

APPLICATION BY THE UNITED NATIONS SYSTEM OF THE MAR DEL PLATA
ACTION PLAN ON WATER DEVELOPMENT AND ADMINISTRATION

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Table of Contents

	<u>Paragraphs</u>
Preface	1-6
I. <u>A World-Wide Concern</u>	
- An all-inclusive scope	9-13
- A government's responsibility	14-17
- Role of international organizations	18-22
- A costly long-term effort	23-27
- An integrated approach	28-29
II. <u>The Main Fields of Action</u>	
- Concerning the resource itself	31-34
- Preparedness for water development and management	35-39
- International co-operation	40-41
III. <u>Support from the United Nations System</u>	
- Water policy, planning and administration	45-47
- Assessment of water resources	48-53
- Community water supply and waste disposal	54-60
- Water for agriculture	61-65
- Water for energy and other uses	66-73
- Environment, health and pollution control	74-78
- Natural hazards	79-82
- Training, research and public information	83-87
- Mobilization and utilization of financial resources	88-96
- Regional and international co-operation	97-104
IV. <u>Strengthening the Capacity of the System</u>	
- Basic global co-ordination arrangements	105-118
- Strengthening the regional economic commissions	119-128
- Integration at country level	129-133
V. <u>Conclusions and Recommendations. Orientation for the Future</u>	
- On general policies and strategies	134-138
- On capability, co-ordination and co-operation	139-142/148-151/154
- On decentralization at regional level	143-144
- On strengthening the resident co-ordinator's role	145
- On TCDC	146-147
- On non-governmental organizations	152-153

Preface

1. In 1972 the Joint Inspection Unit issued a report on Treatment of Water Resources in the United Nations Family of Organizations (JIU/REP/72/3). Its main purpose was to examine the activities of each organization in this field, as provided in their mandates, in order to assess efforts made to ensure inter-organization co-ordination, and to suggest further steps towards a more integrated and effective system-wide approach concerning problems of water administration.
2. A lot of progress has been made since then. But the tasks still to perform are numerous and complex, as shown by decisions adopted at the 1977 Water Conference, which in many ways expanded the role of the international organizations in the promotion and support of water resources development and sound management. The new responsibilities derived from these decisions, and the launching of the International Drinking Water Supply and Sanitation Decade, prompted the JIU to undertake another assessment of the capacity of the United Nations system in this field.
3. This new report therefore seeks to contribute to the analysis of the constraints and limitations which might still be impeding maximum results, and to examine trends for future action. In so doing the Inspector intends to highlight the readiness of the organizations and agencies of the System to respond, individually and collectively, to the needs of countries willing to give effect to the Mar del Plata Action Plan recommendations.
4. The first chapter defines the nature and scope of the tasks ahead. It briefly discusses the underlying policy principles and commitments agreed upon at the Water Conference. Chapters II and III examine the measures recommended and the contributions expected, with relevant data which was either drawn from the proceedings of the Conference (doc. E/CONF/70/29), prepared on the basis of information directly received by JIU from the organizations and specialized agencies, or extracted from the documentation submitted by ACC to the Committee on Natural Resources. The rest of the report discusses efforts under way for strengthening the response of the international community to the needs of developing countries, and explores possibilities which still remain to be tapped.
5. As part of this study a "Guide to agencies and offices of the United Nations system active in the water field" is being issued separately as a JIU Note, summarizing the programmes and activities of 18 organizations for 1980-1981. Since this Note is of concern primarily to the water specialists in the various organizations and to the ACC Inter-Secretariat Group on Water Resources, it has been printed only in English and distributed to the organizations concerned. Copies may be obtained from the Joint Inspection Unit at the Palais des Nations in Geneva.
6. The Inspector is pleased to acknowledge the valuable assistance received from a consultant, who spent one month gathering and analyzing data, and wishes to record his appreciation for the co-operation of many officials of the United Nations family from whom he received information and advice.

I. A World-Wide Concern

7. In many respects the United Nations Water Conference, its resolutions, recommendations and Plan, was the culmination of a series of international efforts 1/ concerning ways and means of improving the development and administration of this vital resource on a global scale. In other respects it represents the beginning of organized action in this field.

8. The 1981-1990 International Drinking Water Supply and Sanitation Decade, also programmed at this Conference in response to the United Nations Conference on Human Settlements, was launched at the thirty-fifth session of the General Assembly 2/. This decade is an important aspect of the Mar del Plata Action Plan. It stresses the urgency of the commitment and the need on the part of governments and the international community to set adequate priorities for the action required to achieve the Habitat targets.

An all-inclusive scope

9. The purpose of the Mar del Plata Conference 3/ was, in principle, "to exchange experience on water resource development and water use, review new technologies and stimulate greater international co-operation" 4/.

10. In actual fact, however, the scope was widened to include the conclusions and decisions of previous meetings on various aspects of water, so as to deal with the full range of problems related to the development and administration of the resource. The original consensus reached by the Member governments at the Natural Resources Committee, back in 1971, that water was "a major long-term natural resource problem of mankind" 5/, was fully understood and supported. "For the first time the range and complexity of the problems of water development confronting mankind were being taken up in their totality... in a systematic and comprehensive manner" 6/.

1/ Since the first "UN Scientific Conference on the Conservation and Utilization of Natural Resources" (Lake Success, 1949) the United Nations organizations and specialized agencies have been actively involved in operational programmes, studies and discussions related to the development and rational use of water. For decades FAO, the UN, UNDP, UNESCO, the World Bank, WHO and WMO, in particular, sponsored, organized and supported inter-governmental, regional and country activities and projects designed to promote and facilitate exchange of information and technical knowledge on the assessment and utilization of water, to train specialized personnel, to explore and carry out new action development programmes and public works and to manage the resource efficiently. Currently, the whole United Nations system of organizations is engaged in providing technical co-operation and financial assistance in the field of natural resources taking advantage of the progress achieved in the understanding of the issues and limitations involved and of the need for a unified approach and concerted action to deal effectively with all related economic and social problems of basic importance, such as health, food, energy and human settlement.

2/ GA resolution 35/18, 10 November 1980.

3/ Approved by ECOSOC resolution 1761 (LIV) endorsed by GA resolution 3513 (XXX).

4/ ECOSOC resolution 1572 (L).

5/ E/4969, p. 6.

6/ Statement by Secretary-General of the Conference (Doc. E/CONF.70/29), p. 102.

11. The scope of the Conference had been clearly anticipated at the General Assembly Second Committee by the Representative of Argentina (the host Government), who stated that a world-wide survey of water resources and future needs was appropriate in view of the importance of water and the grave consequences of possible shortages. He stressed the indispensable need for "intensified international co-operation" and urged the Conference to undertake a "detailed study of present and future water resources for all purposes, from domestic to agricultural and industrial uses including food production. The technological potential for the efficient use of water, and the risks of pollution resulting from increasing industrialization, also called for evaluation, exchange of information and decisions taken with the full participation of all States and covering the full range of implications" 7/.

12. As shown in the global perspective of the Action Plan, the results of the Conference were of significance to developed and developing countries alike, and contributed to strengthening the principle of a unified approach to development already adopted by the international community as a general basic policy.

13. The all-embracing Action Plan and policy recommendations and resolutions of the Water Conference are now recognized to be fundamentally important for guiding and accelerating the development and rational utilization of the resource.

A government's responsibility

14. The policy options, guidelines and priorities worked out at the Conference emphasized the legal and institutional dimensions of the problems identified, and the primary responsibility of governments in solving them. Political will in particular was considered a critical factor in efforts to overcome, at the national and international level, the legal and institutional requirements to the development and sound management of water resources. The Conference also stressed that any external assistance and participation by third parties would have to be subject to the sovereign prerogatives of governments in the planning and conduct of activities aimed at achieving the objectives of the Mar del Plata Action Plan.

15. The attainment of the Plan objectives requires a series of measures which are essentially a matter of public policy and governmental responsibility, especially with respect to legislation and administrative regulations, the planning and management of the resource, the choice of development priorities and the mobilization of public and private funds, as well as co-operation and co-ordination with other governments and/or international organizations. The responsibility of governments also includes promoting the level of preparedness necessary for the countries to cope successfully with present and future water problems.

16. The programmes of work recommended at the national, regional and international levels, cover the whole range of possible activities in this field. But it is mainly at the country level that government authorities and the civil service should be armed with the necessary legislation, development plans, personnel, equipment and financial resources for coping with this important and complex task in its short and long-term aspects.

17. The countries should organize themselves --when necessary--, to adopt a water policy framework and institute clear levels of decision to start action

7/ A/C.2/SR.1709, 2 December 1976.

as soon as possible 8/, provide the necessary means and facilitate solutions for the implementation of these programmes according to their priorities and needs.

Role of international organizations

18. The United Nations system includes organizations with a particularly important role to play in assisting governments in the implementation of the Mar del Plata Action Plan. Water development and its orderly administration are now universally considered a key factor for the improvement of the economic and social condition of mankind, in the context of a unified approach to development, and as such essential for the attainment of a more equitable world order.

19. As noted by the Secretary-General of the Conference, the governments have had the opportunity "to impart new vigor to multilateral action and to enable the international community to carry out its expanded role in a more dynamic manner" 9/.

20. It was recognized at the same time that international assistance, essentially catalytic, is effective only when there is also dynamism "and vigorous national action..." since "the main burden of effort in water-resource development must be borne at the national level" 10/.

