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BACK-TO-OFFICE REPORT

ON

AFRICAN DESERTS AND ARID LANDS COMMITTEE (ADALCO) MEETING  
HELD IN ALGIERS (ALGERIA) 3-5 DECEMBER 1990

by

Regional Advisor of Drought and Desertification Control

December 1990

### Mission Objective

1. To participate in the AMCEN's African Deserts and Arid Lands Committee (ADALCO) meeting held in Algiers (Algeria) from 3-5 December 1990 on strategies towards halting and reversing desertification process in three main African subregions namely the Sahara, the Kalahari-Namib and the Somali-Chalbi.

### Introduction

2. The ADALCO is one of the five Committees established by the African Ministerial Conference on Environment held in Cairo in December 1985. The four other committees being River and Lake Basins, Forests and Woodlands, Seas and Islands. The mandates of ADALCO Committee include the following:

- (i) initiation and development of programmes aimed at combating desertification with particular emphasis on halting the expansion of the Sahara, Somali-Chalbi and the Kalahari-Namib deserts.
- (ii) promotion and strengthening of national subregional capabilities in land use planning and the management of desertified lands;
- (iii) fostering co-ordination strategies between countries and subregions in planning and implementing anti-desertification activities.
- (iv) assisting subregional inter-governmental organizations such as IGADD, COMIDES, SADCC in the co-ordination and implementation of their anti-desertification programmes.

### Organization of the Report

3. I have summarized in part I of this Report proceedings of the ADALCO meeting held in Algiers from 3-5 December 1990. In part II of the Report, I have reviewed status of land degradation in Africa as well as citing causes for agricultural stagnation and environmental deterioration. Finally, I have proposed targets and programme actions for agricultural transformation as well as the integration of environmental concerns in the social and economic development programmes. The purpose of this review is to give a new orientation to problems of land degradation in Africa with particular emphasis on the integration of environmental concerns in social and economic development strategies of the region.

PART I

PROCEEDINGS OF ADALCO MEETING

Opening Ceremony

1. The meeting was opened by H.E. Mr. Jacques Baudin, Minister of Tourism and Protection for Nature, Vice-President of African Ministerial Conference on the Environment (AMCEN) and Chairman of the African Deserts and Arid Lands Committee.

2. In his opening statement, the Chairman recalled the activities of the ADALCO Committee since its last meeting held in Ouagadougou in February 1990. He noted with satisfaction that the main four recommendations agreed upon during the previous meeting had been implemented. The Minister, however, observed that despite this accomplishment, desertification and drought in African continue to cause destruction to man and his environment. He stressed that AMCEN is an African programme and that the African Governments ought to make a greater contribution towards halting and reversing desertification process. He further reiterated the need to be more innovative in adopting inexpensive and unique strategies for combating drought and desertification. In this regard, the Minister said that the preparatory process for the United Nations Conference on Environment and Development to be held in Brazil in 1992 presented an excellent opportunity for African countries to formulate priority projects on drought and desertification control for the Conference.

Statement by Mr. J. Scoupy

3. On behalf of the Executive Director of UNEP, Mr. Scoupy thanked all the participants for finding time to come to the meeting. He pointed out that UNEP was aware of the formidable economic problems which the African countries were encountering particularly the external debt burden. However, he affirmed that Africa's ecological debt problem was far more severe than the fiscal debt. He further reiterated that the AMCEN programme was designed and approved by the African governments for implementation by the African people themselves. That it has been designed to cope with the complexity of the African rural problems including the incorporation of inexpensive projects that rely on Africa's abundant local initiatives. The plan is a field laboratory for environmental development with potential for replication. Finally, he reiterated UNEP's commitment to provide, within available resources, support to the AMCEN programme.

