

**Action plan for the implementation of the environment initiative
of the new partnership for Africa development**

United Nations Environment Programme (UNEP)

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INTRODUCTION

1. At the beginning of the new millennium Africa is characterized by two interrelated features: rising poverty levels and deepening environmental degradation. Africa is the poorest region of the world. It has the largest share of people living on less than US \$1 per day. Almost 40% of the people in Africa live below the poverty line. At least one-third of Africa's population is undernourished and that number is also growing. Africa is the only region of the world where poverty is projected to rise during this century if adequate measures are not urgently taken. Of the 45 countries on the UNDP list of Low Human Development Indicators, 35 are in Africa. Indeed two-thirds of the 48 countries included in the list of Least Developed Countries are in Africa.

2. The United Nations Secretary General's Millennium Report provides that "Nowhere is a global commitment to poverty reduction needed more than in Africa south of the Sahara, because no region of the world endures greater human suffering". In his report to the second session of the Preparatory Committee for the World Summit on Sustainable Development, the Secretary General notes that half of Africa's population lives in poverty and that the number of poor people is increasing substantially in the region if adequate measures are not taken urgently.

3. In adopting, in New York in September 2000, the United Nations Millennium Declaration, the Heads of States representing the international community, committed themselves to "support the consolidation of democracy in Africa and assist Africans in their struggle for lasting peace, poverty eradication and sustainable development, thereby bringing Africa into the mainstream of the world economy". More specifically they agreed to "take special measures to address the challenges of poverty eradication and sustainable development in Africa, including debt cancellation, improved market access, enhanced Official Development Assistance and increased flows of Foreign Direct Investment, as well as transfers of technology."

4. Related to the rising poverty is the degradation of the environment and increasing loss of the region's natural resources. UNEP's Africa Environment

Outlook (AEO) observes that conditions in natural habitats and fragile ecosystems have been deteriorating resulting in diminishing biodiversity. There are high rates of exploitation of such resources as freshwater, forests, and coastal and marine stocks continue to be used at rates beyond their viable rates of replacement. Land degradation, natural as well as human-induced environmental disasters, and invasive alien species continue to be major problems in Africa. Natural disasters, such as floods, droughts, earthquakes and landslides cause considerable human suffering and economic damage in the continent. On the whole, environmental degradation undermines prospects of fighting poverty, economic growth and sustainable development in Africa. Measures aimed at renewing the region's economies and eradicating poverty must thus promote environmental sustainability. Such measures are founded on the recognition that the environment in general and ecosystems in particular are important sources of goods and services for poverty reduction and economic growth. Just as ecological decline deepens poverty, so can poverty exacerbate environmental degradation. The vicious circle between poverty and degradation of the environment needs to be addressed in a comprehensive manner.

5. In his Millennium Report, the Secretary General of the United Nations concluded that "only Africans can break out these vicious cycles". Africa's leaders have explicitly recognized the fact that economy recovery and growth as well as poverty reduction cannot be achieved without investments in environmental management. This recognition is in the New Partnership for Africa Development adopted by the African Heads of State. It is a programmatic framework in which the leaders pledge "based on a common vision and a firm and shared conviction, that they have a pressing duty to eradicate poverty and to place their countries, both individually and collectively, on a path of sustainable growth and development, and at the same time to participate actively in the world economy and body politic." NEPAD recognizes that the range of issues necessary to nurture the region's environmental base and sustainable use of natural resources is vast and complex, and that a systematic combination of initiatives is necessary in order to develop a coherent environmental programme.

6. NEPAD recommends the development and adoption of an environment initiative - a coherent action plan and strategies - to address the region's environmental challenges while at the same time combating poverty and promoting socio-economic development. This Environmental Action Plan for the first decade of the 21st century is a response to address such challenges. It is prepared through a consultative and participatory process under the leadership of the African Ministerial Conference on Environment (AMCEN). The plan is about Africa's common and shared sustainable development problems and concerns. It is a body of collective responsibilities and actions that African countries adopt and will implement to maintain the integrity of the environment and ensure the sustainable use of their natural resources through

partnerships with the international community. It provides an appropriate framework for the establishment of a strong partnership for the protection of the environment between Africa and its partners based on the commitments contained in the United Nations Millennium Declaration.

SECTION 1: THE ENVIRONMENT IN AFRICA: STATUS AND TRENDS

7. Africa is rich in biological diversity such as minerals, forests, fisheries, land, water and wildlife. Africa has a wealth of natural resources, including minerals, biological diversity, forests, fisheries, water, land and wildlife. It has the largest tropical rain forests and the second largest freshwater lake in the world. The region's forests cover 520 million hectares and constitute more than 17% of the world's forests. They range from the dry tropical forests in the Sahel, Eastern and Southern Africa, humid tropical forests in Western and central Africa, diverse sub-tropical forest and wood formations in Northern Africa and the southern tip of the continent, as well as mangroves in the coastal zones. These forests are however facing increasing deforestation and degradation. Africa has lost 66 million hectares between 1980 and 1995 with 65% of this deforestation during the 1990s.

8. The region has more than 50,000 known plant species, 1,500 species of birds and 1,000 mammals. For example, South Africa has an estimated 20,000 plant species, Kenya has at least 8,000 and Cameroon has more than 15,000. Other African countries such as Madagascar and the Democratic Republic of Congo are known for their rare internationally recognized plant and animal species. Fauna and flora form the foundation of social and economic development of the region and its people. Africa's agriculture is however founded on a narrow range of plant and animal species. Some of Africa's plant species have contributed immensely to the world's pharmaceutical industry. Such plants as *Ancistrocladus korupensis* found in Cameroon, *Pausinystalia yohimbe* (from Nigeria, Cameroon and Rwanda) and *Catharanthus roseus* from Madagascar are being used in pharmaceutical research by industrialized country institutions.

9. The African coastline is vast and traces a variety of habitats - from open ocean, near-shore waters, and sandy and rocky islands to beaches, lagoons, sand dunes, mud and sand flats, rocky cliffs, sea grass beds, coral reefs, and mangroves. Some of the waters surrounding Africa, particularly those from the Straits of Gibraltar to Guinea, are among the richest fishing grounds in the world, and the marine areas from Angola south to the Cape also contain great wealth. Diversity of fish species is high, with more than 4,000 species reported. Some of the most numerous and economically most important fish species are tuna, marlin, and billfish; tuna is a significant source of foreign exchange for a number of countries. Marine and coastal ecosystems contribute significantly to the economies of its countries e.g. in Namibia, the fisheries sector contributes more than 35% of GDP and employs some 12,000 people.

10. Africa contains the world's largest expanse of drylands, covering roughly 2 billion hectares of the continent or 65 per cent of Africa's total land area. One third of this area is hyper-arid deserts, while the remaining two thirds consists of arid, semi-arid, and dry sub-humid areas-home to about 400 million Africans, two thirds of the continent's total. Although reliable data is lacking, it is estimated that some 500 million hectares of land in Africa has been affected by soil degradation since 1950, including as much as 65% of agricultural land.

11. Wetlands cover about 1 per cent of Africa's total surface area. The largest include the Zaire swamps, the Sudd in the Upper Nile, the Lake Victoria and Chad basins, the Okavango Delta, and the floodplains and deltas of the Niger and Zambezi rivers. The diversity of flora and fauna of wetlands in Africa is immense and in many places unknown, with endemic and rare plant species and wildlife, including migratory bird species.

12. Although abundant on a regional scale, water is unevenly distributed by nature and unfairly allocated by man. The total amount of water utilized in Africa is about 90-100 billion cubic meters that represents 2-3% of surface and ground water resources in the continent. Agriculture is probably the largest user of water in the region. At least 6% of Africa's cultivated land is under irrigation in contrast to more than 30% in Asia. A few African countries have high annual averages of water per person but many others already or soon will face water stress or scarcity conditions. Recent studies indicate that more than 300 million people in Africa lack access to safe water. In sub-Saharan Africa about 51 per cent of the population has access to safe water and 47 per cent to sanitation. In general, urban residents have better access to safe water and sanitation than rural inhabitants.

13. Africa's contribution to the global pool of greenhouse gas emissions is still relatively low. It is estimated that the region contributes to only 3.8 percent of the world's total carbon dioxide emissions. Despite the region's comparatively low volumes of emissions to the global greenhouse gas emissions, Africa's economic, ecological and socio-political systems are vulnerable to climate change. Climate change impacts on the countries will be varied, irreversible and long-term. They include: severe climate variability, severe drought, increased erosion and sedimentation of dams leading *inter alia* to changes in patterns of hydro-electric production; sea-level rise endangering coastal zone and small island economies; severe dislocation of the water systems; shifts in agro-climatic zones which would affect biomass production patterns; and general changes in habitats affecting both human and animal population patterns. These impacts could generate irreversible economic and socio-political problems with severe impact on the food security of the continent already affected by a serious food deficit.

SECTION 2: AFRICA'S ENVIRONMENTAL CHALLENGES AND RESPONSES

2.1 Overview of environmental challenges

14. Africa is experiencing an array of serious environmental challenges and problems. Unsustainable exploitation and degradation of forests, soils, wildlife, fresh water, and other natural resources threaten to undermine the region's economic development prospects. For example, the continent is most severely affected by desertification that threatens more than 33 percent of Africa's land area particularly in the Sudano-Sahelian region, Southern Africa and Mediterranean Africa. Recurrent droughts are largely a manifestation of land degradation in the region.

15. The region's economies and political systems are critically dependent on maintaining the environment. Agriculture, the largest sector of the economies is directly dependent on environmental goods and services. In addition, Africa's cultural and political structures are closely tied to the natural resource base, linking the erosion of ecological systems to the erosion of social and cultural systems as well.

16. Despite growing recognition of the importance of natural resource conservation and numerous governmental commitments to environmental protection dating back to 1960, Africa's environment continues to deteriorate. Existing national, sub-regional and regional environmental laws, plans, policies, and institutions have proven inadequate to arrest current trends owing to the lack of adequate financial resources as well as inappropriate response to the root causes of environmental degradation.

2.2 Regional conventions

17. An overwhelming majority of African countries have signed and ratified all the main regional environmental conventions. One of the earliest conservation treaties on Africa was the 1900 London Convention for the Protection of Wild Animals, Birds and Fish in Africa. The aim of the treaty was to prevent the uncontrollable massacre and to ensure the conservation of diverse wild species in Africa which are useful to man.