21. In general, besides the collection, review and publication of information, the study of water problems and the organization and support of technical meetings, seminars and training courses on water-related matters, organizations of the United Nations system provide technical co-operation, financial assistance and advisory services --at country, regional or global levels-- to assist in the planning and implementation of water projects.

22. The role of international organizations seems to have been expanded by the recommendations of the Conference to cover the full range of water activities. Although promotional it is nonetheless an essentially supportive role, to be played only at the request of interested governments. The Action Plan specifies the contributions expected, but, as noted earlier, management and supervision at **the** country level remain the prerogatives of national authorities.

A costly long-term effort

23. Most of the policies agreed upon, as well as the recommendations and resolutions included in the Action Plan, will require a sustained effort for the majority of the countries to be able to achieve the agreed standards and objectives. The action decided implies the acceptance by the participating governments of heavy financial commitments that go with water development, conservation measures and a rational utilization of the resource.

8/ Many governments already reported progress in the implementation of the Action Plan as shown in documents E/C.7/117 and 118 (1981) prepared for the seventh regular session of ECOSOC's Committee on Natural Resources. In some cases progress appears to be still slow, and the limitations difficult to overcome, but the response proved to be positive in general.

9/ Doc. E/CONF.70/29, p. 103.

10/ Ibidem, p. 115.

24. Besides the continuous character of this task, the undertaking of the accepted action programmes involve the adoption by each government of difficult decisions in the face of competing priorities regarding the investment of significant resources, which in many cases are beyond the financial possibilities of the countries and could only be made available from bilateral and multi-lateral sources.

25. The cost of the Mar del Plata Action Plan implementation is difficult to assess, even with reference to individual countries or specific programmes in a given period of time. The estimations which were made, as in document E/C.7/83, have only a notional value 11/, but they contributed to a more realistic conceptualization of the task ahead and of the need of efficient administration, as well as urgent planning for an early start.

26. The magnitude of requirements such as monetary resources and technical capability, are perhaps not as challenging as is the judicious unification of all components necessary to facilitate the execution of water programmes and projects. It has been noted that on numerous occasions the main constraints could be of institutional, managerial and technical nature, rather than financial, or in some cases a matter of public information, political will, continuity of efforts and adequate priority choices 12/.

27. For the United Nations system the commitment is also complex, in terms of its responsibility and the resources needed for its increasing involvement in technical co-operation and financial support, as well as in terms of organization, staffing and adequate operational criteria to play effectively the role assigned by the Action Plan.

An integrated approach

28. The Conference was fully aware of the relevance of certain basic principles evolved within the United Nations system towards the achievement of a more equitable world order, such as the "unified approach to development analysis and planning", and was consequently informed of the need for an overall water policy taking into account the different aspects and implications of water resources administration.

11/ Such as the amount of \$8,980 million for making the assessment of the water resources in all countries by the year two thousand (E/C.7/83); or the amount of 100,000 million dollars in a 15-year global target to improve irrigation in some 45 million hectares and incorporate 22 million hectares of new irrigated land (E/CONF/70/29). The launching of the International Drinking Water Supply and Sanitation Decade stimulated more recently some calculations of the same character, such as the number of two billion people to be reached with safe water supply to meet the goals of Mar del Plata, which means that around 500,000 people have to be reached with new installations per day during the period 1981-1990 (UNICEF, "Waterfront", August 1980). A survey of the World Bank estimates that an investment of 300 billion dollars would be needed to meet the targets of the Decade, while inputs from development banks in water-related projects were in 1979 of \$1,426.1 million (A/35/367).

12/ In this regard the Action Plan included, inter-alia, several concrete recommendations on education and training as well as in policy, planning and management.

29. The question here was not only that of a strategy for combining economic growth with the achievement of social objectives, but also that of adequate organization and management of the resource in regard to all its uses, and in its necessary relationships with other basic problems of mankind. The integrated management of the resource, based on a water policy of inter-disciplinary conception, was as a result fully supported and included in the Action Plan as operational criterion to be adopted in general by the governments concerned, particularly at the country level.

II. The Main Fields of Action

30. As a result of the United Nations Water Conference the Mar del Plata Action Plan identified several areas where measures are most needed to promote sound water resources management and development. These areas are briefly described below.

Concerning the resource itself

31. Assessment of the resource was considered a priority. In many countries the lack or the unreliability of hydrological and meteorological information are still a limiting factor for the adequate planning and administration of water in its multiple uses.

32. The gathering, storage, retrieval, standardization, evaluation and dissemination of data, for the countries to be able to estimate surface and ground water resources and the potential for augmenting these resources, require a series of measures at national and international levels such as the exchange of information as well as the access to and the utilization of adequate financing, technology and training facilities.

33. This resource is of vital importance in regard to the world economic and social development possibilities: for the provision of drinking water and sanitary facilities; for correcting deficit in the production of food and agricultural products; for hydroelectric power generation; inland navigation; industrial development; recreation, and other activities of mankind for which water is a key factor or a sine qua non condition.

34. In this connection the Action Plan recommended measures to implement resolution C.12 of Habitat and for the launching of the International Drinking Water Supply and Sanitation Decade; took into consideration the resolutions of the World Food Conference; called for world-wide action to improve water development in agriculture to boost production and to protect agricultural land; encouraged studies on the multiple and integrated development of water in watersheds with hydroelectric potential, and measures to integrate plans for hydropower with overall development plans including the use of modern technologies; etc.

Preparedness for water development and management

35. A comprehensive and vigorous national water policy encompassing effective legislative and administrative measures was considered indispensable if optimal economic and social benefits are to be realized in this sector, as well as public acceptance secured for planned water schemes and their financing. Such measures are also basic to the protection of human health and the environment,

as well as for disaster prevention and preparedness against floods and droughts. Within the responsibility of governments, all these policy, planning and administration measures are crucial to the solution of water-related problems, to ensure efficiency and cost-effectiveness, optimize investments for water development and improve its management through adequate institutional arrangements and infrastructure.

36. The Plan called for Action to cope with shortages of skilled professional and sub-professional personnel, and to provide the specific knowledge and technical capability required for sound water management.

37. Surveys were recommended to determine national needs for administrative, scientific and technical manpower. Training programmes were envisaged, inter-alia, to give management planners an understanding and appreciation of the various disciplines involved in water resources development and utilization; to provide professional, technical and skilled manpower in hydrology, hydrogeology, hydraulics, social, biological and health sciences and water desalination, and to provide managers for water resources systems, operators for water distribution and treatment plants including monitors for water quality installations. Extension services at the farm level should also be organized.

38. Since the use and management of water resources must be based on factual knowledge, it was also agreed that research activities, particularly aimed at devising new management techniques and technologies, should be strengthened and expanded. Co-operation should be promoted between water research and development administration and to ensure that research endeavours respond first to priority problems as determined in national plans.

39. Arrangements are also needed to provide financing for project planning, formulation and implementation, determining priorities and possibilities for mobilizing resources and for making water projects more efficient and self-sustaining.

International co-operation

40. In line with efforts to overcome major constraints such as the lack of capital and trained manpower, as well as the exigencies of natural resources development, resolutions and recommendations of the Conference pointed to the need for inter-country co-operation, particularly in the case of international rivers and areas where measures for regional forecasting, planning, development, regulation, management, environmental protection, use and conservation could be adopted.

41. In recognition of the growing economic, environmental and physical interdependence across international frontiers, as well as of the importance for developing countries to achieve individual and collective self-reliance in the development of their water resources, action was recommended for among other purposes the identification of programmes for water resources development that can be achieved jointly in specific sectors such as community water supply, irrigation, drainage, hydroelectric generation; the development and management of transboundary water resources, groundwater development, means for the prevention and reduction of losses due to floods and droughts and pollution, water legislation and training, transfer of technology suited to the requirements of the developing countries and the development of such technology.

III. Support from the United Nations System

42. Organizations of the United Nations system are expected to play their traditional role --in keeping with their respective mandates and when so requested by governments-- of providing technical and/or financial assistance in support of the implementation of the Mar del Plata Action Plan. This role is described broadly under each field of activity in the Action Plan. The need for increased co-ordination within the United Nations system is also stressed as a pre-condition for an integrated and concerted approach to water development and management problems.

43. The regional commissions, by virtue of their mandates, have a significant role to play in the promotion of regional co-operation --through TCDC and other intergovernmental programmes-- in the field of water resources development and relevant management. The commissions should assist in identifying inter-sectoral, sub-regional, regional and inter-regional projects and preparing programmes. They should intensify their efforts in the water sector and assign specific responsibility to an existing intergovernmental committee or create a new one if necessary, and establish ad hoc groups of experts.

44. The expected co-operation and present support of the organizations of the United Nations system are summarized in the following sections of the report. It is relevant to recall that the agencies have both "regular programmes" (financed from regular assessed budgets) and "operational activities" or field projects largely financed from extra-budgetary sources (via UNDP, funds-in-trust, etc., which consist of voluntary contributions by governments and others). The two types of co-operation are reviewed briefly and systematically in the "Guide" 13/, and discussed under each field of action below, not exhaustively but more by way of illustration. In this context it is important to note that "operational activities", mainly country projects, cover about 90 per cent of all the system's water-related activities, and that these are subject to request mostly of individual governments.