Welcoming address by Dr. B. Kadik

4. On behalf of the Algerian Minister for Agriculture, Dr. Bachir Kadik, Director of Forestry, welcomed all the participants to Algeria for the Fourth ADALCO meeting. He pointed out that desertification was the most dramatic environmental hazard which continues to ravage the African environment. That many meetings and conferences had been held on halting desertification but the process continues to degrade our soils and vegetation. Dr. Kadik singled out the need to incorporate regional and international co-operation in strategies for combating desertification and the impacts of drought. He also pointed out that Algeria was always willing to share its experiences with her neighbours on the establishment of the North Sahara Green Belt.

Attendance (see list attached as annex 1)

5. (i) The following members of ADALCO Committee and ADALCO Focal Points attended the meeting:

Algeria  
Angola  
Botswana  
Egypt  
Ghana  
Morocco  
Senegal  
Swaziland  
United Republic of Tanzania

(ii) The meeting was also attended by representatives of the following international organizations:

United Nations Environment Programme  
United Nations Development Programme  
United Nations Economic Commission for Africa

(iii) A representative of the World Association of Lawyers for the Protection of Environment also attended the meeting.

Election of Officers

6. The following officers were elected:

|                |   |                         |                           |
|----------------|---|-------------------------|---------------------------|
| President      | : | H.E. Mr. Jacques Baudin | (Senegal)                 |
| Alternate      | : | Dr. Bakary Kante        | (Senegal)                 |
| Vice-Chairman: |   | Dr. Bachir Kadik        | (Algeria)                 |
| Rapporteurs    | : | Prof. S.K. Imbamba      | (ECA)                     |
|                |   | Dr. William Rugumamu    | (United Rep. of Tanzania) |

Adoption of Agenda

7. the Agenda as it appears in Annex 2 was adopted.

**REPORT ON ACTIVITIES AND PROGRESS ACHIEVED SINCE THE  
THIRD ADALCO MEETING: OUAGADOUGOU**

8. The report on activities was presented by the Secretariat. The main points of the report pertained to the following:

(i) North-East Africa Subregion

That the "Master Plan for the Development of the Nubian Sandstone Aquifer for Combating Desertification in the North-East Africa" has been completed and that copies were available in English.

(ii) South Africa Subregion

The ADALCO Focal Point of the Southern Africa Subregion had participated in the SADCC workshop held in Bulawayo, Zimbabwe (21 June - 4 July 1990) on the "Plan of Action for the Kalahari-Namib Region". The Project Formulation Workshop discussed matters related to land use planning, establishment of natural resource monitoring transects as well as selection and development of pilot areas for the project (see Agenda item 7).

(iii) East Africa Subregion

IGADD held a Forum in Nairobi (15-19 October 1990) on Environmental Protection and Development of Subregional Strategy to Combat Desertification which was attended by over 90 participants including ADALCO Secretary. A proposal was made to send the ADALCO mission to IGADD region in order to promote subregional co-operation in combating desertification.

(iv) West Africa Subregion

A report on "The Control of Desertification and the Spread of the Desert in South Sahara Zone and the Gum Belt through Programmes of Ecological Rehabilitation" had been forwarded to the Governments in the subregion.

(v) AMCEN Pilot Village and Pastoral Zone Projects

To-date, eleven pilot village and pastoral zone projects are in place in the following countries: Djibouti, Egypt, Ghana, Senegal, Uganda, Zimbabwe, Zaire and Kenya.

PRESENTATION OF THE REPORT OF THE PROJECT FORMULATION WORKSHOP  
IN THE FRAMEWORK OF THE PLAN OF ACTION FOR  
THE KALAHARI-NAMIB REGION, BULAWAYO, ZIMBABWE, 25-29 JUNE 1990