18. The African Convention on the Conservation of Nature and Natural Resources negotiated under the auspices of the Organization of African Unity (OAU) was adopted in Algiers in 1968. The Algiers Convention aims to "ensure conservation, utilization and development of soil, water, flora and faunal resources in accordance with the scientific principles and with due regard to the best interests of the people. This treaty anticipated by over two decades many of the sustainable development principles that are embodied in Agenda 21 adopted at the United Nations Conference on Environment and Development in 1992 in Rio de Janeiro. It sought to link natural resource use to conservation and contains many of the elements reflected in global treaties such as CITES, Ramsar and the Convention on Biological Diversity.

19. The implementation of the Algiers Convention has been limited because of the absence of appropriate financial resources and adequate response to the root causes of environmental degradation. In 1985, in collaboration with IUCN, attempts were made by the OAU to revise the Convention. In collaboration with UNEP and IUCN, the OAU has finalized the revision of the Algiers convention to adjust it to the new developments. The revised text will be submitted for adoption at the July 2002 meeting of the Heads of State of the African Union to be held in Durban in South Africa. In addition more specialized regional agreements were adopted. These included the 1985 Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region adopted as a protocol to the 1985 Nairobi Convention for the Protection, Management and Development of Marine and Coastal Environment of the Eastern African Region.

20. The protocol committed parties to “take all appropriate measures to maintain essential ecological processes and life support systems, to preserve genetic diversity, and to ensure the sustainable utilization of harvested natural resources under their jurisdiction.” The protocol provides for meetings of the parties to review the implementation of the protocol, assess the need for further measures and adopt or amend annexes. But these institutional measures were not adequate to meet the goals of the protocol for a variety of reasons. Implementing the goals of the protocol required additional finances, technological knowledge and human capacity as well as national and regional policy efforts particularly those that address the root causes of environmental degradation.

21. Other regional environmental agreements include the 1985 Nairobi Convention for the Protection, Management and Development of Marine and Coastal Environment of the Eastern African Region, the Abidjan Convention, the 1973 Convention Establishing a Permanent Inter-State Drought Control Committee for the Sahel, the 1991 Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, and the 1994 Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora. One of the main achievements of these agreements has been the formulation of regional and national actions on environment issues. But their effectiveness has been hampered by inadequate financial resources and lack of adequate human and institutional capacities.

22. In addition to the environmental agreements or treaties, sub-regional and regional bodies such as the Organization of African Unity (OAU), the Southern African Development Community (SADC), the Economic Commission of West African States (ECOWAS), the East Africa Cooperation, the Economic Commission for Africa (ECA) and the Intergovernmental Authority on Development (IGAD) have established environmental programmes or added environmental concerns onto their political and development agendas. The

African Ministerial Conference on Environment (AMCEN) established in 1985 is the main policy forum that provides the region with an opportunity to address its common environmental problems. The revitalized AMCEN arising from the Abuja Declaration adopted in April 2000 is expected to play a leading role in the future.

2.3 International environmental conventions and programmes

23. *An overwhelming majority of African states are parties to many of the international environmental conventions. African countries have ratified the Basel Convention on the control of transboundary movements of hazardous waste and their disposal, the Stockholm Convention on POPs and the Rotterdam Convention PIC.* African countries have ratified the Ramsar Convention on Wetlands, the Convention on International Trade in Endangered Species (CITES), the Convention on Migratory Species, the World Heritage Convention, the United Nations Convention to Combat Desertification and Drought, the Convention on Biological Diversity, and the United Nations Framework Convention on Climate Change. They are now participating in international efforts to implement these conventions. It must be noted that African Countries played a leading role in the negotiation and now in the implementation of the Convention to Combat Desertification. They played also a major role in the negotiation and adoption of the Cartagena Protocol on Biosafety. The implementation of the Kyoto protocol offers an opportunity for the Africa continent in particular through its Clean Development Mechanism. However, as the negotiation related to the implementation and further elaboration of these treaties are becoming more and more technical, the participation of the African countries will need to be enhanced in order to ensure that the Africa interests are promoted.

SECTION 3: ENVIRONMENT ACTION PLAN FOR THE FIRST DECADE OF THE 21ST CENTURY

24. A coherent, strategic and long-term programme of action is required to promote Africa's sustainable development. This is explicit in NEPAD's emphasis about measures that will ensure that the continent is able to confront its short-term economic growth challenges without losing site of the long-run environmental, poverty *eradication* and social development imperatives. Sustainable development is about the long-term. It can only be achieved through investments in the future. Thus the proposed NEPAD environment programme of action takes a long-term approach. It is about processes, projects and related activities that are aimed at enlarging Africa's economic prospects through sustained environmental management.

25. The proposed action plan is integrated in the sense that it takes full consideration of economic growth, income distribution, poverty eradication, social equity and better governance as part and parcel of Africa's

environmental sustainability agenda. The plan's main goal is therefore to ensure the integration of environmental imperatives into all aspects and programmes of NEPAD. Indeed Chapter 8 of NEPAD on the Environment Initiative cannot be implemented in isolation with the overall objectives of NEPAD. It will be implemented in harmony with the other components of NEPAD.

26. The plan is organized in clusters of programmatic and project activities to be implemented over an initial period of ten years. It is founded on the following principles:

- a. Emphasis is placed on those activities and processes that will add new and significant value to existing national, sub-regional and regional environmental management activities.
- b. The plan of action as a whole and its implementation projects will build upon prior progress.
- c. Activities are to be implemented in such a way as to ensure that that Africa learns from its previous efforts and achievements while taking into account the experience gained in other regions of the world.
- d. Collective action with differentiated capabilities—clear recognition that while the continent has shared goals and obligations, its countries have different levels and ranges of capability—financial, human, scientific and technological—endowments. Genuine regional cooperation will thus be required to mobilize or harness the capabilities to implement the plan of action. In addition, emphasis is on those activities that will ultimately enlarge the region's capacity to engage in environmental management.
- e. The action plan, its goals and implementation are not aimed at meeting interests or needs of a country or group of countries but the African continent as a whole.

27. The suggested action plan will build upon the ongoing activities carried out by the revitalized AMCEN in the context of the implementation of the Abuja Declaration and other relevant African processes. It will complement AMCEN priority programme for 2000-2004 which consists of the two following clusters:

- A. Environment Information, Assessment, Early Warning and Environmental Security; Global negotiations; Coastal and marine Environment and the role of AMCEN at major international conferences including the World Summit on Sustainable Development;
- B. Trade and environment; Industry, technology and pollution; Freshwater resources and Managing forest resources.

28. The action plan will also complement the on-going AMCEN activities including the generation and dissemination of environmental information in Africa; Poverty and Environment in Africa, Environmental Assessment in Africa and the strengthening of the collaboration with major bodies in Africa.

29. The Action Plan is organized in clusters of programmatic areas covering the following priority sectors and cross-cutting issues as identified in Environment Initiative of NEPAD: Combating land degradation, drought and desertification; Wetlands; Invasive species; Marine and coastal resources; Cross-border conservation of natural resources; climate change; and, Cross-cutting issues. The action will build upon the related problems of pollution, forests and plant genetic resources, wetlands, invasive alien species, fresh water, coastal and marine resources, capacity building and technology transfer.

3.1 Objectives of the action plan

30. The overall objectives of the action plan are to complement relevant African processes, including the work programme of the revitalized AMCEN, with a view of improving environmental conditions in Africa in order to contribute to the achievement of economic growth and poverty *eradication*. It will also build Africa's capacity to implement regional and international environmental agreements and to effectively address the African environmental challenges in the overall context of the implementation of NEPAD.

31. Its specific objectives are to:

- a. Contribute to the implementation of NEPAD through the effective implementation of its Environment Initiative;
- b. Promote the sustainable use of Africa natural resources; Strengthen public and political support to sub-regional and regional environmental initiatives.
- c. Support the implementation by African countries of their commitments under the global and regional environment conventions and other legal instruments;
- d. Enhance the human and institutional capacities of the African countries to address effectively the environmental challenges facing the continent;
- e. Promote the integration of environmental considerations into poverty reduction strategies, trade agreements and activities and foreign direct investment.
- f. Foster regional and sub-regional cooperation for environmental management.
- g. Build a network of regional centers of excellence in environmental science and management.
- h. Mobilize and direct African and international scientific and technical communities to solve Africa's pressing environmental problems.
- i. **Enhance the effective participation of the African civil society and in particular the African NGO community.**
- j. Improve the institutional framework for regional environmental governance.

- k. Improve regional and international financial flows to environmental initiatives.
- l. Provide a framework for the establishment of a solid partnership between the African themselves and with their bilateral and multilateral partners, including the multilateral financial institutions such as the Global Environment Facility and in accordance with the spirit and the letter of the United Nations Millennium Declaration.

3.2 Programmatic Areas and Activities

Programme Area 1: Combating land degradation, drought and desertification

32. Land is the critical resource and the basis for survival for most people in Africa. Agriculture contributes about 40% of regional GDP and employs more than 60% of the labour force. Land degradation is a serious problem throughout Africa, threatening economic and physical survival. Key issues include escalating soil erosion, declining fertility, salinization, soil compaction, pollution by agrochemicals and desertification.

33. Desertification affects one sixth of the world's population, 70% of all drylands, amounting to 3.6 billion hectares, and one quarter of the total area of the world. In Africa the impact of desertification is particularly acute. It threatens the lives of millions of persons and seriously affects more than 39% of the total area of the continent. Since 1950, an estimated 500 million hectares of African land have been affected by soil degradation, including at least 65% of agricultural land. If the degradation of cultivated lands were to continue at the present rate, it is predicated that crop yields could be cut by half within 40 years thus having serious negative impact on the food security of the continent and aggravating the poverty and the number of malnourished persons. Although a net food exporter before 1960, Africa has become more dependent on food imports and food aid over the past three decades. In 1995, food imports accounted for 17% of total food needs in the region. The rate is expected to at least double by 2010. As a result of declining food security, the number of undernourished people in Africa nearly doubled from 100 million in the late 1960s to nearly 200 million in 1995. Projections indicate that the region will be able to feed only 40% of its population by 2025. Yet, the agricultural potential of the continent remains untapped.