Water policy, planning and administration

45. The objectives and principles set forth in this section of the Plan dovetail with practically all other recommended realms of action and are of special importance.

46. The type of co-operation expected from international organizations in this particular area is essentially of a technical character, and concerns policy formulation, drafting of legislation, preparation of plans, identification of projects and preparation of feasibility studies and final project reports, strengthening of national institutions and developing of national expertise, exchange of information as well as any other measure the governments may decide to adopt.

47. As **indicated above** the Water Conference called for an integrated approach to development, planning and management of water resources, with due **consideration** to ecological conditions and socio-economic objectives. The United Nations Organizations should be instrumental in promoting this approach. Specific references to it could be found in some programmes, such as United Nations and UNESCO, and this should be a major concern also for those organizations whose programmes are oriented towards sectorial aspects of water resource utilization. Support of adequate water policies, planning and management techniques at national, regional and international levels is a responsibility of all the organizations of the System, notably UN/DTCD

13/ Issued in connection with this report as a separate JIU Note (see para. 5).

as well as the regional commissions, which are particularly responsible 14/ for the promotion and support of regional undertakings. The Action Plan was followed-up systematically (doc. E/C.7/79 and E/C.7/89). Doc. E/1980/19 contains information about current and planned activities, and Doc. E/C.7/118 is a report of the Secretary-General to the Committee on Natural Resources on "Progress and prospects..." in the area, as requested by ECOSOC decision 1980/115.

Assessment of water resources

48. International co-operation aimed at improving water resources assessment, particularly within the International Hydrological Programme and the Operational Hydrological Programme, must be geared to the targets set by the Conference and appropriately supported by national and international governmental and non-governmental institutions.

49. International organizations are expected to strengthen their technical co-operation programmes for the development of integrated national data systems. As appropriate, they should assist in the establishment or strengthening of observation networks and surface and ground water data banks using advanced techniques for recording quantitative and qualitative assessments and characteristics. Assistance is also expected in data processing and retrieval, and for the necessary technology, equipment, training and the establishment of laboratories for comprehensive water analysis.

50. Concerning snow and ice, advice is expected on international standards and the establishment of observation networks, to facilitate exchange of information specially in the case of international river basins.

51. There is close co-operation between WMO and UNESCO 15/, the two agencies with major programmes focused on water resource assessment, and their Operational Hydrology Programme (OHP) and International Hydrological Programme (IHP), respectively 16/. Both programmes have placed more emphasis on the relation between assessment of water management and water resource planning. Both organizations are striving to increase direct assistance in this field, and have close contact with relevant national services, including relations with over 90 national IHP committees. In the case of UNESCO, regular programme budget allocations for 1981-1983 water (assessment and other) activities come to \$4.8 million and field project financial allocations for 1980-1981 to \$4.6 million, while the corresponding figures for WMO are \$1,845,000 for four years and \$12.7 million, respectively --with the bulk for both agencies being allocated to what may be called contribution to assessment of water resources. The figures include expenditures for relevant education and training, etc.

52. The contribution of the System to assessment is not, however, limited to that of UNESCO and WMO, particularly since overall resource assessments are usually supplemented by more detailed and accurate assessments required by development plans (for water supply, agricultural, industrial and power projects)

14/ ECOSOC decision 1980/115 on Water resources policy and planning, within the overall framework of the follow-up of the Action Plan, asked for detailed report to the Committee on Natural resources on the role of the commissions concerning institutional arrangements for international co-operation.

15/ For specific details on the joint activities of WMO and UNESCO, see paragraphs 23-31 of the report on Present and Future Activities of the United Nations system in Water Resources (doc. E/C.7/120).

16/ **An international conference will be held in August 1981 as a joint UNESCO/WMO contribution to the implementation of the Mar del Plata Action Plan.**

and in more particular respects 17/. For example, groundwater exploration and other assessments form large parts of specific development projects assisted by the United Nations (WRB/DTCD), FAO and others. Assessment is also significant in some regional commissions activities, such as ESCAP. Among the particular aspects may be noted, e.g., the GEMS project on water with WHO as lead agency for 300-400 river stations to measure pollution and water quality.

53. Overall, the capacity is there and should be able to meet requests for assistance on assessment, provided governments give adequate priority to such activity in their programming, backed up by sound work on a scientific basis, standardization, design, training facilities and other relevant requirements.

Community water supply and waste disposal

54. The Conference (Resolution II) formulated a special Plan of Action in anticipation of the launching of the International Drinking Water Supply and Sanitation Decade and urged the international community to adopt new approaches to support increased national commitments with particular reference to the least developed and most seriously affected countries. Among other things international organizations were urged to: (a) increase financial contributions to strengthen the capabilities of international and bilateral co-operating agencies; (b) extend co-operation to high priority projects and programmes; (c) intensify collaboration with on-going activities of WHO for monitoring and reporting on the status and progress of community water supply and sanitation; (d) promote public health education; (e) support research, development and demonstration in relation to predominant needs, particularly: (i) low-cost ground water pumping equipment; (ii) low-cost water and waste-water treatment processes and equipment, with emphasis on the use of materials and skills likely to be available to rural communities for installation, operation and maintenance; (f) strengthen the exchange of information; and (g) improve co-ordination within the United Nations system at the country level to ensure a multidisciplinary approach to the development of community water supply and sanitation services, and that rural water supply and sanitation form part of integrated rural development projects.

55. This Plan of Action coincides in substance with the objectives and the measures recommended by the Mar del Plata Action Plan in its section on Water Use and Efficiency, which specifies the type of co-operation expected along these lines from the international organizations.

56. The support provided by the United Nations system in this area is already encouraging. Community water supply and sanitation has been the subject of prompt and intensive follow-up action since the Water Conference. It has been given a headstart in the light of a special progress report (doc. E/C.7/80 prepared by WHO in co-operation with others) and the subsequent ECOSOC resolution 1979/31 of 9 May 1979, as well as special follow-up by the World Health Assembly, UNDP and others.

57. The activities have been accelerated by the formal launching of the International Drinking Water Supply and Sanitation Decade. The preparatory activities have been co-ordinated through a special Steering Committee for Co-operative Action, which at present is composed of representatives of UN/WRB/DTCD, UNEP, UNDP, UNESCO, UNICEF, FAO, IBRD, ILO, HABITAT and WHO under the chairmanship of the UNDP Deputy Administrator, with a particularly active role by UNDP, UNICEF, IBRD and WHO. As the secretariat for the Steering Committee, WHO has established a Unit for Global Promotion and Co-operation for Water Supply and Sanitation (within its Environmental Health Division), which is also to serve as a "clearing house" for the collection

17/ The economic dimension is also important here. Investments in hydro-meteorological networks should be related to the development and administrative planning objectives of the country concerned.

and exchange of information, to monitor overall progress and to provide other support services as appropriate. The UNDP has seconded a senior staff member to assist the Unit, and has also appointed a Co-ordinator for the overall participation of UNDP in the Decade.

58. As part of the preparatory activities, a major report has been produced on "present situation and prospects" (doc. A/35/367) and another on "regional reviews of activities" pertaining to the Decade (doc. A/35/341) as well as donor country reports, in accordance with ECOSOC resolution 1979/31 endorsed by General Assembly resolution 34/191. So-called Consultative Meetings --including donor governments and NGOs as well as the Steering Committee members-- have been held in Geneva in November 1978 and June 1980. In addition to the members of the Steering Committee, support is also provided by others for related resource assessment and by the economic commissions in regional reviews and sometimes special studies and meetings for water supply and sanitation. Beyond the immediate United Nations family, major contributions are made by bilateral donors, regional and other banks, and of course by the developing countries themselves.

59. The capacity of the United Nations system includes an annual WHO budget of some \$17 billion and a professional staff of about 170 (according to E/C.2/80, Annex I, page 2); a rapidly expanding UNICEF field programme, with emphasis on the rural and poor population and expenditures by 1979 exceeding \$50 million in this field; World Bank/IDA financing of "water and sewerage" projects amounting to \$1,440 million (1 July 1977 - 1 May 1980), plus significant amounts as components in projects executed by FAO, UN/DTCD and so on; and behind much of this, UNDP financing and Resident Representatives recognized as co-ordinators and stimulators at the country level.

60. Still, there is a long way to go towards the goals originally laid down by the Human Settlements (Habitat) Conference now being followed-up by the Decade. It could be said that this huge task is just starting now that the whole United Nations system has been called to contribute from all angles to the achievement of these targets.

Water for agriculture

61. The Conference recommended that international organizations should assist in the preparation of master plans and programmes and definitive project reports on the use of water in agriculture, including land use, irrigation, rainfed farming techniques, drainage, flood control, salinity intrusion, swamp reclamation and soil and water conservation. Attention of international financing agencies should be focused on the need to adapt to the intensified programme taking into account the severe constraints imposed by current methods of project financing for the development of water for agriculture, which should receive higher priority in the apportionment of funds. International aid should likewise give the highest priority to the acquisition of skills by national manpower. International organizations should indicate their preference for the employment of local goods and services. It was further recommended to co-ordinate and monitor international financial and technical assistance in the field of water development and use for agriculture, including analysis and assessment of the problem in planning for agricultural water development and setting up and improving institutions.

