







Distr. LIMITED E/ESCWA/ENR/2001/6 26 June 2001 ORIGINAL: ENGLISH

ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA

REPORT

THEMATIC ROUND TABLE FOR THE WESTERN ASIA REGION IN PREPARATION FOR THE "RIO + 10" WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT BEIRUT, 9-11 APRIL 2001

CONTENTS

			Paragraphs	Page
Exec	utive	summary	1-11	3
I.	BA	CKGROUND	12-20	4
	Att	endance	17-20	5
II.	OP	ENING SESSION	21-22	6
III.	PL	ENARY SESSIONS	23-26	6
IV.	RE	GIONAL ASSESSMENT OF PROGRESS	27-59	7
	A. B. C.	Achievements in implementing Agenda 21 since UNCED	31	8 9 10
V.		MMARY OF PRESENTATIONS AND DISCUSSIONS AT THE ENARY SESSION	60-152	13
	A.	Socio-economic aspects of sustainable development in the Western Asia region	61-72	13
	B.	Environmental management and governance for sustainable development	73-89	14

CONTENTS (continued)

		Paragraphs	Page
	C. Water resource management in the Western Asia region	90-106	15
	D. Energy	107-117	17
	E. Land degradation		18
	F. Coastal and marine environment	136-145	19
	G. Trade and environment	146-152	20
VI.	MATRIX OF ACHIEVEMENTS, CONSTRAINTS AND INITIATIVES RELATING TO THE DIFFERENT CHAPTERS OF AGENDA 21 IN THE WESTERN ASIA REGION SINCE 1992		21
	ANNEXES		
I.	List of participants		31
II.	Organization of work	••	40

Note: The Western Asia region includes the following 13 countries: Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, the Syrian Arab Republic, the United Arab Emirates and Yemen.

EXECUTIVE SUMMARY

- 1. The present report describes the wide gap between the requirements of sustainability and the reality of economic development policies in the Western Asia region. Despite the fact that sustainable development has been one of the basic commitments of the region since Rio 1992, much more remains to be done to put the principle into daily practice. Almost nine years after Rio, the report takes stock of what has been attempted and achieved in the Western Asia region by national Governments and regional and subregional bodies to implement the concept of sustainable development. It also sets out major issues which, in the view of the Round Table participants, are an impediment to strong, coherent sustainable development policies in the region.
- 2. On the positive side, national and local Agenda 21 (LA-21), National Strategies for Sustainable Development (NSSD), cross-sectoral National Environmental Strategies (NES) and National Environment Action Plans (NEAP) have been developed in most of the region, providing blueprints for action and setting deadlines for goals and targets.
- 3. Since the United Nations Conference on Environment and Development (UNCED) 1992 there has also been rapidly increasing participation by civil society, including non-governmental organizations (NGOs), trade unions, and the private sector, in the environmental decision-making process.
- 4. On the institutional level, some countries of the region have made substantial progress in preparing for sustainable development. Furthermore, national councils or coordinating bodies in the sustainable development field and NGOs are flourishing in some countries.
- 5. A major positive development was the Declaration by the Council of Arab Ministers Responsible for Environment (CAMRE) at their meeting in Abu-Dhabi, on 3 February 2001, that there is an urgent need for alleviation of poverty and improvement of living standards and economic conditions of the Arab citizen through sustainable development programmes. The Declaration and its associated commitments was later adopted at the League of Arab States summit meeting in Amman in March 2001, thus giving the Declaration legitimacy and momentum for implementation at the regional level.
- 6. Unfortunately, the Round-table discussions revealed that most countries of the region have inadequate technical, human and financial resources. The situation is further complicated by an unfavourable international atmosphere. The main challenge facing most decision makers is how to integrate multisectoral sustainable development policies in a consolidated strategy. Despite all their efforts to avoid the prevailing piecemeal approach, Governments in the region are still far from achieving interlinkages, interdependencies, synergy and coherence in their policy initiatives.
- 7. The Round Table was able to identify and summarize four major obstacles to the achievement of sustainable development in the Western Asia region, namely:
 - (a) Inadequate freshwater supplies and poor land resources;
 - (b) Lack of peace and security;
 - (c) Inadequate monitoring and access to credible information;
- (d) Inadequate public participation in decision-making, resulting in ineffective governance for sustainable development.
- 8. Freshwater supply in the region was found to be highly variable in time and space. The collection of hydrological, meteorological, ecological and socio-economic information for water resource management is still severely hindered at field level by inadequate resources and financial constraints. Most countries have developed water policies to manage water scarcity by devising programmes based mainly on resource development and, to a much lesser extent, on demand management.

- 9. The situation at the regional level is also aggravated by the social and cultural impact of globalization on societies, including uneven distribution of the benefits of development, the rapid pace of technological change and the information revolution. Globalization is resulting in faster socio-economic growth, creating new opportunities and, consequently, yielding higher living standards in most of the developed world. However, these benefits are unevenly distributed and the Western Asia region is almost marginalized. The combination of rapidly expanding global markets and inadequate access to the market by countries of the region has hindered their integration in the world economy. There is a general suspicion that globalization is a dubious concept that will mean increased social, economic and ecological vulnerability. Some efforts are under way to form an Arab Economic Alliance. What impact these efforts will make remains to be seen.
- 10. In view of the widespread unemployment, poverty and weak infrastructure in some countries of the region, the Round Table expressed deep concern that there was a danger that sustainable development might be sidelined and given lower priority as the social and political pressures for accelerated economic development overwhelm Governments. On the positive side, the age structure is in favour of all countries of the region as there is a relatively high percentage of young people.
- 11. At the regional level, the degree of success and/or failure in reconciling economic and environmental agendas has to be assessed. Countries should cooperate to define the characteristics of modern sustainable development governance tools and trends that reflect the practical lessons learned from shared experience. Such tools should include the careful setting of priorities, pursuing cost-effective solutions and seeking synergy in policy reforms that result in environmental improvements and promote socio-economic development.

I. BACKGROUND OF THE ROUND TABLE

- 12. In Resolution 55/199, the United Nations General Assembly decided to organize a ten-year review of progress achieved in implementing the outcome of UNCED at a summit meeting called World Summit on Sustainable Development (WSSD). The summit is to be held in Johannesburg, from 2 to 11 September 2002. The main objectives of the WSSD are to reinvigorate, at the highest political level, the global commitment to sustainable development by identifying accomplishments and areas where further efforts are needed to implement Agenda 21 and the other results of UNCED, and address new challenges and opportunities. This should result in renewed political commitment and support for sustainable development, consistent, *inter alia*, with the principle of common, but differentiated, responsibilities.
- 13. In this connection, the Resolution stressed the importance of early and effective preparation for the summit to be carried out at the local, national, subregional, regional and international levels by Governments and the United Nations system so as to ensure high-quality inputs to the review process, and the fact that the WSSD, including the preparatory process, should ensure a balance between economic development, social development and environmental protection, as these are interdependent and mutually reinforcing components of sustainable development.
- 14. Within this framework, the Economic and Social Commission for Western Asia (ESCWA), in collaboration with the United Nations Environment Programme Regional Office for Western Asia (UNEP/ROWA), the Department of Economic and Social Affairs (DESA) in New York, the Technical Secretariat of CAMRE, and League of Arab States, held an independent Eminent Persons Thematic Round Table at United Nations House in Beirut from 9 to 11 April 2001.
- 15. The objectives of the preparatory Thematic Round Table were to undertake a regional assessment of progress made in achieving sustainable development and evaluate the main achievements in the Western Asia region in the implementation of Agenda 21 since UNCED. The Round Table also addressed the outlook and main constraints faced by the region in achieving sustainable development, and new initiatives and commitments to overcoming constraints and fostering further progress. As part of the regional preparatory meeting, the Round Table also sought to formulate a regional platform outlining key policy issues, priorities and follow-up actions. The Round Table's recommendations are included in this report, which will be made available for consideration ahead of the regional preparatory committees.

16. In this context, the Round Table took stock primarily on the basis of the experience and views of a number of eminent persons and specialists from the region. Most of the eminent persons were independent experts, some representatives of major groups who are known in the region for possessing the necessary political wisdom and practical experience in the sustainable development field and have been actively involved in the implementation of Agenda 21 at the local, national and regional levels. The Thematic Round Table is the first of two round tables to be held in the region. The second is a stakeholder meeting representing all major groups, such as women, youth, NGOs, farmers, the private sector, and academia, involved in all aspects of development in the region. The stakeholder Round Table will be held in Manama, from 23 to 25 September 2001.

ATTENDANCE

- 17. The Round Table was attended by a number of eminent persons from the region with experience in sustainable development and an understanding of its associated international processes. Recognized experts from the region on the selected environmental themes also attended (see annex I).
- 18. In addition to the collaborating partners (UNEP/ROWA, CAMRE, DESA and ESCWA), representatives of nine United Nations specialized agencies and other organizations in the United Nations system attended, namely:
 - (a) The Economic Commission for Africa (ECA);
 - (b) The Economic Commission for Europe (ECE);
 - (c) The Food and Agriculture Organization (FAO);
 - (d) The United Nations Development Programme (UNDP);
 - (e) The UNEP Mediterranean Action Plan (MAP);
 - (f) The United Nations Industrial Development Organization (UNIDO);
- (g) The International Network on Water, Environment and Health (INWEH), and United Nations University (UNU);
 - (h) The World Health Organization (WHO) Office in Lebanon;
 - (i) The WHO Regional Centre for Environmental Health Activities (CEHA) in Amman, Jordan.
- 19. Delegates from nine of the 13 member States attending a back-to-back Expert Group Meeting on Environmental Impact Assessment (EIA), also took part in the Round-table discussions. There were also participants from various institutions in the host country, Lebanon, including academic institutions, national research centres, governmental and NGOs, the private sector and chambers of commerce.
- 20. The following national, regional and international organizations working in the region were also represented:
 - (a) The Organization of Petroleum Exporting Countries (OPEC);
 - (b) The Arabian Gulf University (AGU);
 - (c) The Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD);
 - (d) The Arab Planning Institute (API);
 - (e) The Arab Industrial Development and Mining Organization (AIDMO);
 - (f) The Center for Environment and Development for the Arab Region and Europe (CEDARE);
 - (g) The Islamic Development Bank (IDB);
 - (h) The International Center for Agricultural Research in the Dry Areas (ICARDA);
 - (i) The Kuwait Institute for Scientific Research (KISR);

- (j) The Middle East Desalination Research Center (MEDRC);
- (k) The Regional Organization for the Protection of Marine Environment (ROPME).

II. OPENING SESSION

- 21. The Round Table was opened in the main auditorium of United Nations House, Beirut under the patronage of His Excellency Dr. Michel Moussa, Lebanese Minister of Environment (see annex II for the organization of work).
- 22. The following statements were made:
- (a) Mr. Omar Touqan, Chief of the Energy, Natural Resources and Environment Division of ESCWA welcomed the participants and stressed that they should take stock of where countries of the region stood with respect to sustainable development strategies and experience in implementing Agenda 21;
- (b) Mr. Mahmood Abdulraheem, Regional Director of UNEP/ROWA, proposed that the draft regional environmental outlook prepared for the third Global Environmental Outlook (GEO-3) should be included as a background discussion document;
- (c) Ms. Fatma El-Mallah, Director of the Production Sectors and Environment Department at the League of Arab States, Technical Secretariat of CAMRE, emphasized the importance of the February 2001 Abu-Dhabi Environmental Declaration by the Council. She said that, at their summit meeting in Amman, Jordan, in March 2001, all Arab leaders had adopted the Declaration, renewing their commitment to the principle of sustainable development;
- (d) Mr. Rod Holesgrove, Senior Adviser to the Division for Sustainable Development at DESA, highlighted the importance of the Thematic Round Table in helping the forthcoming WSSD reach tangible, proactive decisions where further efforts are needed to implement Agenda 21. He also emphasized the fact that the discussions should ensure a balance between economic development, social development and environmental protection, as these are interdependent and mutually reinforcing components of sustainable development;
- (e) Ms. Mervat Tallawy, Under Secretary-General and Executive Secretary of ESCWA, stressed the fact that today's environmental geopolitics is characterized by a serious "new world disarray" in which strong leadership by developed countries is missing and most countries have mixed records and agendas. She also said that additional efforts were needed to bridge North-South differences that often hamper environmental negotiations. She emphasized the fact that the Western Asia region should assess its degree of success and/or failure in reconciling its socio-economic development and environmental agendas. She also said that countries of the region should cooperate to define the characteristics of modern environmental management tools and trends, which include seeking synergy in policy reforms that result in environmental improvements and while promoting socio-economic development;
- (f) His Excellency Dr. Michel Moussa highlighted the need for a common platform and unified position for all Arab States at the WSSD in Johannesburg 2002.

