ AZE, DZA, EG BGD, GEO, G BLZ, KGZ, KI COK, LSO, MI CRI, MLI, ML ETH, NIU, PA FSM, PNG, TI GMB, TKM, TZ IDN, UZB, ZN IND, ISR, JAM, KOR, MUS, NAM, NER, NIC, NRU, PAK, THA, TTO, TUV, TZA, URY, UZB, ZAF	GY, ARM, MB, AZE, BOL, R, BRA, DA, CHN, S, COK, K, COM, CRI, HA, DZA, ZA, EGY, ERI,	BLZ, BRA, COD, CPV, ECU, FSM, GHA, GRD, IND, ISR, LKA, MLI, MUS, NER, NER, NTHA	BOL, BRA, BWA, CHN, COD, COK, ETH, FSM, GHA, GRD, ISR, LKA, MUS, NRU, TGO, URY, VCT	ALB, BGD, BWA, COK, DZA, IND, KIR, KOR, MYS, NAM, NIU, PHL, TGO, TTO, TUV, URY	ALB, ATG, BRB, COK, CRI, ISR, KOR, PHL, PNG, THA, URY, ZAF	MUS, PAK	ALB, BLZ, BRA, CHN, DZA, GEO, GMB, IND, KGZ, LCA, MDA, MUS, PAK, THA, ZWE	ALB, BGD, BWA, DZA, GHA, GRD, HTI, JAM, KEN, MUS, THA, URY	ARM, AZE, BLZ, BRA, BWA, CHN, CIV, COD, COK, COM, EGY, ERI, ETH, GEO, GHA, GIN, GMB, GRD, GUY, HTI, IND, ISR, KAZ, KIR, KOR, MDA, MLI, MNG, MRT, MUS, MWI, NAM, NER, NIC, NIU, NPL, NRU, PAK, PNG, PRK, THA, TKM, TZA, UGA, UZB, VCT, VNM, ZMB	ARM, ATG, AZE, BLZ, BRA, BRB, CHN, CIV, COD, COK, EGY, GEO, GHA, GIN, GRD, GR, IND, ISR, KAZ, KGZ, KOR, MDA, MEX, MLI, MNG, MRT, MUS, MWI, NPL, NRU, PAK, PHL, PNG, PRK, THA, TTO, TZA, UGA, URY, UZB, VNM	ALB, ARM, ATG, AZE, BGD, BHS, BRA, BRB, BWA, CHN, COD, COK, COM, CRI, DZA, ECU, EGY, ERI, ETH, GEO, GHA, GMB, GRD, GUY, IND, ISR, JAM, KEN, KGZ, KHM, KIR, KOR, LSO, MDA, MDV, MEX, MHL, MNG, MRT, MUS, MWI, MYS, NAM, NIC, NIU, NPL, NRU, PAK, PHL, PLW, PNG, PRY, TCD, TGO, THA, TTO, UGA, URY, ZMB, ZWE

*Note*: See the annex for a list of Parties and their corresponding three-letter country codes.

28. Parties reported that the technical nature of climate change issues is a constraint to public education. In this context, for example, Namibia encourages the use of indigenous languages in public awareness campaigns on climate change. A few Parties provided information on the translation of climate change materials into national and local languages. For example, Ethiopia translated the Convention and Kyoto Protocol into Amharic, its national language. Printed materials published in other languages and web documents were also translated.

#### 1. Climate change events

29. Several Parties reported that hosting national and international events on climate change such as the COP, workshops, seminars and conferences, provided opportunities to raise the level of awareness of the public about climate change issues. These events are often covered by the mass media and can engage NGOs and the private sector in public awareness exercises.

#### Box 2. Examples of numbers of events reported by Parties

• **Albania**: 15 consultative meetings

• **Brazil**: 150 events between 1997 and 2000

• China: Several hundred over the past 10 years

• **Gambia**: 16 district-level consultations involving 150 to 200 participants (NGOs, and community-based organizations) per consultation

• **India**: 44 events leading to COP 8

• **Kyrgyzstan**: 40 round-table discussions, seminars and conferences

30. Most Parties reported that annual celebrations, such as World Environment Day and Earth Day, provide opportunities for them to conduct public awareness campaigns on climate change. Parties mentioned that sponsoring competitions and awards on climate change is also an effective means of raising public awareness about the issue. For example, India sponsored an art competition involving 100,000 students in 14,000 schools throughout the country. In Malaysia, the Prime Minister presented prizes to the winners of a secondary school poster competition on energy efficiency and renewable energy.

