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UNITED NATIONS
ECONOMIC COMMISSION FOR AFRICA

Report on Mission
To service
The Third Annual Meeting of the
Interagency Group for Water in Africa

15-16 November 1994
Nairobi - Kenya

By

Mr. Azm Fazlul Hoque, Chief,
Water, Environment, and Marine Affairs Section
and
Mr. Mohamed Mahmoud Tawfik, Regional Adviser,
Water Resources, Natural Resources Division

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Report on Mission
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Executive Summary

1. The Third Annual Meeting of the Interagency Group for Water in Africa (IGWA) was organized by UNECA and hosted by UNEP in Nairobi from 15 to 16 November 1994.

2. The meeting was attended by high level representatives from WHO, WMO, UNEP, UNIDO, IAEA, UNECA, UNESCO, UNCHS and Niger Basin Authority (NBA).

3. The meeting was officially opened by H.E. Ms. Elizabeth Dowdeswell, Executive Director of UNEP. In her opening statement, she welcomed the delegates to the UNEP HQs, and informed them about her recent meeting with the Executive Secretary of UNECA which had resulted in a new agreement between the two UN Organizations for more cooperation and collaboration. She also mentioned the area of cooperation between UNEP and other UN agencies. Further, she emphasized the need for closer cooperation among the UN agencies in fresh water management issues in Africa.

4. She also emphasized the need for UN agencies to exercise their influence, to utilize their resources in solving the problems in developing shared water resources in Africa.

5. She concluded by assuring the meeting of UNEP's full support and cooperation in the field of fresh water with other UN agencies and IGO's.

6. The IGWA member agency representatives made opening statements on behalf of their agencies. In their statements they expressed their organizations' appreciation to the Executive Secretary of the UNECA for his kind invitation to participate at the meeting, and to the Executive Director of UNEP for hosting the session. They also reiterated their organizations' commitments to cooperate fully within the UN system in addressing various issues facing water resources development and management in Africa.

7. The UNECA presented a comprehensive paper which served as basis for discussions. Other members gave an outline on their activities in the water sector in Africa. UNEP's regional office for Africa gave a presentation on the mechanism, modalities/approaches, and other concrete ways for interagency coordination and harmonization of water activities in Africa.

8. The discussion centred around exchange of information on joint interagency collaborative water activities in Africa and on identifying further areas of possible collaboration. There was considerable discussions on the idea of organizing a regional conference on river/lake basins management. The delegates from various agencies expressed their high impression on ECA information bulletin in water resources in Africa (MAJI).

9. The meeting identified the following three areas for collaborative efforts by IGWA member agencies in the near future: (i) integrated training programme, (ii) integrated river/lake basins management, (iii) water resources data base for Africa.

10. The meeting recommended a regional conference to be organized on integrated management of transboundary fresh water resources in Africa. A comprehensive training programme for human resources development was also recommended to be developed for interagency collaboration. The development of water resources data base for Africa was identified as one of the priority areas.

11. The UNECA delegates took the opportunity of being in Nairobi at UNEP to carry on intensive discussions with UNEP/Fresh water Unit staff in regard to the proposed joint UNECA/UNEP project proposal on the implication of chapter 18 of Agenda 21.

Report on mission to service the
Third Annual Meeting of the interagency
Group for Water in Africa

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FULL TEXT OF THE MISSION REPORT

Purpose of the mission

1. The secretariat of the United Nations Economic Commission for Africa (UNECA) took a leading role for the establishment of the Interagency Group for Water in Africa (IGWA). Consequently, UNECA was requested by the first meeting of the group in 1992 to serve as its secretariat. On 22nd September 1994, the United Nations Under-Secretary General and Executive Secretary of the Economic Commission for Africa sent out the invitations and the tentative proposed agenda for the third annual meeting of the group to all heads of UN Agencies and relevant IGOs. The United Nations Environment Programme (UNEP) had earlier offered to host the meeting at its secretariat in Nairobi.
2. The UNECA secretariat delegated the Chief of WEMS/NRD and the regional adviser in water resources to service the meeting, to assist UNEP in the preparation for the meeting, and also to present a background paper on the priority areas of activities for cooperation and collaboration among the IGWA members.

Introduction and Background

3. UNECA as the secretariat of IGWA is responsible for organizing the annual meetings of the group. The main objective of IGWA is to coordinate and harmonize the activities of various United Nations and other agencies in water sector in the African region in order to achieve better efficiency and avoid duplication of efforts by these agencies. In this regard, the second annual meeting of IGWA in 1993 requested UNEP to prepare a paper on mechanisms/modalities/approaches and other concrete ways for coordinating and harmonizing water activities in Africa by the IGWA member agencies.
4. The UNECA also, as a secretariat, prepared a comprehensive paper on the priority areas of activities for cooperation and collaboration among IGWA members to serve as a working document for the third annual meeting.

Opening, Attendance, agenda and Organization of Work

5. The Third Annual Meeting of IGWA was organized by UNECA and hosted by UNEP. It was held at UNEP headquarters in Nairobi from 15-16 November 1994. The meeting was attended by high level representatives from the following agencies: WHO, UNEP, UNCHS, UNIDO, IAEA, UNECA, UNESCO, WMO and Niger Basin Authority (NBA).

6. The meeting was officially opened by H.E Ms. Elizabeth Dowdeswell, Executive Director of UNEP. In her opening statement, she welcomed the delegates to the UNEP HQs, and asked them to enjoy the excellent conference facilities in UNEP. She noted that although Africa had abundant water in different places and locations still there was a great need to find tangible solutions for water problems in Africa. She added that water had a potential impact on the environment and this was a real opportunity to focus on water issues in Africa. She asked the group to work more closely as there were many activities which could be implemented jointly within the UN systems.

7. The Executive Director informed the meeting about her recent meeting with the Executive Secretary of UNECA which resulted in a new cooperation and collaboration agreement between the two UN organizations. She also mentioned the area of cooperation between UNEP, WMO, WHO and UNCHS. Further, she emphasized the need for closer co-operation with UNDP, World Bank and the African development Bank in fresh water management issues.

8. In her statement, the Executive Director of UNEP also recalled that in Africa the cross-boundary agreements were still not well developed; and the UN agencies should exercise their influence to expose their tools to solve the river basin organization's problems.

9. In concluding her statement, Ms. Elizabeth Dowdeswell assured the meeting of UNEP's full support and cooperation in the field of fresh water with other UN agencies and IGOs as per the directives of the Governing Council of UNEP.

10. The meeting unanimously elected Mr. Azm Fazlul Hoque of UNECA as Chairman; Mr. Walter Rast of UNEP as vice chairman; and Mr. Oumar Ould Aly of NBA as rapporteur. The agenda of the meeting and the work programme were adopted without amendment.

11. The meeting adopted the following agenda for its discussions.

1. (a) Opening of the meeting and opening statement by the Executive Director of UNEP.
- (b) Opening statements by heads of delegation from other participating agencies.

2. Election of officers of the bureau for the third Annual Meeting of the Group.
3. Adoption of agenda and workplan.
4. Presentation by the member agencies on their list of water activities in Africa with a view to identifying possible areas for interagency coordination and harmonization.
5. Presentation by UNEP on mechanisms/modalities/approaches and other concrete ways for interagency coordination and harmonization of water activities in Africa.
6. Proposal (by UNICEF) to change the name of IGWA to reflect sanitation aspect in the activities of the Group.
7. Date and venue of the fourth meeting of the Group.
8. Any other business
9. Adoption of the report.

Summary of opening statements by IGWA member representatives:

12. The chairman invited the IGWA member representatives to make opening statements on behalf of their agencies.
13. In his statement, the W.M.O. representative expressed his organization's appreciation to the Executive Secretary of the UNECA for his kind invitation to participate at the meeting; and to the Executive Director of UNEP for hosting the session. He reiterated WMO's commitment to co-operate fully with the other UN agencies in the field of water in Africa; and gave an outline of WMO's water related activities in Africa.
14. W.H.O representative briefed the meeting about water aspects in their programme. He informed the meeting about WHO global strategy on health and environment and WHO's collaboration with UN agencies. He noted that more coordination among the UN agencies still needed to upgrade the water programme in Africa.
15. The IAEA representative explained to the meeting how his agency had been actively involved in the development and application of isotope hydrology for more than three decades. He emphasized that some of the activities related to water resources development were carried out in co-operation with WMO and UNESCO. He expressed his organization's interest to be involved in the collaborative ventures with UNECA and other IGWA members to integrate efforts for the benefit of the end users.

16. The UNIDO representative indicated in his statement the importance which his organization attached to the development of water basins in Africa. He mentioned some of the forging collaboration with other agencies and asked the meeting to focus in limited number of areas in which concrete inter-agency co-operation could be promoted.

17. The head of delegation of the UNECA delivered an opening statement on behalf of the Executive Secretary of UNECA. In his statement, the Executive Secretary thanked the Executive Director of UNEP and her staff for hosting the meeting and for efficient arrangement and warm hospitality accorded to the delegates. He emphasized the importance of the IGWA annual meetings as forum for exchange of information and close collaboration to avoid duplications and overlapping in UN activities in water sector in Africa. He then touched on a number of priority areas both in terms of geographical areas in Africa and various subsectoral water resources activities where interagency collaboration and coordination could be enhanced.

18. The Executive Secretary concluded his statement by expressing the hope that enhanced coordination, collaboration and harmonization of water activities among the IGWA member agencies would further improve the working relationship between these agencies and at the same time make their activities more cost effective, such that, their impact on African member States becomes meaningful and effective.

Highlights of the discussions:

19. The meeting was attended by senior technical staff of the participating organizations which made the discussions very effective and intense. They gave an overview of their water activities in Africa with a view to identifying priority areas for interagency co-ordination.

20. The UNECA presented a comprehensive paper which was praised by various member agencies. The paper served as a basis for the discussions. UNECA, UNESCO, IAEA, NBA, WHO, UNCHS, UNIDO, WMO and UNEP gave outlines on their activities in the water sector in Africa. The discussions centred on exchange of information on joint interagency collaboration on water activities in Africa and on identifying further areas of possible collaboration.

21. UNEP's Regional office for Africa gave a presentation on the mechanisms/modalities/approaches and other concrete ways for interagency coordination and harmonization of water activities in Africa.