34. There are an estimated 632 millions hectares of arable land in Africa, however, only 179 million, although unevenly distributed, are actually cultivated. The land degradation phenomenon in Africa is being compounded by recurrent droughts and extreme weather events associated with climate change. Nearly two-thirds of African land is arid or semi-arid. The continent is the most seriously affected by desertification which is threatening more than one-third of Africa's land area. All the sub-regions of the continent are affected by desertification. In Northern Africa alone, more than 57% of the total land is

threatened by desertification. It is based on this reality that the international community, in adopting in 1994 the United Nations Convention to Combat Desertification decided to pay special attention to the African continent through the title of the convention as well as the adoption of a distinct annex on regional implementation for Africa.

35. The United Nations Convention to Combat Desertification (UNCCD) in countries experiencing serious drought and/or desertification, particularly in Africa addresses the desertification challenges from a sustainable development perspective. One of the major features of the Convention is the bottom up approach that entails the involvement of local populations and communities in decision-making and the implementation of the Convention. Also of importance is the role assigned to NGOs and Community Based Organization (CBOs) in the organization of local communities for effective participation in combating desertification. The UNCCD also stresses partnership arrangements between the affected people, the government and the donor community in addressing the causes of land degradation. In implementing the Convention, Parties are called upon to forge co-operation with a view to avoiding duplication. The Convention and its Regional Implementation Annex for Africa (RIAA), calls for the preparation and implementation of National Action Programme (NAP), the Sub-Regional Action Programme (SRAP) and the Regional Action Programme (RAP).

36. African countries have played a leading role throughout the negotiation, adoption and now implementation of the Convention to combat desertification. In accordance with the relevant provisions of the Convention and its Annex for Africa, they have committed themselves to:

- a. Adopt an integrated approach in addressing the physical, biological and socio-economic challenges associated with combating desertification and drought;
- b. Establish strategies and priorities to combat desertification and mitigate the effects of drought
- c. Integrate strategies for poverty eradication into programmes and projects related to desertification control and the mitigation of the effects of drought;
- d. Strengthen sub-regional, regional and international co-operation, especially in the areas of information collection, analysis and exchange, research and development, and in the transfer, acquisition, adaptation and the development of technology;
- e. Cooperate within relevant intergovernmental organizations;
- f. Make appropriate financial allocations from their national budgets towards implementation of the Convention and the RIAA; They have adopted National Action Plans and are embarked in the finalization of Regional and Sub regional Action Plans for the implementation of the convention

- g. Strengthen reforms towards greater decentralization as well as reinforcement of participation of local communities in halting and reversing desertification process; and
- h. Mobilize new and additional national financial resources for the implementation of the Convention.

37. Since the adoption of this unique legal instrument, the priority attached to combating desertification in Africa has also been recognized throughout the proceedings of its Conference of the Parties. In this regard, it must be noted that the third Conference of the Parties held in Recife, Brazil, in November 1999, devoted its attention to reviewing the national reports submitted by African countries. The commitments of the African countries to the issue of combating desertification is evidenced by the ratification of the convention by 52 African countries and the submission in less than two years after the entry into force of the convention, of more than 42 national reports. Most of African countries are actively engaged in the preparation, finalization and implementation of National Action Plans. All the African sub-regions are finalizing Regional and Sub regional Action Plan for the implementation of the convention.

38. Indeed, the implementation of the objectives of the Convention to Combat Desertification remains one of the top environmental priorities of the African continent. Accordingly, the overall objectives of this programme area of the Action Plan is to enhance the support for the implementation of the objective of UNCCD to combat desertification in Africa while improving livelihoods and contributing to ensure food security on the continent, including. More specifically this programme area will aim at:

- a. Support the African countries to prepare and finalize national action plans called for by Article 9 of the Convention;
- b. Support the African countries to implement their national action plan in accordance with the national priorities and actions identified;
- c. Support the finalization and implementation of the regional and sub-regional action plans;
- d. Support the effective implementation of the Annex for Africa of the Convention;
- e. Build a reliable and up-to-date information base on the status and trends in land degradation, drought and desertification on the continent.
- f. Strengthen the continent's capacity to anticipate and monitor land degradation, drought and desertification.
- g. Establish an integrated regional information system and promote information sharing on land degradation and desertification control and in the mitigation of the effects of drought.
- h. Develop holistic and integrated tools and methodologies for sustainable land management.
- i. Develop adaptive land management tools and approaches.

- j. Develop and adopt regional land use guidelines and policies.
- k. Harness indigenous knowledge system of land (natural resources) management, particularly Indigenous Soil and Water Conservation (ISWC).
- l. Disseminate information on best practices in combating land degradation, drought and desertification based on a consultative process with civil society organizations.
- m. Strengthen and mobilise the scientific, technical and institutional capacities for integrated sustainable land management to combat land degradation, desertification and drought.
- n. Enhance the human and institutional capacities of national and regional centers of excellence, including when appropriate the establishment of sub-regional and regional information systems on land degradation, drought and desertification.
- o. Establish a regional network of centres of excellence for the development and implementation of national, sub-regional and regional action programmes to combat land degradation, drought and desertification.
- p. Enhance the public awareness and education in support to the objectives of the Convention.
- q. Promote the effective participation of the civil society including Non Governmental organizations and local community for the implementation of the Conventions.
- r. Promote South-South cooperation;

39. The implementation of this programme area will be undertaken in collaboration of the Secretariat of the Convention and in particular the Secretariat of the Annex for Africa located in Abidjan. The Global Mechanism of the Convention will be requested to mobilize additional financial support to the implementation of this programme area. In addition, the designation, by the Second Assembly of the GEF, of land degradation and in particular desertification as a new focal area of the GEF, is expected to enhance the financial support of the Facility to implementation by African countries of the objectives of the Convention. Specific programme and project activities with performance indicators, timetable and responsibilities will be identified in the operational modalities of the Action Plan.

Programme Area 2: Conserving Africa's Wetlands

40. Despite their economic, social and ecological importance, Africa's wetlands are being degraded at alarming rates. The degradation is caused by a variety of factors including land reclamation, pollution, introduction of invasive alien species and overexploitation of fauna and flora. To address the problem of wetlands degradation, a number of African countries have become contracting parties to the Ramsar Convention on Wetlands since the 1970s. The overall

objectives of the Conventions are to stem the loss of wetlands, promote their wise use, and promote special protection of listed wetlands.

41. At national levels, a variety of initiatives have been launched to promote the conservation and sustainable use of wetlands in Africa. These initiatives include public awareness and education campaigns on the importance of wetlands, establishment of protected wetland areas, rehabilitation of degraded wetlands, and formulation of policies and legislation. These offer the foundation for launching a regional programme on managing wetlands of Africa. The overall objective of the proposed programme area is to support national, sub-regional and regional efforts to implement the Ramsar Convention and related programmes.

42. Proposed activities or actions to be developed under this programme area aim at improving implementation of Africa's commitments under the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat. The activities would include the following:

- a. Integrate the sustainable use and conservation of wetlands into African planning processes and environmental strategies and action plans.
- b. Establish conservation areas on wetlands such as nature reserves.
- c. Encourage research and the exchange of data regarding wetlands and their flora and fauna as well as their traditional use and management.
- d. Enhance the sharing of information and experience in integrated wetlands management.
- e. Strengthen national sub-regional and regional capacities for information and data management.
- f. Support sub-regional and regional scientific assessment of status of wetlands with the participation of all stakeholders concerned including civil society organizations.
- g. Build regional network of representative system of protected wetlands.
- h. Enhance public education and awareness raising on the ecological and socio-economic importance of wetlands.
- i. Promote the application of best practices of wetlands conservation, targeting unique ecologies such as dambos and mangroves.

Programme Area 3: Preventing and Controlling Invasive Alien Species

43. Impacts of invasive alien species are now a major public policy and political concern in many countries of Africa. In Eastern Africa the invasion of the water hyacinth (*Eichhornia crassipes*) in Lake Victoria has caused considerable environmental, economic and social impacts. It includes the unsuitability of fish spawning and breeding areas, inaccessibility of fish landing areas, irregular supplies, poor quality of catch, massive amounts of organic decomposition of dead weed, and clogged water intakes. In South Africa, it is estimated that 7% of water run-off is lost to invading alien plants and that figure is growing.

44. Invasive alien species also affect Africa's forestry, horticulture, trade, tourism and other sectors of the economies. The control and/or management of impacts of these species are thus important aspects of ensuring Africa's economic recovery and development.

45. There are a number of sub-regional and regional instruments that can be used to regulate and/or control the introduction into and use of alien species in Africa. These are mainly conventions dealing the environment, agriculture and trade. The Treaty for the Establishment of the East African Community, the Southern Africa Development Community Treaty and the treaty establishing the Common Market for Eastern and Southern Africa (COMESA) provide measures to regulate and/or control the introduction of alien species, particularly invasive ones. In Article 8 of the Memorandum of Understanding between the partner states of the East African Community (EAC), Partner States agree to "regulate, control and where necessary, prohibit the introduction of alien genetic materials including exotic species of flora and fauna" in Lake Victoria.

46. At the international level there are such efforts as the Global Invasive Species Programme (GISP) including a secretariat with a planned location in Africa. The prevention and control of invasive alien species is also addressed by the Convention on Biological Diversity (CBD) in its Article 8h. The fifth Conference of Parties to the Convention adopted interim guiding principles for the prevention, introduction and mitigation of impacts of alien species and considered proposals to develop an international instrument. The CBD and the Ramsar Convention have developed a work plan on invasive alien species. The Sixth meeting of the Conference of the Parties, held in April 2002 in The Hague adopted a number of decisions to address the issue of alien species that threaten ecosystems, habitats and species. The proposed programme will support African countries to implement the decisions adopted by the Conferences of the Parties on alien species. It will focus inter alia on the following activities:

- a. Preparation of national invasive alien strategies and actions plans;
- b. Incorporate invasive alien species considerations into national biodiversity strategies and action plans called for by article 6a of the Convention;
- c. Integrate invasive alien species into sectoral and cross-sectoral policies, strategies and plans as called for by article 6b of the Convention;
- d. Promote research and assessments on the impact of alien species on biological diversity as well as the socio-economic implications of invasive alien species particularly the implications for indigenous and local communities;
- e. Promote the use of traditional knowledge to address alien species, in accordance with Article 8j of the Convention;
- f. Monitor introduction of alien species into African environments

- g. Training of Africans on issues associated with alien species, their prevention and control.
- h. Developing means to enhance the capacity of ecosystems to resist or recover from alien species invasions.