9. The report was presented by Dr. W. Rugumamu, ADALCO Focal Point, who attended the workshop as ADALCO representative. He reported that the workshop was organized by the SADC Co-ordination Unit, Soil and Water Conservation and Land Utilization Sector, based in Maseru, Lesotho. Participants were drawn from Botswana, Zambia, Lesotho, Angola, Swaziland, Tanzania, Zimbabwe and UNEP Headquarters. It was pointed out that the project consultant, Mr. Portillo presented the 128 page project document for discussion. The Plan of Action document was reported to be in line with ADALCO's goals in that it focuses on reversing environmental degradation and improving the welfare of the small scale agropastoralists in the subregion. The Action Plan, it was reported, falls into three phases namely preparatory, first and second phase. It was recommended that on the basis of a sound and scientific contribution by the workshop participants, the consultant revisits the report on key issues. In the light of this workshop, Dr. Rugumamu calls, first for harmonization of the activities of this project with ADALCO's stock raising zone per member State, second for training of small holder agropastoralists on the basis of successful indigenous livestock husbandry techniques, third for ADALCO's involvement in the formulation of National Environment Strategy and fourth for assistance to some member States namely Angola and Namibia in the design of ADALCO's pilot villages and stock raising zone projects.

PRESENTATION OF THE REPORT ON THE DEVELOPMENT OF THE  
NUBIAN SANDSTONE AQUIFER FOR COMBATING  
DESERTIFICATION IN NORTH-EAST AFRICA

10. The report was summarized by the Secretariat. It was pointed out that the project was first conceived as a "Transnational project on the Management of Major Regional Aquifer in N.E. Africa" during the UNCOD held in Nairobi in 1977 and that it had been taken up by ADALCO in 1987. He pointed out that the sandstone aquifer occupying an area of about 2,000,000 sq. km underlies the common border areas of Sudan, Egypt, Libya and Chad. Environmentally, it was observed that the zone has a relief characterized by a vast sandy plain, which is occasionally interrupted by scattered flat topped Nubian plateaux and escarpments. Further, the area is dominated by aridity which is to a greater extent reflected by scanty natural vegetation. The major economic activities include cultivation along some patches of the Nile and several oasis as well as camel grazing by nomadic pastoralists who depend on short-lived grasses and herbs that sprout after every rain shower. The region, however, is known for the largest camel raising in the world. By way of conclusion, it was observed that the groundwater mass in this zone is about 14,000 cubic km which is comparable to

a discharge of the Nile for 1500 years, and that it is generally suitable for human consumption and irrigation farming. Prof. Skoupy further outlined six project fact sheets for the respective countries.

#### DISCUSSION OF ITEMS 6,7 AND 8 OF AGENDA

11. In his introductory statement, the Chairman stressed the dire need to embark on project implementation within the African region. further, the Chairman reiterated the need for closer ADALCO and intergovernmental organizations (IGO) e.g. SADCC, COMIDES, IGADD and CILSS. Consequently, it was recommended that TGOs should submit their proposals to ADALCO Secretariat in order to establish a project data bank for the region. Furthermore, the Chairman suggested to member States to take advantage of the UNDP fifth cycle to submit the projects for funding. The meeting took note and accepted the reports that were presented. It was recommended that ADALCO Secretariat in conjunction with AMCEN should undertake necessary steps to contact potential donors to fund the projects. Finally, it was strongly recommended that the 28 COMIDES projects be transferred to ADALCO and that efforts be made to obtain funds for their implementation.

#### REPORT OF THE FIFTH MEETING OF THE AMCEN BUREAU

12. The Committee received a report of the AMCEN Bureau presented by Secretariat. Members requested the Secretariat to ensure that documents were sent to them in advance of meetings in order to facilitate effective participation. After a long deliberation, members recalled the existence of DESCON and resolved that member countries should redesign their projects for presentation during the 1992 global conference on Environment and Development.

#### REPORTS FROM ADALCO NATIONAL AND SUBREGIONAL FOCAL POINTS

13. Members received and discussed reports from national and subregional focal points, namely Ghana, Egypt and Senegal as well as Morocco and SADCC respectively on the status of ADALCO activities under their mandate. The need to learn from each others' experiences was expressed by the members.