62. Agricultural water requirements are enormous, as made clear in the Water Conference and some subsequent studies. With the pressure of growing population and food problems, relevant activities would have multiplied at different levels in any case, but have undoubtedly been spurred by both the 1974 World Food Conference and the Water Conference, particularly so perhaps in regard to investment and training activities.

63. In fact, activities are so numerous and information so fragmentary, as noted by FAO in a progress report on water resources development and management in agriculture (E/C.7/81), in follow-up of the Water Conference, that it is impossible to prepare a coherent overall assessment of progress. As a consequence, in resolution 1979/70.III, ECOSOC has urged governments to establish reporting (with more coherent results still awaited), while requesting appropriate organizations to get on with programme execution, relevant studies and training.

64. It is difficult to isolate "water" from other inputs in agriculture; at the same time, however, it is important to integrate water for agriculture with other water uses and needs so that a parochial view is avoided and overall water management is not sub-ordinated to one use sector, agriculture, even if it is quantitatively the biggest consumer by far.

65. FAO is of course the agency with major responsibilities in this field. Its major programme on agriculture includes a natural resource programme with expenditures in 1980-1981 of \$2.3 million plus \$1.9 million from extra-budgetary sources for the regular programme and financial allocations of \$24 million in 1980-1981 for corresponding field projects (mostly from UNDP and trust funds). The FAO/World Bank 18/ Co-operative Programme also plays an important role in developing projects, as does the FAO co-operation with the World Food Programme, IFAD and other intergovernmental and non-governmental organizations; among the latter may be noted the International Commission on Irrigation and Drainage carrying out an enquiry on training needs and facilities, and the International Development and Research Centre carrying out another on needs for applied research in agricultural water use. World Bank/IDA lending for irrigation and drainage projects in the period July 1977 - May 1980 totalled \$ 3,500 million out of total projects costs of \$ 5,465 million. Other system agencies are also involved in various relevant aspects, such as UNESCO and WMO as already noted on assessment, WHO on health aspects, UNEP on environmental implications, UN/DTCO on broader river basin and water resource development and overall water management, etc.

Water for energy and other uses

66. International organizations are expected to assist in preparing long-term plans for utilizing the potential for power development in river basins, and definitive project reports to help in seeking investment finance; to promote detailed load surveys at the national and sub-regional levels and in individual river basins, and to assist in preparing plans, programmes and projects for inland water transport, taking into account the needs of land-locked countries, to support the construction of basic facilities such as navigation channels and locks, the maintenance of water-ways and the mapping of navigation charts, and to build-up the requisite technology within the countries. They are also expected to assist in the formulation of specific plans and projects for the development and management of water resources to combat desertification; the location of sources of financing for the implementation of projects; the preparation and execution of training programmes at all levels, and the assessment of water requirements for industrial purposes and in evolving economical methods for the reuse and recycling of water, where necessary. It was proposed that programmes for the exchange of information through expert and other meetings be strengthened and that research and study programmes be arranged with regard to pricing policy and methods of water and waste-water treatment.

67. Among other important water uses, power generation, inland navigation, industrial water uses and combatting of desertification figure prominently and in various ways in the activities of various system agencies. These "miscellaneous" uses, which are not identified with particular specialized agencies, account for considerable activities in the UN/DTCO and Regional economic commissions, which also broadly provide substantive support not covered by others.

18/ For more details on FAO/World Bank financial commitments and expenditures in this field, see ACC report, ibidem, paras. 69-73.

68. Hydroelectric power generation is an important component in the UN/DTCD work and field projects, often as the centre-piece of multi-purpose river basin projects. The ECE has a long history of European co-operation in the hydropower field, given further impetus with increasing fuel prices, and some other regional commissions have undertaken various studies. UNIDO has become active in mini-hydropower units, equipment and design standardization, etc. Assessment work, such as by UNESCO and WMO, is of course basic also in this area. A Technical Panel on Hydropower has been established, among several others, for the Conference on New and Renewable Sources of Energy. On the purely operational side, the UNDP/OPE is engaged in several hydropower projects. Hydroelectric power has long been a main object of World Bank lending, and in the period 1 July 1977 - 1 May 1980 Bank/IDA financing for hydropower development has amounted to \$1,096 million (out of a total cost of \$7,187 million) while at the same time World Bank guidelines for evaluation of hydropower projects and environmental factors have gained prominence. Occasionally, hydropower figures as a component in many agricultural projects executed by FAO. Various non-governmental and intergovernmental organizations are, of course, also active in this field, such as the World Energy Conference, the Latin American Energy Organization (OLADE) and the International Commission on Large Dams. Another dimension of power generation concerns the enormous cooling water requirements of thermal power plants. This aspect is dealt with in numerous studies and projects on water demand, power planning, prevention of thermal pollution etc., in several agencies.

69. Inland navigation is sometimes part of multi-purpose projects, and is the focus for example of some projects assisted in Latin America by the UN/DCTD, where the Water Branch has been strengthened with inland navigation and public works competence. Inland navigation is prominent in the work of ECE, and some other commissions and agencies. Interest has grown with stress on problems of land-locked countries.

70. Industrial water use is bound to increase with industrialization, and with it problems of competition for water, of effluents and pollution. From early preoccupation by the predecessor of WRB/DTCD (with publication on "Water for Industrial Use" in 1958), the problems have gained increasing attention from ECE and other RECs, WHO, UNEP etc, and of course UNIDO as the lead agency in this field.

71. Other relevant water uses such as for recreation, tourism, timber floating, etc., are components of broader projects and studies, but sometimes without the required attention to problems of integration. Inland fisheries is of course a field of major concern in FAO, covering fish production in natural and artificial lakes, rivers, estuaries, flood plains and through intensive aquaculture. The feasibility of developing or maintaining fishery resources is highly dependent on integration with all other forms of water development affecting the aquatic environment in terms of water quantity, discharge rates and water quality.

72. The role of water in combatting desertification has been given further impetus with the Desertification Conference, the subsequent establishment of a Desertification Unit in UNEP and the launching of various relevant studies and projects such as on ground water exploration and management in northeast Africa and the Arabian peninsula. Other recent projects include the FAO Desertification Map and various soil and water conservation activities.

73. On the whole, the infrastructure for the capacity to meet the contributions expected with regard to the water uses described above may be said to be adequate, with appropriate financial support, to provide additional services in response to increased requests for assistance.

Environment, health and pollution control 19/

74. Many, if not most, of the problems of environment, health and pollution related to water are man-made. The whole United Nations system is well aware of this fact, particularly so after the 1972 Environment Conference and the amplification of relevant aspects by the Water Conference.

75. The international organizations geared up their activity and are working on just about all the measures recommended, or at least as far as this can be done at global and regional levels in regular programmes, and to the extent requested by the countries, sometimes in specific projects but perhaps more significantly as part of comprehensive projects.

76. UNEP and WHO are of course most visible in this area, as principal advocates and animators of environmental and health activities. But practically all the agencies are involved in various ways through programmes adopted by their governing bodies, not only out of concern about environment, health and pollution per se, but also the environmental impact of water resource development projects for irrigation, industrial and power uses, etc.

77. Many of the activities are carried out in close co-operation among organizations with WHO or UNEP as lead agencies, and the latter also as a financing agency through its Environment Fund. UNEP has a central role in the assessment of pollution and environment impact concerns (such as on large dams and man-made lakes). WHO has extensive experience with drinking water standards, sanitation, health aspects of agricultural and other projects, water pollution control and of course water-related disease vectors; indeed, its water activities are centred in the WHO Environmental Health Division. The WHO Division of Vector Biology and Control acts as secretariat for the WHO/FAO/UNEP Panel of Experts on Environment Management for Disease Vector Control. Several of the Regional economic commissions are very active in this area, notably so ECE and ECLA. Among other agencies, UNIDO deals with industrial water input and waste, and FAO **is** involved with programmes on pollution and inland fisheries, drainage, conservation and reclamation, watershed management, etc. IAEA is watching water pollution from nuclear radiation; UNESCO is engaged in a variety of relevant activities (through its IHP and MAB --man and biosphere-- programmes), and WMO has a programme on hydrology in environmental management. Environmental impact concern is now definitely very much part of project development of UNDP, World Bank and others.

78. Because the activities considered here are so much a part of a variety of other activities, it has been impossible to isolate and quantify the relevant work in terms of money or manpower (though preparations are under way on a systemwide medium-term plan in environment, including water aspects). However, it may be concluded that the expertise is basically available to meet the expected contributions.

Natural hazards

79. In the field of management of flood and drought loss, co-operation is expected to: (1) further the development of hydrologic models; (2) study risk evaluation and other aspects of flood plain zoning and management and disaster prevention; (3) provide technical and other assistance in implementing flood control and flood protection works, and (4) arrange for a programme of information exchange on drought loss management and weather forecasting.

^{19/} A concise summary of measures recommended under this heading by the Conference can be found in the ACC report, ibidem, paras. 105-118.

80. Floods and droughts are manageable to some extent, through preparedness and prevention by proper planning, but not usually totally avoidable at reasonable cost. Floods are sudden and often dramatic and droughts slow and creeping; but both require different actions at local and regional levels and different approaches in assistance.