47. More specifically the programme area will aim at :

- a. Designing and establishing a "rapid response mechanism" to move quickly to eradicate potentially invasive species as soon as they appear.
- b. Designing educational programmes to build capacity to deal with invasive alien species for field staff, managers, specialists and policy and decision-makers, including support for community empowerment to deal with early detection and control of invasive species.
- c. Promoting pilot projects in particular on illustrative invasive or flagship native species at risk for dual purposes of capacity building and public awareness raising.
- d. Strengthening infrastructure for research as well as research networks that incorporate risk assessment, risk management and research approaches.
- e. Build capacity to identify record and monitor invasions and develop lists at national and regional level of potential and established alien invasive species.
- f. Review relevant policies, legislation, and institutions to identify conflicts, gaps, weaknesses and inconsistencies and strengthen national measures for prevention, eradication and control of alien invasive species.
- g. Consider the establishment of coordinating mechanisms and process between different levels and departments of government;
- h. Ensure participation and access to relevant information by all stakeholders including local communities in the development and implementation of laws and policies.
- i. Develop control measures to regulate and minimize the introduction of alien invasive species at the point of origin (export), destination (import) or both.
- j. Strictly regulate movement and release of alien species at national level especially in or near vulnerable ecosystems, biodiversity hotspots, and protected areas.
- k. Develop surveillance, monitoring and early warning systems to detect the introduction of IAS and take emergency action as appropriate and warranted.
- l. Enhance the application of environmental impact assessment and risk analysis.
- m. Build Public Awareness and Engagement at all levels of society.
- n. Foster regional and sub-regional cooperation in risk assessment, prevention, eradication, control as well as sharing of information and experiences.

Programme Area 4: Conservation and sustainable use of coastal and marine resources

48. Africa's coastal ecosystems and marine biodiversity contribute significantly to the economies of many countries, mainly through fishing and tourism. They are a major source of livelihood for many thousands of households. Coastal and marine resources contribute considerably to the revenue of countries of the region. For example, in 1997 total marine fish catch exports from Africa contributed US\$445 million to the countries' economies. The fisheries sector is also a significant employer. 70% of the world's fisheries are considered overexploited. Declines in catch rate along the African coasts are also evident. Moreover, marine and coastal resources are under increasing threat from development-related activities. Up to 38% of the African coastline of 40,000km, including 68% of marine protected areas is considered to be under high degree of threat. Uncontrolled urbanization of the coastal zone is a major cause of such as degradation. In some cases, marine pollution from major coastal cities has even reached toxic levels.

49. Africa's coastal ecosystems are also threatened by industrial pollution, mining and oil exploration activities. Although the level of industrial development in the continent is still relatively low compared to other regions in the world, the rate is accelerating along the coastal zones. The Mediterranean basin is now one of the most polluted semi-enclosed seas in the world. Mangroves have high ecological and socio-economic importance. However, mangroves and coral reefs are increasingly under threat from human activities. The Indian Ocean contains about 15% of the world's coral reefs, of which more than one-half is estimated to be at risk from human activities, including those associated with climate change.

50. Current regional efforts to manage the resources are in the form of such conventions as the African Convention on the Conservation of Nature and Natural Resources adopted in Algiers in 1968, the 1985 Nairobi Convention for the Protection, Management and Development of Marine and Coastal Environment of the Eastern African Region, the 1981 Convention for Cooperation in the protection and development of the Marine and Coastal Environment of the West and central African region, known as the Abidjan Convention and the 1991 Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa. There are other numerous regional and sub-regional initiatives on coastal and marine resource management, including the Global Programme of Action (GPA) on land based sources of marine pollution adopted in December 1995 which was reviewed at the First Intergovernmental meeting held in Montreal, Canada in November 2001.

51. Building on the achievements of the Pan-African Conference on Sustainable Integrated Coastal Management held in Maputo in July 1998, the Cape Town

Declaration on an African Process for the Development and Protection of the Coastal and Marine Environment, particularly in Sub-Saharan Africa was adopted in December 1998. It was endorsed by the OAU summit held in Algiers in July 1999 and reaffirmed at the OAU Summit held in Lusaka, Zambia in July 2001. The Cape Town Declaration affirmed the commitments of African leaders to strengthen cooperation through the relevant existing global and regional agreements, including the GPA, programmes and institutional mechanisms, in particular through the coordinating framework of the Abidjan and Nairobi Conventions.

52. The African Process, developed through a UNEP/GEF Medium Sized projects entitled "Development and Protection of the Coastal and Marine Environment in Sub-Saharan Africa", has mobilized eleven nation teams to conduct assessments of the degradation of coastal and marine environment in the countries. Its outcomes will contribute to the development of a common coastal policy that ensures that coastal and marine resources are conserved and sustainably used, and that coastal development is equitable, sustainable and optimizes the use of valuable coastal resources. It has identified the following priority areas for future interventions: coastal erosion; pollution; sustainable use of living resources; management of key habitats and ecosystem; tourism.

53. The overall objective of this programme area is to support the implementation of the objectives of the Abidjan and Nairobi Conventions and contribute to implementation of the decisions of the Super Precom of the African Process to be held in Abuja, Nigeria in June 2002 regarding the protection of the coastal and marine environment. In management Africa's coastal and marine resources in an integrated manner and in particular:

- a. Coastal erosion control in Sub-Saharan Africa;
- b. Development and implementation of Integrated Marine and Coastal Area Management in Sub Saharan Africa;
- c. Impacts of climate change and sea-level rise on the coastal zones of Sub-Saharan Africa;
- d. Conservation of biodiversity through the enhancement and establishment of marine protected areas;
- e. Promoting the establishment of RAMSAR sites and developing participatory and integrated approaches for river basin management;
- f. Enhancing the productivity and stability of mangroves;
- g. Improving the protection and stability of coral reefs and associated communities;
- h. Development of sustainable coastal tourism development and policies and strategies;
- i. Promoting environmental sustainability within the tourism industry through the implementation of an eco-certification and labeling pilot programme for hotels;

- j. Preparation of national ecotourism strategies and implementation of pilot projects;
- k. Pilot measures to demonstrate the best practices in mitigating environmental impacts of tourism;
- l. Assessment and mitigation of the ecological and socio-economic impacts of destructive fishing practices;
- m. Mariculture development;
- n. Impact of global climate change in key marine and coastal ecosystems;
- o. Strengthening management, monitoring, control and surveillance capacity in fisheries management organizations;
- p. Promotion of alternative livelihood strategies;
- q. Solid waste Management and Pollution control;
- r. Development and application of technologies for sewage treatment in cities and towns;
- s. Control of eutrophication in semi-enclosed areas.

54. In addition the objectives of this programme area will also aim at assisting African countries to implement the relevant provisions of the Global Programme of Action for the Protection of the Marine Environment from Land Based and support the activities contained in the Montreal Work Programme for the period 2002-2006, including the strategic action plan on municipal wastewater. The activities under this programme area will aim at:

- a. Incorporating the objectives of the Global Programme of Action into actions programmes, strategies and plans at local, national and regional levels and into sectoral policies;
- b. Strengthening the capacities of regional seas organizations;
- c. Preparing action plan to address priorities of interventions;
- d. Strengthen the capacities of relevant local and national authorities;
- e. Supporting the implementation of the strategic action plan on municipal wastewater.
- f. Promote demonstration projects on the implementation of the guidelines on Integrated Coastal area River basin management (ICARM).

55. The implementation of the activities under this programme area will be undertaken in close collaboration with the Nairobi and Abidjan Convention and the Global Programme of Action on the Protection of the marine Environment form land based activities.

Programme Area 5: Combating Climate Change in Africa

56. Africa accounts for 14% of the world's population. However, nine of ten people have no access to electricity and three fourths of their energy comes from traditional fuels. Consequently, Africa's emissions of greenhouse gases that cause climate change are still low, estimated to be only 7% of global emissions, and Africa presently emits only 3.5% of the world's total carbon

dioxide. In addition, Africa's vast forest reserves serve as a significant sink for carbon dioxide and thus play an important role in alleviating and balancing the emissions of industrialized countries. Although Africa has not historically contributed to the climate change phenomenon and its forests have played the role of a significant sink for the carbon emitted by industrialized countries, it is predicted that the continent will suffer the most from the adverse effects of climate change. It is ironic to note that those who have contributed least to climate change will be the first to suffer the most.

57. In the Sahel region, per capita consumption of commercial primary energy is less than 3% of that of industrialized countries. However, millions of people could suffer from widespread desertification associated with climate change. What is valid for the Sahel region is valid for the continent as a whole. Climate change resulting in sea-level rise and flooding or erosion of low-lying coastal areas will have serious impacts on the continent and its natural resources as evidenced by the 2000 flooding in Mozambique and the severe drought in Eastern Africa. The recent increase in frequency and severity of natural disasters may be attributed to climate change.

58. Drought is the most tragic affliction in Africa, due to its regularity and its severity. In 1984, over 150 million people in 24 countries were on the brink of starvation due to drought. With global warming resulting from increased concentrations of heat-reflecting gases in the atmosphere and increased radiation from ozone layer depletion, the incidence of drought is expected to increase in the arid and semi-arid regions of Africa. Sea temperature change is predicted to increase the frequency and intensity of cyclones in the Indian Oceans. Most of East, Central and Southern Africa, as well as the Western Indian Ocean islands are also affected by the El-Nino Southern Oscillation (ENSO), a natural climatic phenomenon which brings above average rainfall to some regions and reduced rainfall to others. This calls for greater preparedness as well as for measures to mitigate the causes and impacts of climate change.

59. The United Nations Framework Convention on Climate Change (UNFCCC) is the international legal instrument that promotes "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." It explicitly recognizes developing countries' low levels of greenhouse gas emissions as well as their economic development aspirations.

60. At the third Conference of Parties to the UNFCCC held in Kyoto, Japan in December 1997, Parties adopted the Kyoto Protocol. The Protocol establishes legally binding obligations on Annex 1 countries (developed country Parties) to reduce emissions of greenhouse gases (GHGs) on average by 5.2 per cent below 1990 levels by years 2008-2012. It also establishes a Clean Development Mechanism (in Article 12) that is meant to assist non-Annex 1 Parties

(generally, developing countries) in achieving sustainable development and in contributing to the ultimate objectives of the UNFCCC.