### 2. Mass media

- 31. The widespread availability of mass media (radio, print and television) makes it easier for Parties to reach out to the general public on climate change issues. Brazil and India reported an increasing trend in newspaper citations on climate change, particularly on issues relating to the Kyoto Protocol. Increase in print and television coverage on climate change issues was also observed when Parties hosted the COP and workshops relating to climate change. Some Parties report that information campaigns are carried out mainly through the radio because television is not widely available.
- 32. Some Parties provided information on the regular newspaper columns dedicated to environmental issues. However, media exposure to climate change issues depends on the ability of journalists to write articles on environmental issues and translate technical terms into the language that the public can easily understand. For example, the Environmental Council of Zambia conducted a training workshop on climate change for 16 members of the print and electronic media. Other countries, such as Egypt, Ethiopia, India, Kenya, Kiribati and Malaysia, also provided information on their training activities for journalists and media practitioners. The training programmes are aimed at encouraging journalists to take an active role in raising public awareness on the issue and to facilitate dialogue among stakeholders in the various sectors affected by climate change.

#### 3. Internet

- 33. Many countries disseminated information through the Internet. Several Parties reported setting up web pages on climate change that include information on the preparation of their initial national communications, updates about climate change, project descriptions and publications. Parties said the Internet allows for greater transparency in the preparation of national communications, increased coordination among agencies involved in climate change issues and heightened public awareness. Internet communication also provides an opportunity for national experts who were not involved in the national communication process to provide feedback, thus enhancing the quality of national communications.
- 34. Brazil reported that its climate change web site contributed to the development of its national communication and helped raise public awareness. In 2000, about 3,000 pages of information on climate change in three languages (Portuguese, English and Spanish) were posted on the web site. China used the Internet to disseminate latest information about progress on climate change issues, policies and projects. China's national communication cited six web sites relating to climate change in China.

#### 4. Civil society and religious organizations

- 35. Most Parties reported the important role that civil society and church-based groups play in raising public awareness about climate change. NGOs often take a lead role in advocating policies on climate change, conducting training, facilitating the participation of civil society groups and implementing projects. Networks of NGOs are reported to be involved in climate change issues at the local, regional and international level.
- 36. Religious organizations, because of the respect they garner, are seen as effective in sensitizing people about environmental issues. Some Parties, such as Cambodia, Comoros and Ghana, emphasized the role these organizations can play. Cambodia has implemented non-formal education on environmental issues with monks using Buddhist concepts. More religious organizations are actively involved in public education on environmental and climate change issues through their involvement in local communities and educational institutions. These organizations were reported to have incorporated environmental education into their worship, organized tree-planting activities and advocated for change in behaviour to address the problems of the environment and climate change.
- 37. Local communities are most vulnerable to the impacts of climate change. They can also be mobilized to implement various projects on climate change. Several Parties provided information about their activities to educate communities about climate change issues. For example, in Lesotho, government agencies used the traditional village assembly (Pitso) to disseminate information. Community-based environmental trainings sessions were organized in Malawi to increase the level of awareness of the people on environment and climate change issues.

#### 5. Surveys and assessments of education, training and public awareness

- 38. The effectiveness of programmes and activities on education, training and public awareness may be gauged on the degree of change in the attitudes and behaviour of people and actions taken by the different sections of the society relating to climate change. Some Parties provided detailed information on the outcomes of surveys they conducted on public awareness. For example, China conducted a national survey involving university students, civil servants, farmers, workers and community residents on their sources of information on climate change (figure 1).
- 39. Parties also provided information on the number of news articles and features in print and television. For example, 10 special television programmes on climate change were shown in Georgia. The Republic of Korea reported that in 1996 there were 3,648 energy conservation articles/public

awareness announcements in newspapers and magazines, 1,737 on television and 3,080 on radio. Brazil reported an increasing number of articles written on climate change in newspapers and magazines from 11 in 1995 to almost 500 in 2000.