81. Floods are often catastrophic and call for quick relief, such as mobilized by UNDR0 in the United Nations system, and on a much larger scale through other channels. The relief may be totally inadequate in proportion to the disaster, but then again there appears to exist no agreement on international responsibility for damage in member countries or even a definition of "disasters" qualifying for relief. Beyond relief and disaster activities by UNDR0 and others, quite a few System activities are devoted to flood preparedness and prevention, such as by WMO on forecasting, typhoons, tropical cyclones and flood warning, an activity shared with ESCAP and others. More long-term prevention is a vital component of many FAO activities on water development, erosion control, and watershed management; and in river basin and sometimes pure flood control projects with assistance from UNDP, the World Bank, UN/DCTD, WHO and others. Even the United Nations University (UNU) is involved in some aspects, such as in one on land slides in Nepal and others on water-related studies on humid tropics and arid lands. Floods tend to be recurring and many governments thus to be more ready to step in with prevention (by engineering works and non-structural measures) with assistance from the international organizations.

82. Drought loss management appears to have more difficulty in taking hold, but has been given an additional boost with the Plan of Action to Combat Desertification, which was endorsed by General Assembly resolution 32/172 of 19 December 1977. According to a report on drought loss management (E/C.7/87), a platform exists for a further large-scale attack on the problem by the international community, but the combat seems to be developing slowly at the national level and especially so in the most seriously affected and least developed countries. Hence, in resolution 1979/70.VIII, ECOSOC had invited recipient and donor countries to work together to formulate and implement suitable projects.

Training, research and public information

83. In this field international organizations may assist in conducting surveys on available manpower and needs, reviewing the research work done and outlining the directions for future research work needed; strengthening existing educational and training institutions, including vocational training, and improving course contents; establishing new training centres; strengthening research institutions and setting up new ones; providing scholarships for undergraduate and graduate courses; undertaking regional studies in consultation with the countries concerned to identify the incidence of problems relating to the education and retention of staff; exchanging information and experiences and disseminating research results; preparing research projects, including global studies of environment trends; standardizing methods of processing relevant data; and investigating the possibilities of new technologies such as weather modification, long-term weather forecasting, desalination and remote sensing to augment water availability.

84. It is recognized that education, training and research, as well as public information, are pre-requisites for the successful overall implementation of the Mar del Plata Action Plan. A follow-up overview is provided in a report on "public information, education, training and research" (doc. E/C.7/88, prepared by UNESCO), in the light of which ECOSOC (in resolution 1979/70, IX) invited UNESCO and all other organizations of the System to accord the highest priority within their specific water resources programmes to activities in the field of public information, training and research.

85. We have here again a field requiring a system-wide input. Training needs are met not only by UNESCO-sponsored courses in hydrology and water sciences, but by training activities by just about all the agencies related to their specific fields (see agency by agency review in the "Guide"). These activities take place through a large number of fellowships, seminars, workshops, training courses, symposia, sponsoring of training institutes, etc., and on-the-job training of many more counterparts in operational projects. Besides UNESCO, reference may be made in such context to FAO activities in watershed management, aquaculture, irrigation and drainage, with special emphasis on support to national programmes for improving farm water management; WHO and UNICEF in water supply and sanitation, WMO in hydrological networks and forecasting, IAEA in isotopes, UN/DTC and RECs in water management, policy and planning, etc., with various NGOs and others too numerous to list.

86. Research needs are highly varied, concerning the level of development, climatic differences, water development needs and other factors. Such needs are met, at least in part, by the System's agencies, in relation to their specific fields, by promotion of international contacts, meetings, symposia, seminars, etc., and extensive programmes of publications, on technologies and other relevant aspects. Much concrete research and experimentation goes into execution of field projects assisted by the System.

87. While it would be difficult to isolate and add up sensibly in terms of expenditures and manpower the efforts made to meet training and research needs 20/, it may be noted that those needs also are not well assessed comprehensively or with precision and that consequently it is difficult to judge whether needs are being met. Undoubtedly, there is scope for vastly expanded training and research activities, if so requested by developing countries and for that matter in many industrial countries. Training and research in water management and water economics, for example, may be judged totally inadequate in all quarters and not particularly in the United Nations system. There appears to be a lack of synthesis in training and research to meet real needs in the water resources field. Perhaps the United Nations University and the economic commissions in their respective regions, should be encouraged to go into these aspects systematically and in a co-ordinated fashion.

Mobilization and utilization of financial resources

88. Co-operation from international organizations, particularly the World Bank, regional development banks and other financing agencies, was recommended to increase the flow of necessary funds on the best possible terms. To this end these organizations were requested, inter alia, to give sufficient weight to the socio-economic effects of water resources development projects; co-ordinate their policies and activities; adopt methods of project execution encouraging participation of national capacities, and promoting regional co-operation; undertake co-operative studies or joint action for the development of international river and lake basins.

89. Since the nature and duration of investments in this field does not usually attract private financing --with the exception of certain kind of equipment--, the major sources of capital for water resources development are the public sectors of the countries themselves and the international community, through bilateral and multilateral assistance.

20/ See with respect to regional efforts JIU/REP/80/10.

90. The report of the Secretary-General to ECOSOC 21/ concerning the arrangements recommended by the Action Plan, includes a detailed account of the assistance provided by the United Nations system in project identification and feasibility --through UNDP and UNEP, mainly in the financing role, and FAO, IAEA, UN, UNESCO, WHO and WMO complement of substantive activities--, and in project development and investment where the World Bank Group 22/, IFAD and UNICEF are the most important (see "Guide").

91. At the regional level the African, Asian and Inter-American development banks, the Arab Fund for Economic and Social Development and other international organizations and funds are also very active and contribute substantially in this field.

92. The Asian Development Bank allocated in 1977 \$87.5 million to irrigation projects and \$45.3 million to water supply and sanitation, plus \$95.9 million for irrigation and \$39.5 million for water supply and sanitation from Special Fund resources.

93. The African Development Bank, in the same period, allocated \$15 million to water supply and sanitation from its ordinary capital resources, plus \$13 million for water supply and sanitation and \$6 million to irrigation allocated from the African Development Fund.

94. The Inter-American Development Bank allocated in 1977 \$270 million in loans to water projects, almost half of it for hydroelectric power.

95. The Arab Fund for Economic and Social Development, in the period of 1974-1980 financed 56 water projects of a total cost of about \$5.8 million with loans for \$1.2 million.

96. Substantial funds have been made available though much more are still required. However, in many cases there are problems concerning the ability to properly organize and execute the projects approved.

Regional and international co-operation

97. The assistance expected in this field involves a number of diverse matters and refers to almost all sections of the Action Plan: TCDC, financial and institutional arrangements, water supply and sanitation, joint training activities, development of shared water resources, exchange of information, the strengthening of international water law, etc. The co-operation of all organizations of the System is needed, and concerted action is recommended including the strengthening by re-deployment of the Secretariat support services of ECOSOC and its Committee on Natural Resources.

98. Practically all the water activities of organizations of the System's under their regular programmes and field operations, could be included in the category of regional and international co-operation. Much of this activity has already been covered above, and this section will therefore be limited to activities related to technical co-operation between developing countries (TCDC), development of shared water resources, and relevant financing arrangements.

21/ E/S.7/83. See also a report prepared by WHO on "Sources of Technical and Financial Assistance in the field of Drinking Water Supply and Sanitation".

22/ For the period 1976-1977 the loans of the Bank for water-related projects amounted to \$1,327.3 million, and IDA credits to \$514.4 million.

99. The Water Conference recommendations on TCDC were followed up by the UN Conference on TCDC (in 1978). It approved a Plan of Action for Promoting and Implementing TCDC, which (while non-sectoral in nature) should stimulate further action also in the water field. A follow-up report (doc. E/C.7/86) reviews relevant examples of TCDC in water between governments (including river basin co-operation) and by the United Nations system. UNDP has established a TCDC information referral service (including water), with a special unit at UNDP Headquarters. Formulation of a pilot project in water resources management has, however, been slow for lack of concrete government requests. TCDC is being promoted modestly in practice, by such methods as the use in field projects of experts, consultants, equipment and fellowships from developing countries in other developing countries. Regional economic commissions are in a strategic position, and like other System agencies are instrumental in promoting TCDC by assisting joint programmes, institutions and exchanges.

100. Development of shared resources has been and is the subject of many activities, ranging from review, collection and dissemination of information on international water law, as carried out mainly by UN/DTCDC and FAO, to very extensive assistance by practically all the agencies in various forms to development of international river basins. Some progress has been made by the International Law Commission on codification in this field, and the General Assembly (in resolution 34/186) has commended 15 "drafting principles" prepared by a UNEP Intergovernmental Working Group on Natural Resources Shared by Two or More States. With some delay, ECE has held a meeting (in September 1980) on international river commissions; and after further encouragement by ECOSOC (in resolution 1979/70.VI in light of document E/C.7/85) and progress by UN/DTCDC in financing and other arrangements, an inter-regional meeting of international river commissions --originally called for in Water Conference resolution VII-- is being held in Dakar, Senegal, in May 1981, with much relevant documentation on activities of the United Nations system as well as numerous river basin commissions and governments in this field.

101. Financing arrangements are given much attention in the Action Plan, and has been followed up with an in-depth study (E/C.7/83) on financing arrangements for international co-operation in the development of water resources. It expresses doubt regarding an additional mechanism, but stressed the need for an increase in overall flow of development financing and especially the importance of ensuring a steady flow of viable projects, and strengthening co-ordination between and with financing agencies. ECOSOC has since urged governments (in resolution 1979/70.V) to formulate a steady flow of properly prepared project proposals, with emphasis on feasibility and adequate national priority ranking. Many activities are directed to this aspect, such as in the co-operative programmes of the World Bank with FAO, WHO and bilateral programmes, and the agencies of the System are well aware of the importance of follow-up implementations in this area.