22. Three major areas were identified for collaborative efforts by IGWA member agencies in the near future. These were: (i) integrated training programme, (ii) integrated river/lake basins management, (iii) water resources data base for Africa. It was agreed that IGWA members should focus their joint activities in achieving them.

23. In regard to the integrated training programme, it was suggested that the steps should consist of: (a) assessment of training needs, (b) developing action plan for addressing training needs, (c) developing an approach for seeking donor support.

24. There was considerable discussions on the idea of a regional conference on river/lake basins management. It was also strongly recommended that river basin experiences outside of Africa be included in the conference, and that IGWA members should co-sponsor such a conference.

25. The delegates from various agencies expressed their high impression on ECA information bulletin on water resources in Africa (MAJI), and appreciated it as a tool for information exchange. ECA representative urged IGWA members to provide any information on meetings and other relevant activities in the field of water resources to ECA secretariat to be published in the MAJI.

Conclusions and Follow-up Activities

26. Conclusions

- (a) After extensive discussions, it was concluded that Inter-agency collaboration should be based on the shared goals of the UN system in water resources management.
- (b) The UNECA, in cooperation with UNEP should be focal point for information exchange activities.
- (c) There is a necessity for the UN system to assist the region in taking stock of policies, programmes and action on river/lake basins management, particularly transboundary basins.
- (d) IGWA should encourage consultations at early stages of agencies' planning and programming exercises relating to water activities.
- (e) Project proposals for IGWA joint activities can be prepared for donor agencies' consideration.

Recommendation for follow-up action

27. The meeting agreed on the following recommendations and follow-up actions:

- (a)
 - A Regional conference should be organized on integrated management of transboundary fresh water resources in Africa.
 - UNECA should develop a background document along with other IGWA documents to serve as a working document for this conference.
 - The conference should take place in 1996.
 - UNECA and UNEP should jointly prepare an aide memoire on the conference and to be distributed to IGWA members and other agencies as appropriate for information and discussions at the fourth meeting.
 - The possibilities of GEF and other funding sources for the conference should be explored.
 - Interagency coordination should be promoted at the programming stage.
- (c)
 - A comprehensive training programme for human resources development should be developed for interagency collaboration.
 - UNESCO was requested to prepare a comprehensive document on human resources development in the sector of education and training in water resources in Africa. The IGWA members were invited to provide input to UNESCO for the preparation of this document which should be circulated in time among which should be circulated in time among interagency members for discussions at the fourth IGWA meeting.
- (d)
 - The development of a water resources data base for Africa was identified as one of the priority areas. W.M.O and UNEP were requested to prepare a background document on feasibility of water resources data base for Africa for consideration by IGWA at its fourth meeting.

Date and Venue for the Fourth Meeting

28. Several organizations offered to host the next meeting of IGWA between October and November 1995. Given the desirability for meetings of IGWA to be held in Africa, the meeting requested the secretariat to contact the relevant river/lake basin authorities and other UN organizations to determine their interest in hosting the next meeting. Based on the outcome of these enquiries the secretariat would choose the venue for the next meeting and inform the IGWA members.

Other business

29. The W.M.O and UNIDO representatives suggested that the time allocated to the meeting was too short for adequate discussions. It was therefore suggested to expand the meeting time to three days.

30. The IAEA representative informed the meeting that, IAEA would hold an International water symposium in Vienna concurrently with World Water Day (22 March, 1995), and invited the IGWA members to make presentation at this symposium. The meeting agreed that UNECA and UNEP will prepare this paper for presentation on behalf of IGWA.

31. The full text of the meeting report and other relevant documents are included in Annex 1 to 9 to this mission report.

Other Mission Activities:

32. The UNECA delegates took the opportunity of being in Nairobi at UNEP, and had intensive discussions with UNEP/Fresh water unit staff in regard to the project proposal on the implications of Agenda 21. UNEP views were to cover all the African countries under this project, but ECA representatives expressed their doubt and suggested to cover only selected countries due to the limited fund. The ECA representatives invited Mr. Walter Rast, Chief Fresh Water Unit, UNEP, to visit ECA in Addis Ababa for more discussions early December 1994, and to finalize the project document.

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**UNITED NATIONS
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**Third Annual Meeting of the
Interagency Group for Water in Africa**

**UNEP-Nairobi
15-16 November 1994**

REPORT

**OF THE THIRD ANNUAL MEETING OF THE
INTERAGENCY GROUP FOR WATER IN AFRICA**

REPORT OF THE THIRD ANNUAL MEETING OF THE INTERAGENCY GROUP FOR WATER IN AFRICA

ORGANIZATION OF THE MEETING

1. The Third Annual meeting of the Interagency Group for Water in Africa (IGWA) was held at the headquarters of the United Nations Environment Programme (UNEP), Nairobi 15-16 November 1994. The meeting was attended by representatives from the following agencies: WHO, UNEP, UNCHS, UNIDO, IAEA, UNECA, UNESCO, WMO and Niger Basin (NBA) Authority. The list of participants is enclosed as Annex 1 of this report.

OPENING OF THE MEETING (AGENDA ITEM 1:)

2. The meeting was officially opened by Ms. Elizabeth Dowdeswell, United Nations Under Secretary General and Executive Director of UNEP. A summary of her opening statement is as follows:
3. Ms. Dowdeswell welcomed the delegates to the third meeting of the Interagency Group for Water in Africa. She underlined the importance of water resources as one of the most important issues for Africa, both for health and economic development. She noted that as opposed to other regions in the world, Africa had abundant water resources. Despite this, there were still regions in Africa with critical water shortages due to uneven distribution of water both in time and space.
4. The Executive Director also stated that water transcended borders and could easily lead to conflicts if not managed and utilized properly. She added that the UN system was looking for ways to assist African nations to manage this critical resource, noting that one way this could be achieved was through the coordination of activities among UN agencies working in this sector. Fragmentation of activities was not effective.
5. The Executive Director also informed the meeting that UNEP was taking steps to coordinate activities internally through increased involvement of its regional offices in its activities. Externally, UNEP had a fruitful relationship with UNECA and a long term collaboration with other agencies, including WMO, WHO and UNESCO. UNEP was also the secretariat of AMCEN. In addition, UNEP and UNDP had signed an agreement for collaboration in 4 areas, including water resources. This would enable UNEP to mobilize UNDP resources at country level. She added that IGWA could benefit by collaborating with the World Bank and by using Country Strategy notes. To this end, it was important to include freshwater resources as an issue in the Country Strategy Notes. This would also avoid duplication of country studies.

6. She also advised the meeting that IGWA could contribute by assisting countries to develop transboundary river agreements, and by developing management tools useful for water resources management in the countries. She also urged that UN agencies be proactive in regard to African water resources.
7. She informed the meeting that UNEP's Governing Council also had underlined the importance of integrated water resources management. She closed by emphasizing the importance of collaboration among UN agencies in the field of water resources and promised UNEP's continued support to the group.
8. The IGWA members then were invited to make opening statements on behalf of their agencies.

WMO

9. The WMO representative expressed his organization's appreciation to the Executive Secretary of the UNECA for his kind invitation to participate in the meeting and to the Executive Director of UNEP for hosting the session. He noted that WMO's primary focus in Africa was the application of meteorology and hydrology towards increasing food production and in mitigating the effects of natural disasters. He reiterated WMO's commitment to co-operating fully with the organizations of the UN system in achieving this goal.
10. An outline was given of WMO's water-related activities in Africa, in particular the regional aspects of the Operational Hydrology Programme (OHP) and the Hydrological Operational Multipurpose Systems (HOMS). Mention was also made of the potential value of the WMO Global Runoff Data Centre in Koblenz, Germany, and of the WMO/World Bank initiative for the development of a World Hydrological Cycle Observing System (WHYCOS).

WHO

11. The WHO representative expressed his pleasure to join again at the Third Annual Meeting of the Interagency Group for Water in Africa. The water aspect of the WHO programme is quite active, because almost 1.4 million children die before reaching the age of five. Of these deaths, more than 50% are from seven African countries of WHO/EMRO. Therefore, inadequacy of water supply and sanitation services has a significant bearing on the mortality situation in the region.
12. WHO has followed up tasks in the light of the International Drinking Water Supply and Sanitation Decade (1980-90). Subsequent to that, UNCED held in Rio de Janeiro (Brazil) in June 1992 produced Agenda 21 which includes water and sanitation. WHO prepared a Global Strategy on Health and Environment. This was strongly supported by the World Health Assembly. The Regional offices also have been strongly following up the programmes and activities in the area of water and sanitation.

13. WHO's collaboration with UN agencies (UNDP, UNICEF, UNEP, FAO etc) is good. However, more coordination amongst UN agencies is very useful and necessary. The WHO representative expressed his confidence that the meeting would come up with the practical aspects of UN Agencies' collaboration and coordination. This would also upgrade the water programme in Africa.

IAEA

14. The International Atomic Energy Agency representative stated that the IAEA has been actively involved in the development and application of isotope hydrology for more than three decades and is recognized as one of the leading institutions in this field. Isotope applications in arid and semi-arid regions in which many African countries are located form a major component of the isotope hydrology activities carried out within both the research and the technical co-operation programmes of the IAEA. Much of the assistance to member States has been given in terms of introducing the methodological aspects of these modern techniques in arid zone hydrology, and in building up infrastructures.
15. Practical applications of isotopes in African countries are supported particularly within the framework of the Technical Co-operation Programme where the IAEA has played a major role through the provision of training, expert services, equipment and analytical services. A number of projects are also concerned with the establishment or strengthening of national analytical capabilities in carrying out isotopic analyses for hydrological applications.
16. It was emphasized that some of the activities related to water resources development are being carried out in good co-operation with other organizations in particular with WMO and UNESCO, and recently contacts also were established with UNEP and WHO to seek concerted actions in the field of water and environment.
17. Given the need for strengthening efficient water resources development and sustainable management in Africa, the IAEA representative stated he was very pleased to be involved in the collaboration with the UNECA and the Interagency Group for Water in Africa (IGWA), and to integrate efforts for the benefit of the end users.

