#### REPORT OF THE FIRST AFRICAN EXPERT MEETING ON SUSTAINABLE CONSUMPTION AND PRODUCTION

#### I. INTRODUCTION

1. The First African Expert Meeting on Sustainable Consumption and Production was held in the context of the Third African Roundtable on Sustainable Consumption and Production in Casablanca, Morocco, 17 - 20 May 2004. The meeting was organized by the United Nations Environment Programme (UNEP), in consultation with the United Nations Department of Economic and Social Affairs (UN DESA), and hosted by the Moroccan Center for Cleaner Production. Financial support for the meeting was provided by the Governments, national cleaner production centers, academia, civil society, private sector and international organizations.

2. The objectives of the meeting were:

(a) To identify regional and sub-regional priorities and needs for sustainable consumption and production in Africa;

(b) To consider a regional framework for promoting more sustainable consumption and production, contributing to poverty alleviation, economic development and environmental protection;

(c) To consider the international 10-year framework of programmes on sustainable consumption and production agreed at the Johannesburg World Summit on Sustainable Development, to review the Marrakech Process agreed at the First International Expert Meeting on Sustainable Consumption and Production, and to consider how African countries could participate in and benefit from the international process;

(d) To prepare outcomes of the meeting, which could be presented to the African Ministerial Conference on the Environment (AMCEN), to other regional institutions such as NEPAD, ECA and the African Union, to DESA and UNEP, and to the next international expert meeting in 2005, for further action.

#### **II. PLENARY SESSIONS**

3. The Co-Chairs of the plenary sessions were: Mr Mootaz Khalil, Director, Environment and Sustainable Development Affairs, Ministry of Foreign Affairs, Egypt; Ms Nassere Kaba, Director of Policies and Strategies for the Environment, Ministry of Environment, Côte d'Ivoire; and Mr Mourad Skalli, Counselor to the Secretary of State for the Environment of Morocco.

4. In opening the expert meeting, Mr Mourad Skalli of the Secretariat of State for the Environment of Morocco underlined the importance of the "Marrakech Process" as a means for establishing priorities for international cooperation in sustainable consumption and production. He also emphasized the important role for the National Cleaner Production Centres in promoting practical work on the issue. He highlighted waste management as one of the main priorities in Africa, and in Morocco in particular, and stressed the importance of using both legislative

measures and incentives to address the issue. Mr Skalli reiterated the readiness of Morocco to continue to be a driving force on sustainable consumption and production.

5. Mr Bas de Leeuw of UNEP noted that the Johannesburg Plan of Implementation (JPOI) adopted at the World Summit on Sustainable Development (WSSD) called for a 10-year framework on programmes on sustainable consumption and production. In response to that call, an International Expert Meeting on the 10-Year Framework was organized in Marrakech, Morocco, 16 - 19 June 2003. That meeting launched the Marrakech Process, including a strengthening of regional processes, as well as the organization of task forces and roundtables on specific issues relating to sustainable consumption and production. The Marrakech meeting agreed that a second international expert meeting should be convened in 2005 to review international and regional cooperation in support of sustainable consumption and production.

6. Mr de Leeuw also noted that regional meetings had been held in Latin America and the Caribbean and in the Asia-Pacific region. The results of the regional expert meetings will be brought to the attention of the next international expert meeting, to be held in 2005, as well as to other international and regional organizations and meetings. He emphasized the importance of achieving tangible progress, for which the opportunities of the sustainable consumption and production agenda for contributing to poverty eradication need to be highlighted.

7. Mr Ulf Dietmar Jaeckel of the Federal Ministry of Environment of Germany noted that Africa was ahead of some other regions in regional organization on the Marrakech Process. He noted that Europe would hold a regional meeting on sustainable consumption and production in November 2004 in Belgium. He highlighted the call in the JPOI to develop an active dialogue involving all stakeholders, including environmental organizations, social organizations and other community organizations. He informed participants of major initiatives taken by the German Government such as the National Strategy for Sustainable Development "Perspectives for Germany" with concrete targets including a doubling of energy and resource efficiency and reducing land use by 2020, increasing the share of organic agriculture from 4% to 20% by 2010, and increasing imports of goods from developing countries.

8. Mr Ralph Chipman of the United Nations Division for Sustainable Development/DESA noted that this First African Regional Expert Meeting could contribute to the Marrakech Process by identifying priorities and needs for regional and international cooperation in sustainable consumption and production. The results of the meeting would be used by the United Nations and other international organizations in their efforts to promote international cooperation focusing on the needs and priorities of developing countries and drawing on the experience of both developed and developing countries. He also presented a background paper on sustainable consumption and production issues and activities in Africa, prepared in consultation with Mr Mersie Ejigu of the Partnership for African Environmental Sustainability (PAES) (www.un.org/esa/sustdev/sdissues/consumption/Marrkech/conprod/10Yafr.htm).

9. Mr Stephen Karekezi of the African Energy Policy Research Network (AFREPREN) presented a background paper on energy consumption patterns in Africa, noting the different patterns in different sub-regions. He emphasized the low levels of energy consumption in most Sub-Saharan African countries as a major obstacle to sustainable development. The use of

traditional biomass fuels, including wood, agricultural residues and animal dung, for most household energy, particularly in rural areas, had serious impacts on health, particularly of women and children, as well as negative environmental impacts.

(www.un.org/esa/sustdev/sdissues/consumption/Marrkech/conprod/10Yafr.htm)

10. Ms Adriana Zacarias Farah of UNEP emphasized the linkages between poverty and sustainable consumption and production, noting that African countries had an opportunity to "leapfrog" over the unsustainable technologies and practices of the developed countries. She defined poverty as the inability to meet basic needs, including food, shelter, health and education, and a lack of choices and access to markets. She noted that the priority in developed countries is to increase resource efficiency in consumption and production, while in Africa the priority is to increase consumption and production to meet basic needs, while improving social conditions and reducing environmental impacts. Hence, sustainable consumption and production approaches in Africa (and other developing countries) represent an opportunity to leapfrog to sustainability. It will require the development of national strategies and implementation through strategic policy mixes. Examples of technology leapfrogging include the use of renewable energy and mobile phones in rural areas. Less industrialised countries can adopt sustainable technologies without going through the polluting phases of industrialization that the developed countries went through. Leapfrogging might require changes in values, perception, and understanding of the quality of life. Sustainable consumption and production in Africa can lead to hybrid societies with traditional knowledge, technologies and values mixed with high technology and modern scientific knowledge. Ms Zacarias also noted that it is important to include aspects/projects of sustainable consumption and production in national poverty reduction strategies.