IV. Strengthening the Capacity of the System

102. The ability of organizations of the United Nations system to provide adequate assistance for an accelerated implementation of the Mar del Plata Action Plan depends, in great measure, on their individual access to larger financial support. It also depends to an even greater extent on their collective readiness to rationalize arrangements for inter-organization co-ordination and co-operation designed to check fragmentation of efforts and eliminate wasteful overlap and duplication, and to improve managerial and operational effectiveness and impact. Some of the measures likely to contribute to that end include a constant exchange of information and a concentrated application of technical and financial resources through joint planning, programming and execution of water projects.

103. Measures in this respect --adequate financing and more concerted co-operation within the System-- were promoted by the Water Conference through recommendations which have been followed up so far with positive results within the international community. In this chapter the Inspector would like to concentrate however on efforts accomplished in matters of co-ordination and co-operation, which are possible through internal management improvements and would seem especially important concerning the efficient performance of the supporting activity of the organizations, and the application of some basic policies of the System such as the integrated approach to development, which is of great relevance in this field.

104. Although for the implementation of water-related activities the critical test concerning the effective capacity of the assisting organizations is their performance at the country level, inter-secretariat co-ordinative efforts for harmonized and concerted action are increasingly important for strengthening the System as a whole, and should therefore be appraised at Headquarters and regional level also, particularly as envisaged in the restructuring resolution and other related measures adopted lately by the General Assembly 23/.

Basic global co-ordination arrangements

105. The Mar del Plata Action Plan refers in many instances to concerted assistance and co-ordination of policies and activities, co-operative studies and joint undertakings, as a needed approach by organizations of the United Nations system. In its resolution VIII, the Conference recommends that ECOSOC, its Committee on Natural Resources and the regional commissions should play a "central role" in the promotion of intergovernmental co-operation as a follow-up on the Action Plan, and that ACC proposals for interagency co-ordination be examined for consideration and implementation.

106. The actual process towards better levels of co-ordination within the System since its beginning is well known: a slow effort, rather frustrating notwithstanding some good examples of co-operation among the agencies. All this has already been analyzed in several documents of the organizations' secretariats as well as in the 1972 JIU report on the treatment of water resources. In the 1950s and 1960s it was evident that the mere notions of unified programming, comprehensive development for multipurpose use, and systematic integrated treatment of water as a resource --introduced by the UN Conference on the Utilization and Conservation of Resources (1949) to guide the activities of the international community in this sector-- were not enough to produce results of administrative character 24/.

107. Several resolutions of ECOSOC can be mentioned concerning co-ordination, and during this long period the performance of the UN Water Resources Development Centre, as well as that of the ACC Sub-Committee on Water Resources, could be cited as a favourable beginning of practical value but with still rather fragmentary effects in the System as a whole. Because of their very broad responsibilities, ACC and CPC could not devote enough attention to this particular resource.

108. It is mostly in the 1970s that the United Nations system received the necessary thrust and orientation for concerted and comprehensive action, including

23/ There is of course the internal level of the organizations themselves, where important improvements to avoid duplication and to facilitate joint action could be achieved by their own management, as is happening in many cases.

24/ They proved however to be of great beneficial effect on the promotion, design and initiation of difficult development programmes for international river basins.

water resources development and administration. Several significant policy measures were adopted in this decade 25/. In addition the Committee on Natural Resources was established to assist ECOSOC and CPC "to maintain the necessary liaison" and ensure "efficiency and co-operation".

109. At its second session (1972), after suggesting guidelines to be followed and measures to be taken in assisting developing countries, the Committee recommended that the Secretary-General prepare reports on the work programme and sphere of competence of the organizations of the System, including the views of these organizations on the division of responsibilities among them in the field of natural resources. The Committee has since then provided the most solid basis for ACC efforts to integrate the inputs of the different organizations, particularly at the planning and programming stages, and to promote their functional relationships and co-operative activities at all levels.

110. In 1977 two important events contributed to strengthen these policies: the United Nations Water Conference, and the initiation of the restructuring process endorsed by General Assembly resolution 32/197. The Mar del Plata Action Plan provided the technical and political substratum for comprehensive action in the water field 26/, while the restructuring recommendations provided the general administrative guidance for the organizations of the System to intensify their functional relationships.

111. The effect of all these measures and accumulated experience on interagency co-operation 27/ together with the increasing interest of the Committee on Natural Resources in questions related to institutional arrangements for co-operation in the implementation of the Action Plan 28/ have, in the view of the Inspector, consolidated the capacity of the United Nations system to produce concerted action and the required functional co-ordination at Headquarters level.

112. At this level particularly, there is still need for better conceptualization of the "central" guiding and supporting roles; but it seems for all practical purposes that a general understanding about the proper scope of co-ordination

25/ The use of medium-term planning and programme budgeting as tools for system-wide co-ordination is also contributing to achieve coherence and facilitate the optimal use of technical and financial resources.

26/ The first practical demonstration that things were changing in favour of organized and concerted action was given by ACC report to the Water Conference (doc. E/CONF/70/CBP/4) on "Present and Future Activities of the United Nations system in Water Resource Development". This document was prepared with the co-operation of and endorsed by the organizations concerned, and includes a system-wide presentation of their capacity vis-à-vis the main areas of activity, together with the problems and constraints still to be faced. Among the latter the report pointed out the existing limitations of the co-ordinating machinery at global level, and the need for a special continuous support for interagency co-operation, exchange of information, evaluation and follow-up. The report also included in this regard the proposal for the establishment of an Inter-Agency Water Resources Board backstopped by a permanent secretariat. This proposal was repeated in an ACC report to the third special session of the Committee on Natural Resources (E/C.7/84 and E/C.7/84/Add.1), and again in document E/C.7/120 submitted to the seventh session of the Committee (May 1981) referring this time to an Inter-Secretariat Group of Water Resources and its suggested terms of reference.

27/ See the Progress report by ACC (E/1978/107). Also E/1978/144.

28/ See the ACC report on Institutional Arrangements for International Co-operation for Water Development (E/C.7/84). Cfr. Report of the Committee on Natural Resources on its third special session (E/1979/39).

within the System is now on its way --at the planning and implementation stages-- with emphasis on functional results rather than formal institutional implications 29/.

113. In this context functional co-ordination means, primarily, adequately integrated planning and implementation as a means of making the most rational use of the available capacity of the United Nations system and the international community in order to produce maximum results and impact on the needs of developing countries.

114. Resolution 34/191 of the General Assembly requested the Committee on Natural Resources to continue to provide during the 1980s guidance and oversight on the activities of the organizations of the System. Furthermore, in its resolution 34/214, the General Assembly reiterated that co-ordination at the inter-secretariat level "should aim at effectively assisting in the preparatory work for inter-governmental decisions and in their translation into mutually complementary or joint programme activities".

115. The machinery exists for overseeing the follow-up on the Action Plan 30/, and even has great potential for assisting the promotion of more interagency co-operation arrangements. The organizations are aware of the need for improvement, and in a recent report of the Ad hoc Inter-secretariat Meeting on Water Resources Development to ACC Consultative Committee on Substantive Questions (Progr.) they agreed to contribute to the report requested by ECOSOC resolution 1979/68 for submission to the Committee on Natural Resources. They also recognized that the effective implementation of the Mar del Plata Action Plan "would entail a system-wide effort" 31/.

29/ In connexion with this issue see the Secretary-General's report to the General Assembly on restructuring of the economic and social sectors (doc. A/34/736) particularly pp. 9-10.

The notion of "functional co-ordination", if properly applied to mean co-ordinating activities in specific substantive sectors rather than reviewing existing legal relationships could considerably improve interagency co-operation procedures.

Decentralization and division of labour as advocated in this report does not mean fragmentation; it is a good management principle, but to be effective requires strengthened coherence and systematic global co-ordination at Headquarters level. The term "system" is used here to mean a conglomerate of organizations (functionally and administratively autonomous) working together to pursue a common interest on the basis of common policies and operational criteria. Restructuring does not mean that a new superstructure will emerge to assume consolidated authority and responsibility for discharging the mandates of these various components. Recognition of the existence of autonomous parts --with their own spheres of competence--, together with the need for comprehensive action for the "system" to be effective in fulfilling common objectives, justifies the move to establish and/or strengthen "central" functions which are indispensable if the whole system is to be in a position to respond more effectively to the global challenge of economic and social development.

30/ The Conference was systematically and comprehensively followed up in the third special session of the Committee on Natural Resources (E/1979/39), to which a series of documents (E/C.7/78-94) were submitted dealing with specific subjects. Review of implementation by governments and international organizations, as well as a comprehensive plan of action by the latter will take place at the seventh regular session of the Committee in May 1981.

31/ ACC/1979/84.

116. The need for a better programming of the activities of the United Nations system through joint efforts of all concerned was further stressed in the following ACC background material for the discussions of the Committee on Natural Resources at its seventh session (May 1981). In document E/C.7/120 ACC reported on the provisional arrangements instituted for inter-secretariat co-operation in accordance with ECOSOC resolution 1979/68. At the same time, concerning the request of the Council "to recast the draft terms of reference of the proposed Interagency Water Resources Board", ACC reported on the establishment of an Inter-secretariat Group of Water Resources, which was approved subject to the views of the Committee on Natural Resources.