#### FOLLOW-UP ACTIVITIES OF ADALCO

14(a) Members made the following recommendations:

- (i) That a follow-up be made on the identified projects, namely the Plan of Action for the Kalahari-Namib Region and the Nubian Sandstone Aquifer.
- (ii) That there is need for harmonization of ADALCO projects with intergovernmental organizations' projects.

- (iii) That a concerted effort be made to identify potential donors.
- (iv) That promotion of subregional projects be encouraged.
- (v) The need to look into the possibility of establishing an environmental trust fund, taking into consideration the existing socio-economic problems in the region.

(b) Members endorsed the proposal submitted by ECA on "Study tour/training workshop in Morocco for African Government Specialists from CILSS and IGADD member States" to facilitate exchange of experiences between and among member States.

(c) Members requested the Secretariat to contact Botswana, Zimbabwe and Namibia concerning hosting of the 1991 ADALCO meeting.

#### CLOSING CEREMONY

##### Statement by the Chairman of ADALCO

15. The chairman of ADALCO called for the development of a common strategy to combat environmental problems in general and desertification in particular. He pointed out that the new economic order for Africa will depend on the outcome of the 1992 Conference on Environment and Development. He thus, urged African countries to develop a common front for the Conference. He further reiterated that the transfer of technology should not be commercialized so as to enable the Third World countries to transform their economies. Finally, the Chairman moved a vote of thanks to the Algerian people, the Government and the Minister for Agriculture for creating conducive conditions for the meeting.

#### PART II

##### PROTECTION AND MANAGEMENT OF AFRICA'S LAND RESOURCES

##### United Nations Conference on Desertification and Financing of Desertification Control

16. One of the main outcomes of the United Nations Conference on Desertification (UNCOD) held in Nairobi in 1977 was the adoption of the Plan of Action to Combat Desertification (PACD) which consisted of 28 recommendations. In order to halt the expansion of the deserts, Governments were requested to set up national machinery to assess the extent of desertification, monitor the spread of deserts and to prepare national plans to deal with the priority problems. Governments were also invited to co-operate on the management of shared resources such as the regional aquifers. In this connection, six transnational projects were set up, one of which pertained to the management of regional aquifers in the N.E. Africa



as discussed earlier. The United Nations Agencies as well as intergovernmental organizations were invited to participate in the implementation of PACD.

17. Since UNCOD, a number of African countries and their intergovernmental organizations have formulated national plans for the management of the environment. The plans have included national conservation strategies, forestry conservation strategies, soil conservation strategies, national plans to combat drought and desertification, etc. The preparation of these strategies has been carried out with the support of the various international organizations including the UN system.

18. In order to assist member States in the implementation of national plans to combat desertification, a Desertification Control Consultative Group (DESCON) was established by UNCOD and mandated to procure funds for halting and reversing the process. For eight years (1978-1985) the total costs of projects submitted to DESCON amounted to \$540.6 m for 74 projects. Out of the 74 projects submitted, only 29 had been implemented either in part or in their entirety at a cost of \$43.3 m. The sixteenth meeting of IAWGD recommended that DESCON should be wound up as it had failed to procure sufficient funds for combating desertification. However, IAWGD's decision was stood over by the UNEP Governing Council due to pressure from member States which did not want to see DESCON "killed". The G.A., by resolution 44/172, decided that DESCON should meet once a year until UNCED (1992) and every two years thereafter.

19. Four years after UNCOD in Nairobi, drought returned to Africa and this time dealt a great blow not only to drought prone Sahelian countries but even to those countries which had previously enjoyed tropical humid climates. A total of 34 African countries experienced ravages and suffering of that drought. Today 36 out of 50 member States are seriously affected by drought.

#### Agricultural Stagnation

20. In rural Africa, many families depend on land for food. They also depend on forests and trees for fuelwood, building materials as well as generation of an income. Because of increasing pressure on land, its productivity continues to decline resulting in the lowering of agricultural production. As a consequence, what would have been a normal dry spell turns into a severe drought and a manageable food shortage becomes a devastating famine. Africa is the only continent where per capita food production has continued to decline since the early 1960s. However, food imports as well as food aid have been on the increase. For example, the cereal imports of sub-Saharan Africa reached 8.2 million tons in 1986.