61. The overwhelming majority of the African countries are contracting Parties to the UNFCCC and many have already signed and ratified the Kyoto Protocol. The UNFCCC creates obligations on African Contracting Parties. The main obligations relate to communicating to the Conference of Parties information on national inventories of sources and sinks of anthropogenic emissions of greenhouse gases. In addition, African countries are expected to:

- a. Integrate climate change considerations into their social, economic and environmental policies and programmes;
- b. Keep levels of their emissions under check by periodically or as required providing national inventories of anthropogenic emissions and removal by sinks;
- c. Promote education, training and public awareness;
- d. Promote the sustainable management of sinks and reservoirs of greenhouse gases; and
- e. Promote and/or conduct relevant research and cooperate in exchange of information.

62. African countries have identified adaptation to climate change their key priority. They are thus expected to put in place measures that will reduce their vulnerability to climate change and increase their adaptation capacities. This programme will support African countries to meet their commitments and priorities associated with the implementation of the UNFCCC and its Kyoto Protocol. The Action Plan will entail the following actions:

- a. Conduct assessments to determine the region's vulnerability to climate variability;
- b. Test and promote appropriate climate change adaptation measures and strategies in consultation with all stakeholders including the scientific and civil society organizations;
- c. Prepare an African action plan for the implementation of the G8 initiative on the promotion of renewable energy;
- d. Establish a network of centers of excellence for renewable energy in Africa;
- e. Build the region's capacity for systematic observations;
- f. Develop and implement Clean Development Mechanism (CDM) projects;
- g. Enhance public awareness and education on climate change and its associated anthropogenic causes;
- h. Provide appropriate technical training to assist African stakeholders including government agencies, scientific and technical communities and NGOs to fulfil their commitments under the convention and its protocol including on issues related to the preparation of National Communications to the UNFCCC.

Programme 6: Cross-Border Conservation or Management of Natural Resources

63. Africa's natural resources, like those of other continents, are continuous across national borders. Accordingly, sustainable natural resource management requires coordinated cross-border policy and action. This is particularly important for "mobile" resources, including freshwater, biodiversity and genetic resources, including potential negative impacts GMOs. Cross-border collaboration on sustainable use, conservation and management of natural resources can provide both economic and conservation benefits greater than would be achieved by countries working alone. One example is the creation, on 12th May 2000, of the Kgalagadi Transfrontier Park (KTP) the world's first formally designated transfrontier park, bringing together the 28,400km² Gemsbok National Park in Botswana with the 9,591km² Kalahari Gemsbok National Park in South Africa as a single unit under a unified system of control and management, with tourists being able to move freely across the international boundaries between the two countries. A cross-border approach to sustainable use and conservation of natural resources within the NEPAD Environment Initiative should be seen as a complement and extension to existing national initiatives and should build on these national level initiatives where the right opportunities arise.

Freshwater

64. While Africa uses only about 4% of its renewable freshwater resources, water is becoming one of the most critical natural resource issues. Africa has abundant freshwater resources in large rivers and basins. The continent has over than 50 significant international river basins, more than any other continent. Africa harbors the second largest freshwater lake in the world, Lake Victoria. For 14 African countries, their entire territory falls within international river basins. The region has more than 160 lakes that are larger than 10 square miles. Most of the lakes are located around the equatorial region and the sub-humid East African Highlands within the Rift Valley. There are 83 River and Lake Basins in Africa with the following distribution: Northern Africa 11, Western Africa 29, Central Africa 8, Eastern Africa 20 and Southern Africa 15. With over 50 major international water basins in Africa, two or more countries share watercourses.

65. Agriculture is the largest user of water in Africa accounting for 88% of the total water use. It is estimated that 40 to 60% of the region's irrigation is currently lost through seepage and evaporation. Groundwater resources are also crucial for many countries in Africa. However the rate of exploitation is causing increasing threats. The continent is one of the two regions in the world facing serious water shortages. More than 300 million people in Africa still lack adequate access to safe water. The demand for water is increasing rapidly due to population growth and economic development. As a result, Africa's share of

water on a per capita basis is estimated to have declined by as much as 50% since 1950.

66. Currently, 14 countries in Africa are subject to water stress or water scarcity, with those in Northern Africa facing the worst prospects. A further 11 countries will join this category of countries in the next 25 years, bring the number to more than half of the African countries. It has been estimated that by 2025 more than 230 million people (16% of Africa's population), will be living in countries facing water scarcity and more than 460 million (32% of Africa's population) will be living in water-stressed countries. About 50 rivers in Africa are shared by two or more countries. Access to water from shared rivers may be a source of political tension if the situation is not addressed. It must be noted that for the first time, environmental refugees are now in greater number than those caused by conflicts. In addition, water quality is also decreasing at an alarming rate owing to industrial pollution and lack of adequate water treatment thus causing major and persistent health problems. Issues of water quantity and water quality are indeed the most pressing environmental issues in Africa.

67. In adopting the Declaration of the African Minister responsible for Water Resources at the International Conference on Freshwater held in Bonn, Germany in December 2001, the African Ministers stressed that water is the key natural resource throughout Africa. The Ministers decided to focus their efforts on: governance of the water sector; intergovernmental policy dialogue for water security; financing for the development of the water sector; building capacities for the management of the water sector; transfer of technology; meeting the water needs of Africa urbanizing centres; guaranteeing adequate water, sanitation and hygiene services; strengthening the role of women in the management of water resources and the provisions of adequate sanitation services; linking the freshwater environment with the coastal and marine environment.

68. The Abuja Ministerial Declaration on Water: a Key to sustainable development in Africa adopted in April 2002 establishes the African Ministerial Conference on Water (AMCOW) which will adopt at its first substantive session to be held in 2003 an African Regional Programme of Action on freshwater. It also decided to:

- a. Develop a regional implementation support programme to strengthen the on-going water sector reforms in Africa;
- b. Seek support for the establishment of a Regional Water Technology collaborating Center for Africa;
- c. Develop a regional strategy and plan for technical/advisory services with regard to policy, legal and other instruments for the efficient management of freshwater resources in Africa;

- d. Promote actions which will translate into reality the African Water Vision;
- e. Designate the existing African Water Task Force to play the role of a “Regional Water Watch” to be entrusted with the responsibility of providing scientific, information, expert advice and early warning on the changes in the water situation in Africa.

Biodiversity, Forests and plant genetic resources

69. Africa's biodiversity and natural wealth are key to contributing to the economic development of the continent. It includes five globally significant biodiversity hotspots (Cape Floristic Province, the Eastern Arc Mountains and Coastal Forests of Tanzania and Kenya; Madagascar and the Indian Ocean Islands, the Succulent Karoo, and the Guinean Forests of Western Africa. Africa has a large and diverse heritage of flora and fauna, including major domesticated crops. The continent is home to more than 50,000 known plant species, 1,000 mammal species, and 1,500 bird species. Eastern Africa has the highest numbers of endemic species of mammals (55%), birds (63%), reptiles (49%) and amphibians (40%). Madagascar is the most endemic-rich country in Africa and one of the six most significant concentrations of plants in the world is the Cape Floral Kingdom. 70% of the wild species in North Africa are known to be of potential value as sources of traditional food, medicine and pharmaceuticals and half of these have more than one potential use.

70. Savannahs, the richest grasslands in the world, are the most extensive ecosystem in Africa. They support many indigenous plants and animals as well as the world's largest concentration of large mammals. African wetlands also have a rich biological diversity, with many endemic and rare plant species as well as wildlife such as migratory birds. Wetlands are found in most African countries. Throughout centuries, African societies have depended on the rich biodiversity of the continent for survival. They have developed strategies to protect and conserve this natural heritage for the benefit of their own and future generations. In some cultures, rich areas of biodiversity, including forests were often designated as sacred or protected areas.

71. The first national parks in Africa were created in the first half of the 20th century, including the Kruger National Park in South Africa in 1928. A symposium on nature conservation was convened in 1938, which resulted in the designation of many of the existing protected areas in the Arab countries of the continent. There are now more than 3,000 or so protected areas in Africa representing 240 million hectares. Under the leadership of the Organization of African Unity, the African Convention on the Conservation of Nature and Natural Resources was adopted in Algiers on 15 September 1968.

72. Most of the African countries have ratified the biodiversity-related conventions. However the large and diverse biological heritage of the continent

is at risk in all regions of Africa. Some species have already been reported as extinct and many others are under threat of extinction. Recent estimates show that a total of 124 animal species have become extinct from the wild and 924 animal species are critically endangered or vulnerable. Twelve plant species are extinct and 869 are critically endangered. Despite being among the most biologically productive ecosystems in Africa, wetlands are being lost as they are regarded in most of the cases as wastelands and potential areas for agriculture. The introduction of exotic species over the past century has also contributed to biodiversity loss. Armed conflicts have also led to significant ecological damage and biodiversity losses.

73. Environmental pollution is an increasingly major threat to biodiversity in many African countries. Pesticide residues have reduced the populations of several bird species and other organisms. As the region continues to industrialize the adverse impact of pollution on biodiversity is most likely to increase unless cleaner production processes and technologies are promoted. Climate change is the latest emerging threat to biodiversity in Africa. It has already been identified as an emerging cause to the loss of habitat to many species and in particular amphibian populations

74. Most of the African countries have submitted their national report to the Conference of the Parties to the UN Convention on Biological Diversity and are preparing, finalizing and implementing their biodiversity strategies and action plans called for by Article 6(a) of the Convention. The objective of this Action Plan will aim at improving Africa's implementation of the objectives of the Convention including the relevant decisions of the Conference of the Parties with a particular emphasis on sustainable use and the fair and equitable sharing of benefits. To this end, the ecosystem approach will be promoted. A special attention will be devoted to implement throughout Africa the Bonn guidelines on access to genetic resources and fair and equitable sharing of the benefits arising out of their utilization.

75. African countries have played a leading role in the negotiation of the Cartagena Protocol on Biosafety. Many African countries have signed the Protocol and are now engaged in the process of ratification. On the issue of biosafety, this Action Plan will aim at increasing efforts to prepare and implement national biosafety frameworks by African countries. It will also entail the development and implementation of activities to build African human and institutional capacities in accordance with the decisions of the Intergovernmental Committee of the Cartagena Protocol chaired by an African official.

76. The forests of Africa cover 520 million hectares and constitute more than 17% of the world's forests. Forests play an important economic role in many African countries. They provide 6% of the GDP in the region, the highest in the world. But the share of forest products in trade is only 2%. Africa's forests are

threatened by a combination of factors including agricultural expansion, commercial harvesting, increased firewood collection, inadequate land and tree tenure regimes, inappropriate agricultural systems, and accelerating urbanization and industrialization. Droughts and armed conflicts also contribute significantly to forest degradation.