UNECA

18. The head of delegation of the UNECA delivered an opening statement on behalf of Mr. Layashi Yaker, United Nations Under-Secretary General and Executive Secretary of UNECA. In his statement, Mr. Yaker thanked Ms. Elizabeth Dowdeswell, United Nations Under-Secretary-General and Executive Director of UNEP and her staff for hosting this meeting and for the efficient meeting arrangement and warm hospitality accorded to the participants.

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19. Mr. Yaker emphasized the importance of the IGWA annual meetings as they not only provide an opportunity for exchange of information on the activities of member agencies but also contribute to the efficiency and effectiveness of these organizations by avoiding duplications and overlapping in their activities in the water sector in Africa. He further noted that these meetings were also expected to lead to joint collaborative activities which would make the impact of their assistance to African member states more meaningful and visible.
 20. Mr. Yaker noted that the level of interagency collaboration between UNECA and UNEP, and between UNECA and WMO, has improved significantly over the last 2-3 years, but that there is more room for improvement in this area. He suggested that there should be more exchange of information on such collaborative arrangements between the IGWA member agencies.
 21. Mr. Yaker then touched on a number of priority areas both in terms of geographical areas in Africa, and in various subsectoral activities in water resources where interagency collaboration and coordination could be enhanced. These included the Nile River Basin, the Zambezi and Lake Malawi basin, the Lake Chad basin, the Niger River Basin, the Senegal and the Gambia River basins and others. He further noted that fragmented efforts by many international agencies for development of some of these river/lake basins such as the Nile, Lake Chad, Zambezi and others had so far met with limited success. He called for combined, integrated approach by all concerned international agencies in their assistance for multipurpose development of these and other river/lake basins in Africa. He also asked for collaborative efforts by all concerned international agencies in their assistance to the existing river/lake basin organization in Africa in promoting TCDC/ECDC among themselves, in promoting subregional and regional cooperation and in bringing them closer together in their working relationship. This, he noted, would contribute to achieving goals and objectives of the African Economic Community.
 22. Mr. Yaker concluded his statement by expressing the hope that enhanced coordination, collaboration and harmonization of water activities among the IGWA member agencies would further improve the working relationship between these agencies and at the same time make their activities more cost-effective, and their impact on African member states more meaningful and effective.

UNIDO

23. The representative of UNIDO highlighted the importance his organization attached to the development of water basins in Africa. In addition to forging co-operation among the countries concerned, it was essential to adopt an integrated economic development programme for these water basins with a view to generating income and employment for the rural population living in those areas.

24. UNIDO was, therefore, forging collaboration with other agencies such as FAO, UNESCO, WHO, UNEP and ECA in the development of agro-industries, energy and transport systems. He concluded by expressing the hope that this meeting would agree on a limited number of areas in which concrete inter-agency co-operation could be promoted.

ELECTION OF OFFICERS OF THE BUREAU (AGENDA ITEM 2.)

25. The meeting unanimously elected representatives from the following organizations for its bureau:

- | | |
|------------------|--------------------------------|
| 1. Chairman | - UNECA (Mr. Azm Fazlul Hoque) |
| 2. Vice-Chairman | - UNEP (Mr. Walter Rast) |
| 3. Rapporteur | - NBA (Mr. Oumar Ould Aly) |

ADOPTION OF AGENDA (AGENDA ITEM 3.)

26. The meeting adopted its agenda which appear in Annex II.

PRESENTATION OF LIST OF WATER ACTIVITIES IN AFRICA BY VARIOUS MEMBER AGENCIES (AGENDA ITEM 4)

27. The participating agencies gave an overview of their water activities in Africa with a view to identifying priority areas for interagency co-ordination and harmonization. These presentations are summarized below.

UNECA

28. The UNECA representative presented a comprehensive paper on "Priority Areas for Interagency co-operation and collaboration" to serve as a basis for discussions. The paper included a brief background and summary of the Second IGWA Meeting, and identified the challenges facing long term sustainable water resources development in Africa.

29. The second part of the paper focused on priority activity areas for co-ordination and joint collaboration among the member agencies. These areas, inter alia, are as follows:

- Technical assistance to member states, NGO's, and IGO's;
- Developing effective methods for data and information dissemination among the member states and IGOs;
- Strengthening capacity building.

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30. The paper also considered the Nile Basin, Lake Chad Basin, Zambezi and Lake Malawi Basin as priority areas for co-ordination and collaboration among the IGWA members;

31. The third part of the paper included a list of current and future ECA water activities which is included in Annex IV.

UNESCO

32. The activities implemented by UNESCO in Africa are conducted in connection with the International Hydrological Programme and implemented through the UNESCO Regional Office for Science and Technology in Africa (ROSTA) in Nairobi. They include the following:

A. WATER RESOURCES ASSESSMENT AND MANAGEMENT IN AFRICA

(i) COMPREHENSIVE AND COMPARATIVE STUDY ON THE GREAT LAKES OF AFRICA:

33. The purpose is to compile the information gathered on the hydrology and limnology of the great lakes of Africa by preparation of monographs and a comprehensive report on their similarities and differences. This project was developed in co-operation with IDEAL (International Decade for the East African Lakes).

34. A joint IHP/IDEAL symposium was held by UNESCO in Jinja, Uganda (February 1993) on the limnology, climatology and paleo-climatology of the East African lakes. Three monographs on the hydrology and limnology of lakes Victoria, Tanganyika and Malawi will be published by early 1995. These results also will be presented at a regional seminar in 1995.

(ii) Humid Tropics Project:

35. This project is to establish a regional programme encompassing research, education, training and knowledge and technology transfer on water-related issues/problems of the humid tropics and other humid regions of Africa. The primary activity meeting was held in Abidjan, Ivory Coast from 24 to 28 October 1994.

(iii) FRIENDS Project - Study of flow regimes:

36. Two regional projects were conducted in Southern Africa (February 1991) and in Western/Central Africa (Ouagadougou, November 1992) to improve knowledge of the flow regimes of the African rivers to enhance appropriate design of their impoundment and exploitation.

B. EDUCATION - TRAINING AND CAPACITY BUILDING

(i) Regular training courses:

37. Within the framework of the IHP, two regular post-graduate courses in hydrology are sponsored and followed up by UNESCO including (i) an 18 month course in water resources engineering at the University of Dar-es-salaam, Tanzania; and (ii) two 9 months courses in mobilization of water resources and agriculture hydraulics in Ouagadougou (Burkina Faso). UNESCO also is contributing to a regular WMO course on operational hydrology in Nairobi.

(ii) Workshop - Training Seminars:

38. Short workshops/training courses also are organized, to upgrade the level of African hydrologists and hydrogeologists and to improve their ability to conduct hydrological assessment.

(iii) UNESCO CHAIR:

39. To enhance the capabilities for advanced training and research, and contribute to development and rapid transfer of knowledge to the developing countries, a water-related UNESCO chair will be established in early 1995 at the University of Malawi.

C. INTERNATIONAL CONFERENCE ON HYDROLOGICAL SERVICES IN AFRICA.

40. WMO and UNESCO prepared a report (1991) on the current state of water resources assessment at the global, regional and national level, to assess progress made since the UN/Water Conference (1977) in the field of water resources assessment, and to identify key issues as the foundation of a strategy for water in the 1990's and beyond. The report highlighted the deterioration of monitoring networks and reliable hydrological data due to the poor situation of national hydrological services in Africa.

41. WMO, UNECA and UNESCO are considering the organization of an international conference on the hydrological services in Africa with the objectives of (i) identifying main problems faced in carrying out hydrological activities and, (ii) preparing a plan of action to improve the situation.

IAEA

42. Isotope techniques have proved to be a very useful tool for water resources assessment and development in the African region when adequately utilized with other hydrological methods in an integrated manner. Most of these isotope techniques are based on the measurement of naturally-occurring isotopes in the water cycle such as stable isotopes of the elements of the water molecule, environmental tritium and radiocarbon.
43. The agency's activities in isotope hydrology in Africa were started in the early 1980s in the Sahelian countries, and later extended to other countries especially in East Africa. Recently, a joint effort of the IAEA Department of Technical Co-operation and the Department of Research and Isotopes was started to define a regional project on the practical use of isotope techniques in water resources development in Africa. Areas have been identified in each of the nine African countries where adequate assessment of scarce water resources is crucially needed for large population centers for development activities.
44. The specific areas towards which activities will be targeted are as follows:

Algeria - assessment of underground water resources in the Hoggar and Tassilis through isotope and hydrochemical studies; Egypt - assessment of the recharge rate from the Nile aquifer to the western desert fringes; and study of agricultural pollution; Ethiopia - assessment of replenishment of water resources in the Moyale region and vicinity; Libya - an isotopic approach to groundwater recharge of Kufra aquifers in South-East Libya; Mali - assessment of the recharge and evaporation rates of unconfined aquifers within the Gondo Plain; Morocco - assessment of balance terms of some South Atlantic aquifers for optimum management of the water resources; Niger - study of the dynamics of underground water in the alluvial valley of Dallol Maoui for water resources management, hydro-agricultural development and land utilization; Senegal - reassessment of water resources to upgrade the water supply for Dakar and its vicinity; Sudan - northern state adjacent Nile aquifers study project - groundwater development and enhancement of proper water management.

45. The project will be implemented in two phases. The activities to be carried out under Phase I (1995-96) will begin in Egypt, Ethiopia, Morocco and Senegal. Activities are expected to be carried out in Phase II (1997-98) in Algeria, Libya, Mali, Niger and Sudan. The project is expected to yield important hydrological data which is essential from the socio-economical standpoint for water and development authorities in planning medium and long term sustainable development based on rational management of water resources.
46. The project will be implemented mainly by participating countries. Agency support is crucial for provision of analytical services at least in Phase I, and guidelines for field work and data interpretation. It is essential to appoint a technical expert in the region to undertake coordination, monitoring of the activities and dissemination of information. The IAEA input includes expert and consultancy services for planning, co-ordination, implementation and evaluation of project activities; equipment for regional laboratories, consumable and supplies for field work, laboratory and specific analytical services necessary; training through organization of regional scientific seminars, workshops and exchange of scientists and qualified technicians. The total budget is estimated to be US \$1,776,000.
47. The IAEA is seeking concrete support to the isotope hydrology project for Africa in terms of logistics and financial contributions by other donors. The UNECA, Addis Ababa, jointly with UNEP, (Nairobi) could play a major role to integrate the IAEA activities with in the scope of the Interagency Group of Water in Africa (IGWA) and to promote concerted actions with other UN organizations in the water sector of concerned African countries.

