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ARAL SEA PROGRAM - PHASE 1

**Briefing Paper for the Proposed Donors Meeting to be
Held on June 23-24, 1994 in Paris**

**Europe and Central Asia Region
Aral Sea Program Unit
World Bank, Washington, D.C.
May 1994**

Abbreviations

BVOs	River Commissions (of Amu and Syr Dar'ya)
DGSREC	Department of Coordination for Socio-Economic Research and Ecological Cooperation (under the Technical Director of EC)
DCWM	Department of Coordination of Water Management (under the Technical Director of EC)
EC	Executive Committee of the ICAS
ICAS	Interstate Council for Addressing the Aral Sea Crisis
ICSDSTEC	Interstate Commission for Socio-economic Development and Scientific, Technical and Ecological Cooperation
ICWC	Interstate Commission for Water Coordination (this is same as ICCWS used in previous Bank reports)
IDA	International Development Association
IFAS	International Fund for Aral Sea
SANIIRI	Central Asian Scientific Research Institute for Irrigation
SIRC	Scientific Information and Research Center
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

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EXECUTIVE SUMMARY

1. The main objective of this paper is to provide a briefing to the donor countries and international agencies on the Aral Sea Program - Phase 1 which was formulated by the Executive Committee (EC) of the Interstate Council for the Aral Sea (ICAS) with the assistance of a World Bank Mission.

Background

2. The Aral Sea Crisis: The Aral Sea basin covers an area of 690,000 km². Its principal riparians are the five states of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The other riparian, Afghanistan, covers very little drainage area. The Aral Sea lies between Kazakhstan and Uzbekistan in a vast geological depression in the Kyzylkum and Karakum Deserts. In 1960, it was the fourth largest inland lake in the world. Since then it has shrunk to less than half its original size because of the nearly total cutoff of river inflow from the Amu Dar'ya and Syr Dar'ya Rivers as a result of heavy withdrawals for irrigation. The desiccation of the Sea resulted in the loss of its fishing industry, the destruction of the ecosystem of the Sea and the deltas, the blowing of salts from the exposed seabed which are toxic to humans and deleterious to crops, and the depressed economy of the areas close to the Sea. Indiscriminate use of water for non-agricultural purposes, inefficient irrigation practices, excessive use of chemicals for growing cotton and rice crops, and lack of adequate drainage caused extensive waterlogging and salinity and polluted the groundwater and drainage inflows to the rivers and the Sea. Water pollution from urban and industrial wastes has further aggravated the pollution problems. Numerous reports and articles have been written by experts, both national and foreign, during the past decade on this crisis and have attracted worldwide attention. The UNEP carried out a "Diagnostic Study for the Development of an Action Plan for the Aral Sea" in July 1992. The report presented a comprehensive analysis of the basic causes of the Aral Sea crisis and provided a sound basis for the analysis of strategies for addressing the crisis.

3. The World Bank Mission - September 1992: In response to requests for assistance from the five Aral Sea states, a Bank Mission visited the region in September 1992. After a review of existing reports, field visits, and discussions with the ministers and local officials of the region, the Mission presented an Aide Memoire recommending four major thrusts to address the crisis: (1) stabilizing the environment of the Sea; (2) rehabilitating the disaster zone around the Sea; (3) undertaking comprehensive management of the international waters; and (4) building the regional institutions to plan and implement the above programs. Following the basin states' acceptance of the Mission's recommendations, the Bank prepared a program framework to be carried out in three phases. In collaboration with the UNEP and the UNDP, the Bank organized an international seminar in Washington on April 26, 1993 to mobilize the support of donor countries and international agencies for the proposed program for addressing the crisis. Ministerial level representatives of the five Aral Sea basin states presented their respective Heads of States'

messages requesting international support for the program and confirmed their strong commitment to cooperate to address the Aral Sea crisis. The donors supported the proposal to establish a "Fund" with substantial grant financing to start work on the first phase of the program.

4. The World Bank-UNEP-UNDP Mission - May 1993: A joint Bank-UNEP-UNDP Mission visited the region in May 1993 to identify the Program's Phase 1 projects. After several weeks of discussions and field visits, the Mission presented its Aide Memoire identifying a "Needs Program" comprising 19 urgent projects for consideration. The Interstate Council subsequently met on July 13, 1993 to review the Mission's recommendations and made far-reaching strategic decisions on the policies, concepts, programs, and regional organizations for addressing the crisis. The Council submitted its decisions for approval by the five Heads of States, who met at Nukus on January 11, 1994 and approved the Council's recommendations. The objectives and scope of the approved policies, institutions, and programs were consistent with the Mission's views and recommendations.

5. The World Bank Mission - February 1994: A Bank Mission visited the region in February 1994 to assist the Executive Committee (EC) in identifying and preparing specific projects for the Aral Sea Program - Phase 1. On completion of its work, the Mission presented an Aide Memoire at a wrap-up meeting with the EC on March 19, 1994. The Aide Memoire was in two volumes. The first volume included an overview of the Phase 1 Program and the Mission's main recommendations and findings; the second volume included project briefs and terms of reference for pre-investment/feasibility studies of the proposed projects. The EC agreed with the Aide Memoire and its recommendations.