77. During the 80's, Africa lost an estimated 47 million hectares of forests. By 1995, another 19 million hectares had been lost, an area the size of Senegal. In most African countries, there has been an increasing demand for wood products, especially firewood and charcoal. As a result, the consumption of forest products nearly doubled during 1970-1994. At least 90% of Africans depend on firewood and other biomass for their energy needs. More recently, new economic reform measures have removed subsidies on energy alternatives, which further increased the demand for firewood and other biomass. Recent projections estimate that the consumption of firewood and charcoal will rise by 5% by 2010.

78. Africa's forests and associated plant genetic resources are unknown, unstudied, undervalued and under-utilized. Possibly less than 50% of the region's forest ecosystems and plants therein have identified and studied. Threats to plant genetic resources are poorly assessed and analyzed. Meeting NEPAD's goals of achieving sustainable agricultural production, improving human health conditions by utilizing medicinal plants and promoting environmentally sustainable trade will be based on strong scientific knowledge and information on the region's forests generally and plant genetic resources in particular.

79. The objective of this Action Plan is to initiate additional activities to implement plant genetic resource conservation in accordance with the objectives of the UN Convention on Biological Diversity and the International Treaty on Plant Genetic Resources. It will also build capacity for Africa's continued participation in international negotiations on forests.

Section 3: Environment Action Plan for the First Decade of the 21st Century (Continued)

3.3 Cross-cutting issues

80. Major cross-cutting issues include health and environment; trade and environment and the transfer of technology. The actions identified cannot take place without the consideration of issues related to gender and traditional/indigenous knowledge.

A. Health and the environment

81. Exacerbated by rapid population growth, poverty remains the primary cause for most of sub-Saharan Africa's environmental health problems. With a total population of about 450 million, half of Africa's residents have no access to health services and two-thirds lack safe drinking water, according to a 1991 report by the World Bank. Many sub-Saharan water supplies are undrinkable, contaminated by bacteria, untreated or poorly treated sewage, heavy metals and silt from soil erosion, fertilizers and pesticides, mining tailings, and industrial waste. Most Africans are also gravely affected by indoor and outdoor pollutants, microbes that cause life-threatening, diarrhoea and tropical diseases, HIV/AIDS, inadequate sanitation and sewage treatment, desertification and deforestation, mining, and the overuse of pesticides and insecticides. The impacts of Genetically Modified Organisms (GMO's) on human health are an important aspect under the Cartagena Protocol on Biosafety. Due to the lack of knowledge on environmental sustainable alternatives and proper quality control on agricultural products, African farmers have greatly increased their use of chemically based pesticides, herbicides, and fungicides. More than 11 million acute pesticide poisonings, including those with only minor effects, occur annually in Africa, making them a major public health problem. Chemicals as arsenic, cadmium, lead, mercury and sulphuric acid used in various industrial process including mining contaminate water and soil and affect human health. Persistent Organic Pollutants (POPs) widely used in agriculture, disease vector control and industry and generated as by-products in industrial processes and uncontrolled combustions represent a serious threat to human health due to their endocrine disruption effects on immune function, the nervous system, and certain aspects of reproduction in both humans and wildlife.. At least 50,000 tons of obsolete pesticides as well as tens of thousands of contaminated soils have accumulated in most of African countries over long periods. These pesticides pose serious threath to the health of both rural and urban population and contribute to land and water degradation.

82. A large number of African countries are Parties to the Basel Convention on the control of transboundary movement of hazardous wastes and their disposal, the Bamako Convention of 1991, the Rotterdam Convention on the Prior Informed Consent. African countries are also working for the ratification of the recently adopted Stockholm Convention on Persistent Organic Pollutants. They have initiated the activities for the preparation of the National Implementation Plans as required by Article 7 of the convention. The objectives of the activities to be undertaken under this programme area of the Action Plan aim to assist African countries to implement their commitments under chemicals related conventions for which they are contracting Parties. This may include the following:

- a. Strengthening of institutional arrangements and technical infrastructure for Chemical management.
- b. Assisting in the implementation of the objectives of the Rotterdam, Stockholm and Basel conventions.

- c. Developing policies to monitor chemical trade and movements.
- d. Improving public awareness raising of chemical hazards.
- e. Providing user training.
- f. Enhancing control of the use and distribution of pesticides with the view to minimizing risks;
- g. Substituting the most dangerous active substances with safer ones including non-chemical alternatives and the use of indigenous practices,
- h. Preparing and implementation National Action Plans in accordance with the relevant provisions of chemical-related conventions.
- i. Ensuring sub-regional and regional coordination of the activities relating to the convention.
- j. Establishing regional networks and centres of excellence.
- k. Promoting the harmonization of national and regional legislation concerning POPs and chemicals and wastes management including strategies and approaches for enforcement, monitoring and compliance;
- l. Promoting the coordination among government authorities and other stakeholders on issues related to chemical safety (chemicals management, labeling and classification).
- m. Initiating activities for the introduction and diffusion of Integrated Pest Management and Integrated Vector Management techniques by taking advantages of experiences in other regions and developing local adaptations,
- n. Developing and adopting sound and sustainable alternatives in the use, management and disposal of toxics in industry.
- o. Strengthening the regional capacity for chemical analysis.
- p. Implementing programmes to clear all obsolete pesticide stocks from Africa and put in place measures to prevent their recurrence.

B. Trade and Environment

83. The past two decades have witnessed rapid trade and investment liberalization in many African countries. Countries have instituted new trade and investment policies and laws and created agencies to be responsible for promoting liberalized trade and investment. In many cases, the policy and legal instruments as well as the agencies have not taken into account environmental considerations. Domestic and regional decision-making systems have tended to separate economic, trade and investment issues from environmental factors. Specific environmental standards and rules must be built in national, sub-regional and regional trade and investment regimes to ensure that liberalized trade and foreign direct investment practices contribute to meeting sustainable development goals.

84. To promote the integration of environmental considerations into sub-regional and regional trade and investment regimes the following activities or actions are proposed:

- a. Undertake a review of the environmental content and implications of such sub-regional and regional trade and investment treaties and selected programmes.
- b. Review the impact(s) of international trade liberalization on shared ecosystems such as freshwater, coastal and marine resources, and forests.
- c. Establish an African working group on trade, investment and environment to explore and develop common environmental principles and policies that would be integrated into regional and sub-regional treaties and programmes
- d. Strengthen Africa's capacity to participate in WTO's committee on Trade and Environment.
- e. Organize regional meetings to promote dialogue between ministries of environment and those responsible for trade with the aim of facilitating national and regional efforts to ensure that trade, investment and environmental policies and practices are mutually supportive.
- f. Prepare and adopt an African code of ethics on trade, investment and environmental sustainability.
- g. Develop and harmonise of national and regional legislation in line with the international conventions including strategies and approaches for enforcement, monitoring and compliance

C. Transfer of environmentally sound technologies

85. Africa's sustainable development is largely dependent on its ability to develop, acquire and apply environmentally sound technologies. "Environmentally sound technologies are not just individual technologies, but total systems which include know-how, procedures, goods and services, and equipment as well as organizational and managerial procedures."

86. African countries have been active at negotiating for favourable terms of technology transfer. In such conventions as those on biological diversity and climate change, they have always called on the industrialized countries to facilitate the transfer of new technologies through relaxation of intellectual property protection. Issues of technology transfer are also noted in national and sub-regional action programmes on desertification.

87. To help facilitate the acquisition and/or transfer of environmentally sound technologies to African countries, the following activities will be considered and developed:

- a. Establishment of a regional clearing-house mechanism that would gather and disseminate information on the nature and range of environmentally sound technologies on the international market.
- b. Support to African countries to formulate and implement incentive measures that may include subsidies and tax policies.

- c. Establishment of a fund for the acquisition of the technologies and support to local research efforts aimed at generating environmentally sound technologies.
- d. Develop and implement an African Action Plan for the implementation of the United Nations Secretary General Global Compact initiative aimed at mobilizing private sector support for the sustainable development of the continent.

D. Assessment and Early warning

88. Africa environmental assessment capacity to address environmental challenges will need to be enhanced. To this end, the following activities may be promoted:

- a. Support the development of an Africa programme in early warning, including the establishment of an Africa Information Network.
- b. Prepare and implement institutional capacity building for integrated environment assessment.
- c. Increase access to relevant information data and information to support vulnerability assessment and the issuing of early warnings of environmental emergencies issues and threats;
- d. Incorporate environmental aspects of early warning and vulnerability assessments into the decision-making process for disaster preparedness and management;
- e. Facilitate access to and dissemination of information on environmental issues and threats at national, sub-regional and regional levels, using the best possible date information;

4. IMPLEMENTATION OF THE ENVIRONMENTAL ACTION PLAN

89. The Environmental Action Plan is a living document that will need to be reviewed by AMCEN in order to adjust it to the changing needs and circumstances. Its implementation will require a long-term approach. It will be implemented in harmony with the other components of NEPAD and building on the achievements and work programme of AMCEN and other relevant African initiatives such as the African Ministerial Conference on Water and the African Process. It will require an appropriate implementation mechanism as well as adequate financial resources.

A. Implementation mechanism

90. The implementation of the Environment Action Plan will required renewed efforts from the African leaders in charge of environment issues. To this end, the revitalized AMCEN will act the main African policy forum for the implementation of the African Environment Action Plan. The Bureau of AMCEN is mandated to play an active role for the implementation of the Action Plan during the inter-sessional period of the Conference. The Implementation of the Action Plan will be reviewed at the regular meeting of AMCEN based on a

written report of the Bureau. The Action Plan will be implemented in close cooperation with the African Union, the Secretariat of NEPAD, and the Economic Commission for Africa. To this end the President of AMCEN will submit regular reports on the implementation of the Action Plan to the conference of ministers of the African Union and the Economic Commission for Africa.

91. The review of implementation will entail a review of the measures undertaken from the time of adoption of this Action Plan. It will entail a review of the status of the environmental problem concerned in each programme area of the Action Plan, a review of the sources of the environmental problems of concern in each programme area and a review of the national measures to address the problem, particularly national policies. The purpose of the review will be to enable states to see what others are doing to implement the Action Plan in a given programme area, to identify common problems faced with the goal of enabling African countries to learn from each others experience and improve implementation efforts.