III. PLENARY SESSIONS

23. At the beginning of the meeting, an introductory statement was made by the senior adviser of DESA introducing the guidelines to be observed for the Rio + 10 regional preparatory process. He identified the aims of the process and said the regional Round Table was a mechanism for drafting practical proposals, identifying initiatives and suggesting innovative approaches aimed at expediting progress in the implementation of Agenda 21. He emphasized the fact that preparatory work at regional level would be very significant in drafting the provisional agenda and establishing the possible main themes for the WSSD. He identified two types of expected outputs from the regional meetings which would be of interest to the summit: (a) regional commitments by Governments or stakeholders which could be included in the "package

of summit outcomes", but do not require global negotiations; and (b) issues identified at the regional level which do require global consideration and negotiations. He also said that, while regional themes, issues and priorities vary from region to region, there should be a minimum level of consistency and uniformity among all regions of the world.

- 24. In order to provide a sound basis for discussion, the remainder of the plenary session was entirely devoted to presenting brief background papers on priority themes and issues affecting sustainable development in the region. The papers were categorized in the following seven priority themes:
 - (a) Socio-economic aspects of sustainable development;
 - (b) Environmental management and sustainable development governance;
 - (c) Water supply and management;
 - (d) Energy;
 - (e) Land degradation and biodiversity;
 - (f) Coastal and marine environment;
 - (g) Trade and environment.
- 25. Each speaker briefed participants on the main achievements, obstacles and impediments, gave his or her personal view of the prospects, and proposed initiatives on each of the themes. The background presentations were used as a basis for discussion and to guide participants on the linkages and interfaces between each priority theme and its impact on sustainable development in the region.
- 26. The second session was devoted to discussing the national, subregional and regional initiatives to respond to regional problems, while, in the last session, initiatives, innovative approaches and opportunities at the global level were discussed. Following these sessions, a working group was set up to bring together all the ideas and initiatives that had been discussed. The deductions, ideas and initiatives that had arisen during the discussions were summarized theme by theme in the form of matrices (see chapter VI).

IV. REGIONAL ASSESSMENT OF PROGRESS

- 27. During the discussions, a number of issues emerged as main concerns for the region, such as high population growth rates and their impact on the environment; poverty, with its direct effects on environmental degradation; chronic water scarcity and deteriorating water quality; continuing land degradation; urbanization and the associated waste management problems and spread of slums and shanty towns; environmental pressure on the resource base caused by trade liberalization; food security problems; loss of biodiversity; marine pollution and the degradation of coastal and marine environments, and so on. Insufficient public participation in decision-making processes, marginalization of stakeholders, lack of funds, poor capacities, gender imbalance, insufficient information, inadequate transparency, lack of peace and security in the region and inadequate governance for sustainable development were some of the factors identified as impeding sustainable development.
- 28. When the background papers had been presented, there were round-table discussions on the second and third days of the Meeting to elaborate on the achievements and constraints facing progress towards sustainable development, but they were more focused on initiatives and proposals at regional and international levels. The matrix compiled in chapter VI summarizes all the detailed technical outcomes of the discussions regarding achievements, constraints, initiatives and proposals for action plans to implement Agenda 21 and to further regional and global sustainable development.
- 29. It is believed that the outputs given in the matrix provide a regional platform or basis for further discussion by the wider audience at the Stakeholder Round Table to be held in Bahrain from 23 to 25 September 2001. The outcomes of both Round Tables will be carried over to the Regional Preparatory Committee CAMRE Ministerial Session in Cairo at the League of Arab States from 28 to 30 October 2001.

A. ACHIEVEMENTS IN IMPLEMENTING AGENDA 21 SINCE UNCED

- 30. Since Rio 1992, sustainable development progress in the Western Asia region has been neither smooth nor easy. In most cases, policy makers have had to confront the sheer complexity of linking environment and development problems. The following were identified as some of the achievements made in the region since UNCED 1992:
- (a) In the last nine years, Governments in the region have been seeking more effective way of promoting sustainable development through behavioural changes, while maintaining efficacy and freedom;
- (b) On the social front, countries of the region have made significant progress in education, extending life expectancy, lowering infant mortality and improving health care, sanitation and literacy for women;
- (c) On the economic front, most countries have undergone economic reform and restructuring. They have promoted market economies and decentralization and lowered inflation rates. The region has witnessed substantial privatization efforts associated with an increase in revenues and the propagation of secondary industrie:
- (d) On the institutional level, some countries have made substantial progress in preparing for sustainable development. There are now national councils or coordinating bodies in the field of sustainable development, and NGOs are flourishing;
- (e) Countries have accepted that their environmental problems are critical and that socio-economic development cannot be divorced from environmental protection;
- (f) Some countries have levied environmental taxes to discourage the unsustainable use of materials and energy, while the rest continue to subsidize inefficient water and energy use, and mining. The emerging use of market instruments (where feasible) to achieve sustainable development in the NEAP in the region is a very welcome trend. Meanwhile, most Governments have started working with the private sector, rather than against it;
- (g) Apart from the global success achieved in controlling Ozone Depleting Substances (ODS), other conventions have made limited progress;
- (h) National and local Agenda 21, NSSD, NES and NEAP have been formulated in most countries, providing blueprints for action and setting deadlines for goals and targets;
- (i) The development of NSSD, NES and NEAP in most countries has given new impetus to assessing past environmental policies at the national and local levels. A great deal has been learned about multi-sectoral, bottom-up, participatory, and integrated approaches, what is effective and what is not, which approaches are effective and practical;
- (j) The Round Table valued the efforts made by the League of Arab States, assisted by regional United Nations organizations, in identifying, harmonizing, testing and using sustainable development indicators and indices for monitoring and reporting on sustainable development at the local, national, subregional, regional and global levels;
- (k) Since Rio 1992, a large number of countries have acted to strengthen national policy frameworks. In most countries, national councils for sustainable development and/or environmental protection have been established and some have introduced high-level policy-making and coordination powers. Few are using fiscal measures, economic incentives or conventional environmental management tools to change unsustainable production and consumption patterns;
- (l) Broader participation by major groups through NGOs and local initiatives have been a positive development since UNCED;
- (m) There is increased public awareness of environmental conservation and the concepts of sustainable development;

(n) Some local communities have developed a local Agenda 21; however, there has as yet been little success in integrating the social, economic and environmental dimensions of sustainable development. This modest degree of success is attributed to centralized decision-making, lack of local taxation mechanisms to finance sustainable development, and government bureaucracy.

B. OUTLOOK AND MAIN CONSTRAINTS

- 31. Despite all the efforts countries have made, the Round Table expressed serious concern that the region is entering the new millennium with no integrated plan of action or clear commitment to confront serious water scarcity, continuing environmental degradation and other enormous challenges, including poverty and the impact of globalization. The following observations were also made:
- (a) There is still a lack of clarity and/or regional consensus on exactly what sustainability means. Therefore, it was felt that there should be a public debate about the concept itself and the strategies for achieving it;
 - (b) Poverty is a serious obstacle to sustainable development in some countries;
- (c) Both persistent poverty in some parts of the region and a standard of living based on excessive consumption in others parts, are incompatible with achieving the sustainable use of resources;
- (d) Except for the oil-rich Gulf States, the debt burden is an additional constraint. The need to meet high interest payments has severely limited Governments' ability to provide resources for basic services and invest in growth while protecting and conserving natural resources;
- (e) It is unfortunate that the gap between industrialized countries and the region's developing countries has widened. On the global scale, foreign direct investment (FDI) and joint venture have increased, but some 80 per cent of this investment has been made available only to ten countries in South East Asia. Poor countries in the Western Asia region have been almost totally marginalized;
- (f) With the implementation of the Convention on Climate Change, the economic stakes in the region are very high. The essential question is this: what socio-economic and, possibly, political ramifications will the Kyoto Convention have on the oil-exporting countries of the region? Like the rest of the world community, the oil-exporting countries are not prepared to bear the unfair consequences of the convention. It is important to note that, for purely economic reasons, the Convention has been resisted even by some of the most developed countries;
- (g) There is a widening gap between the requirements of sustainability and the reality of socioeconomic development policies in countries of the region. The implementation of environmental policies is particularly inadequate. The political measures as such are ineffective;
- (h) People's concern for their quality of life is not reaching the political institutions, while the policies and actions of institutions are not reaching the minds of the people;
- (i) Lack of communication between environmental legislators and the bodies responsible for implementation at the different levels of Government, insufficient information and lack of involvement and participation in the policy-making process by the people concerned are some of the reasons why environmental policies are often not implemented effectively;
- (j) Another reason for the slow or imperfect implementation of sustainable development is the unwillingness of national Governments to hinder or slow down the flow of foreign investment. To attract business opportunities, some countries have achieved competitive advantages by relaxing environmental requirements and regulations;
- (k) Lack of regional harmonization of environmental standards and policies means that those standards are too lax in some countries and too rigid in others. As a result, some countries are often reluctant

to implement strict environmental legislation for fear of losing economic opportunities to others applying less stringent environmental regulations;

- (l) Except in the oil-rich Gulf States, uncontrolled population growth, rapid urbanization and migration resulting from worsening living conditions, are all posing an enormous challenge with respect to housing, health, education and urban infrastructure, especially sanitation and urban transport;
- (m) Most countries have been hampered by inadequate financial, institutional and technical capacities and have struggled to put in place effective institutions for managing social, economic and environmental issues in an integrated manner;
- (n) International donors have, for various reasons, not lived up to the expectations raised by the global partnership struck at UNCED. The volume of development assistance has been in decline since the Earth Summit. Developed countries, as a group, have failed to fulfil their commitments, particularly to the least developed countries in the region. So far, the provision of financial resources required for the implementation of Agenda 21 to the least developed countries has fallen far short of needs;
- (o) The compartmentalized nature of Government structures has often been an obstacle to finding coordinated responses to sustainable development needs;
- (p) In most countries, environment ministries, departments annexed to ministries and low-level councils are either not central in the Government decision-making structure, or have limited influence over sectoral ministries;
- (q) The use of economic instruments, such as water pricing, for demand management faces serious cultural resistance since it conflicts with long-established practices, religious precepts and social traditions and is a subject of political disagreement. Efforts are under way in some countries to price the services procured by water resources development and/or delivery;
- (r) Most countries lack the resources needed to implement existing NSSDs or continue supporting national committees for sustainable development established in response to Rio 1992;
- (s) A fragmented and inconsistent donor-driven approach to supporting national/local Strategy for Sustainable Development without a sense of national/local ownership has often failed to promote implementation of such strategies. The most successful external support for the region has come when donors, including regional organizations, have mobilized funding, provided consultative fora and played catalytic roles, while encouraging national agencies and experts to lead the process;
- (t) Although, most intellectuals in the region master English as a second language, most public servants and stakeholders have no access to up-to-date information on sustainable development since it is unavailable in Arabic. In some cases, the language barrier is an obstacle to understanding and implementing sustainable development concepts.