117. The Inspector believes that this is a commendable and practical step forward to intensify co-operation. Based on the participation and understanding of the organizations of the System it could produce positive effects not only at Headquarters level but also on regional and country efforts for mutual assistance and concerted action. The terms of reference now proposed should be adequate to cover all the aspects necessary for comprehensive programming and to enlarge and intensify this co-operation, including environmental components and the activities of the organizations concerning the International Drinking Water Supply and Sanitation Decade.

118. The provision of continuous secretariat support, expected at this level from the Department of International Economic and Social Affairs (DIESA), is another positive arrangement in accordance with the restructuring objectives. DIESA will not assume in this case the responsibilities of ACC nor of any organ of the subsidiary machinery of the Committee, but the co-ordinating functions assigned to the Department in accordance with the restructuring resolution justify its secretariat role 32/.

Strengthening the regional economic commissions

119. The importance of regional co-operation was stressed by the Water Conference and considered a primary factor in strengthening national efforts in the water field. The role of the commissions was examined in chapter III of this report taking into account the request of Conference resolution VIII to ECOSOC concerning their activities and competence in the sector. Section G of the Action Plan and its annex with specific regional recommendations, refers to the contribution of the commissions and the action particularly expected in Africa, Europe, Latin America and Western Asia.

120. General Assembly resolution 32/197 included recommendations relevant to the role of regional commissions "as the main general economic and social development centres within the United Nations system for their respective regions", where "they should exercise team leadership and responsibility for co-ordination and co-operation"; provide inputs for the global policy-making processes and participate in its implementation; be consulted on the definition of the objectives for the medium-term plan of the United Nations concerning their regions; participate in operational activities including preparation of inter-country programmes; assist in identifying and preparing TCDC programmes, and be able to function as executing agencies of inter-sectoral, sub-regional, regional and inter-regional projects, as well as "in areas which do not fall within the purview of the sectoral responsibilities of specialized agencies and other United Nations bodies". However, efforts should be made to utilize to best advantage the machinery already in existence.

121. General Assembly resolution 33/202 decided that the commissions shall have, in their own right, the status of executing agencies for the types of projects referred to above, and requested the Secretary-General to proceed with the de-

32/ Cfr. report of the 18th session of the Committee for Programme and Co-ordination (General Assembly Official Records, 33rd session, p. 117).

centralization of relevant activities and technical co-operation projects; the strengthening of co-operation arrangements, and the involvement of the commissions in the ACC machinery as well as in those other arrangements that might enable them to effectively exercise their responsibilities for co-ordination at regional level. This process was re-emphasized by General Assembly resolution 34/206.

122. The 1972 JIU report recommended the strengthening of the water sections of the regional commissions mainly on account of their uniquely favourable position to act as catalysts for water resources development and to make co-ordinated studies to promote effectively an integrated approach. At that time this recommendation was quite pertinent since, in spite of the experience and potential of the majority of the commissions, their participation and activity in this field was in general limited, either for lack of resources, inability to make an effective input to co-ordination meetings, or just weak functional relationships with the rest of the United Nations system, including United Nations Headquarters.

123. As a result of the Water Conference and the restructuring process, co-ordination meetings began to take place systematically under the leadership of the commissions 33/, and arrangements well intensified to sustain mutual co-operation and assistance with organizations and agencies of the System including the use of regional co-ordinating results as inputs in central interagency bodies within the ACC machinery (E/1978/107 and E/C.7/89) 34/.

124. ECOSOC resolution 1979/67, recalling that regional commissions should strengthen and intensify their activity in the water sector, recommended that they be provided "with sufficient manpower and financial resources", including, if necessary, funding "from the regional resources of the United Nations Development Programme for encouraging activities relating to TCDC".

125. Some of the commissions, particularly in the case of ECLA and ESCAP, already have reasonable manpower capability assigned to their water resources sections, and were strengthened through re-deployment from United Nations Headquarters; but in general their potential does not measure yet to the level of their increasing responsibilities, while the lack of travel funds has even limited their contacts within their respective regions and participation in global co-ordinating activities.

126. Decentralization in this field cannot be achieved merely through re-deployment. It is a complex matter which is also related to the actual support the commissions are in a position to receive from their Member countries, in order to facilitate their participation in water-related programmes and projects. This might take time, but the Inspector believes that the process is following a reasonable course 35/. Water is a sector to which priority was assigned in

33/ ECLA and ESCAP already established interagency task forces in this regard. Perhaps further decentralization of resources from the specialized agencies headquarters to their regional offices is again worth considering to strengthen the field at this level.

34/ Proposals for intergovernmental mechanisms for water resources were made in commissions which still did not have such bodies (E/1979/91) and the commissions became active at inter-secretariat meetings as well (ACC/1979/84).

35/ Cfr. E/1979/76 and A/34/736 (annex). Particularly with regard to co-ordination and co-operation, the progress report of the Secretary General (A/35/546) analysis the overall implications of restructuring resolution 32/197 for the regional commissions. In its decision 35/440 the General Assembly stressed the need for the commissions to consider those implications further (E/1981/1).

the decentralization process; but it is also a difficult field to handle on a regional basis, where it is somehow linked to the success of inter-country co-operation activities and general progress in the implementation of sections G and H of the Mar del Plata Action Plan. There is no doubt however that the commissions are in the best position to define regional development guidelines in the promotion of the Action Plan's objectives.

127. Co-operation arrangements should be promoted by the commissions, when relevant, in close co-operation with other regional organizations such as the Organization for African Unity 36/, the Organization of American States and others. For instance, the experience of the "Co-ordinating and Consulting Board for the River Plata Development Programme", based on a co-operation agreement between the Economic Commission for Latin America (ECLA), the Inter-American Development Bank (IDB), the Inter-American Committee of the Alliance for Progress (CIAP), the Organization of American States (OAS) and United Nations Development Programme (UNDP), although short-lived, is worth exploring as a model of great potential in this context. The case of the Mekong River is another good example of co-operation and effective leadership.

128. The potential of the commissions as main centres for water development in their respective regions could be improved at the global level by consistent participation in the work of ACC Inter-Secretariat Group on Water Resources, and through the strengthening of their own interagency co-ordination machinery.

Integration at country level

129. This depends mainly on the integrated view of the countries themselves concerning water resources development programmes. However, the modus operandi of the assisting agencies could have a significant effect both at the planning and implementation stages. The Water Conference stressed the value of co-ordination and co-operation among international organizations at this level and promoted its improvement to ensure a multidisciplinary approach (as in the case of community water supply and sanitation). Resolution VIII para. (f) recommends that "under the leadership of UNDP Resident Representatives, the United Nations system should intensify the co-ordination of projects and programmes undertaken at the request of the governments of developing countries".

130. The relevance and importance of co-ordination was stressed in the same resolution of the Conference requesting ECOSOC priority consideration of these arrangements in the restructuring of the economic and social sectors of the System. General Assembly resolution 32/197 endorsed this policy of integration (Annex, paras. 33 and 34), in accordance with the objectives and priorities of the governments concerned, and established that the UNDP country programme should be utilized as a frame of reference and that a single official should be entrusted, on behalf of the United Nations system, with overall responsibility for co-ordination of operational activities at the country level to evolve "a multi-disciplinary dimension in sectoral development assistance programmes".

131. Resolution 34/213 reaffirmed that the co-ordination of the various assistance inputs is a prerogative of the governments and at the same time a responsibility of the "Resident Co-ordinator" 37/, although this function "does not affect relations between governments and individual organization of the System or the direct lines of authority and communications between the representatives of those organizations at the country level and their own executive heads".

36/ See for example paras. 81-85 of the "Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa" (A/S-11/14 of 21 August 1980), and General Assembly resolution 35/117 on co-operation between the United Nations and the Organization for African Unity.

37/ A designation which would be normally given to UNDP Resident representatives in the future (GA/34/213).

132. This co-ordinating role of the resident co-ordinators, already promoted by a long experience with the Consensus, is being well established with the support of the governments and the general goodwill not only of bilateral donors but of the specialized agencies themselves. As a matter of fact, the existence of a focal point to facilitate coherence through an integrated approach should not affect the identity and mandates of the co-operating organizations in fulfilling their commitments to the Member countries.

133. In line with this policy, the members of ACC Inter-secretariat Group for Water Resources agreed in their first session (11-17 November 1980) that the Group should not only review field activities but assist in their co-ordination at the country level and promote the exchange of information; review global activities which might best support field operations, and facilitate inter-organizational co-operation 38/. This support from Headquarters level to the resident co-ordinators is essential, and in the view of the Inspector it should facilitate an effective and multi-disciplinary approach. This is anyhow a responsibility which must be shared by all the organizations involved in field activities at the country level. A good example in this regard was provided by the Steering Committee for Co-operative Action recommending that the UNDP Administrator designate the Resident Representatives as the focal point for the Water Decade activities at country level.

V. Conclusions and Recommendations. Orientation for the Future

134. Organizations of the United Nations system have achieved a good measure of success in defining and establishing concepts, operational criteria and institutional arrangements which are basic to the effective fulfillment of their role of assisting member countries in water development and management programmes. Progress in this area might appear to have been slow, but the results to date are certainly encouraging in view of the wide range of possibilities that have been opened up for the future (paras. 2, 7, 21-22 and 27-28).