11. Mr Samba N'Diaye, Executive Secretary of the Senegal Association for the Defense of the Environment and Consumers, and representing Consumers International, noted the important role of consumer protection policies and consumer organizations in promoting sustainable consumption and production in Africa. The United Nations Guidelines on Consumer Protection, as expanded in 1999 to include sustainable consumption, provides guidance to countries in developing sustainable consumption and production policies. Mr N'Diaye also noted that consumption patterns in developed countries can have important impacts in developing countries. In the case of Senegal, increasing demand for fish and fish products in developed countries is resulting in depletion of African fisheries, creating hardship for Africans dependent on fish production and consumption.

12. Mr Desta Mebratu of the UNEP Regional Office for Africa noted that regional efforts to promote sustainable consumption and production in Africa needed to take into account the great diversity of economic and social conditions in the region. He further noted that most African countries have high levels of chronic poverty and are low on the UNDP human development index (HDI) and human poverty index (HPI). Economic conditions have stagnated or deteriorated in many countries in the last 20 years. He emphasized that the depletion and degradation of natural resources, as both a cause and consequence of poverty, poses a particularly challenge for Africa. Much of the African population live on fragile ecosystems with low agricultural productivity, and with pressure on resources exacerbated by high population

growth rates. While industrialization in most African countries is low relative to other regions, industrial activity has significant environmental impacts in urban and coastal areas.

13. Mr Mebratu stressed that policies and programmes to promote sustainable development in Africa should address both the supply side and the demand side. A key issue that needs to be addressed in this regard is the structural transformation of the African economy through the promotion of sustainable industrial development. He further highlighted the key measures that could be taken by the key stakeholders in order to promote sustainable consumption and production in the region. In this context, governments should provide incentives for sustainable consumption and production and disincentives for unsustainable practices. Infrastructure, such as transportation and communication networks, should be reoriented with a view to long-term sustainable development. Technological capacity building and the development of centres of excellence are needed, as are financial mechanisms to support these activities. He noted that public procurement could support sustainable consumption and production, as could requirements for environmental impact assessments (EIA) or strategic environmental assessments (SEA). Civil society has an important role to play in public advocacy and in promoting public and consumer awareness, together with public institutions, through media campaigns and education all levels.

# **III. WORKING GROUPS**

14. Detailed discussions of experiences, needs and priorities with respect to sustainable consumption and production were held in six working group sessions, as follows:

A. Four parallel thematic working groups:

- Energy
- Water and natural resources
- Urban development
- Industry

B. Two parallel sub-regional working groups

- North Africa
- Sub-Saharan Africa

15. The following are the reports of the working groups as prepared by the Rapporteur of each group and the Secretariat and as discussed in the final plenary.

### A. WORKING GROUP ON ENERGY

16. The Working Group on Energy included 12 participants from 8 countries and one international organization. The Working Group was chaired by Dr. Patrick Mwesigye, Director of the Uganda Cleaner Production Centre. Mr Stephen Karekezi of the African Energy Policy Research Network was Rapporteur.

17. To analyze the key issues pertaining to the sustainable consumption of energy in Africa, participants agreed to adopt a sub-sectoral analytical approach that focused on the following sub-sectors:

- Industry
- Household
- Transport

#### Energy use in the industrial sector

18. To develop appropriate sustainable energy options for the industrial sector, the Group thought it wise to first identify important energy challenges facing the sector. This approach would ensure that proposed sustainable energy options for industrial sector reflect the prevailing realities in the regions and thus lead to more effective impacts.

19. The industrial sector in Africa can be divided into two categories. The first category is energy intensive industries such as cement manufacture and other process industries that use a large amount of heat and electricity. In many cases, energy accounts for a significant portion of production costs. The second category consists of industries that use limited amounts of energy and therefore face much lower energy bills. The Group emphasized that a differentiated approach should be used in pursuing sustainable energy consumption goals in the aforementioned two categories. The high energy costs associated with energy-intensive industries generally imply greater willingness to make significant investments in sustainable energy options. With respect to the second category, concerned decision makers are generally unwilling to go beyond low-cost housekeeping measures.

20. The Group underlined the very serious twin problems of unreliable and poor quality power supply facing the industrial sector in certain African countries, particularly in the sub-Saharan region. The underlying causes of the absence of reliable and good quality power supply include drought-related hydropower deficiencies and siltation of hydropower dams due to upstream deforestation and soil erosion. Other contributing factors include obsolete technology and equipment, poor maintenance, high system losses and poorly skilled technical personnel. It was also noted that inappropriate tariff structures can result in low revenues leading to inability to finance the replacement of aging equipment.

#### **Response options**

21. As a priority response to the unreliability of energy supply to industry, participants underlined the importance of sustainable energy options to diversifying energy supply. Participants highlighted successful case examples of energy supply diversification in several

African countries. In Morocco, grid-connected wind power is providing an important contribution to national power supply. Tanzania plans to use its reserves of cleaner natural gas to reduce its reliance on drought-sensitive hydro power, while the southern African region is using regional interconnections to diversify and promote the use of cleaner energy sources. Kenya currently meets 10% of its power supply from geothermal energy, which has proven valuable in addressing drought-related shortfalls of hydropower. In West Africa, the regional pipeline project, supplemented by combined heat and power generation units as well as higher efficiency combined-cycle power plants, is expected to diversify the region's energy supplies.

22. For industrial energy end use, the Group proposed the following options that deserve greater attention:

- Co-generation, which is both an end user and supply response option. In Mauritius, bagasse-based co-generation meets 40% of the country's power supply, while captive power generation is widely used in many agro-based and forest industries in the region;
- Use of solar water heaters to pre-heat water for industrial steam generation. Although attractive, this end-use option is still constrained by its high upfront investment cost;
- Other demand side management (DSM) options, such as efficient industrial motors and drives, power factor correction/capacitor banks, energy-efficient buildings, and differentiated electricity tariffs that encourage DSM;
- Information dissemination and awareness creation;
- Properly designed end-use interventions to benefit the poor. For example, revenues from Mauritius sugar co-generation is equitably shared among both large-scale and small-scale sugar cane farmers.

# Household energy

23. The Group identified a range of sustainable energy options classified by 2 major end-user groups, namely urban and rural households. One option that is applicable to both end-user groups is the need to subsidize upfront costs of cleaner energy alternatives, which is a constraint to improving access the poor. Ownership and income generating options should be given priority.