NIGER BASIN AUTHORITY (NBA):

48. The representative of NBA presented the greetings and thanks of the Executive Secretary of his organization. The representative then presented a brief history of NBA. Some achievements made in the domain of water resources are:
- (a). A study on the flood anomalies of the River Niger (1975-1983) with assistance from ORSTOM (France) and FAC (France);
 - (b). Monograph of the River Niger (1968 and 1983) with the assistance of ORSTOM and FAC;
 - (c). Development of a mathematical model of the River Niger (1978-1985), with assistance of FAC, ORSTOM, SOGEAH and IGN;
 - (d). The constitution of hydrological, meteorological, cartographic and geographic data Bank (1978-1984) with the assistance of USAID;
 - (e). Hydraulic management study of the upper and middle course of the River Niger (1983-1985) with the assistance of UNDP and FAO;
 - (f). Establishment of a Hydrological Forecasting System in the Niger Basin - HYDRONIGER (1980-1991) with the assistance of UNDP, WMO, EDF, OPEC;

(g). Studies on the desertification control methods in the Niger Basin (1985-1994) with the technical assistance from JAPAN and JALDA (Japan). Following the resolutions of the last statutory meetings of NBA, important actions scheduled in the domain of water resources for the short and medium terms are as follows:

- (i). Elaboration of legal framework for the management of water shared from the Niger Basin;
- (ii). Pursuit and re-enforcement of the achievement of HYDRONIGER in the context of the Phase III;
- (iii). The extension of the mathematical model of the River Niger to the upstream (in Guinea) and downstream (in Nigeria) and its eventual transfer to NBA;
- (iv). Realization of the hydrometeorologic monograph for the River Niger; and
- (v). Staff training.

49. NBA and its member states are greatly interested in other regional projects whose impact is evident on the water resources management and the environment of the Niger Basin particularly the following projects:

UNEP/WHO/UNDP/WMO Project, Niger river system: an integrated approach to watershed management with particular reference to sustainable land-use development, pollution, and biodiversity conservation;

WMO/World Bank Project: "World Hydrological Cycle Observing System (WHYCOS Africa)

FAO/EEC Project: Water resources management of the Niger Basin by integrated remote sensing.

WHO

50. In the Eastern Mediterranean Region (EMR), it is estimated that out of almost 13 million children born each year, approximately 1.4 million die before reaching the age of five. Of those deaths, more than 50% of the deaths are in African countries of WHO/EMRO, and about 40% are due to diarrhoeal diseases. In all, diarrhoeal diseases are responsible for between 15% and 20% of all mortality in the region. Inadequacy of water supply and sanitation services has a significant bearing on the mortality situation in the region. These deaths could be prevented at low cost and by better development and management of water resources. Environmentally sound and sustainable development of water resources are the basis of future development, so are today's children. Both tend to be under-valued by decision-makers because their values are difficult to quantify economically.

51. There is little doubt that in many arid and semi-arid member countries of EMRO, lack of water for drinking, agricultural, industrial uses will present severe constraints on future economic development. In some countries plagued with high population growth rates, the next decade will witness a tightening of these constraints, unless vigorous and definite steps are taken now to head off an emerging water crisis. Because of the urgency of the problems, and overriding need to develop integrated land water management schemes, efforts will be focused on the development, conservation, database information, institutional build up and sustainable management of water resources. Special attention will be given to the problems and needs of those developing countries already facing severe shortages.
52. It is therefore, in accordance with the global goal of the World Health Organization to reach health for all by the year 2000 and of the overall effort of the United Nations system to promote the integrated management of water resources in the process of social and economic development.

UNCHS (HABITAT):

53. UNCHS (Habitat) core activities in urban water resources and related environmental infrastructure services (water supply, sanitation and drainage) are executed under its Settlements Infrastructure and Environment Programme (SIEP). In addition to its regular research programmes, SIEP projects carry out field research and capacity building activities in several cities of developing countries.
54. UNCHS (Habitat) "Urban Management Programme" (UMP) and "Sustainable Cities Programme" (SCP), despite their broader coverage of urban issues, also touch upon some aspects of water resources, water supply and sanitation (infrastructure component) management in urban areas. UMP is executed in collaboration with the UNDP and World Bank. The Sustainable Cities Programme implements the environmental component of UMP. WHO is a partner in the execution of this component.
55. In addition to the above activities, UNCHS (Habitat) has a broad programme of country level technical cooperation projects on shelter and urban development. A significant part of these projects have a water resources and environmental infrastructure component, thus reflecting an increasing demand for support in these areas within an overall policy of integrated urban settlements development. The coordination of these projects with other agencies of the United Nations system is done on ad-hoc basis, normally through the United Nations Resident Representative in the respective countries.

56. UNCHS (Habitat) has also started preparatory activities for the Second United Nations Conference in Human Settlements (Habitat II) to take place in 1996, 20 years after the Vancouver Conference (Habitat). It has been established that the main outcomes of the Conference will be a "statement of principles" and an "action plan" for the improvement of human settlements conditions in an urbanizing world. The sustainable management of urban water resources and environmental infrastructure services is an important component in the formulation of a plan of action to improve human settlements conditions. Habitat II Secretariat is taking the necessary measures to ensure that the preparatory process and the outcomes of the Conference take into consideration and are coordinated with the efforts of other United Nations Agencies and activities, such as those of the ACC Subcommittee on Water Resources.

UNIDO:

57. In his presentation, the UNIDO representative indicated that several UNIDO activities in Africa had implications on the development, management and utilization of water resources. Rather than listing those activities, he considered it more pertinent to restrict his presentation on a number of specific activities of direct relevance to the meeting.
58. The first activity related to the assistance extended by UNIDO to OMVS in the preparation of a development programme in the field of agro-industries, along with related energy and transport systems. In the same vein, UNIDO had initiated some years back a programme for the exploitation of Lake Kivu gas and other related industrial development activities.
59. A major activity which had enjoyed inter-agency cooperation with UNEP and ECA, was related to the Gulf of Guinea environment project, which has recently been approved for GEF financing for a total of about \$ 6 million. In an UNDP financed regional transport equipment industries project, a diagnostics survey had been carried out and opportunity studies prepared for a number of water transport equipment manufacturing enterprises in Africa.
60. Other activities of direct relevance carried out or initiated by UNIDO were related to effluent treatment in a regional leather project in Africa; treatment of water born diseases in northern Cameroon, Chad and Central Africa Republic; the use of plastics in agriculture and the development of water pumps utilizing, e.g., solar energy and irrigation equipment (pipes and valves) for water extraction, distribution and conservation.

WMO:

61. The meeting was informed of WMO's water-related activities in Africa. It was noted, in particular, that the organization maintained close links with the hydrological services of over 50 countries, and provided technical guidance and assistance, as required, in developing national capabilities for water resources monitoring and assessment. Under its Operational Hydrology Programme

(OHP), these activities were concerned mainly with the design and operation of hydrological observation networks, data collection, transmission, processing and archiving systems and with hydrological forecasting.

62. Special mention was made of the Hydrological Operational Multipurpose System (HOMS), which was established in 1981 to facilitate the transfer among participating countries of technology used operationally in the field of hydrology. Thirty-eight African countries are among the 118 participating countries.

63. A Global Runoff Data Centre (GRDC) was established at Koblenz, Germany under the auspices of WMO. It is operated by the German Federal Institute of Hydrology. The aim of the Centre is to develop data sets of mean daily flows for the major rivers of the world which could be used in regional and global water and climate related studies.

64. The meeting was also informed of the WMO/World Bank initiative to establish a World Hydrological Cycle Observing System (WHYCOS). This system was needed to supplement or to provide hydrological data to meet an increasing demand, particularly in areas where conventional hydrological activities were declining. The System was conceived as a monitoring network, transmitting observations from selected key stations at prescribed intervals, via satellites, to national and regional centers. The meeting was informed that stage one of the initial component for Africa (HYCOS-Africa) was to establish a network of 100 stations. Detailed proposals for a network for the SADC countries were agreed with SADC-ELMS. A request from IGADD for assistance in preparing a similar project had been received and WMO is currently consulting with the World Bank on this request. Also within the WHYCOS framework, a MED-HYCOS network was being developed for the benefit of the countries of the Mediterranean rim. Together, these different components when implemented should provide a strong boost to African hydrological activities.

UNEP

65. UNEP serves as the secretariat of the African Ministerial Conference on Environment (AMCEN). The Freshwater Unit specifically serves as the secretariat for Committee on River and Lake Basins (CORLAB), as well as secretary to the Management and Planning Group of the Water Resources Network for AMCEN.

66. The major part of the UNEP Freshwater Programme continues to focus on integrated management of freshwater resources, including river and lake basins and groundwater aquifers. To this end, the Freshwater Unit has worked with riparian Governments in development and adoption in 1987 of the Action Plan for the Zambezi River Basin. Further, parts of the Action Plan have been initiated with financial support from UNEP. UNEP in cooperation with UNSO and the riparian Governments also has assisted in development of a Diagnostic Study and Action Plan for the Lake Chad Basin which was adopted in January

1992. Subsequent support has been for development of a Decision Support System for the purpose of prioritizing the projects, identified in the Action Plan. UNEP also will assist in organization of a donors meeting for the Lake Chad Basin early next year.

67. UNEP's Freshwater Programme is continuing its work toward the development of a Diagnostic Study and Action Plan for the Nile River Basin. UNEP also is involved with its GEF partners (World Bank, UNDP) in the initial phases of development of a GEF project proposal for Lake Victoria. The work will focus on three major issues, including (i) fisheries, (ii) water hyacinth, and (iii) land use and water pollution.
68. UNEP's Freshwater Programme is also continuing its training and education activities, primarily under the umbrella of its GEMS/Water activities. These activities include: (i) regional training course on practical control of lakes and reservoirs (October 1993) involving thirty participants from 16 countries, (ii) GEMS/Water data handling and analysis courses using RAISON/GEMS software (October 1993) involving twelve participants from the Nile Basin riparian countries, (iii) GEMS/Water Quality Monitoring and Assessment training course (November 1993) involving twenty officials from eight countries, and (iv) GEMS/Water Analytical Quality/Assurance course for Nile Basin riparian countries (February 1994) involving twenty participants from the Nile Basin riparian countries.
69. Planned activities include (i) Water Quality Monitoring Handbook to be published in early 1995; (ii) Follow-up training course on data analysis and handling for Nile Basin riparian countries, (iii) National GEMS/Water Seminars for several African countries, and (iv) Water Quality Monitoring and Assessment courses for francophone West African countries.