135. The recognition that water is an indispensable resource for economic and social development and the wide acceptance that an integrated approach is essential to its effective development and management constitute an achievement in itself. Thus comprehensive planning based on a multi-disciplinary approach has become a significant feature of water development and management schemes at the country and regional levels, where an integrated view of the problem is now frequently reflected in the design and execution of important programmes. Further, the need for concerted co-operation at all levels and for inter-organizational co-ordination arrangements --although still in an embryonic stage-- are pretty well established. This evolution in concepts and approaches amounts to a commendable degree of progress (paras. 10-13 and 28-29).

136. However, the concepts, policies, institutions, etc., evolved by the United Nations system need to be further strengthened and consolidated. The implementation of the Mar del Plata Action Plan is in fact just beginning. It will be a very long task. The organizations of the United Nations system are capable, in the view of the Inspector, of providing the necessary assistance if so requested;

38/ It was suggested that a briefing paper on the roles of each organization and their methods of collaboration be prepared and sent to resident co-ordinators and to the country or field representatives of the agencies (ACC/GWR/1980/10).

but their present and future effectiveness in this field is very much linked to an all-inclusive implementation, by all concerned, of the principles and operational policies instituted by the participating governments in the Water Conference and endorsed by the General Assembly and other governing bodies (paras. 10-12, 15 and 21-24).

137. Besides the achievements resulting from the application of science and technology and environmental approaches, the Inspector feels that it will be particularly important for the organizations and specialized agencies to continue their present efforts towards still better levels of co-ordination and co-operation; to promote TCDC operations; to increase the participation of NGOs in this field, when pertinent, and to attune their action, individually and collectively, to the basic policy strategy of the international community for the establishment of the New International Economic Order.

138. Water policy, planning and administration, including governments' clear perception of their priorities, public information and political will, are the heart of the matter concerning the solution of water related problems. The initiative in the planning and execution of any action in this field remains the exclusive prerogative of governments. The role of United Nations system organizations, even when expended as it appears in the Action Plan, is only subsidiary and supportive of governments' activities (paras. 14, 22 and 35).

139. Only in the 1970s did the United Nations system receive the necessary thrust and orientation for concerted and comprehensive action in this field. The Committee on Natural Resources provided a solid basis for ACC efforts towards integration and functional co-ordination. The restructuring resolution of the General Assembly and the Water Conference recommendations provided the technical and institutional framework for water development and management activities (paras. 108-110).

140. Co-ordination arrangements have since then been on the right course, including decentralization to the regional level. The thrust does not appear to have been sufficiently vigorous in all cases, but positive developments have taken place recently within ACC and the Inspector is pleased to note the constructive position taken by the participating organizations with respect to the idea of a central machinery to promote coherence and strengthen co-operation (paras. 111-112, 115, 123 and 126).

141. There is hardly any field of action nowadays so independent as to be considered the particular responsibility of just one agency. The common policy framework instituted by the Mar del Plata Action Plan advocated the harmonization of plans and programmes, and promoted the general view that the complex nature of this sector requires in most cases system-wide inputs and an integrated and multi-disciplinary approach (paras. 102-103 and 116-117).

142. This is not merely a matter of emphasis that seeks to minimize the need and the advantages of specialization. It is a question of effective management at the global level, where overall policy and operational strategy is essential for co-ordination and the achievement of optimal results. In fact, specialization is more effective, and could only be justified, if the System were in a position to provide central guidance and harmonize its activities. To do this with the participation of all responsible organizations, the central machinery must be able to actually oversee the follow-up of the Action Plan in its entirety, promote co-operation, evaluate results of inter-organizational efforts and provide assistance for co-ordinating water-related activities at all levels (paras. 112-113 and 117).

143. The Inspector agrees that there should be a certain flexibility with regard to the scope of each individual organization or group of organizations in this field; but he firmly believes that without concerted action and unity of the whole, as indicated above, it will be difficult to follow the guidelines of the restructuring resolution. It also seems pertinent to note here that the International Drinking Water Supply and Sanitation Decade, as part of this Plan, is not considered a separate or parallel development effort of the international community. Although it is too early to assess its results, the arrangements made for concerted action are quite promising as regards achieving the Decade's objectives, and could provide an interesting model for the future organization of interagency activities in other areas. The Inspector also thinks that a substantive division of labour should be maintained to facilitate the work of the Steering Committee for Co-operative Action; however, its co-ordinating and co-operating mechanisms should continue to contribute to the central-global role of the United Nations System's co-ordinating machinery. The same criteria should apply to the co-ordination of water-related activities of any other programme within the System. The Committee on Natural Resources and the ACC Inter-Secretariat Group for Water Resources are the key instruments for securing the necessary co-operation for the organizations to fulfill their mutually complementary activities in the implementation of the Plan (paras. 113-114 and 117).

144. Effective participation and leadership of the regional commissions in the process of co-ordination are rather recent. But arrangements are being intensified in this direction and their results are already considered a valuable input to global follow-up efforts. In general, however, the manpower potential of the regional commissions in this field should be further strengthened avoiding duplications (paras. 119 and 122-123).

145. Decentralization in this case is too complicated a process to properly implement. It requires primarily definite support of the governments within the region, besides the allocation of funds or the re-deployment of personnel from United Nations Headquarters. In this context, it is important for the commissions to promote closer co-operation arrangements with the respective regional organizations, and to avoid unnecessary duplicating of activities in the field (paras. 126-127).

146. The strengthened role of the resident co-ordinators will be very important for achieving coherence and effectiveness at the country level, but it will also depend strongly on governments' support and of assistance and guidance from the specialized agencies and the Inter-secretariat Group at Headquarters. Relationships with the regional commissions could also be helpful (paras. 129-133).

147. Much of the support of United Nations organizations concerning water-related activities should be carried out at the country, regional and sub-regional levels. Technical co-operation among developing countries (TCDC) is, however, one of the areas needing increased and continuous promotion taking into account its great potential for contributing to the solution of practically all water development and conservation problems. It is moreover, a strategy of fundamental importance for achieving collective self-reliance (paras. 40-41).

148. The Inspector feels that if something is missing here regarding the intensity of TCDC operations, it is not the conviction of all concerned about the values of mutual help among neighbouring and riparian countries, nor the lack of understanding or of general information about possible exchanges of knowledge or about common efforts. The needs, possibilities and advantages of this level of co-operation have been discussed within the United Nations system for a long time, including the Committee on Natural Resources; a Plan of Action was approved by the participating governments of the United Nations Conference on TCDC, and there are some interesting examples of successful co-operation among developing

countries which could be mentioned. In this connection, it would seem necessary to intensify United Nations system's support to regional training and research centres to enable them to serve as radial points for disseminating development knowledge and skills within the regions. A related approach would consist of increased systematic training in the planning, execution and management of water projects. Similarly, an effort should be made to define a properly organized interdisciplinary training. Training courses in water economics and other related disciplines should be strengthened and geared to the solution of national needs (paras. 87 and 98-99).

149. All in all, the United Nations system has a demonstrated capability in the field of water resources that should enable it to satisfy requests for assistance in practically all the realms of action required for the implementation of the Mar del Plata Action Plan (paras. 53, 60, 65, 73, 78 and 86).

150. The Plan objectives are being implemented at too slow a pace, particularly at field level; but the emphasis given to water problems by all concerned seems to indicate a generally vivid perception of their importance (chapter III).

151. Concerning future support commitments of the United Nations system in this field, it is the view of the Inspector that the technical co-operation machinery of the organizations and agencies active in this field will be required to do more with present available resources, and that, consequently, the improvement of its output capacity should come mainly through new efforts for better planning and internal management, and through co-operation among organizations concerned (chapter IV).

152. In this line of thought, the Inspector is pleased to note that the establishment of the Inter-secretariat Group for Water Resources is being proposed with adequate terms of reference, and that it will receive proper substantive support from DIESA (paras. 117-118).

153. Another possibility for increasing the capacity of the System could be to bring into play the technical resources of associated non-governmental organizations. Most of the agencies and organizations of the United Nations system are somehow receiving some contribution of this kind, and benefit from additional network linkages and exchanges with professionals and institutions in the field. FAO, for example, maintains formal and informal relationships and working contacts with fourteen NGOs specialized in water-related matters; UNESCO has links with twelve such organizations; WMO with seven; ECE nineteen, and ESCAP four. There are six NGOs in consultative status with ECOSOC in this same field. Ten more are placed on the roster by decision of the Council or by action of the Secretary-General (para. 137).

154. These contributions are significant and have great potential. The Inspector feels that this question should perhaps be examined also by the Inter-secretariat Group for Water Resources, particularly to promote evaluation and co-ordination at this level in order that the United Nations system may take better advantage of its association with NGOs with appropriate know-how and in a position to contribute to increasing its capacity to support implementation of the Mar del Plata Action Plan (paras. 111, 113, 115, 117 and 142).

155. Two additional measures should be further explored in this connection: the preparation of the System's medium-term plan for water resources development and administration, following the ACC comprehensive plan of action, and a decision for the Committee on Natural Resources to devote alternative bi-annual sessions to water-related problems covering the entire Action Plan, as proposed, in order to encourage support and participation and to ensure more in-depth review and overall guidance (paras. 108 and 139-140).