24. In urban households, the following sustainable energy options were proposed:

- Improved energy-efficient biofuel stoves. Over a million improved stoves have been disseminated in Kenya, and similar programs have registered encouraging progress in other countries in eastern, western and southern Africa;
- Dissemination of energy-efficient kerosene and LPG stoves to replace environmentallyunsound traditional biofuel cookstoves;
- Compact fluorescent lights, which are widely used in several African countries, notably South Africa, Tunisia and Morocco;
- Insulation blankets for domestic water heaters to conserve energy, which have been piloted in South Africa;
- Pre-paid meters, which encourage efficient use of electricity and improved household energy budgeting. These have been widely tested in Algeria, South Africa and Tanzania, but the high upfront cost of the meters continues to be a major barrier to wider dissemination;

- Household appliance standardization to encourage use of energy-efficient devices, which has been piloted in Ghana and shows encouraging progress;
- Differentiated tariffs that encourage household energy-efficient practices;
- Efficient building designs, exemplified by a model house in Kenya.

25. For rural households, the following sustainable options were proposed:

- Better combustion techniques, with promising results recorded in Kenya and South Africa;
- Smokeless energy-efficient stoves, widely disseminated in Kenya.
- Woodlots, which have proven popular in Western Kenya
- Rampumps, widely used in northeast Tanzania.
- Biogas;
- Small/mini/micro/pico hydropower.

# Transport

26. Participants agreed that regulations were very effective and low-cost policy tools for promoting more efficient use of energy in the transport sector. For example, bicycles attract a high import tariff in a number of African countries. Removal of this tariff would greatly facilitate greater use of bicycles, which constitute a more sustainable transport option.

27. Innovative parking space charging schemes can encourage the wider use of mass transit and non-motorized systems. Uganda and Kenya provide some evidence that parking space charging schemes can play influence urban transport patterns.

28. Other options that were identified but not exhaustively discussed include:

- Car pooling
- Unleaded fuel. Although a number of African countries have launched unleaded fuel initiatives, the Group stressed the need for encouraging a complete shift to unleaded fuel and discouraged partial removal of unleaded fuel;
- Improved vehicle and infrastructure maintenance, as an important sustainable option for reducing energy-related vehicle emissions;
- Mass urban transit to be given priority. Pilot schemes are ongoing in Tunis, and a pilot scheme is under consideration in East Africa;
- CNG for motor vehicles;
- Biodiesel/ethanol (blending);
- Promotion of high-capacity energy-efficient train and river/lake transport. The Volta River/Lake transport option has proven to be notably successful;
- Encouragement of improved regional air links.

# **Regional initiatives**

29. Participants agreed that promotion of sustainable energy options at the regional level should first target regional organization with a specific energy mandate. Examples include:

• Southern African Power Pool (SAPP)

- Power Institute for East and Southern Africa (PIESA)
- Union of Producers, Conveyors and Distributors of Electrical Energy in Africa (UPDEA)
- African Roundtable on Sustainable Consumption and Production (ARSCP)

#### **B. WORKING GROUP ON WATER AND NATURAL RESOURCES**

30. The Working Group on Water and Natural Resources included 13 participants from 11 countries and one international organization. The Chair of the Working Group was Prof. T. Ramjeawon of the University of Mauritius, and the Rapporteur was Dr Mohamed Tawfic of the Suez Canal University.

31. The working group noted the diversity of African countries both in terms of the natural environment and socio-economic conditions, and the resulting diversity of needs, priorities and options. Some countries, particularly in North Africa and Southern Africa, suffer from a serious scarcity of water, while others, particularly in central Africa, have an abundance of water, although most of it is undeveloped and unused.

### Priorities

32. Management of water resources, on the river basin or catchment level, including water resource protection plans, was generally a priority, particular in water-scarce areas where population growth and industrialization are producing a steady increase in the demand for water. Where water is scarce, water withdrawals need be managed, and a legal framework of water rights and standards, suitably enforced, is essential to that purpose. Education, information and awareness raising concerning the importance of productive and efficient use of available water are important both for encouraging efficient use of water and for building public support for water management policies and enforcement.

33. Groundwater is an important source in many areas, and groundwater withdrawals should be regulated as part of general water resources management. However, groundwater resources are generally poorly understood, and research is needed on both the quantity and quality of groundwater resources.

34. Developing sources of water as alternatives to surface water was also considered important in most countries. Rainwater harvesting has increasingly been recognized as an important potential source of good quality water. For high-value uses in water-scarce areas, desalination is an option, although it is expensive and energy intensive, and the environmental impact of the brine by-product can be serious, as for example in Egypt. In coastal areas of Morocco, seawater is used in place of freshwater for industrial cooling. Reducing leakage in municipal water distribution systems and irrigation systems can also increase effective water supply.

35. Reuse of treated wastewater is a priority in water-scarce areas such as North Africa for such uses as irrigation of trees and non-food crops and for industrial cooling. Egypt, for example, is using partially treated wastewater on non-food crops. However, there are concerns over the health risks of using treated wastewater on food crops.

36. In some countries with high rainfall, such as Uganda, the priority for water management is not to limit water withdrawals, but to encourage productive use of the large unused water supplies. Small-scale irrigation systems, mini-hydropower systems, and gravity flow water

distribution systems can be effective low-cost means of expanding the productive use of water resources without large investments.

37. Water management in water-scarce areas should also take into account the "invisible" or "embodied" water contained in imported or exports products, particularly agricultural products. Water-scarce areas can make best use of limited water resources by exporting products requiring little water to produce and importing water-intensive products.

# Water quality

38. Protection of water quality, including through pollution prevention and municipal and industrial wastewater treatment, is a central element of water resource management and a priority for most countries. Establishing and enforcing industrial effluent standards is important, but requires water quality monitoring as well as enforcement mechanisms, and many countries have insufficient capacity for effective water quality management.

39. Water quality management systems and facilities can be financed on a user-pays or polluterpays approach. South Africa has general effluent discharge standards and is developing a discharge charge, with additional charges for particular pollutants. Uganda has developed water effluent standards as a basis for applying the polluter-pays approaches, with charges to be introduced next year. In some cases, however, the polluter-pays approach is not feasible. In many cases, water management is financed from public budgets, although such budgets are commonly not sufficient to provide adequate water management.