C. IDENTIFICATION OF NEW INITIATIVES AND COMMITMENTS

1. Regional initiatives and commitments

- 32. The Round Table took note of the Abu-Dhabi Declaration, Perspective of Arab Environmental Action of 3 February 2001 by CAMRE, seeing it as a commitment by countries of the region to further their sustainable development efforts in the twenty-first century.
- 33. There is an urgent need for a change in consumption and production patterns in the region.
- 34. Countries should give equal weight to two, interlinked priorities: first, they must show that protecting the environment is worthwhile, or alternatively that the cost of doing nothing is exorbitant, a task principally for economists and sociologists, assisted by environmental scientists; second, they must put this message

across in such a way as to mobilize the public at large. Nobody can do this better than NGOs, which should be further promoted in the region, including by the media.

- 35. Good, community level, bottom-up approaches are often discouraged by cumbersome bureaucratic procedures in the region. Institutional reforms and restructuring should be undertaken to minimize bureaucracy while maximizing interdepartmental coordination and collaboration and greater participation by civil society.
- 36. The region should regard participation as an indispensable ingredient of effective sustainable development policy development and implementation. This means genuine involvement by citizens (including the private sector) in sustainable development decision-making, which can be achieved by building and investing in partnerships that work. This, in itself, will create a sense of shared responsibility for better management.
- 37. Countries should do more to involve and inform the public as an effective and efficient way of protecting the environment, whether through education on environmental issues, eco-labelling, publishing pollution emission data, or building institutions that involve the public directly in resource management.
- 38. The Round Table called upon regional organizations concerned with trade issues to establish a regional trade and environment programme to address and coordinate regional activities relevant to the issue.
- 39. Sustainable development in the region requires institutional reforms to optimize the procedures of environmental governance. Civil society, including scientific communities, advisory institutions, NGOs and non-profit grassroots organizations should be supported, consulted and involved in framing and monitoring policies for sustainability.
- 40. The Round Table called upon the countries of the region to strengthen their political commitment and efforts to implement sustainable development policies and enhance the quality of life for all sections of the population, with special emphasis on vulnerable groups, such as children and women.
- 41. For the purposes of formulation, monitoring, implementation, and evaluation, Governments and NGOs in the region should further develop and strengthen their capacities to monitor environmental performance in relation to socio-economic development, collecting and interpreting data, selecting and using indicators, conducting impact assessments and using modern technology to manage information.
- 42. Particular attention should be paid to promoting coordination and cooperation between various sectors in Government in order to enhance countries' capacity to support national and local efforts for implementing sustainable development strategies.
- 43. National multi-stakeholder consultations should not be a token process of getting "precooked" Government plans and programmes rubber-stamped by the public. Rather, they should become for for genuine participation and dialogue.
- 44. Realizing that returns on environmental investments far exceed the return on other investments, the Round Table emphasized the need to secure sustainable funding for sustainable development efforts in the region. This might entail the establishment of a regional mechanism to fund the environmental aspects of socio-economic development activities.
- 45. Regional organizations should be responsible for following up international environmental conventions signed or ratified by countries of the region.

2. Global initiatives

46. The Round Table felt that, nearly ten years after UNCED 1992, countries needed more assistance and better focus from United Nations organizations working in the region. This should entail better coordination

to help the countries of the region as a whole to develop, implement, follow up, monitor, evaluate, readjust and report on their sustainable development strategies and action plans.

- 47. Today's environmental geopolitics are characterized by serious "new-world disarray" in which strong leadership by developed countries is lacking and most countries have mixed records and agendas. The countries of the Western Asia region are convinced that the world cannot effectively achieve sustainable development without the full involvement of the developing countries. Further effort is needed to bridge North-South differences that often hamper environmental negotiations.
- 48. The Round Table called on the international community to stand by its UNCED commitments and shoulder its moral responsibilities by increasing assistance for capacity-building, transfer of environmentally sound technologies (ESTs), and provision of financial support to countries needing to develop and pursue sustainable development.
- 49. The Round Table also noted that the transfer of ESTs to the region falls far short of what is needed to bring about sustainable development and called on the industrialized countries to take the necessary steps to facilitate access to and transfer of ESTs to the countries of the region on concessionary terms in line with Agenda 21. It called on the United Nations to play a more active role in improving developing countries' access to ESTs.
- 50. Achieving sustainable development will require the donor community to give top priority to helping countries of the region further to enhance the integration of social, economic and environmental policies. Efforts should be made to ensure the provision of basic social services to the least developed countries, especially in rural areas, improve education and health services, and empower women as resource managers at the community level.
- 51. Countries of the region are concerned by the potential impact of global warming on the livelihoods of millions of people living in low-lying coastal areas. Higher temperatures and rising sea levels are a serious threat to millions of residents of small islands (Bahrain), small Gulf States, Palestine and Northern Egypt. The Round Table called on developed countries to accept and shoulder their share of responsibility by reducing emissions.
- 52. The Round Table noted that foreign financial assistance for countries in need in the region, as recommended in Agenda 21, has not been forthcoming in sufficient amounts, reminded the industrialized countries of their pledge to allocate 0.7 per cent of gross national product (GNP) to assisting developing countries and urged them to honour their commitments.
- 53. The Round Table stressed the growing need for the establishment of an enabling global economic environment to give poor countries of the region access to investment capital, advanced ESTs, debt relief and easier access to international markets.
- 54. Countries of the region emphasized the importance of enhancing cooperation with United Nations bodies responsible for sustainable development in order to obtain further support. In this connection, they called on the international community for more resources to support regional United Nations organizations and contribute more generously to environmental funds allocated to developing countries in the region.
- 55. Achieving sustainable development requires an equitable global partnership truly responsive to the needs of countries of the region that ensures them their fair share of the benefits of globalization.
- 56. Seeing decisions through is not a major problem when citizens recognize institutions as their own and as acting in their interests, but when global environmental issues are addressed, particularly carbon emissions, people in the region feel they are being dictated to by foreign Governments and tend to be obstructive or, at best, passive. Developed countries are therefore asked to play an exemplary, disinterested role in persuading the public in countries of the region to accept their share of responsibility for these problems.

- 57. The Round Table emphasized the need to strengthen global, interregional, regional and subregional cooperation to promote environmentally sound technology transfer, information networking and adopting measures to counter potentially negative impacts of globalization.
- 58. Given the high share of oil revenue in the gross domestic product (GDP) of oil-exporting countries in the region, the negative socio-economic implications of the implementation of Kyoto Green House Gases (GHG) reduction strategies are far-reaching and will affect all countries of the region. The region's oil-exporting countries are counting on the international community to compensate them for the potential socio-economic devastation and appeal for more time and technical assistance to diversify and restructure their economies.
- 59. The Round Table called for the support of developed countries in building the intellectual, institutional and technical capacities of the poorer countries of the region to enable them to improve land use and adopt sustainable agricultural practices.

V. SUMMARY OF PRESENTATIONS AND DISCUSSIONS AT THE PLENARY SESSION

60. The presentations delivered for each theme on the first day of the Thematic Round Table are summarized as follows: (i) current situation at the regional level; (ii) achievements made since UNCED 1992; (iii) obstacles and constraints hindering the implementation of Agenda 21; and (iv) proposals and initiatives for promoting and expediting implementation of Agenda 21.

A. SOCIO-ECONOMIC ASPECTS OF SUSTAINABLE DEVELOPMENT IN THE WESTERN ASIA REGION

- 61. Economic growth and development in the Western Asia region are cyclically tied to oil revenue. In general, oil revenue surpluses in the Gulf Cooperation Council (GCC) countries have led to substantial investment in infrastructure and human resources. The heavy dependence of the regional economy on oil has led to a serious lack of diversification.
- 62. Expenditure in most countries of the region has increased at relatively higher rates than revenue to meet the growing demands of an expanding public administration, rising inflationary pressures and the resulting increases in the wages of public servants, in addition to massive increases in defence spending. Deficits are financed by drawing on foreign reserves and issuing domestic debt instruments. As a result, structural imbalances have appeared and debt has risen substantially for many countries, forcing them to undertake major economic reform programmes.
- 63. The region is vulnerable to the impact of international phenomena such as globalization and the rapid proliferation of information and communication technologies. Generally, the region is suffering from imposed macroeconomic structural adjustment, reform policies and privatization programmes, many of them socially insensitive.
- 64. Gender issues and equity are becoming an increasingly important part of the political agenda in the region. Overall rates of literacy have increased in some countries over the last two decades. Female literacy has also shown a steady increase in most countries, but has remained lower than among males.
- 65. There is now a general consensus that economic development cannot be divorced from the social and environmental or political and cultural dimensions of development.
- 66. In order to meet the challenges of globalization, the skill base needs to be improved through educational reform. Behaviour and attitudes will have to change when there is less dependence on a single sector (oil) or employer (public sector).
- 67. Countries need to grapple with the acute social problems resulting from inequitable income distribution leading to high rates of unemployment, weakening or disappearance of the middle class and degrading poverty in rural and remote areas and slums.

- 68. Countries need to combat the imbalance in rural and remote areas in the provision of basic social services, including education, health and housing, which is causing a deterioration in the quality of those services, as well as illiteracy, poor health, urbanization and migration, especially by refugees and displaced persons.
- 69. Threats to community cohesion and family structure and values, and limited advancement in the status of women and more limited participation in the development process, also need to be vigorously addressed.
- 70. In some countries, many people live in extreme poverty, the majority of them in rural areas. Women and children suffer disproportionately from the effects of extreme poverty and often bear the brunt of economic downturns and environmental degradation.
- 71. There is a need to formulate gender-sensitive socio-economic policies that address such issues as poverty, unemployment, the empowerment of women, access for the disabled, and literacy.
- 72. There is a need to capitalize on the limited available opportunities to meet these challenges. This involves furthering sustainable human development within an enabling environment that advocates transparent, accountable governance, brings about genuine democracy, safeguards human rights, and integrates social and environmental dimensions into economic development.

B. ENVIRONMENTAL MANAGEMENT AND GOVERNANCE FOR SUSTAINABLE DEVELOPMENT

- 73. Environmental institutions in the Western Asia region are either not central in Government decision-making structures or have limited influence over sectoral ministries.
- 74. If UNCED has had an impact in the region, it has been most pronounced in greater priority being given to environmental issues. Environmental legislation has been revised and environmental administration units strengthened. It can therefore be said without too much exaggeration that the state of the environment has improved to some extent in most of the region, mainly as a result of limiting some clear sources of pollution.
- 75. The level of public awareness has increased dramatically, and significantly more NGOs are addressing environmental issues throughout the region.
- 76. Most countries have developed cross-sectoral NSSDs in the form of NESs and NEAPs, but the level of implementation is disappointing.
- 77. Although these NSSDs have frequently been effective in highlighting important environmental issues, they have sometimes been less successful in identifying priorities and policy instruments for action and generally failed to bring about changes in policy.
- 78. Cultural, political and socio-economic aspects are not adequately reflected in NSSDs. Criteria for selecting policy options for strategy implementation is often ill-defined, usually lacking information on cost-effectiveness and technical feasibility. Social, political, and cultural acceptability is often overlooked.
- 79. Sustainable development policy instruments, such as command and control, participation, and awareness are used individually, without synergy or linkages to maximize combined impact.
- 80. Most NSSDs in the region have failed to identify the optimum institutional and administrative rearrangement needed effectively to coordinate and implement action plans. In most cases, NSSDs are incompatible with the strategies of other sectors.
- 81. Use of economic instruments for sustainable development is severely handicapped by inadequate and/or unreliable environmental monitoring systems, lack of environmental health records, inadequate ecological and health risk assessment and lack of environmental accounting or monetary evaluation of the health and ecological impacts of development.