PRESENTATION BY THE MEMBER AGENCIES ON THEIR JOINT AND INTERAGENCY COLLABORATIVE WATER ACTIVITIES IN AFRICA (AGENDA ITEM 5)

70. Discussions centered on the exchange of information on joint interagency collaborative water activities in Africa, and on identifying further areas of possible collaboration. Several agencies presented information on their collaborative activities. This included future collaborative efforts between UNECA and UNEP on implementing Chapter 18 of Agenda 21 in Africa. The other collaborative efforts being planned is between UNECA and WMO on International Conference on Hydrological Services in Africa. The objective of this Conference is possible rehabilitation of hydrological services at the national level in Africa.

P R E S E N T A T I O N B Y U N E P O N
MECHANISMS/MODALITIES/APPROACHES AND OTHER CONCRETE
WAYS FOR INTERAGENCY COORDINATION AND HARMONIZATION OF
WATER ACTIVITIES IN AFRICA. (AGENDA ITEM 6)

71. UNEP's Regional Office for Africa gave a presentation on the mechanisms/modalities/approaches and other concrete ways for interagency coordination and harmonization of water activities in Africa.
72. The major challenge will be to coordinate the relevant programmes and projects of the UN system so that they reinforce each other in support of the national and regional goals and priorities for sustainable development in, and among, African countries. Co-ordination is particularly needed in the water resource programmes of the UN system so that they proceed along complementary, rather than parallel, directions. The UN system must renew its efforts to find new and more effective ways of coordinating its agency activities. Coordination can become an activity in itself. Yet, programmes with different, often competing goals cannot be coordinated without first making their goals compatible. The first and most important activity is setting up shared goals and one common policy framework for the UN system's water programmes in Africa.
73. In initiating discussion on this topic, the UNIDO representative reiterated his suggestion that focal point for IGWA be established; and recommended this task to ECA and UNEP. He also suggested that IGWA establish three task forces to deal with the 3 major issues previously discussed at the meeting, namely: (i) integrated training programme, (ii) international conference on river basin management, and (iii) water database for Africa. It was pointed out that this meant identifying agencies to take lead roles within IGWA on these topics. The meeting agreed that responsibilities are as follows:-
 - (a) Integrated Training Programme - UNIDO and UNESCO;
 - (b) Integrated River Basin Management - ECA and UNEP; and
 - (c) Water Resource Database for Africa - WMO and UNEP.
74. In regard to the integrated training programme, the UNIDO representative suggested that the steps consist of (a) assessment of training needs, (b) development of action plan for addressing training needs (c) development an approach for seeking donor funds. There was considerable discussion on the idea of regional conference on river/lake basins management. It was strongly recommended that river basin experiences outside of Africa also be included in the conference.

75. The ECA representative reiterated his previous statement that his organization had planned a small expert group meeting on this topic for 1996. The meeting strongly recommended that a meeting on this topic be expanded to an regional conference on river basin management, to be co-sponsored by the various agencies comprising IGWA. It was noted that the WMO/ECA conference on African Hydrological Services could be in competition in view of the limited availability of funds.
76. The ECA representative also urged IGWA members to ensure that information on meetings and other relevant activities in the field of water resources be submitted to ECA for inclusion in its bulletin, MAJI. The ECA representative informed the meeting that under the ECA proposed 1996/97 programme-budget, ECA intends to hold a meeting for senior experts from the existing transboundary river organizations. He also invited the other IGWA agencies to contribute to this meeting to broaden its scope.

CONCLUSIONS AND RECOMMENDATIONS FOR FOLLOW-UP ACTIONS

77. After extensive discussions, the meeting arrived at the following conclusions and identified follow-up activities as follows:

CONCLUSIONS:

78. (A) Basis and Framework for Concerted IGWA Action
Inter-agency collaboration should be based on the shared goals of the UN system in water resources management. Agreement of such common goals will provide a framework for agency inputs to focus programming and/or activities. Such shared goals will enable IGWA to focus on selected priorities such as (a) technical assistance; capacity building; information exchange; assessment; monitoring; reporting; and mobilization of resources.
- (B) Focal Point for Information Exchange Among Members of IGWA:
79. There is a need for IGWA members to have access on a regular basis to information on major IGWA members activities in the area of water resources management. This will enable IGWA agencies to follow-up more effectively on developments, and also access detailed information materials.
80. The UNECA in co-operation with UNEP, should be focal points for this information exchange activity. The possibility of using existing bulletins/newsletters (ECA, UNEP, others) should also be explored.

(C) River/Lake Basin Organizations:

81. Another opportunity for IGWA co-operation relates to River/Lake Basin Organizations. There is a need for the UN system to assist the Region in taking stock of policy programmes and actions on river/lake basins management, particularly transboundary basins. Such stock-taking, in which IGWA member Organizations can play a major role in terms of reporting on the situation (issues and constraints) can be a major IGWA activity under UNECA's direction.

(D) Planning and Programming exercises

82. Where possible, IGWA should encourage consultations at early stages of agencies planning and programming exercises related to major projects or activities. This will allow for identification of possible contributions from IGWA members.

(E) Resource Mobilization

83. This is an important area providing opportunities for IGWA collaboration. Project proposals on carefully selected IGWA joint activities (e.g., the proposed Conference on River/Lake Basin Organizations) can be prepared for GEF and other donor agency consideration.

84. (G) UN agencies should concentrate on assisting the riparian member states, for the development of integrated management of transboundary freshwater resources in Africa.

RECOMMENDATIONS FOR FOLLOW-UP ACTIONS:

85. On the basis of the above conclusions, the meeting agreed on the following recommendations and follow-up actions:

(A) Regional Conference

86. A regional conference should be organized on integrated management of transboundary freshwater resources in Africa. It was also agreed that the background document presented by ECA should be further developed and this, along with other IGWA documents, should serve as working documents for this conference. It was further agreed that the proposed regional conference takes place in 1996. It was also agreed that an aide memoir on the conference be prepared by ECA and UNEP, and be distributed to IGWA members (and other agencies as appropriate) for information and discussion at the next meeting. The possibilities of GEF and other funding sources for the Conference should be explored;

(B) Interagency Cooperation

87. Interagency coordination should be promoted at the programming stage;

(C) Human Resources Development

88. Human resources development and training for water resources development was strongly emphasized as priority areas for collaboration. Given the fact that all IGWA members are involved in some type of training activities, it was agreed that a comprehensive training programme for human resources development should be developed for interagency collaboration.
89. UNESCO was, accordingly, requested to prepare a comprehensive document on human resources development in the sector of education and training for water resources in Africa. The document will consist of an assessment of the human resources requirement and training needs, and recommended action programme for meeting the above human resources and training needs in various sectors such as health, industry, environment, land-use, agriculture, climate, meteorology, and education, along with the cost plan. UNIDO, FAO, WMO, IAEA, UNEP and other agencies were invited to provide input to UNESCO for the preparation of this document. The document should be circulated among interagency members in time for discussion at the next IGWA meeting in 1995.

(D) Water resources data base

90. The development of a water resources database was identified as another priority area for interagency collaboration. To that end, WMO and UNEP were requested to prepare a background document on the feasibility of water resources database for Africa for consideration by IGWA at its fourth meeting.

PROPOSAL (by UNICEF) TO CHANGE THE NAME OF IGWA (AGENDA ITEM 7)

91. It was agreed that this was an important item for IGWA consideration. Because of the absence of the UNICEF representative, who had suggested this item at the second annual meeting of IGWA in 1992, discussion on this topic was postponed to the next IGWA meeting.

DATE AND VENUE OF FOURTH MEETING (AGENDA ITEM 8):

92. The meeting reiterated the importance of IGWA which has provided a useful forum for interagency coordination and exchange of information on water resources development activities in Africa. It therefore reconfirmed the need for annual meetings of IGWA.
93. Several organizations IAEA, WHO, ECA and UNEP offered to host the next meeting of the IGWA. Given the desirability for meeting of IGWA to be held in Africa, the secretariat was requested to contact relevant river basin authorities and other organizations to determine their interest in hosting the next meeting. Based on the outcome of these enquiries it was decided that the secretariat would choose the location of the next meeting and inform the IGWA members. The meeting date will be October or November in 1995.

ANY OTHER BUSINESS (AGENDA ITEM 9)

94. WMO and UNIDO representatives suggested that the time allocated for the meeting was too short for adequate discussions. It was, therefore, agreed that the meeting time be expanded, if needed. This would be determined by the secretariat based on the number of items to be considered by IGWA at its meetings. The representatives also suggested that discussions at the next meeting be limited to (1) integrated training activities, (2) regional conference on transboundary river basins management, (3) feasibility of African data base and (4) the UNICEF proposal for changing the name of the IGWA to highlight sanitation issues.
95. The IAEA representative informed the meeting that IAEA would hold an international water symposium in Vienna concurrently with World Water Day (22 March, 1995). He invited the IGWA members to make a presentation at this symposium. The meeting recommended that ECA and UNEP prepared this paper and ensure its presentation on behalf of IGWA.
96. The Niger Basin Authority representative informed the meeting that the Niger Basin Authority was preparing a colloquium on the Niger River Basin "Save the River Niger". The exact date for the colloquium will be conveyed to the secretariat.

ADAPTATION OF MEETING REPORT (AGENDA ITEM 10)

97. The meeting received, discussed, amended the report and adopted it. Any additional comments from IGWA members were to be sent to the secretariat within one month. The Secretariat will make necessary corrections, and distribute the report to the members during the following month.

98. The members thanked the UNECA for organizing the meeting and the Executive Director of UNEP for opening and hosting the meeting. They also extended their thanks to the Chairman and the Vice-chairman for leading them effectively in their deliberations.

UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA

**Third Annual Session of the
Interagency Group for Water in Africa
Nairobi, Kenya, 15-16 November 1994**

**Statement of Mr. Layashi Yaker
United Nations Under-Secretary General and
Executive Secretary of the Economic
Commission for Africa**

Addis Ababa, Ethiopia

UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA
Third Annual Session of the Interagency Group for Water in Africa
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Statement of Mr. Layashi Yaker, United Nations Under-Secretary-General and Executive Secretary of the Economic Commission for Africa

Your Excellency
Madame Elizabeth Dowdeswell
United Nations Under Secretary General
and Executive Director of the
United Nations Environment Programme,
Distinguished Agency representatives,
Ladies and Gentlemen:

It is indeed my pleasure to send this message on the occasion of the opening ceremony of the Third Annual Session of the Interagency Group for Water in Africa (IGWA). One of the most important objectives of IGWA is to enhance coordination, collaboration and harmonization of water resources activities in Africa by various UN agencies and other Intergovernmental organizations. From that point of view, I consider the sessions of IGWA very important and I had the best intention to be personally present to discuss with you matters of mutual interest in these areas. However, I regret to say that my prior engagements prevent me from doing so. But I assure you that I will closely follow the outcome of your deliberations at your Third Annual Meeting.

At the very outset, let me congratulate and thank Madame Elizabeth Dowdeswell Executive Director of the United Nations Environment Programme (UNEP) and her hard working colleagues for hosting this Third Annual Session of IGWA in this beautiful settings of the United Nations Centre in the beautiful city of Nairobi. This is the first time, in the three

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years' life of IGWA that its annual session is taking place outside its secretariat at UNECA at Addis Ababa, Ethiopia. I am sure you will agree with me that the Group took the right decision last year at its Second Annual Session to accept the generous offer by the UNEP secretariat to host this third session. You can feel the warmth of hospitality of concerned UNEP staff members by the wonderful and smooth arrangements for the meeting including the hotel and transportation arrangements to and from the UNEP secretariat. On your behalf, and on my own behalf, let me thank wholeheartedly the Executive Director of UNEP, and her staff for their warm hospitality accorded to all of us. We already feel quite comfortable being here at UNEP.

As I have noted earlier, I consider the sessions of IGWA very important. For one thing, IGWA is expected to enhance coordination, collaboration and harmonization of water resources activities in Africa by various UN agencies and other Intergovernmental organizations and thus make the impact of these activities in various African member States more meaningful and visible. For another, IGWA is expected to enhance the working relationship in water sector in Africa between and among the UN agencies and other concerned IGOs. Thus, it is expected to contribute to the effectiveness and efficiency of these organizations in serving the interests of African member States by avoiding duplication and overlapping of activities to the maximum extent possible. IGWA, in this way, can contribute to the efficiency of the UN agencies and other IGOs themselves in their water sector activities in Africa.

Distinguished Participants

Ladies and Gentlemen

Three years back, IGWA was formed with a mandate from our global counterpart, namely the UNACC Inter-secretariat Group for Water Resources to enhance coordination and harmonization of water resources activities in Africa by various UN agencies and other intergovernmental organizations. The expectations were that there would be more interactions, more joint activities in the water sector in Africa by these organizations. In this connection, the success of the Group so far can at best be described as mixed. Although there has been a

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significant increase in interactions and joint activities between ECA and UNEP and to a limited scale between ECA and WMO, such collaborative efforts between and among other agencies have either been limited or not known to us. One of the objectives of having these annual sessions is not only to enhance such joint collaborative efforts but also to exchange information on such activities. I hope by the end of your two day meeting, you will not only know more about your collaborative efforts in these areas, but you will also come up with plans for future collaborations between our agencies in this important sector in Africa.

I am pleased to note that one of your agenda items at this session will deal with identifying priority areas for cooperation and collaboration between our agencies in water sector in Africa. As you know there are a number of areas where the UN agencies could combine their efforts. These, include the Nile river and lake Malawi basin, the Zambezi river basin, the Lake Chad basin, to name only a few. These and other river and lake basins in Africa hold immense potential for development and they all face critical problems in their integrated development. The problems range from lack of political will on the part of the basin countries to the administrative, managerial and financial problems. I believe, in all these areas, the UN and other IGOs can jointly make a significant contributions in promoting mutual understanding and inter-country cooperation among the basin countries. For years, UNECA has been trying to do just that in a number of areas. For example, UNECA has been trying to bring together the Nile basin countries through the auspices of the UNDUGU Group. Two years back, we were successful in having these Nile basin countries agree on a memorandum of understanding (MOU) for mutual cooperation and collaboration for integrated development of the Nile river basin area. The MOU agreed upon at the expert meeting in Cairo in 1992 was placed at the Group's ministerial level meeting at Addis Ababa in 1993 where it was stalled by the member States for reasons best known to them. Thus, the effort of UNECA in this important area which came very close to a successful conclusion was again submerged into uncertainty for sometime to come for reasons of sensitivity of the issue among the Nile basin countries.

I know of other international initiatives like the Nile 2001 and the Tecconile initiatives for these same purposes which also so far achieved only limited success.

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Another priority area which needs the attention of both member States, UN and other international agencies and donor countries are the LCBC, Lake Malawi and the Zambezi river basin areas to name a few. Yet, another priority area for interagency cooperation is in the promotion of subregional and regional cooperation including TCDC and ECDC specially among the existing transboundary river basin organizations in Africa. This will not only lead to cooperation and collaboration between these organizations but also contribute to the goals and objectives of the African Economic Community by bringing these organizations closer together in their working relationship. It is my firm belief that if the UN and other international agencies combine their efforts and undertake joint activities in these areas, their impact will be much more effective and visible and the member States will appreciate such joint activities as it will benefit them immensely. I shall therefore appeal to all of you here to plan and agree upon future joint activities by your agencies in these and other similar areas.

Distinguished participants,
Ladies and Gentlemen,

There are a number of other areas in water sector in Africa where various UN agencies can collaborate. This include exchange of information and data base, exchange of reports and joint advisory and technical assistance missions to the African member States. These activities will strengthen the working relationship between the UN agencies and at the sametime will make the activities more cost effective and their impact on the African member States meaningful. I recall that recently ECA carried out field missions in water resources sector to African member States on behalf of the UN Headquarters and the Islamic Development Bank. This kind of arrangements make the missions more cost effective as well as they enhance cooperation between these agencies. I am also happy to report that there are excellent cooperation between ECA and the League of Arab States in water sector in Africa. I am convinced that similar type cooperative efforts can be replicated between other UN agencies and IGOs in Africa.

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Ladies and Gentlemen,

You have an important agenda for the next two days. Much can be achieved in the way of cooperative arrangements between our organizations and I am optimistic you will do justice to your agenda and make your this once a year meeting fruitful and meaningful.

I wish you success in your deliberations. Thank you.

THIRD ANNUAL MEETING OF THE INTERAGENCY
GROUP FOR WATER IN AFRICA

Nairobi, 15-16 November 1994

Statement by the WMO Representative

Mr Chairman,

I would like, on behalf of the Secretary-General of WMO, Prof. Patrick Obasi, to express my Organization's appreciation to the Executive Secretary of the United Nations Economic Commission for Africa for his kind invitation to participate in this meeting. Prof. Obasi has requested me to convey to you his best wishes for a successful meeting.

Mr Chairman, WMO's involvement in water is defined under the Organization's Hydrology and Water Resources Programme. The overall objective of this programme, as contained in the WMO Long Term Plan, for the decade 1992- 2001 is:

"To ensure the assessment and forecasting of the quantity and quality of water resources, in order to meet the needs of all sectors of society, to enable the mitigation of water-related hazards, and to maintain or to enhance the condition of the global environment".

This objective is reviewed every four years by Congress and could be modified in accordance with the changing needs of Members and with technological developments. The current objective includes promoting the development of, at least the minimum capabilities in developing countries through technology transfer and technical assistance to enable them, on their own, to assess their water resources on a continuing basis, to respond to the threats of floods and droughts and thus meet all the requirements for water and its use and management.

The Hydrology and Water Resources Programme is divided into three mutually supporting component programmes:

- Operational Hydrology Programme (OHP) - Basic Systems
- Operational Hydrology Programme (OHP) - Applications and Environment
- Programme on Water-related Issues

An important part of the OHP is the Hydrological Operational Multipurpose System, perhaps better known by its acronym HOMS, which has been developed for the transfer of hydrological technology among participating countries. The system which was established in 1981 now has over 440 pieces of hydrological technology available to the 118 participating countries. To date 3156 transfers have been made; 340 to Africa and 38 from the region. The developing countries are by far the major beneficiaries of this system.

The OHP is the major water programme of WMO and contains important regional components. The regional component for Africa is formulated and implemented by the WMO Regional Association for Africa which meets every four years. This Association with a present membership of 56 countries is currently meeting in the Botswana capital Gaborone. The discussions of this meeting could therefore provide valuable inputs to the Gaborone deliberations on Hydrology and Water Resources which is scheduled to start on Friday 18 November.

Apart from the OHP, a number of the water-related activities of WMO is linked to other technical and scientific programmes of the Organization. This includes the World Climate Programme in which the impact of climate change and climate variability on global freshwater resources, sea level rise, and drought and desertification are major studies. It is also linked to the Tropical Cyclone Programme which aims at mitigating the effect of tropical storms such as hurricanes, cyclones and typhoons and their floods and storm surges which annually ravage many areas of the world. The south-eastern and central parts of Africa are frequently under threat.