40. One way to promote cost-effective industrial wastewater treatment is to cluster polluting industries together, allowing common water treatment facilities, as has been demonstrated in Tunisia and Morocco, for example for leather tanneries.

41. Protecting water source areas from polluting activities is also needed, particular for sources of drinking water.

#### Agricultural water use

42. Improving the efficiency of water use in agriculture is a priority in many countries, including promoting efficient irrigation systems such as drip irrigation and water efficient crops. In Egypt, water-inefficient flood irrigation is banned in new irrigation developments and water-intensive rice growing is banned in some areas. One approach that has proven effective in managing agricultural water use and improving efficiency, without introducing politically-sensitive water pricing, is the use of local water user associations for water management.

#### Policy instruments for water management

43. Water pricing can be a tool for managing water consumption and promoting efficient use and is used in a number of countries. However, water pricing is a very sensitive issue in many countries and may not be politically or socially feasible. Charging for water services, particularly for urban water supplies, as a cost recovery mechanism is more widely accepted. In some countries, to minimize opposition, water pricing has been introduced at a very low level, then slowly increased as it became accepted.

44. Public-private partnerships can be a means for improving efficient water services, but management of such partnerships requires a strong public regulatory agency. Public-private partnerships have been effective in improving urban water management in Morocco and Egypt. They have also been used in Cote d'Ivoire, where an inter-ministerial council oversees the private contractor's performance.

45. The establishment of funds to provide financial support on a cost-sharing basis for improving industrial water management have proven effective in some countries. Promoting environmental management systems (EMS), such as ISO 14000 systems, can also promote improvements in industrial water management.

46. Charging for water services such as household water supplies is commonly done by metering water consumption, but meter installation is costly, particularly for the poor. Alternative low-cost volumetric pricing systems for low-income households, such as used in South Africa, include daily filling of a tank of a standard basic volume and flow-limiting systems.

### Meeting the water needs of the poor

47. A priority for meeting the needs of the poor in many countries is facilitating access to safe drinking water. As women often bear the burden of collecting water for household use in the absence of piped connections, they suffer particularly when water sources are distant. Improving water supply infrastructure is important for this purpose.

48. In South Africa, all households are entitled to 25 liters per person per day of free water for basic needs, with increasing block pricing for higher consumption. Increasing block tariffs are also used in Cameroon to ensure affordable water for poor people while reducing unnecessary consumption by others.

49. In rural areas, water user associations can provide a valuable function in managing and maintaining water infrastructure. Rainwater harvesting can also provide good quality water at low-cost for low-income and rural households.

50. Water supply is often a constraint in improving sanitation for the poor. In crowded urban slums unserved by sewer systems, water use for sanitation can also pose serious threats to health and the environment. An effective approach to overcoming this constraint, as applied in parts of South Africa, is the use of dry sanitation techniques that dispose of human waste safely without consuming water, allowing reuse of other household "grey" wastewater for non-drinking purposes. This "ecological sanitation" is also being applied in Uganda in schools, marketplaces and towns with high watertables. Other water-conserving sanitation techniques include low-flush toilets and membrane filtration systems for the treatment of household wastewater.

51. The Working Group felt that a concept paper would be valuable to investigate the potential for innovative systems for the supply of water and sanitation services (leapfrogging or tunneling through the environmental Kuznet's curve), using a life-cycle assessment approach which includes social and developmental assessment criteria.

52. It was also noted that in some cities, wealthier households are provided with subsidized lowcost clean water through piped municipal water supplies, while poor people pay higher prices for water, often of lower quality, from private water vendors. Municipal water supply systems should ensure equitable distribution of public water services between rich and poor.

# **Regional cooperation**

53. Regional cooperation could support capacity building for water management, including for water legislation and regulation and the application of environmental impact assessment (EIA) and strategic environmental assessment (SEA). Regional cooperation could also be useful for managing transboundary water resources, including transboundary aquifers. Regional organizations could assist in mobilizing funding from international financial institutions for water management activities.

54. Information exchange on a regional basis can promote the dissemination of best practices in water management, both among public water management agencies and for improving industrial performance through improved technologies and tools.

# Natural resource management

55. Management of natural resources in general, including water resources, can benefit from life-cycle thinking, taking into account all impacts of resource extraction, processing, consumption and disposal. Education and awareness raising, based on life-cycle thinking, can contribute to changing unsustainable behaviour with respect to resource consumption, particularly for resources under threat of depletion and endangered species.

56. Education is needed for improving resource management, including in life-cycle assessment, cleaner production, and green chemistry, which is now being taught in Egypt. Public education and information can be supported by the media and such means as brochures distributed by public utilities. Morocco is promoting basic environmental education by establishing environmental clubs in all elementary schools.

# C. WORKING GROUP ON URBAN DEVELOPMENT

57. The Working Group on Urban Development included 10 participants from 8 countries and one international organization. The Chair of the Working Group was Mr Morris Chidavaenzi, Director of the Zimbabwe Cleaner Production Center, and the Rapporteur was Mr Clive Wabule Wafukho, Executive Director of Ivory Hygiene and Environmental Services, Nairobi.

58. The Working Group discussed priorities, best practices and policy recommendations for urban development in Africa as they relate to sustainable consumption and production. The issues discussed were waste management, transport, urban planning, and housing.

### Waste Management

59. Some of the main problems facing African countries on waste management are:

- Lack of infrastructure for waste management, including waste prevention, sorting and collection, transportation and final disposal, with final disposal as an immediate priority;
- Lack of access to and adoption of appropriate technology to manage waste, such as containers to collect sorted waste, recycling plants, and properly designed landfills;
- Widespread illegal dumpsites;
- Limited presence of formal systems to sort and recycle waste;
- Lack of enforcement of waste management regulations.

60. In most African countries, the main problem in waste management is lack of infrastructure for collection, transport and disposal. In Kenya, for example, there is a national policy on waste management, which gives responsibility to local governments for policy development and implementation, but enforcement is weak. There is not a single sanitary landfill for Nairobi. The only available disposal facility is a former quarry right next to the Nairobi River, and some waste is dumped directly into the river. There are similar problems in other cities in Kenya, as well as other cities in Africa.

61. There are small-scale examples of composting, recycling and reuse in Africa, but these are not being scaled-up, partly due to lack of markets for the end products, such as compost from organic waste.