Other
12%
Seminars
30%

Public
information
campaigns
20%
22%

Figure 1. Outcome of a national survey in China on sources of information on climate change

#### IV. Needs and constraints

- 40. Sustaining the activities aimed at training experts and educating and raising the awareness of the public continues to be a challenge in most countries due to limited financial and human resources and competing priorities, such as poverty alleviation and food security. The lack of experts working on climate change issues is partly due to the high turnover of experts involved in climate change. It is in this regard that many Parties expressed the need for strengthening governmental, non-governmental and academic institutions in order to sustain the programmes aimed at building and enhancing local capacities to respond to climate change. Table 5 summarizes the needs expressed by non-Annex I Parties relating to education, training and public awareness.
- 41. Some Parties expressed the need for assistance in the development of audio-visual materials for distribution to the mass media. A few Parties expressed the need for technical support in translating documents and publications into national and local languages to allow the widespread dissemination of climate change information to the public.
- 42. As climate change is a relatively new area of study, most Parties expressed the need for assistance in incorporating climate change into regular school curricula. Parties also identified the need for support in strengthening academic and research institutions to serve as centres of excellence on climate change by educating students that are interested in climate change issues.
- 43. The establishment of continuous training programmes ensures the availability of experts who can be involved in climate change projects. Parties expressed the need for support in developing professional training packages on GHG inventories, education, training and public awareness, vulnerability and adaptation assessments, mitigation assessments and technology needs assessments.

Table 5. Summary of needs of non-Annex I Parties relating to education, training and public awareness

Areas	Needs	Parties
Education	Development and integration of climate change into curricula	BOL, CAF, EGY, ETH, FSM, GMB, GUY, IND, KIR, MLT, MNG, MWI, SYC, UGA
	Development of educational materials	ETH, MAR, MDV, MHL, SYC
	Training of teachers	ETH, MDA, MDV, MWI, SYC
	Scholarship programmes	IND, KIR, SLB
Training	Technical training (greenhouse gas inventory, vulnerability and adaptation, mitigation)	ARG, ATG, AZE, BOL, CHN, EGY, ETH, FSM, IND, JOR, KIR, LBN, MHL, MNG, MUS, NRV, PHL, ROK, SLB, SLV, SYC, TZA, UGA, URY, WSM, ZMB, ZWE
	Training on project implementation (e.g. renewable energy, energy efficiency, clean development mechanism, etc.)	DZA, EGY, MDV, MHL, SYC
	Training for policy and decision makers	ATG, BWA, CHN, COM, DZA, EGY, ETH, FSM, KIR, MDA, MDV, MHL, MNG, NAM
	Training directed at target sectors (media, non- govermental organizations, community-based organizations, etc.)	EGY, IND, MDA, MDV
	Trainers training	CPV, MDA, GUY
Public	General public awareness	COM, EGY, MNG, NAM, SYC, UGA
awareness	Production of print and audio-visual materials	EGY, ETH, GMB, MNG
	Seminars/lectures/workshops	EGY, ETH, KIR, MDA, MNG, SYC
Other	National, regional and international cooperation	ATG, BHS, BRB, COL, CUB, DMA, EGY, HND, MAR, MNG, PER, SYC, TGO, TUN
	Translation of materials into local languages	BFA, BOL, GMB, LSO, MDA, MDV, MHL, NIU, PER, PNG
	Institutional support	ATG, CAF, CHN, CPV, EGY, GMB, IND, SLB
	Establishment/strengthening of regional centres	ATG, BFA, BHS, BRB, CUB, GUY, MAR, NIU, PAN, PNG, TGO, TTO, TUN

*Note*: See the annex for a list of Parties and their corresponding three-letter country codes.

## V. Challenges and opportunities

- 44. Although Parties in general reported a low level of public understanding about climate change, changes in weather patterns and extreme weather events, such as floods and droughts, have contributed to increased public awareness about climate change issues.
- 45. NGOs and the private sector were reported as playing an important role in information dissemination. Some Parties mentioned the Climate Action Network at the national and regional level as having taken the lead in public awareness campaigns among the NGO community. The Business Council for Sustainable Development was also mentioned as one of the NGOs taking an active role, particularly in raising the awareness of the private sector on climate change issues. In South Africa, the private sector has been involved in establishing centres of excellence. Through their advocacy efforts, NGOs and the private sector have helped to shape climate-friendly policies, resulting in renewable energy and energy efficiency programmes. Many Parties emphasized the need for more involvement of women and young people in climate change outreach activities.
- 46. The availability of different media, even in remote places, provides a means for reaching out to the public. Based on a few surveys conducted and reported in the national communications, television, newspapers and the Internet are the three main sources of information on the environment and climate change. A survey conducted in China showed that 88 per cent of the respondents got their information from television, 80 per cent from newspapers and 37 per cent through the Internet. Other Parties also mentioned that access to satellite television channels such as CNN (Cable News Network), BBC (British Broadcasting Corporation) and Discovery Channel, which regularly feature the topic of climate change, also increased public understanding.
- 47. Parties provided information on technical cooperation between and among non-Annex I Parties and developed countries on education, training and public awareness. Cooperation took place at the governmental and non-governmental level. As the number of academic institutions involved in climate change research grows, it is expected that cooperation, particularly at the regional and subregional level will also increase. Parties said that the academic community also plays a crucial role in institutionalizing the study and analysis of climate change through the engagement of more experts in various research and training programmes.