- 82. Poor decentralization is a major obstacle to financing the implementation of local Agenda 21 in most countries.
- 83. The prevailing culture, traditions and political norms in some countries mean that the decision-making hierarchy still finds it difficult to tolerate a participatory, bottom-up approach, or accept any public pressure.
- 84. Some authorities still regard publishing environmental information as a sensitive issue that might lead to public confusion or panic, tarnish the country's image and impair tourism and development.
- 85. The failure to bring about equitable, comprehensive peace in the region is hindering the integrated management of shared water resources and obstructing eco-zone management. Downstream countries' fear that upstream riparian countries might charge for the water flowing to them is obstructing the fee mechanism in water pricing.
- 86. Speakers stressed the need to institutionalize new policies for environmental management, sustainable development governance and other related areas, both within and between Governments. In order to achieve sustainable development, their recommendations included:
 - (a) Raising public environmental awareness;
 - (b) Establishing partnerships with all stakeholders;
 - (c) Promoting public and major group participation;
 - (d) Encouraging sustainable production;
 - (e) Advocating sustainable consumption;
 - (f) Integrating sustainable development policies into Government programmes;
 - (g) Fostering cleaner production mechanisms;
 - (h) Authorizing public disclosure of information and acknowledging the public right to know;
 - (i) Using environmental accounting, economic tools and market instruments;
 - (j) Reconciling socio-economic development and environmental protection.
- 87. In order to implement an approach for sustainable development governance that would integrate economic, environmental, and social priorities at institutional level, speakers proposed the establishment of an independent environmental authority supported by a higher council for environment (HCE) at ministerial level headed by the Prime Minister (PM) as a better way of bringing ministries and offices together to reconcile different sectoral approaches.
- 88. Traditional development plans should gradually become sustainable development strategies and plans.
- 89. Command and control alone cannot ensure the implementation of sustainable development goals. Market-based instruments and other policy and social initiatives are also needed.

C. WATER RESOURCE MANAGEMENT IN THE WESTERN ASIA REGION

- 90. Misconceptions about food security and using agriculture to distribute oil wealth in some GCC countries have led to the promotion of heavily subsidized large-scale agriculture plans for greening the desert using scarce, finite water resources.
- 91. Increased demand on scarce water resources is mainly due to rapid population increase. More than 80 per cent of the fresh water resources available to the region are diverted to agriculture.
- 92. Speakers attributed the problems of water resource management in the region to several factors, including:
 - (a) National policies in the region are driven by a desire for food security;
- (b) Absence of equitable peace, mutual mistrust and prevailing scepticism among riparian countries sharing the same water resources;
 - (c) Escalating sectoral competition for a dwindling water supply;

- (d) Predominance of wasteful irrigation practices;
- (e) Inadequate compliance, inspection and enforcement capacities;
- (f) Insufficient public involvement and awareness;
- (g) Fragmentation, weakness and overlap of water resource management authorities;
- (h) Lack of the inspection and monitoring capacities needed for the application of economic instruments.
- 93. The speakers attributed deteriorating water quality in the region to two major factors: over-exploitation and the discharge of domestic, agricultural and industrial effluent beyond the assimilative capacity of aquatic systems. Water-borne diseases and epidemics have been proven to be a major threat to public health in most countries.
- 94. Although some countries experienced some economic growth during the 1990s, they were unable to obtain any significant increase in water supply or sanitation service coverage. Their ability to allocate either domestic or foreign funds was seriously undermined by high levels of foreign debt.
- 95. The predominance of the supply side management approach, combined with weak, fragmented institutional structures, still prevails, as water-related services are usually extended to promote public health and food production.
- 96. Since UNCED 1992, the countries of the region have made a considerable effort to raise awareness of the lack of water resource management and demonstrate to the public the need for demand control.
- 97. During the last few years, recognition of the need to entrust water resource management to the lowest appropriate levels and to promote public/private partnership as an effective means of making more efficient and ecologically aware use of scarce water resources has gradually been increasing. Major groups, such as farmers, NGOs, academia, women, and youth, are increasingly becoming essential actors in water resource management at the national and, particularly, local levels.
- 98. Of necessity, most countries have started to invest in more efficient irrigation technologies. Success stories in increased average yields, higher productivity and wastewater reuse have been reported from several countries.
- 99. Important progress has been made in water resource data generation, compilation, retrieval and dissemination, adopting modern field measuring systems, information and communication technologies. Technologies such as Geographic Information Systems (GIS), monitoring by remote sensing and computerized databases of water resources still need to be made far more widely available.
- 100. Financial commitments to water supply and sanitation at the national and local levels have remained partially unfulfilled. Even with the overall rise in public funding for the sector, the disparity between the level of investment needed to achieve full water and sanitation coverage and the level of investment actually made is still sizeable.
- 101. Legislation for water resource protection and management has been enacted in most countries, but there is still a lack of political will and inadequate capacity to enforce it.
- 102. Given the cross-cutting, multidisciplinary nature of water resource issues, many regional and international organizations are addressing them from various angles. In order to avoid duplication, speakers called on the international organizations involved in the water sector further to coordinate priorities and work.
- 103. Given the fact that over 80 per cent of the water resources available to the region originate outside its political boundaries, speakers called on international and regional organizations to extend interregional cooperation with up-stream riparian States for more efficient and equitable management of shared water

resources; river basin, eco-zone and watershed management; and implementation of integrated water resource management strategies.

- 104. Speakers called on the countries of the region to strengthen regional and international cooperation in the fields of institutional and human capacity-building, research, information sharing and technology transfer.
- 105. Despite the promotion of a strategic integrated approach to water resource management by the United Nations, regional and subregional organizations, more effort needs to be made to draw up and implement integrated national water policies and programmes.
- 106. Speakers called on countries of the region to ask relevant United Nations organizations to provide further technical assistance in capacity-building, development of integrated water management policies and strengthening water resource institutions.

D. ENERGY

- 107. The energy sector in the Western Asia region is characterized by unsustainable energy consumption patterns with a high-energy intensity equivalent to 1.7 times the world average and a wide range of per capita energy consumption of from 200 to 12,740 kilograms of oil equivalent/capita/year (kg.o.e/capita/yr).
- 108. The increase in the use of electricity has surpassed GDP growth by a large margin, demonstrating the fundamental importance of electricity for economic development.
- 109. The region has an installed electricity generating capacity of over 72 Giga Watt (GW), but more than 40 per cent of the population has no access to electricity. Regional interconnections of electricity grids have recently expanded considerably.
- 110. Since UNCED 1992, collective action by Governments of the region, international organizations and NGOs has resulted in a significant increase in public awareness of inequity in energy distribution and use, energy-linked environmental problems and unsustainable consumption patterns.
- 111. Increased public awareness has led to a slight improvement in the efficiency of energy use in industry, power generation, lighting, household appliances and transportation. New policy measures, upgraded technologies and improved management have all contributed to this.
- 112. The Governments of several countries have introduced national policies and economic incentives for the promotion of renewable sources of energy, with varying degrees of success. This has also entailed national support programmes and the development of the necessary institutional capabilities.
- 113. Despite the blessing of an extensive resource base for renewable energy in the region, growth is slow and its aggregate contribution to total energy yield remains minimal and insignificant. Renewable energy, including hydropower generation, accounts for only three per cent of power production in the region.
- 114. Many countries have switched to natural gas-fired combined cycles featuring low cost, high efficiency and reduced environmental impacts whenever natural gas is readily available. In 1998, natural gas contributed some 41.1 per cent of total energy consumption in the region as compared to only 20 per cent in 1975.
- 115. The slow pace of policy and institutional reforms needed to create an enabling environment for public sector investment in energy has been a major barrier to investment.
- 116. Financial and technological cooperation between industrialized and developing countries of the region in the field of energy has not improved significantly or increased since UNCED.

117. Mobilization of large investment from domestic and foreign sources to meet current demand and the anticipated growth of the energy sectors in the region are a real challenge. In this connection, speakers called on countries to establish better financial cooperation with industrialized countries and seek further assistance from international organizations to develop appropriate institutional tools to promote large-scale FDI.

E. LAND DEGRADATION

- 118. The degradation of land resources in the Western Asia region continues to be one of the most serious environmental issues. Chronic water scarcity, high population growth, intensive farming and poverty are all putting great pressure on the highly fragile ecosystem.
- 119. Rangeland accounts for a considerable percentage of total area, but plant cover is characterized by poor productivity and lack of biodiversity. Overgrazing, persistent drought, the uprooting of woody species for cooking and heating by the poor, tillage and mismanagement of scarce water resources are the main reasons for the degradation of rangeland.
- 120. Salt damage to irrigated land is extensive and a chronic problem. Irrational use of irrigation water and poor management have led to salinization, water-logging, alkalization and nutrient depletion in large areas.
- 121. Rapid population growth and demographic redistribution have led to the loss of fertile arable lands to urbanization, industrial development and non-agricultural activities.
- 122. The persistent geopolitical instability in and around the countries of the region has led Governments to adopt strict national policies for food security. Fulfilment of these policies has necessitated the application of large-scale agricultural protectionism, subsidized pricing for agricultural inputs and products and the imposition of trade barriers. Heavily subsidized agrochemicals, along with free or cheap irrigation water, have severely affected water and land resources and contributed to unsustainable patterns of agricultural production.
- 123. Desertification as the last phase of land degradation is common, particularly in countries where the agricultural sector makes a significant contribution to the national economy. This phenomenon is affecting the most vulnerable, most disadvantaged groups.
- 124. Many countries have drawn up and implemented national and regional action programmes to combat desertification. Most countries have signed the Convention to Combat Desertification. The region is in the process of drawing up an action plan on the basis of the regional strategy.
- 125. Most countries have developed and enacted water and land use legislation with varying, but generally modest, degrees of success due to poor implementation and enforcement.
- 126. Since UNCED 1992, countries have acquired greater knowledge and understanding of their land resources and agricultural practices, and their linkages with the environment. This advance is directly attributable to the steadily decreasing costs of rapidly evolving modern information technologies and decision-making tools.
- 127. Most countries have introduced and progressively used GIS for combining land resource use and socio-economic information, which is proving very valuable for sustainable development decision-making. However, more effort needs to be made to improve networking and regular updating of information at the local, national and, it is to be hoped, regional levels. Despite the progress that has been made, the loss of land resources and increasing severity and extent of land resource degradation continue.
- 128. Countries have to varying degrees pursued market liberalization and deregulation policies. In many cases, uneven success in economic and agricultural reform has compelled Governments to reintroduce or reinforce intervention.

- 129. Some countries have adopted improved production technologies, which have resulted in higher food (mostly cereal) production. However, it was also noted that the technologies needed if small-scale farmers are to escape from poverty are not reaching the most needy.
- 130. Countries have not, unfortunately, adjusted their agricultural and land management policies to take advantage of opportunities created by the widespread development of competitive global markets.
- 131. As trade barriers have been lowered and environmental standards enforced, many agricultural producers in the region are now facing increasing competition while trying to cope with declining support services and loss of subsidies owing to structural adjustment and imposed economic reform policies.
- 132. The countries of the region need to sharpen their understanding of the mechanisms and factors affecting desertification and drought.
- 133. Countries should allocate more resources to, and initiate innovative solutions in support of, land users in rural communities to deal with new global changes and overcome the constraints faced by the poor, marginalized and disadvantaged, in particular women, indigenous peoples and small farmers.
- 134. Countries should allocate additional resources to the full implementation and enforcement of the international conventions and Multi-Lateral International Environmental Agreements (MEA) to which they are parties, and national regulatory instruments addressing land use management, biodiversity, sustainable agriculture and rural development.
- 135. At the inter-ministerial level, countries should harmonize and reconcile policies, strategies and programmes for: (i) land use; (ii) integrated ecosystem management; (iii) sustainable agriculture and rural development plans; and (iv) integrated resource management.