62. Another problem is that waste from health care facilities is mixed with other municipal solid waste.

63. The following solutions were proposed:

- Adopt the waste hierarchy approach, starting with waste prevention;
- Encourage public/private partnerships for waste management;
- Apply extended producer responsibility. For example, waste tires are a problem in Africa as on other continents. South Africa is considering an approach where the purchase price for new tires includes a surcharge to pay for the systematic recovery of tires at their end of life. South Africa is also considering broader application of this approach to electronic waste;
- Separation of different types of waste at the source, which facilitates reuse and recycling;

- Education and information for citizens, especially children, including on waste reduction;
- Assist scavengers in improving their working conditions by integrating them in the newly created recycling programs.

### Transport

64. Some of the main transportation problems facing African countries are:

- Poor development of infrastructure, including roads, rail lines, inland waterways, and air transport, as well as interconnections among modes;
- Low-value, old, inefficient, emission-intensive vehicle fleets for both private and public transport;
- Poorly maintained and inefficiently run mini-buses;
- Poor management of public transportation;
- No provision for pedestrians and cyclists on the roads.
- 65. The following solutions were proposed:
  - Invest in public transport, including trains and bus systems;
  - Design sustainable transport, including roads, to improve mobility in cities;
  - Provide efficient and comfortable public transport;
  - Encourage use of public transport;
  - Support non-motorized transport by including in overall transport planning infrastructure such as bicycle lanes and paths for pedestrians;
  - Phase out leaded fuels;
  - Require emissions testing of vehicles.
  - Improve and encourage clean fuels.

# **Urban Planning:**

66. Some of the main problems facing African countries on urban planning and design are:

- Lack of opportunities in rural areas, which increases migration to cities, where marginalized people join and expand unplanned settlements;
- Failure of comprehensive execution and implementation of urban plans due to corruption;
- Lack of master plans for cities in some African countries.

67. The following solutions were proposed:

- Sustainable planning of cities, including residential and commercial areas that are in tune with sustainable transport design;
- Strengthen institutional capacity to effectively implement urban plans, and promoting transparency and accountability;
- Encourage economic activity in rural areas to reduce urban migration;
- Promote "green-building" through ecological design, including natural lighting, local construction materials, insulation, and standards for energy and water efficiency;
- Design and promote low-cost housing, using alternative "green" technologies;
- Provide green areas in cities.

68. Other important issues that were not discussed for lack of time include governance and unemployment.

### D. WORKING GROUP ON INDUSTRIAL DEVELOPMENT

69. The Working Group on Industrial Development included 18 participants from 16 countries and one international organization. The Chair of the Working Group was Ms Jane Nyakang'o, Director of the Kenya National Cleaner Production Center, and the Rapporteur was Prof. David Mungai of the University of Nairobi.

70. The working Group analyzed factors leading to the low industrial productivity in the region, followed by an identification of policies and measures to improve that situation, with governments, private sector and civil society having active roles. Issues discussed included mainstreaming cleaner production, finding new market opportunities, promoting corporate responsibility, better control of hazardous and toxic waste, and improving working conditions.

71. Participants felt that too little added value was generated in African industry, leading to exports of African raw materials and resources to be processed in other regions, and often returned to Africa as semi-processed goods or end products at high prices. On the demand side there was often a consumer preference for imported goods, which were perceived to be of higher quality. Inefficiencies in production processes, obsolete technologies, lack of skilled labour, lack of access to capital, and lack of domestic research and development were mentioned as obstacles on the production side. Improving industrial productivity could also be promoted by strong policies to promote better working conditions, including safety and health in the work place, as well as by measures to combat HIV/AIDS. This would contribute to the eradication of poverty, since increasing productivity generates income (which should be shared equitably), and higher workplace stand ards would improve working conditions.

72. Some participants pointed to "unfair competition" to local products from imported goods and second-hand goods and equipment, due to the high cost of, or lack of, utilities (water, electricity, infrastructure), poor management practices, and a generally unfavorable political climate. Participants felt that the capacity to develop and implement product standards in Africa should be developed.

73. Improving industrial productivity would require policies targeted at small and medium sized enterprises (SMEs) and specialization within the region, as well as better transfer of technologies, including South-South. It would also require the development of mechanisms to help SMEs bear the incremental costs of the adoption of new technologies, and other economic incentives. Cleaner production needs to be more widely adopted through mainstreaming into national policies, plans, programmes and legislation, finding new and innovative financing mechanisms, promoting sustainable corporate procurement, and strengthening and broadening capacities to convey the importance of the broader sustainable consumption and production agenda to clients, particularly SMEs.

74. Creating new marketing opportunities and improving access to international markets were considered essential, in particular by developing and improving quality standards for both domestic and international markets. Some strategies for developing domestic markets need to be improved. Some participants advocated a shift in industrial strategies towards developing local

and regional markets rather than international markets, which are difficult to access and in which consumer preferences are difficult to assess.

75. Influencing domestic consumers' market preference for imported goods would require a change of attitude (which could be achieved through better information and awareness campaigns), better promotion of local products, and activities to improve the quality of local goods and services. It was also felt that production of sustainable goods, services and equipment in Africa should be promoted through green public procurement programmes.

76. Corporate responsibility needs to be promoted, with revenues ploughed back into local communities. Some participants felt that corporate environmental reporting should be made mandatory.

77. On the issue of hazardous and toxic wastes, a specific recommendation was that the Bamako Convention and the Ban Amendment to the Basel Convention should be ratified by all African countries. Developed countries should not export to developing countries hazardous materials, or second hand products or equipment; and they should enforce their own regulations. Participants felt a need for truly implementable national action plans on prevention, management and disposal of hazardous and toxic wastes. Capacity building for national and regional negotiation and implementation of multilateral environmental agreements (MEAs) was considered highly necessary, in particular in the negotiation phase, since some governments sign conventions without having adequate knowledge – and therefor resources and skills – to comply.

78. Working conditions need to be improved by development and amendment of regulations, updating and strengthening enforcement of occupational health standards (OHS) at national levels, and encouraging adoption of international OHS standards. HIV/AIDS policies should include creating more awareness about impacts of HIV/AIDS on economic productivity, enhancing on-going activities on HIV/AIDS, improving livelihoods of people, and promoting more manufacturing of retroviral drugs.

79. Regional cooperation was considered important, as it promotes technology transfer and synergies. It was noted that networking among National Cleaner Production Centres and other organizations promoting sustainable consumption and production needed to be strengthened.

80. It was concluded that industrialization was needed to alleviate poverty as it would create employment and improve infrastructure and social services.