# VI. Summary

- 48. Education, training and public awareness play an important role in fulfilling the commitments of non-Annex I Parties under the Convention. The information provided by Parties varied in detail. Cooperation between and among governmental agencies, the private sector, NGOs and educational institutions is important for the success of public education campaigns on climate change. Parties expressed a need for continuous education, training and public awareness efforts in order to address the increasing challenge posed by climate change and to fulfil Parties' commitments under the Convention.
- 49. Since the submission of the first national communication in 1997, Parties have gained experience in the implementation of education, training and public awareness programmes, particularly in international cooperation. In the future, there may be more opportunities for South–South and North–South cooperation on climate change through exchange of information and experts and education and public awareness materials. Lessons drawn from the implementation of programmes and activities guided the preparation of COP decision 11/CP.8 on the New Delhi work programme on Article 6 of the Convention. This decision will provide the basis for the implementation of education, training and public awareness programmes.

# Annex

# List of Parties covered in the sixth compilation and synthesis

Albania	ALB	T 1'	IND
Algeria	DZA	India	IND
Antigua and Barbuda	ATG	Indonesia	IDN
Argentina	ARG	Iran (Islamic Republic of)	IRN
Armenia	ARM	Israel	ISR
Azerbaijan	AZE	Jamaica	JAM
Bahamas	BHS	Jordan	JOR
Bangladesh	BGD	Kazakhstan	KAZ
Barbados	BRB	Kenya	KEN
Belize	BLZ	Kiribati	KIR
Benin	BEN	Kyrgyzstan	KGZ
Bhutan	BTN	Lao People's Democratic Republic	LAO
Bolivia	BOL	Lebanon	LBN
Botswana	BWA	Lesotho	LSO
Brazil	BRA	Madagascar	MDG
Burkina Faso	BFA	Malawi	MWI
Burundi	BDI	Malaysia	MYS
Cambodia	KHM	Maldives	MDV
Cameroon		Mali	MLI
	CMR CPV	Malta	MLT
Cape Verde	CAF	Marshall Islands	MHL
Central African Republic		Mauritania	MRT
Chad Chile	TCD CHL	Mauritius	MUS
China	CHL	Mexico	MEX
		Micronesia (Federated States of)	FSM
Colombia	COL COM	Mongolia	MNG
Comoros	COM	Morocco	MAR
Congo	COK	Namibia	NAM
Cook Islands Costa Rica	CRI	Nauru	NRU
		Nepal	NPL
Cote d'Ivoire	CIV CUB	Nicaragua	NIC
Cuba	PRK	Niger	NER
Democratic People's Republic of Korea		Nigeria	NGA
Democratic Republic of the Congo	COD	Niue	NIU
Djibouti	DJI	Pakistan	PAK
Dominica	DMA	Palau	PLW
Dominican Republic	DOM	Panama	PAN
Ecuador	ECU	Papua New Guinea	PNG
Egypt	EGY	Paraguay	PRY
El Salvador	SLV	Peru	PER
Eritrea	ERI	Philippines	PHL
Ethiopia	ETH	Republic of Korea	KOR
Gabon	GAB	Republic of Moldova	MDA
Gambia	GMB	Saint Kitts and Nevis	KNA
Georgia	GEO	Saint Lucia	LCA
Ghana	GHA	Saint Vincent and the Grenadines	VCT
Grenada	GRD	Samoa	WSM
Guatemala	GTM	Senegal	SEN
Guinea	GIN	Seychelles	SYC
Guyana	GUY	Singapore	SGP
Haiti	HTI	Solomon Islands	SLB
Honduras	HND	South Africa	ZAF

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Sri Lanka	LKA	Tuvalu	TUV
Sudan	SDN	Uganda	UGA
Swaziland	CHW	United Republic of Tanzania	TZA
Tajikistan	TJK	Uruguay	URY
Thailand	THA	Uzbekistan	UZB
The former Yugoslav Republic of		Vanuatu	VUT
Macedonia	MKD	Viet Nam	VNM
Togo	TGO	Yemen	YEM
Trinidad and Tobago	TTO	Zambia	ZMB
Tunisia	TUN	Zimbabwe	ZWE
Turkmenistan	TKM		

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