Mr Chairman a number of studies, in particular, the World Bank/UNDP Sub-Saharan African Hydrological Assessment Project and the WMO/UNESCO Regional Water Resources Assessment report have shown that most of the Hydrological Services in Africa have now declined to such a level that they cannot meet the needs for water resources data and information either for the development of national projects or for broader sub-regional or regional studies. This situation in Africa, as well as in other developing regions, has encouraged WMO and the World Bank to develop the concept of a World Hydrological Cycle Observing System (WHYCOS). WHYCOS is dedicated to support and encourage Hydrological Services through capacity building. The System is conceived as a monitoring network transmitting observations from selected key stations at prescribed intervals, via satellites, to national and regional centres. Stage one of the initial component for Africa (HYCOS-Africa) is to establish a network of 100 stations. Detailed proposals for a network for the SADC countries were agreed with SADC-BLMS. A request from IGAAD for assistance in preparing a similar project has been received and WMO is currently consulting with the World Bank on this request. With regard to West and Central Africa, a number of individual countries have expressed interest in having WHYCOS implemented in the sub-region. Support for the project by a sub-regional body would serve as a catalyst for further action. Also within the WHYCOS framework, a MED-HYCOS network is being developed for the benefit of the countries of the Mediterranean rim. Together, these different components when implemented should provide a strong boost to African hydrological activities.

On the question of inter-agency co-operation in the field of water, WMO maintains good links with ECA particularly with regards to the joint planning of meetings in Africa. There is a good working relationship with IAEA. Within the framework of the GEMS-WATER programme, activities are planned and implemented jointly with UNEP, WHO and UNESCO, particularly in the area of water quality during the last few years. WMO's closest links in

hydrology and water resources are with UNESCO. Over the years WMO and UNESCO have improved their collaboration in hydrology to the extent that a number of Member countries of both organizations have recognized the benefits of even closer integration of UNESCO's IHP and WMO's OHP activities at national and international levels. Consequently, a Task Group was set up between the two agencies with the purpose of examining current and planned activities and making proposals for bringing about this integration. In considering the different alternatives, the Group adopted a step by step approach, at the bottom level there were a number of small changes that could be made easily and rapidly, for example more joint publications. At the top level, over a longer time period and with more difficulty there is the possibility of establishing a single identifiable international programme in hydrology with one governing body and one secretariat—the International Hydrology and Water Resources Programme.

Mr Chairman, WMO's primary focus in Africa is the application of meteorology and hydrology towards increasing food production and in mitigating the effects of natural disasters. WMO therefore stands committed to co-operating fully with the Organizations of the United Nations System in achieving this goal.

THANK YOU

UNITED NATIONS CENTRE FOR HUMAN SETTLEMENTS (HABITAT)

THIRD ANNUAL MEETING OF THE INTERAGENCY GROUP
FOR WATER IN AFRICA

NAIROBI, 15-16 NOVEMBER 1994

OPENING STATEMENT

UNCHS (Habitat) ACTIVITIES IN THE AREA OF WATER RESOURCES AND ENVIRONMENTAL INFRASTRUCTURE

UNCHS (Habitat) core activities on urban water resources and related environmental infrastructure services (water supply, sanitation and drainage) are executed under its Settlements Infrastructure and Environment Programme (SIEP). In addition to its regular research programmes, SIEP projects carry out field research and capacity building activities in several cities of developing countries.

The creation of SIEP answers a set of emerging demands for the delivery of adequate external support activities in developing countries. In the first place, SIEP tries to respond to increased national and international concerns to execute actions to achieve sustainable patterns of settlements development. As such, SIEP is developing strategies to implement the recommendations for action on urban water resources and environmental infrastructure services included in Chapters 7 and 18 of Agenda 21.

Secondly, current trends towards devolving competences of local authorities and service agencies for the management of urban water resources and environmental infrastructure services makes imperative the design of strategies to assist these authorities in building their capacity to assume their new responsibilities.

A third aspect relates to the demand for the implementation of support activities that are more responsive to actual national and local needs. As such, SIEP's project execution strategy contemplates working in close coordination with local authorities and the creation of consultative mechanisms to promote the participation of other stakeholders on urban water resources and service management.

Finally, the recognised need for greater efficiency in the management of urban water resources and environmental infrastructure services demands the development of innovative management technologies and software suitable for their application in developing countries. As such, SIEP is giving increased priority to the development of appropriate management tools and instruments for the use and allocation of water resources and infrastructure services.

To respond effectively to the above demands, SIEP's field research and capacity building activities are executed at the local level and in partnerships with the local authorities of the cities where it operates. The Programme endeavours to

executed by other organizations of the United Nations system. At present, coordination is done in an ad-hoc basis and not as part of overall agreements for country level cooperation. SIEP is coordinating some of its on-going field activities with UNDP, WHO and UNICEF.

Current research and development activities of the programme focus on the review and design of instruments for the assessment of effective demand for water resources and infrastructure services. Work is also being done on the formulation of appropriate instruments for the appraisal of investment options on water resources and infrastructure services delivery.

UNCHS (Habitat) "Urban Management Programme" (UMP) and "Sustainable Cities Programme" (SCP), despite their broader coverage of urban issues, also touch upon some aspects of water resources, water supply and sanitation (infrastructure component) management in urban areas. UMP is executed in collaboration with the UNDP and World Bank. The Sustainable Cities Programme implements the environmental component of UMP. WHO is a partner in the execution of this component.

In addition to the above activities UNCHS (Habitat) has a broad programme of country level technical cooperation projects on shelter and urban development. A significant part of these projects have a water resources and environmental infrastructure component, thus reflecting an increasing demand for support in these areas within an overall policy of integrated urban settlements development. The coordination of these projects with other agencies of the United Nations system is done in an ad-hoc basis, normally through the United Nations Resident Representative in the respective countries.

UNCHS (Habitat) has also started preparatory activities for the Second United Nations Conference on Human Settlements (Habitat II) to take place in 1996, 20 years after the Vancouver (Habitat). It has been established that the main outcomes of the conference will be a "statement of principles" and an "action plan" for the improvement of human settlements conditions in an urbanizing world. The sustainable management of urban water resources and environmental infrastructure services is an important component in the formulation of a plan of action to improve human settlements conditions. Habitat II Secretariat is taking the necessary measures to ensure that the preparatory process and the outcomes of the Conference take into consideration and are coordinated with the efforts of other United Nations Agencies and activities, such as those of the ACC Subcommittee on Water Resources.

CONTRIBUTION OF NBA TO THE 3rd CONFERENCE
OF THE INTER-AGENCY GROUP FOR WATER IN AFRICA
(NAIROBI, 15th to 16th NOVEMBER, 1994)

Mr. Chairman,

Honourable Delegates,

The Executive Secretary of the Niger Basin Authority (NBA). Alhaji OTHMAN Mustapha requested me to extend his greetings, many thanks for the invitation extended to NBA to participate in this Conference and he sends his message of praying success for our meeting.

Mr. Chairman,

The Niger Basin Authority is one of the oldest Inter-governmental Organisations in the West African sub-region if one considers the date of its creation in 196 as the Niger River Commission (NRC) charged with the responsibility of organising regional cooperation with a view to harmoniously harnessing the natural resources of the Niger Basin.

In 1980, the Niger River Commission (NRC) was transformed to the Niger Basin Authority (NBA) by the 2nd Summit of its Heads of States and Governments in order to accelerate the integrated development of the Basin which consequently reinforce cooperation among the Member States. These Member States sharing the 2,000,000 sq. km of the Basin are : Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Guinea, Mali, Niger, Nigeria, and Tchad.

Studies on the water resources and how to carry out these studies have been the fundamental preoccupation of NBA throughout its existence. Towards that end some remarkable achievements have been made some of which are :

- (a) A study on the flood anomalies of the River Niger (1975-1983) with assistance of ORSTOM (France) and FAC (France) ;
- (b) Monography of the River Niger (1968 and 1983) also with the assistance of ORSTOM and FAC ;
- (c) Development of the Mathematical Model of the River Niger with the

- (d) The constitution of Hydrologic, meteorologic, cartographic and geographic Data Bank with an aspect of personnel training thanks to the technical assistance from USAID (USA) from 1978 to 1984 ;
- (e) Hydraulic management study of the upper and middle course of the Niger (1983-1985) with technical assistance of the UNDP and FAO ;
- (f) Establishment of a Hydrologic Forecasting System in the Niger Basin - HYDRONIGER (1980-1991) with assistance of UNDP, WMO, FED and the special funds of the OPEP ;
- (g) Studies on the desertification control methods in the Niger Basin, (1985-1994) with the technical assistance from Japan and the Japan Agricultural Land Development Agency (JALDA) This study comprises a substantial aspect of water resources .

Mr. Chairman,

The Niger Basin Authority like all the other Inter-governmental Organisations of the Sub-Region had experienced and is still experiencing serious financial and institutional difficulties. This situation is essentially tied to the internal economic difficulties of the entire Member Countries. However, during the recent statutory meetings, particularly the Extraordinary Session of the Council of Ministers which took place in Niamey, in April, 1993 and the Ordinary Session of Bamako in June, 1994, far reaching measures were taken to revive the activities of the Organisation. In that regard, some considerable actions, such as the following, are either taken or about to be taken :

- the renewal of the management team ;
- the reorganisation of the - Executive Secretariat ;
- the carrying out of a study on the balance-sheet and the perspectives of the NBA with a view to adapting the objectives of the Organisation to the interest and means of the Member Countries ;
- the payments of contributions to the working Budget ;
- the sensitisation of Fund Donors ;

- the pursuit of the activities of the HYDRONIGER Project (collection, treatment, Forecasting and diffusion of Hydrologic Data) and the pursuit of the JALDA Project (Experimentation for the control and the Fight Against Desertification).

In the domain of water resources, NBA has set for itself the short term and middle term priority as follows :

- (a) Elaboration of legal framework for the management of water shared from the Niger Basin. The MULPOC of West Africa has accepted to finance a Mission of Consultants for that matter ;
- (b) The pursuit and the re-inforcement of the achievement of HYDRONIGER in the context of the Phase III, the project document of which is available ;
- (c) The extension of the Mathematic Model of the River Niger to the Upstream (Guinea) and Downstream (Nigeria) and its eventual transfer to NBA ;
- (d) Realisation of the Hydrométéorologic Monography of the River Niger, the project document of which is also available ;
- (e) The training of Staff ;

By the way, NBA and its Member States are greatly interested in other regional projects whose impact is evident on the water resources management and the environment of the Niger Basin. Some of the projects under reference are :

- UNEP/WMO Project Niger River System : an integrated approach to watershed management, with particular reference to sustainable land-use development pollution control and biodiversity conservation
- WMO/WORLD BANK Project " World Hydrological Cycle Observation System" (WHYCOSS-AFRICA).
- FAO/FEC Project : Water Resources Management of the Niger Basin by Integrated Remote sensing".