92. The Bureau of AMCEN will be assisted by a steering committee comprising the members of the steering committee of the UNEP/GEF Medium Sized Project on the Development and Implementation of the environment component of NEPAD namely: Algeria, Egypt, Mali, Morocco, Nigeria, Senegal, South Africa, Tanzania and Zambia. The steering committee will meet at the level of experts and when appropriate at the level of ministers. A meeting of the steering committee will be convened at least once a year. The inter-agency task force established under the UNEP/GEF projects will continue assisting the steering committee under the overall coordination of the secretariat of AMCEN.

93. The steering committee through the Bureau of AMCEN will submit to the 10th meeting of AMCEN a detailed document on the operational modalities for the implementation of the Action Plan. These operational modalities will include concrete project activities, performance indicators, time table and a delineation of responsibilities among relevant actors as well as monitoring mechanisms. To this end the approach followed by the African Process may serve as a useful model. In this regard the steering committee will organize thematic experts meetings with a view of further elaborating the priorities identified in the Action Plan. The steering committee in preparing the operational modalities for the implementation of the Action Plan will take into account the results of the World Summit on Sustainable Development of relevance to Africa.

94. At its first meeting the steering committee will finalize the criteria and guidelines for the preparation for AMCEN approval at its 10th meeting of projects activities building on the following criteria aimed at ensure coherence in the implementation of the action plan.

- **Regional, sub-regional and multi-country projects or regional outlook-**Projects developed and selected under the action plan should have a sub-regional or regional outlook or involve several African countries.
- **Multi-focus:** Projects should aim as far as possible at integrating the three pillars of sustainable development.
- **Participatory nature:** Projects should be developed through a participatory approach with strong ownership with all partners including the government, the private sector, civil society including NGOs and the scientific community;
- **Programmatic approach:** Projects should be integrated in a comprehensive, programmatic as far as possible strategic approaches;
- **Sustainable Development Perspective:** Projects should be designed taking into account the need to alleviate poverty and promote economic growth;
- **Capacity Building:** Projects should integrate capacity development needs as part of their planned activities;
- **Maximize utilization of African expertise:** Projects should aim at maximizing the utilization of local experts and institutions;
- **High rate of duplication:** Projects should be designed to ensure replication and dissemination of good practices and experiences.
- **Sustainability of activities:** Projects should have activities whose benefits are sustainable beyond the life cycle of the interventions;
- **Fundability:** Only projects likely to attract adequate domestic funding and external support shall be considered.
- **Promote sharing of experiences and learning:** Projects should aim at promoting sharing of experiences, enhancing regional cooperation and collective learning;
- **Performance criteria:** Projects should contain clear objectives, performance indicators and monitoring mechanisms;
- **Thematic balance:** Balance between the thematic areas of the Action plan should be sought;
- **Geographical balance:** Balance between the five Africa sub-regions should be sought based on the United Nations geographical groupings;
- **Equity:** Equity should be integrated in the project.

B. Financial Resources

95. The implementation of the Action Plan will require the provision of adequate financial resources to be mobilized by Africans themselves. However, based on the commitments agreed upon by the international community and as contained in the United Nations Millennium Declaration and the Monterrey Consensus on financing development additional financial resources will be required. To this end, a donor meeting with the participation of the bilateral and multilateral financial institution including the GEF will be convened for mobilizing additional financial resources required for the implementation of the Action Plan and in particular its attached annex on capacity building. This meeting will be held no later than the December 2002.

CONCLUSION

96. The African Environment Action Plan for the implementation of the environment initiative of NEPAD is a concrete response by African leaders to address the environmental challenges facing the continent with a view of promoting sustainable development in one of the poorest continent of the world. It offers a unique opportunity to build a strong and vibrant partnership between Africa and its partners including the private sector. Africa leaders are determined to fulfill their commitments and their responsibilities towards present and future generations in order to protect the local and the global environment of our planet. Africa expects its bilateral and multilateral partners to join forces and support this historical initiative. As a matter of urgent priority for the establishment of such a partnership the annex containing a strategic plan to build Africa's capacity to implement global and regional environmental conventions is submitted.

ANNEX 1

A STRATEGIC PLAN TO BUILD AFRICA'S CAPACITY TO IMPLEMENT GLOBAL AND REGIONAL ENVIRONMENTAL CONVENTIONS INTRODUCTION

1. Agenda 21 (Chapter 37) defines "capacity-building" to encompass "the country's human, scientific, technological, organizational, and institutional and resource capabilities. A fundamental goal of capacity-building is to enhance the ability to evaluate and address the crucial questions related to policy choices and modes of implementation among development options, based on an understanding of environmental potentials and limits and of needs as perceived by the people of the country concerned. As a result, the need to strengthen national capacities is shared by all countries". It is a knowledge-intensive process requiring the continuous upgrading of skills, organizational capabilities, policies and laws. Capacity building is therefore a long-term and dynamic process.

2. Building the capacity of African countries to implement global environmental conventions has been recognized as one of the priority challenges to meet sustainable development. This recognition is articulated in decisions of conferences of parties to the conventions of all major global and regional environment conventions. As the primary financial mechanism of the Conventions signed in Rio de Janeiro, the Global Environment Facility (GEF) has recognized such a need by initiating in 1996 the enabling activities and initiating the Capacity Development Initiative. There is growing commitment by African countries themselves and the international community to invest in strategic and coherent activities that build the region's capacity to implement conventions in a coordinated and comprehensive manner.

3. The Global Environment Facility (GEF) through its Capacity Development Initiative (CDI) has supported a number of assessments of national and regional capacity needs. It is supporting more national capacity need assessments. These are aimed at identifying and clarifying the specific human resource, institutional, financial, policy and other capacity requirements of countries. They provide the necessary basis for formulating and implementing national and regional capacity building programmes.

4. One of the priority goals of the environment initiative of the New Partnership for Africa's Development (NEPAD) is to build Africa's capacity to implement environmental conventions and such related international legal instruments as the protocol on Biosafety. To respond to such an urgent need, a Strategic Plan for Capacity Building for Africa (SPCB) - to achieve capacity building goals of the environment initiative has been developed. The plan is organized around clusters of activities and processes that will be implemented over a 5-year period. The proposed activities target specific needs identified by African countries themselves. The countries will also take overall leadership in implementing this plan. The suggested plan will build on and complement the GEF Capacity Building Initiative and will aim at achieving its overall objectives. It will be submitted to the donor meeting to be held before the end of the year 2002 on the Africa Environment Action Plan for the implementation of the New Partnership for Africa's Development.

5. African countries face numerous challenges in their efforts to implement their commitments under global environmental conventions and to achieve sustainable development. Since the 1972 Stockholm Conference on the Human Environment, many agreements and related regulatory instruments have been adopted at international level to conserve and manage the natural environment and to guide human activities for sustainable development. Today there are well over 200 relevant multilateral agreements concluded on environmental subjects as diverse as biological diversity, Biosafety, Transboundary Long-Range Air Pollution, the Law of the Sea, Climate Change, Toxic substances, Desertification and Protection of the World's Cultural and Natural Heritage. Several environmental agreements have been concluded at regional and sub-regional levels.

6. The implementation of the global environmental conventions must necessarily take place at national level. Unfortunately, many African countries lack the capacity to implement fully the complex provisions of this growing body of international law. Building the capacity of these countries must now be given top priority. But such capacity building must be informed by and based on the country's own needs and priorities.

7. Africa's priorities for the implementation of the conventions can generally be drawn out of national reports, national strategies and action plans, statements by delegations at meetings of conference of parties, project proposals

submitted to financial institutions and donors and reports of national workshops as well as country studies. The capacity needs include:

- a. Development of adequate national policy frameworks for the effective implementation of the global and regional conventions.
- b. Preparation and implementation in a coordinated manner of national, legal and regulatory frameworks to comprehensively address the complexity of issues covered by global conventions.
- c. Promote / Enhance adequate institutional mechanisms for the implementation of such frameworks, including strengthening the role of environmental institutions.
- d. Promote / Enhance mechanisms for environmental information including coordination, integration, and delivery to identified targets, and particularly those in the policy and decision making process.
- e. Promote / enhance mechanisms required for regional and international cooperation on issues of common concern such as the management of shared ecosystems, including for example: migratory species, trade in endangered species, shared coastal and inland water bodies, transboundary river basins and pollution, as well as exchange of information and expertise.
- f. Promote information and understanding of the status of and trends in environmental degradation, vulnerability to climate change, impacts of land degradation and desertification and implications of loss of biodiversity in addition to a variety of other environmental challenges is still meager in many African countries.
- g. Enhance the negotiating and technical skills of the African representatives at the meetings of the major global conventions.
- h. Public awareness of global conventions and related sustainable development instruments

I. OBJECTIVES

8. The overall objective of the Strategic Plan for Capacity Building for Africa (SPCB) is to enable African countries to implement in a coordinated and comprehensive manner their commitments under global and regional environmental conventions and other international legal instruments. It will also promote sharing of experiences at national, regional and sub-regional levels and to encourage South-South cooperation.

9. *The SPCB should apply to decisions made at other CPs as well.* The SPCB is being developed and will be implemented through partnership among Africans themselves and between them and the international community. It will take a comprehensive approach for developing the capacities needed by African countries to fulfill their commitments under global and regional environmental agreements. It is process oriented and aims at maximizing impact at the

national and regional levels. As stated above, the plan focuses on capacity needs identified by countries themselves. Its specific objectives are to:

- a. Support African countries to generate and use relevant knowledge and information to implement their commitments under global environmental conventions;
- b. Assist African countries to implement capacity building provisions of the United Nations Convention to Combat Desertification.
- c. Support African countries to implement capacity building provisions of the Convention on Biological Diversity and other biodiversity related conventions such as CITES, RAMSAR and CMS.
- d. Assist countries to implement capacity building decisions adopted by the second meeting of the Intergovernmental Committee for the Cartagena Protocol on Biosafety.
- e. Assist African countries to implement capacity building decisions adopted by the seventh session of the Conference of Parties to the United Nations Framework Convention on Climate Change held in Marrakech, Morocco in November 2001.
- f. Support African countries to prepare for the entry into force and the implementation of the Kyoto Protocol.
- g. Support countries to create skills for negotiating and participating at meetings of parties to global environmental conventions
- h. Support the improvement of national, sub-regional and regional policies and related legal instruments for implementing global environmental conventions.
- i. Strengthen national, sub-regional and regional institutional arrangements to implement global environmental conventions and related sustainable development instruments.
- j. Assist countries to implement capacity building decisions and activities of chemicals related conventions.
- k. Assist Least Developed Countries (LDC's) of Africa to prepare and implement national adaptation programmes pursuant to the decision of the seventh session of the Conference of Parties to the UN Convention on Climate Change.
- l. Support African countries to prepare for the entry into force and the implementation of the Stockholm Convention on Pesticides and Organic Pollutants (POPs) and the Rotterdam Convention on Prior Informed Consent (PIC).
- m. Strengthen the capacity of African countries to implement regional seas conventions and related regional and global programmes of action.
- n. Support the countries to implement the environmental pillar (in particular those aspects related to global environmental conventions) of the Johannesburg Plan of Action.
- o. Promote the maximization of synergies between environmental and other global and regional conventions.