F. COASTAL AND MARINE ENVIRONMENT

- 136. The coastal and marine environment is the major life-sustaining environment in the Western Asia region. For large coastal communities in the GCC subregion, it is the main source of drinking water through thermal desalination, the sole source of industrial cooling water and the only route for trade, oil and gas exploration, exploitation and export, and the import of goods. The coastal environment is also one of the main sources of high quality protein, a recreation area for the poor, and has potential for marine parks, the development of eco-tourism, and urban expansion.
- 137. Dredging and land reclamation projects along the shores of many countries have resulted in significant destruction of marine habitats, the death of coral reefs, coastal depositions and erosion, and loss of nursing grounds and productive areas.
- 138. Rapid urbanization and encroachment by human settlements and the development of tourism in prime coastal areas have resulted in significant physical alteration of coastlines.
- 139. Pollution from land-based sources has been recognized as a major threat to the marine environment in the region. Continuous discharge of partially treated industrial and municipal wastewater is putting major pressure on the health of the marine ecosystem.
- 140. The GCC subregion is characterized by intensive oil and gas exploitation, processing, reformulation and shipping. When combined with massive brine and cooling water discharges from power-desalination installations, the (Arabian) Persian Gulf is likely to become one of the most polluted seas on Earth.
- 141. Over the past decade, there has been significant progress in promoting the integrated approach to coastal zone management in most countries. Furthermore, most countries now appreciate the need for EIA studies and have developed policies and regulations governing implementation of those policies, for approving coastal and near-shore marine projects.

- 142. There has been progress in protecting living marine resources and developing and managing sustainable fisheries. Policy measures have been taken in most countries to reduce over-fishing, including restrictions on fishing seasons, banning the sale of certain species, regulating fishing gear, restricting fishing areas, and so on. However, the policies are severely hampered by inadequate awareness, ineffectual enforcement capacity and poor institutional arrangements.
- 143. All countries of the region are taking part in major action plans organized in three subregional conglomerations, namely, the Mediterranean, Kuwait and Red Sea and Gulf of Aden Action Plans. The purpose of the action plans is the conservation of the marine environment and coastal areas and sustainable development of coastal zones.
- 144. The region is constantly plagued by wars and aggressions of varying magnitude. These conflicts are inflicting serious damage on the marine and coastal environment, particularly in the form of massive oil spills and the disposal of large amounts of debris.
- 145. Countries should promote interregional cooperation for the protection of the marine environment.

G. TRADE AND ENVIRONMENT

- 146. Countries of the Western Asia region have well-founded fears of developed countries using environmental trade measures and regulations as a means of discriminating against their exports. Their main concern is that stringent trade measures imposed by developed countries might not foster the economic or environmental improvement of the region.
- 147. Small and medium enterprises in the region are not in a position to cope with the implications of trade liberalization.
- 148. Countries should raise decision-makers' awareness of the interrelated issues of trade and the environment and build the capacity of staff at all levels in all relevant public and private institutions.
- 149. Countries should institute dialogue between ministries of trade, environment, agriculture and industry. Relevant regional and international organizations working in the region are expected to play a major role in promoting this dialogue.
- 150. Countries that are World Trade Organization (WTO) members should be more active in meetings of the Committee on Trade and the Environment (CTE). They should be more involved in CTE and other multilateral trade and environment discussions in order to relay their viewpoints and protect the interests of their exporters.
- 151. Where necessary, the international community should provide technical and capacity-building assistance to improve the environmental aspects of production, in order to meet unilateral measures against products that pose risks to human, animal or plant life and health.
- 152. Countries should initiate eco-labelling schemes at the regional level to facilitate the attainment of eco-labels that enable products to penetrate markets in the industrialized countries.

VI. MATRIX OF ACHIEVEMENTS, CONSTRAINTS AND INITIATIVES RELATING TO THE DIFFERENT CHAPTERS OF AGENDA 21 IN THE WESTERN ASIA REGION SINCE 1992

Sectors	Achievements	Constraints	Initiatives and proposals
Socio-economic	 Economic restructuring has improved. 	 Privatization has partially achieved its goals. 	☐ Integrating social and environmental dimensions into economic
	 □ Privatization has improved. □ Number of civil society groups has increased. □ Inequality declining. □ Inflation rates lowered. □ Increase in revenues. □ Increase in secondary industries. 	 Poverty remains a significant problem in some areas and is leading to the spread of slums. Social and environmental costs are not reflected in national accounts. The quality of social services is questionable. Vulnerability of the economy to external market shocks and raw 	 development. Addressing social and economic inequity at national and international levels. Providing an environment conducive to small and medium enterprises (SMEs). Harmonization of customs and tariffs.
	 □ Increased education and literacy, especially for women. □ Life expectancy improved. □ Care for handicapped increased. □ Infant mortality rates reduced. □ Access to safe drinking water, health care, and sanitation dramatically improved. 	material (including oil) market fluctuations. Increase in unemployment, especially among women and the younger generations. Women and children remain the most vulnerable in the region. Social and economic conditions in the region have not benefited from globalization.	 □ Acceleration of the process of economic integration and establishing free trade zones at the Arab regional level. □ Restructuring and diversifying economies so as to minimize external market shocks. □ Improving favourable investment climate. □ Lifting customs protection. □ Adopting more effective population policies. □ Improving living conditions in rural areas □ Improving the quality of social

Sectors	Achievements	Constraints	services, especially in rural areas. Broadening education and literacy, and making it more effective by using more creative approaches that promote sustainable development. Addressing poverty as a cause and effect of environmental degradation. Initiatives and proposals
Trade and Environment	 □ Greater awareness of the WTO, and greater participation by countries of the region. □ Increased awareness of the implications and opportunities of trade liberalization. □ Adopting institutional arrangements to address trade and environment issues. □ Greater awareness of the relationship between trade and environment. 	 □ Concern over the use of the environment as a trade barrier. □ Difficulties in meeting environmental requirements/criteria relevant to international trade. □ Inadequacy/disparity in standards affecting exports and imports. □ Lack of appropriate human resource capacity. □ Deficiency in institutional structures to cope with globalization. □ Small and medium enterprises are not in a position to cope with the implication of trade liberalization. □ Difficulties in monitoring environmental dumping of goods. □ Trade liberalization could put pressure on the resource base. □ Trade barriers and poverty are interlinked. 	Greater involvement in WTO discussions with a view to ensuring the harmonization of trade and environment. Enhancing the process of adapting national production processes to meet market requirements. Upgrading and harmonizing environmental standards to avoid potential environmental dumping. Taking measures against the importation of dirty industries. Strengthening regional integration and cooperation. Enhancing capacity to implement relevant international conventions including biosafety. Enhancing business and public sector capacity to deal with the pressures of globalization. Promoting environmental accounting and the enhancement of national environmental regulations.

			 □ Accelerating the process of trade liberalization to foster greater access by countries of the region to world markets, as well as to alleviate poverty. □ Avoiding the use of the environment as a trade barrier.
Sectors	Achievements	Constraints	Initiatives and proposals
Land 1. Agriculture	 □ Cultivated area increasing. □ Productivity improving. □ Food production increasing. □ Water-use efficiency/land productivity improving. □ Water-use efficiency/food production improving. □ Cropping patterns improving. □ Agricultural policies improving. □ Institutional structure improving. □ Use of modern and efficient technologies increasing. □ Preparation of national land master plans using remote sensing and GIS increasing. □ National strategies for agricultural development improving. □ Awareness of sustainable use of 	 Per capita share of land decreasing. Per capita share of food decreasing (more food imports). Self-sufficiency (food) decreasing for main commodities. Low rate of improvement in wateruse efficiency (land). Low rate of improvement in wateruse efficiency (food). Decrease of land per capita. Increase of land deterioration and cultivation of marginal lands. Decrease of water supply and deterioration of water quality. Agricultural policies are improving, but at a slower rate than demand is increasing. Limited finances, including those available to acquire more efficient 	 □ Adopting realistic policies matching water availability. □ Setting reasonable targets for levels of food self-sufficiency. □ Improving water-use efficiency (techniques and genetic resources). □ Selecting appropriate crop mixes and agronomic packages. □ Strengthening research for the development of agricultural packages for desert environments. □ Developing drought- and saltresistant crops using biotechnologies. □ Improving agricultural extension services at farm level. □ Acquiring proven new technologies and genetic resources. □ Coordinating the efforts of national institutions and the participation of

agricultural	lands improving.	technologies.	stakeholders in the planning and
		Poor agricultural extension services.	execution of future developments.
		Institutional structure is improving but at a slow rate, and coordination	Decreasing post-harvest losses (in the field, storage and handling).
		among institutions and with stakeholders is poor.	Addressing food demand as well as production.
		Use of technologies is increasing but at a slow rate.	Accounting in view of alternative opportunities for land, water and food
		Dependence on outside aid (food supply and technology transfer).	commodities.

Sectors	Achievements	Constraints	Initiatives and proposals
2. Rangelands	 □ Overgrazing is decreasing in limited protected areas. □ Land productivity improving in protected rangelands. □ Policies and interventions improving. □ Involvement of stakeholders improving. □ Awareness improving. 	 □ Unclear vision of the future. □ National strategies and awareness are developing, but lack clear vision and well defined objectives and programmes for sustainable land and water use at the national and regional levels. □ Policies and development programmes adopted have led to: Increasing overgrazing; Decreasing land productivity in most areas. □ Increasingly high rate of loss of biodiversity. □ Lack of proper integration and coordination among institutions, poor involvement by stakeholders and lack of effective integrated programmes. 	 □ Monitoring land resources using modern technologies, such as remote sensing and GIS. □ Sustainable management of marginal land resources. □ regional integration of land resource management policies, including food security.
Water	 □ Limited increase in total resources Demand by sector □ Agriculture: decreased by unit area. □ Municipal: improving networks. □ Industrial: increasing recycling. □ Water policies and interventions. □ Policies to decrease mining of nonrenewable fossil water. □ Preparation of fresh water national master plans. 	 □ Unresolved problems of shared water resources (surface and groundwater) lead to conflicts. □ Per capita shares decreasing, hampering development. □ Total demand increasing. □ Per capita consumption increasing. □ Aridity and erratic rainfall pattern. □ Water stress index increasing to critical levels. 	 ☐ Sustainable management of shared water resources. ☐ Adoption of river basin management approaches. ☐ Encouraging desalination as an alternative source of water and acquiring desalination technology. ☐ Management of demand including taking measures to do so. ☐ Making use of biotechnologies to improve land productivity and water-

	☐ Developed agricultural policies.		use efficiency.
Sectors	Achievements	Constraints	Initiatives and proposals
	Interventions □ Water use restriction. □ Water pricing in some countries. □ Reduction/removal of subsidies to agricultural inputs. Institutional □ More coordination between institutions and with stakeholders. □ Institutional: integration of efforts. □ Information: improving. □ Accounting: improving. □ Awareness: improving. □ Monitoring and management of water resources and demand progressing.	Ouality deteriorating due to: □ Pollution with health hazards (waterborne diseases). □ Depletion of water resources and conflicts. □ Lack of comprehensive water policies to manage water resources. □ Inappropriate agricultural policies (unsustainable self-sufficiency) set targets for food production. □ Insufficient or inadequate water policies, including water valuation policies. □ Fragmentation of water authorities, and poor implementation of water management policies. □ Intersectoral use conflicts. □ Fast pace of urbanization and rural to urban migration. □ Insufficient reliable hydrographic data. □ Lack of funds.	 □ Introduction of other crop mixes appropriate to the desert environment. □ Introduction of agricultural systems with high water-use efficiencies. □ Recycling waste to reduce/eliminate sources of pollution. □ Recycling industrial wastewater and agricultural drainage water. □ Effective coordination among institutions and stakeholders.
Marine and coasta zones	Bio-treatment of solid and liquid wastes improved. Greater awareness and some improvement in mitigating pollution from land-based resources, and	 Encroachment on coastal areas, dredging and land reclamation increasing. Urban expansion in coastal areas without land-use plans. 	☐ Increasing awareness. ☐ Adopting integrated coastal area management (ICAM) for the sustainable development of the coastal and marine environment.