Yet, famines in many African countries in the 1970s and 1980s have demonstrated clearly the inability of the continent to feed its people. According FAO, there are 29 sub-Saharan countries where the calorie intake is far below requirements.

21. Agricultural production in many of the African countries is by far the largest sector of the economy. A dramatic improvement of the agricultural performance will correspondingly generate the resources for overall development programmes. During the 1960s, Africa's agricultural exports rose by 2%, and as expected, they have been declining since then. One of the reasons which has been advanced to explain the decline in our agriculture is the failure to modernize African agricultural practices such as shifting cultivation. During precolonial era, land fallowing took about four years, but because of population pressure, farmers have been forced to shorten the fallow period resulting in intensification soil erosion and the scarcity of fuelwood. As pointed out above, the adverse weather conditions especially the droughts of 1968-1973 and 1982-1985 also markedly affected crop production in Africa.

#### The debt crisis

22. I have discussed above internal factors which may have adversely affected the economies of the African countries. It is however, pertinent to point out here that the major factors which have been responsible for Africa's retrogression have largely been external with the internal factors being secondary. The principal external cause has been the decline in Africa's commodity trade which accounts for over 80% of foreign exchange earnings. The slump of the external trade in coffee, cotton, groundnuts, cocoa and crude oil triggered declines in investment, employment and imports of essential materials. Faced with excessive foreign debts African countries have been forced to seek external loans culminating in the debt crisis.

#### Deterioration of the African Environment

23. The region's environment has deteriorated dramatically since the 1960s. It is said that Africa's ecological debt problem is far more severe than the fiscal debt! Trees are being cut 30 times as they are being replaced so that more than 80 million Africans have difficulties in obtaining fuelwood. Soil loss in some countries is very severe. Deforestation, overgrazing, and the slash and burn mode of agriculture have resulted in the loss of vegetation cover and fauna. This diminution in vegetation cover has triggered soil erosion resulting in encroachment of deserts on both rangelands and croplands. UNCOD estimated that 6.9 million sq.km was threatened by severe desertification in Africa, south of the Sahara. Because of hardships in rural areas, the peasants have had to seek refuge in cities and trading centres.

Targets and Programme Actions for Sound Management  
of the African Environment

24. I have so far discussed factors which have impeded social and economic development of the region. In the following paragraphs, I present some possible solutions to the problems raised.

Sustainable agricultural transformation

25. Although a few countries in Africa(8%) have achieved food self-sufficiency, it will be necessary for the majority of the countries to increase overall agricultural growth to nearly 4%. Additionally, African countries will have to diversify their crop production instead of being wholly dependent on one or two primary commodities.

26. In order to achieve and sustain a 4% agricultural growth rate, African governments will need to create a favourable environment for the farmers by providing adequate incentives (subsidies, pricing, credit, etc.) as well as reforming the land tenure system. If African farmers are given the appropriate prices for their produce, they will make the right economic as well as resource management decisions. An increase in fuel-wood prices, for example, is likely to encourage widespread tree-planing. There is need to strengthen agricultural research institutions with a view of building up capacity for generating agricultural technologies which are adapted to Africa's variable production system. Indigenous and new technologies (e.g. terracing, alley cropping, agroforestry, water harvesting and spreading, use of appropriate fertilizers, etc.) for rainfed and irrigated agriculture will need to be encouraged and strengthened. The use of high yielding crop varieties which do not require high inputs will need to be promoted. The rational use of fertilizers will be inevitable because they have other advantages in addition to increasing yields. Integrated pest control as well as mechanization of agriculture will need to be pursued as they are likely to increase yields. Finally, it will be essential to promote agricultural intensification rather than bringing more fragile land under the plough.