II. GUIDING PRINCIPLES AND ELEMENTS

10. The design, preparation and implementation of the SPCB shall be guided by the following principles:

- a. Consistent with African national priorities and needs as contained in their respective action plans and strategies as well as national reports on the implementation of relevant conventions submitted to the Conference of the Parties;
- b. Consistent with the relevant provisions of the environmental conventions and the guidance of the respective Conferences of the Parties;
- c. Be country driven with the full participation of major stakeholders and in particular the representatives of the civil society, including NGOs, women and youth;
- d. Be flexible so as to be adjusted with evolving needs and priorities of countries;
- e. It should follow the principle of "learning by doing" as well as a step by step approach;
- f. It should be a continuous, progressive and inter-active process;
- g. It should be undertaken in an effective, efficient, integrated and programmatic manner;
- h. It should mobilize and enhance national, sub-regional and regional institutions and build on existing processes and endogenous capacities;
- i. Take into full consideration the specific needs of the Least developed countries of Africa;
- j. Be consistent and in conformity with other activities of the environmental initiative of the New Partnership for Africa's Development;
- k. Assist in the implementation of the environmental component of the Millennium Declaration adopted in September 2000 by the United Nations General Assembly;
- l. Build on existing bilateral and multilateral capacity building initiatives;
- m. Complement, support or be part of the GEF Capacity Development Initiative;

III. ACTIVITIES

11. To achieve the above objectives the following activities may be considered and developed.

1. Human Resource Development

12. One of the capacity requirements of many African countries is human skills or expertise in policy, legal, technical and scientific aspects or issues emerging from environmental conventions and related protocols. Generally, expertise necessary to translate provisions of conventions into concrete national activities, policies and laws is in short supply in many countries. The countries

have often identified shortage of skills in such areas as taxonomy, climate science, environmental economics and environmental law. There is also a shortage of expertise or skills for negotiating environmental agreements.

13. To support the building and strengthening of Africa's human resource base for the implementation of environmental conventions and related sustainable development instruments, the following activities may be considered:

- a. *Identification of environmental conventions that a country is party to and prioritizing them according to country needs or issues of major concern.*
- b. Preparation and review of appropriate training course modules on environmental conventions.
- c. Identification and selection of appropriate regional and international training institutions.
- d. Preparation of specific training projects. These will focus on specific capacity needs of the countries. The training may be offered as short and long courses depending on specific needs. Emphasis will be placed on developing a core of skills or critical mass of expertise that can/should be shared across the continent. This critical mass will also be utilized to train others. Specific training courses on negotiations--with emphasis on different approaches and tools for negotiating conventions--may be developed.
- e. Frequent review and evaluation of training projects.

2. Public education and awareness raising

14. The achievement of the objectives of the global environmental conventions by the African countries largely depends on the extent to which their general public and decision-makers are aware of the conventions and their respective national obligations. Public and decision-makers support to and ownership of the conventions are very crucial to national implementation.

15. Most global environmental conventions recognize the importance of educating the public and increasing public awareness of the conventions. For example, the Convention on Biological Diversity has devoted its article 13 to measures aimed at public education and awareness. Article 13 calls on contracting parties to "cooperate, as appropriate, with other States and international organizations in developing educational and public awareness programmes, with respect to conservation and sustainable use of biological diversity." Public education and awareness considerations are also integrated into the Convention to Combat Desertification, the Climate Change Convention as well as the Stockholm Convention on POPs.

16. Within the framework of this SPCB, specific activities will be developed to implement public education and awareness provisions of global environmental agreements. Recognizing that countries have developed or will develop their

own priorities and activities on public education and awareness, the following activities may be considered:

- a. Developing common strategies to integrate issues on environmental conventions into education at all levels. This may involve review and revision of school and universities' curricula.
- b. Establish a regional environmental education programme to be coordinated through a network of centers of excellence.
- c. Support university and other tertiary research and educational activities on environmental policy and law. In addition, encourage and support the establishment of cross-disciplinary environmental courses in African universities.
- d. Support countries to develop and provide appropriate information packages to the public, if possible in their national languages.
- e. Support countries to establish media facilities that focus on global environmental conventions and related sustainable development issues.
- f. Organize regional youth environmental sessions and put emphasis on dissemination of information on global environmental conventions.
- g. Encourage and support non-governmental organizations to increase their involvement in environmental awareness building, with emphasis on issues on and emerging from global conventions.

3. Strengthen institutions and improve coordination

17. The ability of African countries to fulfill their commitments under global environmental agreements largely depends on the nature and capacities of institutions that they establish and how such institutions are configured to achieve synergies in their operations. As already stated above, the implementation of conventions is often not effectively achieved because of weak institutions at national, sub-regional and regional levels. Strengthening the capacity of institutions particularly to develop and negotiate appropriate mandates and modus operandi as well as appropriate legal and regulatory frameworks will be one of the key priorities of the SPCB.

18. On the basis of specific priorities of African countries, the SPCB may focus on the following:

- a. Support countries to strengthen mandate and capacities of relevant institutions responsible for the implementation of global and regional environmental conventions.
- b. Promote coordination of and synergies among national, sub-regional and regional institutions responsible for implementation of conventions.
- c. Support the strengthening of AMCEN and sub-regional and regional economic bodies' participation in the negotiation and implementation of conventions.

- d. Promote the establishment and/or strengthening of centers of excellence in environmental law, policy and science as well as to strengthen their participation in regional processes on conventions.

4. Support the development of information systems and related environmental assessments

19. The absence of adequate and relevant information and data has been identified as one of the capacities needs to implement global and regional environment conventions. Also the capacity to generate, manage and effectively use information and data on various aspects of environmental management and governance is in short supply in Africa. Meeting commitments under global conventions will require African countries to strengthen their abilities to generate, manage and use relevant information and data.

20. To contribute to the building of capacity to implement information and environmental assessment related provisions of global conventions, and building on such ongoing efforts as the African Environment Outlook produced through AMCEN, the SPCB may:

- a. Support training of Africans in assessment and information management aspects related to global environmental conventions.
- b. Support national and regional capacity to collect and use multi-sectoral information in decision-making processes and build capacity to collect and analyze data and information for decision-making
- c. Consider supporting the establishment of a comprehensive regional information framework.

5. Mobilize and strengthen the role of scientific and technical communities

21. The implementation of global environmental conventions and related sustainable development instruments is a knowledge-intensive effort that largely requires scientific and technical knowledge. For African countries to meet their commitments such as conducting inventories, assessments and restoration of ecosystems, they require scientific and technical capacities. Establishment of national or sub-regional testing facilities for identifying, detecting and controlling the movements of banned or controlled substances, products and specimens under the relevant MEAs.

22. The SPCB will support African countries to mobilize and utilize their existing scientific and technical communities. Emphasis will be placed on strengthening the role of existing science networks in negotiations, participation in meetings of parties, and scientific research. African science networks can play a major role in the mobilization of existing scientific skills/expertise, generation and provision of scientific information to policy-makers and agencies, organizing and offering specialized training courses on environmental conventions, participation in project conception and

development with governmental agencies, and support to project review, monitoring and evaluation.

23. The SPCB may support the mobilization of the scientific and technical communities by:

- a. Assisting countries in the preparation of capacity profiles of African scientists working on different aspects of environmental conventions and related sustainable development.
- b. Organizing or supporting the organization of meetings of regional science networks or academies to explore specific thematic issues on global conventions.
- c. Promoting exchange of information between African science networks and their countries in other regions of the world.
- d. Supporting research through the networks on issues or problems identified as priority by African countries.
- e. Promoting information exchange through such means as newsletters or journals on environmental conventions.

6. Promote south-south cooperation and sharing of experiences

24. Building Africa's capacity to implement global and regional conventions can be achieved through the development of south-south cooperation and networking. South-south cooperation is crucial to enable African countries to learn or draw lessons from capacity building efforts of other developing countries and regions. In addition, it is important for purposes of training, information exchange and exchange of scientists. Some of the Asian and Latin American countries have developed expertise and experience that are useful to Africa's goals of building capacity to implement conventions.

25. In addition, south-south cooperation may be source of institutional strengthening in Africa. African countries can learn from various institutional models developed in other developing countries. On the basis of specific identified priorities of African countries, the SPCB will promote south-south cooperation through such activities as:

- a. Promote exchange and dissemination of good practices and lessons learned between Africa and other developing regions.
- b. Strengthen the collaboration on issues of common interest at regional, sub-regional and inter-regional levels among developing countries.
- c. Promote sharing of information and experiences in implementing conventions.

IV. IMPLEMENTATION MODALITIES

26. The SPCB shall be a flexible, long-term framework so as to adjust its activities to the evolving needs and requirements of countries and their

changing circumstances. It should be considered as a living document and be reviewed on a regular basis.

27. The implementation mechanism for this plan shall be the same as that for implementing the overall environmental initiative of NEPAD. It will be implemented under the overall responsibility of AMCEN through its Bureau, which will be assisted by the steering committee for the implementation of the Africa Environment Action Plan. The first meeting of the steering committee will identify and recommend for adoption to AMCEN through its Bureau a process of identifying relevant capable institutions to develop and implement the proposed activities will be established. The Steering Committee will provide guidance to the process for developing each of the clusters of activities on the basis of countries' needs and priorities. It will report on a regular basis to AMCEN through its Bureau on the status of implementation of this plan.

28. The Implementation action plan on capacity building shall be submitted to a donor meeting to be held no later than the end of 2002.

Notes to readers

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