	reduction in dumping of solid and liquid waste. ☐ Increase in number of reception facilities for oily ballast water and other waste.	 □ Inadequate awareness of marine and coastal habitats, and their ecosystems. □ Inadequate legislation on sustainable coastal and marine habitats and resources. 	 Developing fisheries and aquaculture management plans at the national and regional level.
Sectors	Achievements Adoption of integrated coastal management and development of regional guidelines are improving. Fish stocks are decreasing. Policies improving. Reduction of over-fishing. Aquaculture improving. Capacity-building improving. Endorsement and implementation of the polluter pays principle. Contingency plans to combat oil pollution prepared in several countries. Policies adopted for sustainable management of living marine resources, coastal and marine habitats and ecosystems.	Constraints Over-exploitation of some valuable marine species. Fishing and landing have increased but yield has decreased. Lack of legislation on the management of transboundary and straddling stocks and enforcement. Absence of a regional fisheries commission in the Red Sea and the Gulf of Aden. Inadequate financial support to sustainable management of coastal and marine ecosystems. Inadequate measures to combat land-based and sea-based pollution. Destruction of sensitive shore	Initiatives and proposals ☐ Developing national and regional mechanisms for sustainable management of living marine resources. ☐ Supporting financial and technical stock assessment studies. ☐ Expanding marine and coastal surveillance, monitoring and assessment of resources. ☐ Developing waste treatment capabilities. ☐ Managing tourism on a sustainable basis to prevent adverse effects on coastal and marine resources and ecosystems. ☐ Rehabilitation of damaged habitats.
	 Coral reef management action plan formulated. Information and statistical data on fisheries improved in some countries of the region. Policies and action plans for reducing navigational risks developed, and monitoring, control and surveillance 	 habitats including turtle nesting grounds. Inadequate quality control of fisheries production. Pressures on resources are increasing due to increased tourism and competition for resource utilization. Introduction of invasive organisms 	 Research and development for sustainable development of coastal and marine areas and resources. Implementing a global action plan (GAP) at the regional level with a view to eliminating sewage releases in the coastal and marine environment and controlling other sources of land-based pollution.

systems initiated. □ Joint action plans (ROPME, PERGSA and MAP).	associated with shipping and the dumping of ballast water.	 Strengthening regional contingency planning and minimizing navigational risks.
 □ Control of over-fishing improved. □ Protocols on protection of biodiversity and establishment of protected areas initiated. 		 Strengthening the implementation of the provisions of the Convention on the Law of the Sea (UNCLOS). Strengthening cooperation and integration between institutions and with stakeholders.

Sectors	Achievements	Constraints	Initiatives and proposals
Governance	 □ Cross-sectoral national environmental strategies and action plans (national and local Agenda 21) developed. □ Participative (bottom up) approach adopted in developing these strategies. □ Larger number of Government councils for sustainable development established with greater public stakeholder and NGO representation. □ Initiation of new markets through privatization and decentralization. □ Better regulatory action to strengthen national policy framework. □ Significant improvement in the implementation of user fees policies. □ Few countries are using physical measures and economic incentives as well as conventional environmental management tools to change sustainable production and consumption patterns. 	 □ Political and social factors hindering subsidy reduction. □ Inadequate reliable, credible environmental monitoring systems are hindering the application of environmental taxation and implementation of performance bonds and fund-refund systems. □ Inadequate regional cooperation and coordination is hindering the full implementation of fee policies. □ Lack of comprehensive peace and security is hindering the integrated management of shared resources and obstructing eco-zone and river basin management. □ Inadequate decentralization is posing major obstacles to implementing local initiatives and local Agenda 21. □ Inadequate property rights. □ Heavy reliance on command and control approach. □ Strong drive for economic development is weakening the political commitment to sustainable development. □ Inadequate disclosure of information is hindering the commitment of the public. 	 □ Elaborating on regulations to correct the imbalance between private and public sectors in environmental liability. □ Identifying the optimum institutional and administrative rearrangements needed to coordinate effectively and implement sustainable development action plans. □ Developing frameworks and systems that allow for the system to follow up, monitor, evaluate and document Government practices to make sure they are consistent with the NSSD and NEAP. □ Civil society, including scientific communities, advisory institutions, NGOs, non-profit grassroots organizations to be supported, consulted and involved in framing and monitoring sustainable development policies. □ Calling on developed countries to play an exemplary (leading), disinterested role in persuading the public in the region to take their fair share of responsibility. □ International donors should live up to the expectations raised by the global partnership struck at Rio.

Sectors	Achievements	Constraints	Initiatives and proposals
SCCIOIS	Achievements	Widespread unemployment, poverty and poor infrastructure in some countries of the region mean sustainable development is being sidelined and given lower priority as social and political pressures for accelerated economic development have overwhelmed Government.	mitiatives and proposais
		 Lack of coordination and cooperation between various sectors in Governments. 	
		 Most Western Asia countries lack the resources needed to implement NSSDs and NEAPs. 	
		☐ A fragmented and inconsistent donor-driven approach to support national/local sustainable development strategy without a sense of national-local ownership.	
		☐ Success in integrating the social, economic and environmental dimensions of sustainable development is as yet inadequate.	
		 Cultural, political and socio- economic aspects are not fully reflected in NSSDs and NEAPs. 	
		 Policy instruments are used individually, without synergy or 	

	coordination.	
	☐ Lack of global leadership.	

Sectors	Achievements	Constraints	Initiatives and proposals
Energy	□ Limited improvement in increasing energy accessibility, particularly for rural areas. □ Relative decline in the average rate of consumption increase. □ Remarkable increased contribution of natural gas to the total energy mix, particularly in the electricity sector. □ Plans and efforts to introduce cleaner fuel to the transport sector (natural gas). □ Several programmes for upgrading energy efficiency, particularly in the power and industrial sectors. □ Reasonable but insufficient improvement in energy production and use efficiency as well as starting private ESCO's. □ Renewable energy technologies demonstrated and starting to reach field application, particularly for wind and solar electricity generation. □ Strategies and demonstrations for renewable energy development, particularly hydro, solar, wind and biomass. □ Improvement in the institutional structure, greater expertise, but limited awareness, in the areas of energy efficiency and renewable energy. □ Remarkable progress in cross-border integration through active planning,	 □ Policies for sustainable energy not yet sufficiently integrated with overall and sectoral energy planning. □ Institutional objectives not yet appropriate or directed towards sustainable energy. □ Limited financial resources. □ Limited level of awareness, industrial capabilities and extension services for renewable energy and energy efficiency programmes. □ Limited regional cooperation and coordination. □ Apparent conflict of interest for the oil and gas community with respect to sustainable development measures. □ Absence of partnership among planners, implementers and the community, particularly in rural areas. □ Heavy dependence on foreign finance and technologies and donor agencies. 	 Ensuring accessibility and security of energy supplies, particularly for rural areas. Integrating sustainable energy policies into the overall energy planning processes. Integrating energy considerations into socio-economic programmes, especially in policy-making of major energy-consuming sectors (building, transport and industry). Strengthening national institutions and regional cooperation mechanisms. Promoting cost-effective mix and enhancing the use of cleaner fossil fuels and renewable energy resources. Upgrading energy efficiency and reducing energy intensities. Gradual reduction of the adverse environmental and health impacts of the energy sector. Promoting renewable energy applications, as appropriate. Enhancing integration, liberalization and economic efficiency, as well as socially responsible phasing-out of subsidies.

	and implementation of interconnected electricity grid, as well as gas networking, is being considered.		☐ Raising awareness and capacity- building for renewable energy and energy efficiency.
Sectors	Achievements Move towards reform and restructuring of the sector towards more economic management.	Constraints	Initiatives and proposals ☐ Developing appropriate technology transfer programmes with enhanced national and regional contributions.
	 Started regional cooperative networking on energy efficiencies and renewables. 		 Allocation of funds required for implementation, particularly to access rural areas.
			 Introduction of market reforms and privatization.
			☐ Enhancing the role of the energy sector in solving the water problem in the region.

Annex 1

LIST OF PARTICIPANTS

A. ESCWA MEMBER STATES

Egypt

Dr. Ahmed G. Abul-Azm

Head of Environmental Management Sector Egyptian Environmental Affairs Agency

30, Misr-Helwan Road, Behind Maadi Sofitel Hotel

Maadi Post Office, Cairo P.O. Box 955

Tel.: (202) 5256452, ext. 7304

Fax: (202) 5256475 E-mail: <u>eeaa@idsc.gov.eg</u>

Iraq

Mr. Sami Mati Polous

Director-General

Regional Planning Department

Planning Commission Karadat Mariam, Baghdad

P.O. Box 2048 Tel.: (964-1) 5372955 Fax: (964-1) 8853653

Lebanon

Mr. Ramez Kayyal Head of UPP

Head of OPP

Ministry of Environment

P.O. Box 70-1091 Antelias, Beirut Tel.: (961- 4) 522222

Fax: (961-4) 418911/523161 E-mail: <u>upp@moe.gov.lb</u>

Ms. Rola Nasreddine

National Focal Point for EIA

Ministry of Environment P.O. Box 70-1091

Antelias, Beirut Tel.: (961- 4) 522222

Fax: (961- 4) 418911/523161 E-mail: r.nasreddine@moe.gov.lb

Ms. Fida Riachi

Administrative Consultant Ministry of Environment P.O. Box 70-1091 Antelias, Beirut

E-mail: friachi@moe.gov.lb

Ms. Lara Moussa Kallas

LEDO/UNDP

Ministry of Environment

Antelias, Beirut P.O. Box 70-1091 Tel.: (961-3) 974925 E-mail: lara@moe.gov.lb

Ms. Nancy Khoury

Public Relations and External Affairs

Ministry of Environment Antelias, Beirut

Tel.: (961-4) 522222 Fax: (961-4) 525080

E-mail: n.khoury@moe.gov.lb.