27. The role and status of African women in agricultural production has received great publicity in recent years. However, in many African countries, women have no credit facilities; they do not own land (no title deeds), and worse still the banks are located in towns rather than villages where the majority of African women live. Moreover, very few women are to be found in higher institutions of agricultural training. One of the reasons why agricultural production in Africa has remained low is simply because the local women have continued to use extremely elementary tools (hoes, slashers, etc.) and that little effort has been made to modernize these tools.

### Environmental integration in social-economic development

28. A major component of environmental degradation relates to impoverishment of the land through mis-use. Therefore, an increase in agricultural productivity and sustainability is one of the most effective ways of protecting the African environment.

29. It is no longer good enough to simply protect land, water and other natural resources without utilizing them for development. The Brundtland Report puts it this way. "Humanity has the ability to make development sustainable - to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs". In addition, the Brundtland Report recognized that "Until recently, conservation of the environment was perceived as something external to the development process. Environmental protection and development, far from being in conflict, are in fact closely interdependent locally, nationally, regionally and globally". Therefore, future strategies aimed at environmental conservation should encompass broad issues, and must recognize intersectoral links instead of pursuing the narrow sectoral concerns. Future environmental action plans should show, for example, how population growth, livestock management, land tenure, water resources management, etc. can be carried out harmoniously for attainment of sustainable development growth.

30. Some of the critical environmental issues which will need to be addressed by the African Governments may be summarized thus:

- (i) promotion of afforestation and reafforestation as a means of combating desertification, climate change as well as providing fuelwood and timber;
- (ii) development of alternative sources of energy to fuelwood such as biogas, geothermal, solar, wind power;
- (iii) promotion of soil conservation measures including sand dune stabilization;
- (iv) promotion of agricultural research in such fields as breeding of high yielding crop species and the management of post-harvest losses as well as harnessing of indigenous technologies for enhancement of food production;
- (v) development of water resources as well as management of rangelands, arid and semi-arid lands;
- (vi) promotion of public environmental awareness for effective participation in conservation and development programmes'

- (vii) monitoring of environmental changes through remote sensing and other techniques in order to predict probability of drought, levels of rainfall, harvest yields, etc.

#### Subregional and regional co-operation

31. Despite the great diversity of the African region (geographical climate, economic, social, etc.) the environmental problems facing the African countries will require subregional co-operation for effective execution. Problems of water and air pollution, sand dune stabilization, watershed and river basin management, livestock disease control and weather forecasting can best be tackled through subregional and regional co-operation rather than individually. In order to solve the above mentioned environmental and other associated problems, the African Governments have grouped themselves into intergovernmental organizations. These include CILSS, IGADD, SADCC, ECOWAS and COMIDES. Through the effort of WMO, many African countries are now collaborating in weather forecasting through the use of remote sensing and other techniques.

LIST OF PARTICIPANTS

ANNEX 1

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AFRICAN DESERTS AND ARID LANDS COMMITTEE  
(ADALCO)

Fourth Meeting 3 to 5 December 1990

Algiers - Algeria

PROPOSED AGENDA

1. Opening statement by the Chairman of ADALCO.
2. Welcoming address by Government Representative of the hosting country.
3. Statements of other delegations.
4. Election of the Bureau.
5. Adoption of the Agenda.
6. Presentation of a Report on Activities and Progress achieved by ADALCO.
7. Report of the Project Formulation Workshop in the Framework of the Plan of Action for the Kalahari-Namib Region, Bulawayo, Zimbabwe, 25-29 June 1990.
8. Report of the Development of the Nubian Aquifer for combating Desertification in North-East Africa.
9. Discussion on items 6, 7 and 8 above.
10. Report of the Fifth Meeting of the Bureau of the African Ministerial Conference on Environment, Dakar, Senegal, 8-10 March 1990.
11. Presentation of Reports by designated ADALCO National Focal Points concerning development action programmes for implementation of priority sub-regional activities.
12. Proposing a follow up of activities of ADALCO.
13. Closing session.