### E. WORKING GROUP ON NORTH AFRICA

81. The Working Group on North Africa, Chaired by Mr. Mootaz Khalil, Director of Environment and Sustainable Development Affairs, Ministry of Foreign Affairs, Egypt, included 14 participants from 5 countries and 2 international organizations. The Group discussed national experiences related to sustainable consumption and production initiatives in the five countries represented.

82. The Working group identified a number of common priorities for the sub-region, including waste management, water management, energy efficiency, air quality, and natural resources management. The Group decided to focus the discussion on the first three items.

83. On the issue of waste management, the Working Group identified the main problems as follows: the lack of waste collection, poor waste management capacities, in particular for industrial and hazardous wastes, and the lack of managed landfills and incinerators. The Group noted the need to address these issues by strengthening the capacity of national institutions for waste management and treatment through provision of financial and technical assistance and the establishment of more managed landfills and incinerators. Participants also agreed on the importance of separating the different types of waste (industrial, urban, hazardous and hospital wastes) and establishing proper treatment systems for each, and in particular for hazardous waste.

84. With regard to water management, participants considered more rational and efficient water consumption in all sectors (industry, agriculture, household) as a main priority. Due to the scarcity and uneven distribution of water resources in North Africa, the Group highlighted the need to effectively use the existing water and to improve the quality and quantity of the water available for consumption. Participants also stressed the importance of waste water treatment and reuse.

85. Energy efficiency is a priority for North Africa, particularly in the industrial sector. In countries with natural gas resources, there is a need to increase its use for multiple purposes, in particular as fuel for public urban transportation. Solar and wind energy should be developed for remote and rural areas through access to and transfer of technology. The Working Group noted the potential of expanding the use of solar energy in the sub-region, as a clean and sustainable source of energy, if appropriate cost effective technologies were available.

#### **Cross-cutting issues**

86. The Group identified several cross-cutting issues applicable to all three main priorities as well as to the other issues identified.

87. Participants identified the need to strengthen legal instruments both by developing new laws and ensuring enforcement of existing laws related to sustainable development and environmental protection. The lack of legal instruments and the inability to enforce existing laws are major barriers preventing the implementation of sustainable consumption and production in North Africa. To address these constraints, stakeholder involvement and participation at all levels was highlighted. Participants agreed that national legislation related to sustainable consumption and production and environmental protection in developed countries were good sources of inspiration for elements to incorporate into national legislation in North African countries. It was noted that in Egypt the law requires new, expanding or diversifying industries to present an Environmental Impact Assessment Study as a pre-requisite for requesting authorization for the new activities.

88. Participants also highlighted the need to mainstream sustainable consumption and production in all sectors, with special attention to the industrial sector. The Group noted some successful initiatives to incorporate sustainable consumption and production in industry based on guidance in efforts by industry to adopt international standards such as ISO 14000. This guidance included an awareness-raising phase followed by a capacity building phase in the selected industries, supported by economic incentives. The Group underlined the need for awareness-raising and communications campaigns as effective tools for promoting sustainable consumption and production in all sectors.

89. Awareness-raising and information campaigns are particularly important where demand for electrical power at peak periods exceeds supply, requiring power cut-offs or "load shedding" to some areas at some times. In Algeria, an awareness-raising campaign launched on television to reduce high use of electricity in certain cities at certain times of the day prevented the need to cut electricity in others.

90. To promote the mainstreaming of sustainable consumption and production in all sectors, the Group highlighted the need to ensure the transfer, accessibility and assimilation of appropriate technology.

91. The Group considered economic incentives to be an important cross-cutting issue, including taxation policies, customs and tariff exemptions, and the creation of special funds to help enterprises adapt sustainable production methods. In Morocco, a special fund called FODEP (Fonds de Dépollution) has been established in collaboration with the German technical cooperation agency GTZ to allow industries willing to invest in pollution reduction to have access to funds at low interest rates. This incentive measure was considered a successful public-private partnership for promoting environmental protection in the industrial sector.

92. Poverty alleviation and economic development were also considered as cross-cutting issues and as important objectives for all policies and actions to be implemented in the area of sustainable consumption and production in North Africa.

# Pilot projects

93. The Group identified a number of pilot projects related to the three main priorities based on successful national experiences and the potential of replication *a* the regional level, in other countries in North Africa, and perhaps in Sub-Saharan Africa.

# 94. Waste management

• In Morocco, the leather industry collects and reuses the chrome used in the production process, recycling it and preventing inefficient use and pollution;

- In Morocco, eco-efficiency was improved in the dyeing and textile industries with the assistance of the Moroccan Cleaner Production Center and in partnership with the private company BASF and UNIDO. Eco-efficiency analysis provided a basis for optimizing the use of materials and energy and minimizing the generation of waste and emissions;
- The Basel Convention Regional Centre for Training and Technology Transfer for the Arab States, based in Cairo, has initiated a regional project for the preparation of a set of tools for the selection, design and operation of hazardous waste landfills in hyper-dry areas.

### 95. Water management

• Egypt has implemented a successful project for treating sewage wastewater and reusing the water for irrigating forest plantations.

### 96. Energy

- Algeria has implemented a successful "energy a la carte" project to promote management of energy consumption in low-income households. Customers buy pre-paid electricity cards, similar to pre-paid phone cards, according to their energy needs and financial resources and are provided with electricity up to the amount indicated in the card. New refills can be purchased later.
- Algeria and Egypt are promoting the use of natural gas as fuel for public urban transportation. Natural gas fueled vehicles are in use in a few cities such as Cairo and Algiers, with a significant improvement in air quality through reductions in pollution emissions and a reduction on dependence on fuel imports.

# Recommendations

97. The Group highlighted some recommendations to ensure that sustainable consumption and production is implemented in North Africa and suggested that these recommendations be considered also in other sub-regions of Africa. The recommendations focused mainly on establishing or expanding regional and/or sub-regional organizations and arrangements in order to create regional strategies and support existing national strategies to promote sustainable consumption and production.

98. In particular, the Group recommended the creation of an African Observatory for Hazardous Waste in collaboration with the Regional Centers for the Basel Convention and the Bamako Convention. The Observatory would support policies and strategies on hazardous wastes and their disposal at the regional and sub-regional level.

99. Participants also suggested the creation of a sub-regional network among the National Cleaner Production Centers to improve information sharing and expand and coordinate activities at the sub-regional level, including pooling of resources. Participants also highlighted the possibility of expanding the Network of Maghreb Industries for the Environment, which is presently financed by GTZ in Algeria, Morocco and Tunisia, and expand it to other countries in the sub-region.