Mr. Joseph Abdel-Ahad

General Director of Town Planning

Ministry of Public Works and Transportation

Beirut

Tel.: (961-1) 301919/302076 Fax: (961-1) 815575/306309

Mr. Ghazi Yehiya Osseiran UN/CDR Coordinator

Council for Development and Reconstruction

Beirut

Tel.: (961-1) 981373/4 Fax: (961-1) 981252/3 E-mail: ghazio@cdr.gov.lb

Ms. Wafa Sharafeddine Rouhana

Senior Planner

Council for Development and Reconstruction

Tel.: 01-981373/6 Fax: 01-981252/3

E-mail: wafac@cdr.gov.lb

Mrs. Amal Karaki Senior Sector Specialist

Council for Development and Reconstruction

Tel.: (961-1) 981373/4/5 Fax: (961-1) 981252/3 E-mail: amalk@cdr.gov.lb

Ms. Samira Sweidan Senior Specialist

Council for Development and Reconstruction

Tel.: (961-1) 981373/4/5 Mobile: (961-3) 741974 Fax: (961-1) 981252/3/1

E-mail: <u>programmes@cdr.gov.lb</u> samiras@cdr.gov.lb

Oman

Mr. Ahmed bin Abdullah Mahroos Deputy Director General Dhofar Governorate Ministry of Regional Municipalities and Environment P.O. Box 2035

Salalah 211, Oman Tel.: (968) 226002 Fax: (968) 226012

Qatar

Mr. Abdulhadi Nasser Almarri Environmental Researcher Supreme Council for the Environment and Natural Reserves P.O. Box 7634

Doha

Tel.: (974) 4437171 (Ext. 279)

Fax: (974) 4415246

E-mail: amarri@mmaa.gov.qa

Saudi Arabia

Mr. Taha M.H. R. Alghazi
EIA Department Manager
Meteorology and Environmental Protection
Administration
Environmental Protection Administration
P.O. Box 1358
Jeddah 21431, Saudi Arabia

Tel.: (966-2) 6512312 /6517832, ext. 2209

Fax: (966-2) 6517832

E-mail: t-alghazi@hotmail.com

Syrian Arab Republic

Mr. Fouad El-O'k Head Chemical Safety Department Ministry of State for Environmental Affairs Tilyani, Damascus

Tel.: (963 -11) 2234309/3330510

Fax: (963 -11) 3335645 E-mail: Env-min@net.sy

United Arab Emirates

Mr. Waiel Basil Mustafa Al-Naimi Senior Environmental Technician Environmental Impact Assessment Federal Environmental Agency P.O. Box 5951

Abu-Dhabi

Tel.: (971-2) 6777363 Mobile: (971-50) 5720527 Fax: (971-2) 6770501

E-mail: waiel4496@yahoo.com

B. UNITED NATIONS, SPECIALIZED AGENCIES AND OTHER ORGANIZATIONS IN THE UNITED NATIONS SYSTEM

Economic Commission for Africa

Mr. Stephen Maxwell Donkor Senior Regional Adviser on Water Resources P.O. Box 3001 Addis Ababa

Tel.: (2511) 517200/443422 Fax: (2511) 514416

E-mail: donkor@un.org or sdonkor@uneca.org.

Economic Commission for Europe

Mr. Branko F.M. Bosnjakovic Regional Adviser on Environment Palais des Nations CH-1211, Geneva 10, Switzerland

Tel.: (41-22) 9172396 Fax: (41-22) 9170107

E-mail: branko.bosnjakovic@unece.org

Food and Agricultural Organization of the United Nations

Mrs. Solange Matta-Saadé Programme Assistant FAO Office in Lebanon Baabda, Lebanon

Tel.: (961-5) 924005/6/7 and 468173

Fax: (961-5) 922128/468173 E-mail: fao-leb@dm.net.lb

United Nations Development Programme

Ms. Lana Jamal Abu-Hijleh Programme Assistant to the Palestinian People Head of Infrastructure and Environment Unit 4A Ya'kubi Str.

P.O. Box 51359, Jerusalem Tel.: (972-2) 6268200 Fax: (972-2) 6268222

E-mail: lana.abu-hijleh@undp.org

<u>United Nations Environment Programme/</u> Mediterranean Action Plan

Mr. Arab Hoballah Deputy Coordinator, Coordinator Unit Vas. Konstantinou 48, (2nd floor) 11635 Athens

Tel.: (30-1) 7273126/117/100 Fax: (30-1) 7253196/7 E-mail: hoballah@unepmap.gr

<u>United Nations Industrial Development</u> Organization

Mr. Giuseppe Papuli Representative UN House, Riad El-Solh Square P.O. Box 11-8575, Beirut Tel.: (961-1) 981301/20, ext. 1602

Mobile: (961-3) 525775 Fax: (961-1) 981415

E-mail: papuli.unido@dm.net.lb

<u>United Nations University/International Network</u> <u>for Water, Environmental and Health</u>

Mr. Walid A.K. Saleh Regional Coordinator - MENA Amman

Tel.: (962-6) 5330334 Fax: (962-6) 5330309

E-mail: wsaleh.unu-INWEH@nchrd.gov.jo

World Health Organization Office in Lebanon

Dr. Habib M. Latiri WHO Representative, Beirut Tel.: (961-1) 612970/1/2 Fax: (961-1) 612973

WHO/Regional Centre for Environmental Health Activities

Mr. Hamed Bakir Regional Adviser, Environmental Health P.O. Box 926967 Amman 11110 Tel.: (962-6) 684655/5524655 Fax: (962-6) 5516591 E-mail: bakirh@who-ceha.org.jo

The World Bank

Mr. Sherif K.F. Arif Regional Environmental Coordinator Rural Development, Water and Environment Department, Middle East and North Africa Region

1818 H Street, N.W. Washington D.C. 20433

Tel.: (202) 473 7315 Fax: (202) 4771374

E-mail: sarif@worldbank.org

C. ARAB FUNDS, REGIONAL AND INTERNATIONAL ORGANIZATIONS

The Arab Center for the Studies of Arid Zones and Dry Lands

Dr. Gilani M. Abdelgawad Director of Soil and Water Use Studies Division P.O. Box 2440 Damascus

Tel.: (963-11) 5743087/5743039/5758413

Fax: (963-11) 5743063 E-mail: <u>acsad@net.sy</u> Web site: www.acsad.org Mr. Wathek Rasoul Agha Prof. in D.U., Water Resources Expert P.O. Box 2440 Damascus

Tel.: (963-11) 5743087/39 /3337370 Fax: (963-11) 5743063

E-mail: acsad@net.sy

Mr. Mohammad S. Abido

Expert

P.O. Box 2440 Damascus

Tel.: (963-11) 5743087/5743039/5758413

Fax: (963-11) 5743063 E-mail: acsad@net.sy

Arab Planning Institute

Dr. Ali Abdel Gadir Consultant

P.O. Box 5834 Safat 13059, Kuwait

Tel.: (965) 4843130 Fax: (965) 4842935 E-mail: aali@api.org.kw

Arab Industrial Development and Mining

Organization

Mr. Zakaria Elbrahimi

Expert Rabat

Tel.: 037 772600 Fax: 037 772188

E-mail: aidmo@arifonet.org.ma

Center for Environment and Development for the Arab Region and Europe

Dr. Ahmad Wagdy Water Specialist

2 Hegaz Street, CEDARE Bldg P.O. Box 1057 Heliopolis

Cairo

Tel.: 4513921/2/3/4 Fax: 4513916/7/8

E-mail: cedare@ritsecl.com.eg

Environment Protection Council

Mr. Salem Abdulla M. Baquhaizel

General Director

Environmental Monitoring and Evaluation

P.O. Box 19719

Sana'a

Tel.: (967-1) 257572/3 Fax: (967-1) 257549

E-mail: aligaber.nou@y.net.ye

Islamic Development Bank

Dr. Karim Allaoui

Vice President Operations' Technical Assistant

P.O. Box 5925

Jeddah 21432 , Saudi Arabia Tel.: (966-2) 6466729 Fax: (966-2) 6374131

E-mail: karimallaoui@hotmail.com

<u>International Center for Agricultural Research in</u> the Dry Areas

Dr. Jan Valkoum

Head, Genetic Resources Unit

P.O. Box 5466

Aleppo, Syrian Arab Republic

Tel.: (963-21) 2213477 Fax: (963-21) 2213490

E-mail: ICARDA@CGIAR.ORG

Kuwait Institute for Scientific Research

Ms. Reem Saad Al-Nafisi

Research Associate

Environmental Science Department

P.O. Box 24885 Safat - 13109, Kuwait

Tel.: (965) 4818712/4836100, ext. 4407

Fax: (965) 4845350

E-mail: Rnafisi@safat.kisr.edu.kw

Middle East Desalination Research Center

Ms. Shannon McCarthy

Associate Director for Development

P.O. Box 21, Al-Khuwair

133. Muscat

Tel.: (968) 695351, ext. 34

Fax: (968) 697107

E-mail: smcarthy@medrc.org.om

Regional Organization for the Protection of Marine Environment

Dr. Nahida Bader Al-Majed Environmental Specialist

P.O. Box 26388 Safat 13124, Kuwait Tel.: (965) 5312140/4

Fax: (965) 5335243/5324172 E-mail: ropme@qualitynet.net

D. ACADEMIC INSTITUTIONS

American University of Beirut

Dr. Mey Salim Jurdi

Chairperson, Environmental Health Department

Faculty of Health Sciences

Beirut

Tel.: (961-1) 350000 Mobile: (961-3) 916580 Fax: (961-1) 744470 E-mail: mjurdi@aub.edu.lb

Dr. Abbas El-Zein

Visiting Associate Professor

Department of Environmental Health

Faculty of Health Sciences

Beirut

Tel.: (961-1) 350000, ext. 4670

Fax: (961-1) 744470

E-mail: abbas.elzein@aub.edu.lb

Mr. Raif Milki

Lecturer, Department of Environmental Health

Faculty of Health Sciences

P.O. Box 11-0236

Beirut

Tel.: (961-1) 350000, ext. 4630 Mobile: (961-3) 501723 Fax: (961-1) 744470 E-mail: rm01@aub.edu.lb

Mansoura University

Dr. Adel Farid Abdel-Kader

Expert

2, Street 277 Off 263 New Maadi, Cairo Tel.: (202) 0101200152

E-mail: adel.farid@menanet.net

E. LEBANESE RESEARCH CENTRES, GOVERNMENTAL ORGANIZATIONS AND PRIVATE SECTOR

Mr. George Abu-Jawdeh

Former UNDP Resident Representative

Lebanese Environment Forum

C/O UNDP Office

Beirut

Tel.: (961-3) 438269 Fax: (961-1) 886771/2

E-mail: gabujawdeh@hotmail.com

Mr. Hratch H. Kouyoumijian

Director

Division of Environmental Sciences National Council for Scientific Research

P.O. Box 11-8281 Bir Hassan, Beirut Tel.: (961-1) 840260 Fax: (961-1) 822639

E-mail: kuymjian@cnrs.edu.lb

Mr. Hassane A. Jaber Vice-President

Lebanese Association for the Management of

Energy and Environment

P.O. Box 50184 Furn El-Chebak, Beirut Tel.: (961-1) 644901 Fax: (961-1) 385043

E-mail: hjaber@litcom.com.lb

Mr. Fady Yarak Executive Director

Rene Moawad Foundation (Friedrich Noaman)

P.O. Box 468, Hazmieh, Lebanon

Tel.: 01-613367/8/9 Fax: 01-613370

E-mail: fyarak@rmf.org.lb

Mr. Suhail Edmond Srour

Associate Expert Dar Al-Handasah Verdun St., Beirut Tel.: (961-1) 320744

E-mail: Suhail.srour@darbeirut.com

Mr. Omar Jean Sakr

Environment Project Manager

Local Private Company "Schtroumpf"

Jounieh, Lebanon Tel.: (961-9) 900214 Fax: (961-9) 931593

E-mail: omar@schtroumpflb.com

Ms. Raghida Haddad

Executive Editor, Environment and Development

Magazine

P.O. Box 113-5474 Hamra, Beirut Tel.: (961-1) 742043 Fax: (961-1) 346465

E-mail: envidev@mectat.com.lb

Ms. Hiam Afif Kreidie

President

Window to Environment Association Shehade St., Akiki Bldg., Tabaris

Achrafieh, Beirut Tel.: (961-1) 200077 Mobile: (961-3) 747800 Fax: (961-1) 200076

Mr. Malek Ghandour General Secretary AMWAJ of the Environment and LEF Jaber Bldg., Verdun Street Beirut

Tel.: (961-3) 241451 Fax: (961-1) 791140

E-mail: amwajenvt@hotmail.com

Ms. Dalia Abdallah Khalil Vision Consulting Group Policy Investment Consultants Boulevard Saida, Beirut Tel.: (961-1) 385707