NBA has, at several occasions renewed its request to the affected Executing Agency on the subject of the evolution of these important projects.

Thank you for listening and God Bless.

UNITED NATIONS
ECONOMIC COMMISSION FOR AFRICA

THIRD ANNUAL MEETING OF
THE INTERAGENCY GROUP FOR
WATER IN AFRICA
Nairobi, Kenya, 15-16 November 1994

Priority Areas of Activities for
Cooperation and Collaboration among the
members of the Interagency Group
for water in Africa
(Agenda item 4)

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Priority Areas of Activities by members of Interagency
Group for water in Africa
(Agenda item 4)

1. Background: The UNECA secretariat took a leading role for the establishment of the Interagency group for water in Africa (IGWA) in 1992 to intensify Cooperation and joint programming where feasible. As recognition of this leading role, The first meeting of the group in 1992 requested the ECA secretariat to serve as its secretariat. The main objective of IGWA is to coordinate and harmonize the activities of various United Nations and other agencies in water sector in the African region in order to achieve better efficiency and avoid duplication of efforts by these agencies.

2. The second annual meeting of IGWA (1993)

The second annual meeting was organized and convened by ECA at Addis Ababa in June 1993. The presence and participation of ten agencies was a significant manifestation of their keen interest and of the commitment of their organizations to water resources development and management in Africa.

The second annual meeting agreed on a number of common ground for future joint activities by the group. This included action to be taken in the following areas:

- Establishment of a system of priorities for coordination of their activities in the various water sub-sectors in Africa as well as in the integrated development of river and Lake basins.
- Preparation of a paper on mechanisms and modalities for coordinating and harmonizing water activities by IGWA member agencies.
- Establishment of a central clearing house for data collection on activities of all member agencies.

3. Challenges to sustainable water resources development

Of all the natural resources, water is probably the most essential for life. In general, the availability of water varies from one locality to another and is dependent on climatic patterns world wide. Although water is considered as a basic ingredient of all forms of life on earth, it may also become a carrier of death. Natural conditions and human activities have over the years affected the quality of available water. Many of these activities

consume the available water without much consideration to the welfare of future generation. This situation calls for properly coordinated management of the water resources. Water resources in Africa are under severe natural and social pressures. Although water is in abundance, shortages have become evident due to pollution and other factors. Poverty, on the other hand, has a tremendous impact on Africa's water resources. The problems related to water are many. Water use and pollution should therefore be addressed in the context of sustainable growth and development. The future strategies ought to emphasize and promote environmentally sound water management to ensure sustainable growth.

Africa needs practical solution to its multiple socio-economic problems. The international agencies should adjust their approaches in their assistance to solve these problems.

Experience has shown that a comprehensive and integrated approach to water resources management can protect the integrity of river basin ecosystems and aquifers and their ability to function in perpetuity. Most of the river basin organizations (RBOs) in Africa which were established under various agreement mainly for sustainable development are suffering from shortage of both financial and skilled human resources. Some also lack political will and conviction of the member states.

The challenges facing long term sustainable water development in Africa have been identified as follows:

- rapid population growth
- increasing demands for water to satisfy people's needs both in agriculture and in expanding Urban Centers
- water quality degradation and pollution
- health impacts
- ground water depletion
- conflict over shared water resources
- growing world wide energy demand
- uncertainties of global climate change
- poor performance of IGOs and NGOs
- rigidity or lack of flexibility in approaches by international agencies and donor countries to assist African countries in sustainable development of their natural resources.

4. Priority Activity Areas

The IGWA members cover a wide range of activities in Africa related to water sector, and to meet with the above challenges, there is a great need to prioritize these activities in order to identify the area for coordination among the IGWA members in the water sector. These areas, inter alia, could be as follows:

- strengthen the capacity building initiatives by African Countries in terms of both human resource development and institution building in the region.
- encourage and promote dialogues among the river/lake basin countries through workshops and seminars etc. to reach a common view regarding the integrated management and development of these basins.
- provide advisory services and technical assistance to member states and IGOs
- collect data and information for dissemination among the member states and IGOs
- launch regional and national campaign for conservation and rational use of water resources.

5. Identified Activities for Co-ordination

To ensure successful coordination among the IGWA members under the above areas the following activities may be considered for joint collaborative implementation.

- technical assistance to member states, subregional, regional and intergovernmental agencies in Africa (Undugu Group, KBo, SADC, PTA, IGAD, LCBC and Tecconile.. etc) through joint multidisciplinary advisory missions.
- organization of joint seminars and workshops with a view to encouraging and promoting dialogue among the professionals in the member states.
- Organization of joint training courses to strengthen the capacity building of the IGOs and member states
- developing effective methods for data and information dissemination among the member states and IGOs.
- raising public awareness as water is one of the most valuable economic resources emphasizing the women's role in the formulation and implementation of the country policies and strategies.

6. Priorities for Coordination of future and on-going activities:

The IGWA member agencies may wish to consider the following activities on a priority basis for cooperation and collaboration among each others.

I. Nile Basin: Already a number of initiatives such as UNDUGU, UNDP/ECA joint initiative, UNEP's diagnostic study, Nile 2002 initiative, TECCONILE, FAO/NBP... etc are underway with limited success in each one. There is a need for coordinated efforts in this area by all these agencies for a greater impact and success. This could be in the form of an Ad-hoc interagency meeting on these activities in the Nile basin area.

II. Lake Chad Basins: Within the framework of Lake Chad Basin Commission (LCBC), the activities are now being geared towards the implementation of the basin development master plan. This plan was elaborated by UNEP and UNSO, on the basis of a study on causes of, and remedies to the deterioration of the environment of the basin. The master plan emphasizes the development of the natural resources in the basin; it contains 26 projects of subregional nature. The organization is currently executing a project on the planning and management of water resources of the basin funded by UNDP. There is a need for coordination in this area among the UN agencies to avoid duplications in their activities and to assist the Commission in securing funds for the programme.

III. Zambezi basin: An agreement on the action plan for the environmentally sound management of the common Zambezi river system commonly known as ZAC Plan was adopted and signed by the representatives of the Governments of Botswana, Mozambique, Tanzania, Zambia and Zimbabwe in May 1987. The plan as designed is a vast integrated development programme covering aspects of the development of the basin water resources including ecological components. At present, all the activities relating to the implementation of ZAC Plan are coordinated by the Southern Africa Development community (SADC). UNEP and some Scandinavian countries pursue their assistance to a few projects within the framework of the plan. UN agencies should cooperate among each others in this area to give substantive assistance to SADC in the implementation of ZAC Plan.

IV. Lake Malawi: The Lake is drained by the Shire river which in turn flows to the Zambezi river within Mozambique territory. The Lake catchment is shared by Malawi, Mozambique, Tanzania and Zambia. Although Lake Malawi is still one of the cleanest lakes in the world, effects of various land use practices in its catchment areas and of deforestation are showing adverse signs on its water quality. In the past, limited assistance was received from UNDP in strengthening water resources management

including water quality monitoring programme and setting up water quality standards. Presently, there are joint commissions existing between Malawi and Tanzania and between Malawi and Mozambique, but there is no multilateral or even bilateral set-up in the form of a common secretariat. There is a great need to have a protocol or treaty among these countries for monitoring and developing Lake Malawi. UNEP and ECA can cooperate in this area.

V. Coordination among RBOs: There is lack of coordination among the River basin organizations in Africa: for example Kagera basin organization (KBO) and TECCONILE belong to the same subregion and their member States are the same. But still there is no exchange of data or information among the two organizations. It is very important to introduce the river basin organizations in Africa to each other to ensure full cooperation and exchange of experience among themselves. This activity can be carried out through workshop or a seminar to be organized by the interested UN agencies.

VI. Establishment of a clearing house for data acquisition, processing and dissemination.

VII. Promoting environmentally sound development and management of river basins.

VIII. Assessment of water hyacinth problems in Uganda, Sudan and Egypt.

IX. Expert meeting on the implications of Agenda 21 for integrated water management in Africa.

X. Regional seminar on sustainable development of natural resources and energy in the context of Agenda 21. "Note: 9-10 can be combined in one seminar"

7. Conclusions

There is a great opportunity among the IGWA members to coordinate and harmonize their activities in the water sector in Africa to avoid duplication and overlapping of efforts and wastage of scarce resources. Also it will have greater impact in the assistance provided to the member countries. The idea of having an organization to act as a clearing house on limited scale is very much ideal to serve the purpose of data collection and information dissemination. In this regard the following information are required:-

- List of all on going and future activities in Africa by IGWA members.

- List of specific Programmes/Projects for joint implementation.
- List of all donor activities in Africa in the Water Sector.
- Mechanisms/Modalities and approaches for coordinating and harmonizing water activities in Africa by the IGWA members.

List of current and future ECA Water Activities

1. Ad-hoc expert group meeting on policies and strategies for the development of natural resources and energy in Africa including water resources was organized in June 1994 by ECA.
2. Proposal for conservation and rational use of water resources in selected North African Countries.
3. Study on problems prospects and strategies for Cooperation for integrated water resources development in the Nile basin.
4. Study on procedures, practices, problems and prospects for small-scale irrigation in selected African Countries.
5. Promotion of subregional and regional Cooperation and providing support to transboundary river basin organizations and other socio-economic groupings.
6. Study on problems related to sustainable development and utilization of natural resources and energy including water resources and strategies for inter-country Cooperation in addressing these problems.
7. Publishing information bulletin on water resources activities in Africa-MAJI.
8. Organizing meetings of the Inter-Agency Group for water in Africa for co-ordination and harmonization of activities in the sector.
9. Organizing a regional seminar on sustainable development of natural resources and energy including water resources, taking into account the environmental aspects of such development in the line with Agenda 21. (in collaboration with UNEP)
10. Organizaing, in collaboration with WMO, an international conference on hydrological services in Africa.
11. Providing technical assistance to LCBC, UNDUGU and other subregional and regional intergovernmental organizations.
12. Providing advisory services to African member States and their IGOs.
13. Undertaking special programmes to assist the island developing countries and least developed and landlocked countries of Africa in the development and manegement of their water resources.