100. The Group also stressed the need to integrate sustainable consumption and production into NEPAD's Action Plan for the Environment Initiative.

101. The Arab Industrial Development and Mining Organization (AIDMO) was considered as having a potential to expand its activities to promote sustainable consumption and production.

102. Participants recommended to explore the possibility of using the existing European Union Partnerships Agreements with a number of countries in North Africa as a means to further promote sustainable consumption and production in the sub-region.

#### F. WORKING GROUP ON SUB-SAHARAN AFRICA

103. The Working Group on Sub-Saharan Africa included 39 participants from 14 countries and 2 international organizations. Mr Patrick Mwesigye, Director of the Uganda Cleaner Production Centre, chaired the Group, and Prof. Chris Buckley of the University of KwaZulu-Natal, South Africa, was the Rapporteur. The Group addressed the needs and priorities of Sub-Saharan Africa with respect to sustainable consumption and production, with a particular focus on poverty reduction, and identified a number of success stories and best practices.

104. The Group noted the extensive linkages between sustainable consumption and production and poverty reduction, as well as the importance of integrating sustainable consumption and production in all development planning. It was suggested that any new development plans or projects should be evaluated from the perspective of sustainable consumption and production.

105. The Group noted the need to improve efficiency of natural resource exploitation and use in Sub-Saharan Africa, and to reduce poverty, through local decision making and participation, which may require legal reforms. Improved resource management and poverty reduction also require capacity building for local communities to ensure informed decision making and ownership. Where possible, indigenous knowledge should be used for resource conservation and economic development, with protection of local intellectual property, such as traditional medicines.

106. In many countries in Sub-Saharan Africa, declining soil fertility due to inappropriate agricultural practices and crops is an obstacle to poverty reduction, food security and the development of agro-industries. Agricultural techniques that could help to address this problem include traditional agricultural practices and organic agriculture. Taking advantage of new and expanding export market opportunities could also contribute to improving agricultural production. In Kenya, an export company has assisted small farmers in producing French beans for the European market, providing technical assistance in meeting market standards, guaranteeing purchases, and marketing the products. Agricultural extension services could assist farmers in identifying market opportunities as well as in sustainable agricultural techniques.

107. Organic agriculture can maintain soil fertility and reduce water pollution from fertilizers and pesticides, while getting premium prices (typically 10-15% higher) in export markets for products labelled as certified organic. The demand for such products, particularly in Europe, has been growing rapidly, in part due to opposition to genetically modified crops. African indigenous knowledge and traditional agricultural practices, with no chemical inputs, can be adapted relatively quickly and easily to organic agriculture, although obtaining certification can be a problem. Some producers in Africa, such as orange producers in Ghana, have obtained organic certification with European assistance. Organic production also has the advantage of being relatively labour intensive.

108. Efforts are also needed to develop African fisheries. In Tanzania, a fish processing company is working with local fishers and fishing communities, providing technical assistance on sustainable fishing practices, hygienic handling techniques and product packaging and

marketing, with guaranteed sales and improved and more stable revenues. Some of the revenues are earmarked for community development.

109. Sustainable agriculture and rural poverty reduction in Africa can also be supported by improved rural communication systems using modern technologies such as cell phones and internet connections. Such systems can provide farmers with accurate and up-to-date information on prices, reducing dependence on middle-men. Modern information and communication systems can also support agricultural extension services.

110. Electrification for rural areas and affordable energy for the urban poor are critical issues for sustainable development in Africa. Most household energy in Sub-Saharan Africa is obtained by burning fuelwood, agricultural residues or animal dung, often indoors and inefficiently, producing serious damage to health and contributing to environmental degradation. Improved biomass energy generation, including agro-industrial co-generation and bio-fuels, could make an important contribution to energy for sustainable development in Africa, particularly in view of the labour-intensive nature of biomass energy. Kenya and Senegal have promoted improved charcoal stoves for cooking, reducing fuel consumption and air pollution. In Mauritius, bagasse from sugar cane is now an important fuel for electricity generation, in addition to providing process heat for sugar refining.

111. Other renewable energy sources, such as wind, solar and geothermal, can also contribute to meeting energy needs, particularly in areas remote from energy grids, or in mixed grids. However, affordable energy storage is a problem with discontinuous sources such as wind and solar. Rural community participation in the planning, financing, operation and maintenance of energy systems is important to their sustainability and their contribution to poverty reduction.

112. Replacement of traditional biomass fuels by modern cleaner energy sources, such as liquified petroleum gas (LPG) can be market driven through liberalization of the energy sector. In Kenya, energy liberalization has led to the introduction of smaller LPG containers - 3kg and 6kg, in addition to the standard 13kg - and wider distribution, making LPG more accessible and affordable to poor people.

113. In the area of water resources, integrated water resource management and efficient use of water were identified as important issues. In some countries, making productive use of available unused water resources was a priority, together with improving water efficiency.

114. In some countries, deforestation in upstream areas is making downstream flow more seasonal, creating difficulties for water management and year-round use. Catchment management and community awareness were identified as important for watershed and water resource management. In Cameroon, a national discussion on deforestation was organized with the participation of civil society, leading to improved policies for forest management, including regulations and fees for harvesting, with the government working with foresters and community organizations to ensure sustainable forest management. In Zimbabwe, community responsibility for forest management had also proved successful, with funding derived from wildlife management through the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE).

115. In the area of urban solid waste management, it was noted that informal waste collection and trading provide an important source of livelihoods for poor people in many countries, play a substantial role in waste management, reuse and recycling. Waste collection, reuse and recycling could be improved, together with the conditions of scavengers, by integrating the informal and formal waste management systems and developing the reuse and recycling supply chains, including through public-private partnerships. Plastic bags and other plastic products are a particular waste problem, which might be addressed through the development of innovative plastic products. There was also a need for improved handling and safe disposal of medical waste, for example by small-scale high-temperature incineration, as in Malawi.

116. Urban street traders are a source of information for their customers, and efforts should be made to use them to promote sustainable consumption and production.

117. The problems facing urban development in Sub-Saharan Africa are exacerbated by high population growth and by rural poverty, which drives rural-urban migration Efforts toward sustainable development in urban areas should therefore be complemented by rural development efforts including improved access to electricity, safe water, sanitation, health care, education and other services, as well as economic diversification and the creation of local industries and employment opportunities.