Fax: (961-1) 385/0/

E-mail: dalia-k@cyberia.net.lb

Mr. Tarek Joseph Chemaly
Head of Department
Directorate-General of Civil Aviation
Beirut International Airport
Beirut

Tel.: (961-3) 731907

E-mail: <u>Tarekchemaly@postmark.net</u>

Ms. Carla Ghassan Khalil Controller of the Recycling Department Sukleen (Sukkar Group) Karantina Road, Sikkey Bldg. Beirut

Tel.: (961-1) 587001/2 Fax: (961-1) 583002

E-mail: carla khalil@hotmail.com

Professor Osama A. El-Kholy Director

Technology Management Programme AGU, P.O. Box 26671, Manama

Tel.: (973) 239603 Fax: (973) 272555

E-mail: osama@agu.edu.bh

Dr. Davood Ghasemzadeh Environmental Policy Analyst OPEC, Obere Donaustrasse 93 1020 Vienna

Tel.: (431) 21112/297 Fax: (431) 2164320

E-mail: dghasemzadeh@opec.org

Dr. Hisham Khatib Vice Chairman World Energy Council P.O. Box 925387, Amman 11190

Tel.: (962-6) 5621532/5815316

Fax: (962-6) 5698556 E-mail: <u>khatib@nets.com.jo</u>

F. EMINENT PERSONS

Mr. Mohamed A. El-Guindy
Chairman
Friends of the Environment Association
8 Ahmed El-Adham St.
San Stefano, Alexandria, Egypt
Tel.: (203) 5837539/5831877
Fax: (203) 582021/3930079
E-mail: fea@access.com.eg

MElguindy@newfuture.com

Dr. Emad El-Din Adly General Coordinator Arab Network for Environment and Development P.O. Box 2, Magles Elshaaba, Cairo

Tel.: (202) 3041634 Fax: (202) 3041635 E-mail: aoye@link.net Dr. Samir Makdisi

Chair

Economics Department

Institute of Money and Banking American University of Beirut

Beirut

Tel.: (961-1) 744485 Fax: (961-1) 744484

E-mail: makdisi@aub.edu.lb

Ms. Fahima Charaf-Eddine

Professor

Lebanese University

P.O. Box 13-6576, Shouran

Beirut

Tel.: (961-3) 815820 Fax: (961-5) 950209

E-mail: fahima@cyberia.net.lb

Dr. Samira Naim Khoury

Instructor

Cultural Studies Programme

President

Arab Women Solidarity (NGO) Civilization Sequence Programme American University of Beirut

P.O. Box 113-6615 Bliss St., Beirut

Tel.: (961-1) 350000 Mobile: (961-3) 237507 Fax: (961-1) 802193/743057 E-mail: sk05@aub.edu.lb

Dr. Mona Khalaf

Director

Institute for Women's Studies in the Arab World

Lebanese American University

Tel.: 03-680192 Fax: 01-791645

E-mail: mkhalaf@lau.edu.lb

Mr. Samir Said Haddad

Chairman of the Commission on Environment International Chamber of Commerce-Lebanon

Ashrafieh, Beirut

Tel.: 01-200437/03-273087

Fax: 01-321220

E-mail: iccleb@sodetel.net.lb

Dr. Samira Ibrahim Islam Professor Pharmacology

Faculty of Medicine and Allied Sciences

Head of Drug Monitoring Unit King Abdulaziz University

P.O. Box 488

Jeddah 21411, Saudi Arabia

Tel.: (966-2) 6895922 Fax: (966-2) 6893091 E-mail: sislam@kaau.edu.sa

Dr. Khaled I. Hariri

Former Cabinet Minister

Vice Chairman of the Environmental Protection

Council in Yemen

Strategic Action Programme for the Red Sea and

Gulf of Aden

The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of

Aden

PERSGA/SAP Jeddah, Saudi Arabia

Tel.: (966-2) 2260864 - 6573224

Fax: (966-2) 6521901

E-mail: khaled.hariri@persga.org

Mr. Moh'd Nabil Alaa El-Din

Vice Dean

College of Graduate Studies and

Director

Biotechnology Graduate Programme

Arabian Gulf University

P.O. Box 26671

Manama

Tel.: (973) 239602 - 9653553 Fax: (973) 272555 - 274028

E-mail: (office): nabeel@agu.edu.bh (home): nabil544@bateles.com.bh

Prof. Eqbal I. Al-Rahmani Associate Professor

Department of Economics

Chair

College of Administrative Sciences

Kuwait University P.O. Box 5486 Safat 13055, Kuwait Tel.: (965) 2521534 Fax: (965) 2519408

E-mail: egbal@kuc01.kuniv.edu.kw

G. ORGANIZING BODIES

Department for Economic and Social Affairs

Mr. Roderick Holesgrove Division for Sustainable Development Department of Economic and Social Affairs UN Headquarters

Two UN Plaza, Room DC2-2230,

New York, NY 10017 Tel.: (1-212) 963-5104 Fax: (1-212) 963-4260 E-mail: holesgrove@un.org

<u>United Nations Environment Programme/</u> <u>Regional Office for Western Asia</u>

Mr. Mahmood Y. Abdulraheem Regional Director Villa No. 2113 Road 2432 Center 324 P.O. Box 10880 Manama

Tel.: (973) 826600 Fax: (973) 825110/1

E-mail: <u>uneprowa@batelco.com.bh</u> <u>Myunrowa@batelco.com.bh</u> Mr. Habib N. El-Habr Deputy Regional Director Villa No. 2113 Road 2432 Center 324 P.O. Box 10880 Manama

Tel.: (973) 826600 Fax: (973) 825110/1

<u>League of Arab States/Council of Arab Ministers</u> Responsible for the Environment

Ms. Fatma S.E. El-Mallah Director Productive Sectors and Environment Department for Economic Affairs Tahrir Square, Cairo 11642 Tel.: (202) 575 0511/575 3078

Fax: (202) 574 0331/761 017/779 549

H. ESCWA SECRETARIAT

Ms. Mervat Tallawy Executive Secretary

Ms. Mariam Al-Awadhi Deputy Executive Secretary

Mr. Omar Touqan Chief, Energy, Natural Resources and Environment Division

Mr. Zeki Fattah Chief, Economic Development Issues and Policies Division

Mr. Hosny Khordagui Chief, Environment Coordination Unit Energy, Natural Resources and Environment Division

Ms. Anhar Hegazi Chief, Energy Issues Section Energy, Natural Resources and Environment Division Mr. Mohamed Abdulrazzak Chief, Natural Resources Section Energy, Natural Resources and Environment Division

Ms. Fatima Sbaity Kassem Chief, Women and Development Unit Social Development Issues and Policies Division

Ms. Christine Fakhoury Economic Affairs Officer, Trade Section Economic Development Issues and Policies Division

Mr. Marwan Mansour Associate Economic Affairs Officer Environment Coordination Unit Energy, Natural Resources and Environment Division

Ms. Hanan Atallah Research Assistant Energy, Natural Resources and Environment Division Mr. Moneem Murrah Administrative Assistant and Senior Secretary Energy, Natural Resources and Environment Division

Mr. Abdel Hafez Issa Senior Secretary Environment Coordination Unit Energy, Natural Resources and Environment Division Ms. Shadan Jamal Secretary National Resources Section Energy, Natural Resources and Environment Division

Annex II

ORGANIZATION OF WORK

Monday, 9 April 2001	
08:30 – 10:00 a.m.	Registration.
10:00 – 11:00 a.m.	Opening session.
	Opening statements
	- Chief, Energy, Natural Resources and Environment Division <i>Mr. Omar Touqan</i>
	- Regional Director, UNEP/ROWA Mr. Mahmood Abdulraheem
	 Council of Arab Ministers Responsible for Environment, Technical Secretariat (CAMRE) Ms. Fatma El-Mallah
	 Division for Sustainable Development/DESA Mr. Rod Holesgrove
	- Executive Secretary of ESCWA Ms. Mervat Tallawy
	- H.E. Minister of Environment Dr. Michel Moussa
11:00 – 11:30 a.m.	Break.
	I. First session (Achievements and Obstacles)
	Chairpersons: Mr. Mahmood Abdulraheem Mr. Omar Touqan
11:30 – 11:45 a.m.	Introductory statement: Mr. Rod Holesgrove (DESA)
	1. Socio-economic aspects
11:45 a.m. – Noon	Social Aspects of Sustainable Development in the ESCWA Region Ms. Fatma Kassem (ESCWA)
Noon – 12:15 p.m.	Discussion.
	2. Environmental management–Governance
12:15 – 12:30 p.m	Governance for Sustainable Development in the ESCWA Region Mr. Hosny Khordagui (ESCWA)
12:30 – 12:45 p.m.	The Road from Environmental Protection to Sustainable Development: A Case Study of Governance in the Arab Region <i>Mr. Osama El-Kholy (UNEP/ROWA)</i>

Discussion.

12:45 – 1:00 p.m.

Monday, 9 April 2001 (continued)

<u> </u>	3. Water supply and management
1:00 – 1:15 p.m.	Implications of Agenda 21 Chapter 18 Mr. Mohamed Abdulrazzak (ESCWA)
1:15 – 1:30 p.m.	Water Demand Management and Pollution Control Key to Securing and Safeguarding the Water Supply of MENA in the 21 st Century Mr. Hamed Bakeer (WHO)
1:30 – 1:45 p.m.	Discussion.
	4. Energy, industry and waste management
1:45 – 2:00 p.m.	The Necessities and Possibilities of Using Solar Energy for Achieving Sustainable Development <i>Ms. Anhar Hegazi (ESCWA)</i>
2:00 – 2:15 p.m.	Impacts of GHG Mitigation Strategies on Developing Countries: Perspective from OPEC Countries Mr. Ghasemzadeh (OPEC)
2:15 – 2:30 p.m.	Discussion.
2:30 – 3:00 p.m.	Break.
	5. Land degradation
3:00 – 3:15 p.m.	Desertification and Land Degradation Mr. Moh'd Nabil Alaa El-Din (UNEP/ROWA)
3:15 – 3:30 p.m.	GEO-3 Process in the Field of Land Degradation <i>Mr. Ahmad Abido (UNEP/ROWA)</i>
3:30 – 3:45 p.m.	Discussion.
	6. Marine environment
3:45 – 4:00 p.m.	Background Paper on the Marine Environment of the ROWA Region Mr. Hratch Kouyoumjian (UNEP/ROWA)
4:00 – 4:15 p.m.	Achieving Sustainable Development of Coastal and Marine Areas in the ROPME Region Ms. Naheda Al-Majed (UNEP/ROWA)
4:15 – 4:30 p.m.	Discussion.
	7. Trade and environment
4:30 – 4:45 p.m.	Trade and Environment Ms. Christine Fakhoury (ESCWA)
4:45 – 5:00 p.m.	Discussion.

Tuesday 10 April 2001

II. Second session (National, Subregional and Regional Initiatives to Respond to Regional Problems)

Chairperson: Mr. Osama El-Kholy

08:30 a.m. - Noon Round-table discussion to elaborate on actions, initiatives, innovative

approaches, challenges and opportunities at the national, regional and

international levels.

Noon – 12:30 p.m. Break.

III. Third session (Global Initiatives)

Chairperson: Mr. Osama El-Kholy

12:30 – 16:30 p.m. Discussion of initiatives, innovative approaches and opportunities at the global

level.

Wednesday 11 April 2001

IV. Fourth session (Consideration of Report of Round Table)

Chairperson: Mr. Osama El-Kholy

09:00 – 11:00 a.m. Discussion of report.

V. Fifth session (Closing Session)

Chairperson: Mr. Osama El-Kholy

11:00 a.m – Noon Adoption of recommendations.

Noon -12:30 p.m. Break.