118. The Group identified a number of policy issues related to sustainable consumption and production that require further work. There is a need to examine how government procurement can promote sustainable development, poverty reduction and competitive advantage, including by government funding of research. There is also a need to address the problem of low wages, for example by strengthening labour laws and enforcement and promoting corporate social responsibility. The potential for opening African markets for Africans should be examined, for example through regional trade liberalization and new products and services designed specifically for the African market.

119. Policies for sustainable consumption and production should be developed to empower women and enhance their participation in decision making, recognizing their important role in changing social attitudes. There is a need for international policies to reduce trade barriers to African exports and to examine the extent to which ecolabels represent barriers or opportunities. New policies to improve governance and access to justice, to increase transparency and to reduce corruption are also needed. In policy making for sustainable consumption and production, job creation should be a major metric for measuring the effectiveness of policies.

120. In the area of health, the provision of safe drinking water and sanitation, in accordance with the Millennium Development Goals (MDGs) and as part of poverty reduction efforts, is a major concern for all countries in the region. Efforts to meet those needs should take into account sustainable consumption and production criteria (e.g. through environmental life cycle assessment). In particular, the possibility of technology "leapfrogging" to introduce more sustainable technologies than conventional developed-country technologies should be considered. Some countries, such as South Africa, have introduced policies to provide all households with a free basic water supply, with a rising block tariff for higher levels of

consumption. South Africa is also introducing dry sanitation techniques to improve access to basic sanitation while conserving water resources.

121. The Group identified a need to develop commercial opportunities for traditional African medicine to contribute to both health care and sustainable development. Health insurance should make provision for prescribing traditional medicines. Products of traditional African medicine include medical drugs, essential oils, cosmetic ingredients and sweeteners. There is a growing international market for such products, many of which derive from trees, offering opportunities for rural poverty reduction and conservation of forests and biodiversity. However, rural communities need assistance in marketing these products, particular to upscale export markets. Inclusion of traditional medicine in health insurance benefits could provide valuable support for such practices. Market opportunities for natural resource based textiles, including 'smart fibre" blends, should also be developed, particularly for fibres unique to Africa. The maximum benefit of sustainable consumption and production can be achieved if it is introduced at the beginning of a "new wave" for products such as traditional medicines.

122. In the area of education, sustainable consumption and production should be mainstreamed into formal and non-formal education. A particular need was recognized for information dissemination and capacity building among youth, including training for entrepreneurship. In Cameroon, a national youth network (The YouthXchange project in partnership with UNEP-UNESCO) has been established to educate and involve young people in sustainable consumption.

# Priorities

123. The Working Group identified a number of priorities for promoting sustainable consumption and production at sub-regional and regional levels in Sub-Saharan Africa.

124. A number of general priorities were identified for Sub-Saharan Africa, including:

- Creating databases of best practice and success stories and networks for information exchange, for example through the African Roundtable on Sustainable Consumption and Production;
- Disseminating information on improving rural energy efficiency;
- Transfer of knowledge and experience on rural electrification;
- Improving transport networks, including rail networks and water transport;
- Using NEPAD as a basis for increasing funding opportunities of cleaner production projects;
- Using multilateral environmental agreements as a basis for promoting the use of biomass energy and cleaner fuels, for example through the Clean Development Mechanism;
- Capacity building on tools for sustainable consumption and production;
- Networking among youth organizations;
- Developing strategies for managing plastic waste;
- Supporting educational institutions in mainstreaming sustainable consumption and production into in curricula.

125. At the sub-regional level, in the Lake Victoria area, a priority could be developing the use of biomass such as the water hyacinth for compost, energy or fibre, as part of integrated use of lake resources. Sub-regional support networks for rural water and sanitation systems would also be useful. A multilateral environment agreement should be considered for shared resources such as Lake Victoria.

126. To improve access to energy for sustainable development, a priority could be the use of agricultural and forestry by-products for co-generation of heat for industrial processes and electricity for general use. Cooperation on such technologies might be most valuable in sub-regions sharing agricultural crops and agro-industries, such as sugar.

127. A priority in the East African region could be improving the commercialization of tea and coffee and increasing local processing and value-added. Promoting organic agricultural production for the premium export market might also be a priority for both the economic and environmental benefits.

# **IV. CONCLUSIONS**

128. The meeting was conducted in a positive and participatory manner. Participants showed their interest in working on policies and projects to promote sustainable consumption and production on Africa, which could make important contributions to poverty reduction and economic development. The adoption of sustainable consumption and production requires policy integration, public-private partnerships, education and capacity building, dissemination of best practices and information sharing.

129. Participants welcomed the establishment of the African Roundtable on Sustainable Consumption and Production (ARSCP) as a non-governmental, not-for-profit regional coordinating institution. They noted that the ARSCP would play an important role in promoting sustainable consumption and production in the region.

130. Participants agreed that awareness and understanding of sustainable consumption and production issues should be promoted among policy makers at national and regional levels. In particular, at the regional level, sustainable consumption and production should be included in the work programme of the African Ministerial Conference on the Environment (AMCEN), including in the implementation of the Action Plans of the NEPAD Environment Initiative and Science and Technology Programme.

131. Participants discussed and agreed on the Casablanca Statement on Sustainable Consumption and Production (Annex I), to be submitted to AMCEN at its 10th regular session, to be held in Tripoli, Libya, in June 2004. They requested the government of Morocco, as host country of the Expert Meeting, in cooperation with UNEP, as AMCEN secretariat, to transmit the Casablanca Statement to AMCEN for consideration.

132. Participants requested the United Nations system, including UNEP, UNIDO and UN-DESA, and other international and regional organizations, as well as development partners to strengthen their support to national, sub-regional and regional efforts in Africa to promote sustainable consumption and production, as part of the 10-year framework of programmes.

133. Participants requested the UN DESA and UNEP secretariats to disseminate the present report, including through the joint UN DESA – UNEP Marrakech Process website, and to consider organizing a second African expert meeting on sustainable consumption and production, in consultation with the African Roundtable on Sustainable Consumption and Production, to further develop a regional strategy on sustainable consumption and production and an action plan for capacity building. They also requested the secretariats to bring the present report and information on follow-up activities in Africa to the attention of the second international expert meeting on the 10-year framework.

134. Participants expressed their appreciation to the Moroccan Cleaner Production Center and the Secretariat of State for the Environment of Morocco for the excellent arrangements for the meeting and the generous hospitality shown to participants.