6. World Bank-UNEP-UNDP Collaboration: On its return to Washington, the Mission held a two-day meeting with representatives of the UNDP and UNEP to discuss the Aide Memoire. Both the UNDP and UNEP representatives agreed with the priority projects included in the Phase 1 Program and supported the findings and recommendations of the Aide Memoire. The modalities of future Bank-UNEP-UNDP collaboration were discussed and agreed upon, and it was decided that the proposed donors' meeting on June 23-24, 1994 in Paris would be jointly sponsored by the three organizations.

Aral Sea Program - Phase 1

7. Program Objectives: The Program has four major objectives: (1) to stabilize the environment of the Aral Sea Basin; (2) to rehabilitate the disaster zone around the Sea; (3) to improve the management of the international waters of the Aral Sea basin; and (4) to build the capacity of the regional institutions to plan and implement the above programs. In addition, the Program is intended to assist riparian states to cooperate and adopt sustainable regional policies for addressing the crisis, and provide a framework for selected national macroeconomic and sectoral policies to achieve sustainable land, water, and other natural resources development.

8. The Aral Sea Program Phase 1: The Phase 1 Program formulated by the EC with the assistance of the Mission includes 19 projects designed to achieve the objectives stated above. It is difficult to classify these projects under each of the objectives stated above because most projects serve more than one purpose and are mutually complementary and reinforcing in view of their strong linkages. However, in broad terms, 3 projects are intended to initiate the first steps for improving the environment around the sea and the river deltas, 7 projects for improving the conditions in the disaster zone, and 9 projects for managing the water resources of the basin. In addition to these 19 projects, the Program includes a separate project for building the capacity of the regional institutions to plan and implement the Program.

9. The Regional Institutions: The regional institutions established by the Heads of States include the ICAS, the EC and the International Fund for the Aral Sea (IFAS). The ICAS is a body of 25 high level representatives from the five states that meets twice a year to hold discussions, reconcile the issues of members states, and decide on the policies, programs, and institutional proposals recommended by the EC. The key organization for developing the policies and programs is the EC, the operational organ of the ICAS. Under its Charter, the EC has been given the status similar to that of a state government with full powers to plan and implement projects approved by the ICAS. The IFAS has been established to finance the Aral Sea programs. The five states are required to contribute a specified share to the Fund for addressing the Aral Sea crisis. The Fund is also intended to channel financial assistance from the donor countries and international agencies for the Aral Sea Program. In addition to the above apex institutions, the regional institutions include the existing Interstate Commission for Water Coordination (ICWC) and its two River Commissions (BVOs), one for the Syr Dar'ya and the other for the Amu Dar'ya, and the new Interstate Commission for Socioeconomic Development and Scientific, Technical and Ecological Cooperation (ICSDESTEC) which is being established. The ICWC and ICSDESTEC will have Project Implementation Units (PIUs) for specific projects.

10. Implementation Plan: The Program is large and complex. None of the identified projects is ready for investment decisions. Pre-investment and feasibility studies, therefore, are essential to ensure sound investments. The Program is multi-sectoral, and each project is unique and requires a different mix of expertise and implementation arrangements. The regional institutions are new and their capacities to plan, manage, and implement projects have to be developed. The Program contains many diverse activities which are too widely scattered for the EC to implement by itself. The EC will need to use and depend on the existing state and local organizations to implement the project activities on its behalf.

11. Given the formidable implementation problems, the Program envisages simultaneous action on all fronts, such as establishing the institutions; building their capacity; carrying out the pre-investment work; building a pipeline of high priority projects; and implementing the studies necessary to improve policies, reform institutions, and develop action programs for subsequent phases of the Aral Sea Program. This approach has the potential risks of over-straining the management capacities of the regional institutions and causing implementation delays. However, these risks will be minimized by following two key strategies -- to implement the Program in stages and to

launch a substantial capacity-building effort. The first strategy envisages implementation of the Phase 1 Program in three stages, each stage providing a sound foundation for taking up the next stage. The first stage of activities involves identifying the priority projects, formulating the Phase 1 Program, and establishing the regional institutions. This stage has now been completed. The second stage involves initiating the preinvestment/feasibility studies and building the capacity of the regional institutions. The third stage includes completing the preinvestment/feasibility studies, implementing the projects that are ready, and preparing the projects for Phase 2. The capacity building strategy envisages assistance for implementing each project as well as for the management of the Program by the EC and IFAS.

12. Capacity-Building Assistance: The apex institutions of the EC and IFAS as well as the project implementation units of the ICWC and ICSDSTEC would require substantial technical and capacity-building assistance for planning and implementing the projects. Each project includes provision for capacity building. In addition, the Program includes a separate capacity-building project for the EC and IFAS. Capacity-building assistance does not merely involve the provision of technical experts, hardware, and training. It requires developing the institutions, enhancing their values and commitment to quality, improving their practices, and increasing their accountability for the results. Helping the institutions carry out the tasks themselves and providing supervisory assistance and support are essential to ensure the effectiveness of capacity-building efforts.

13. Cost Estimates and Time Schedules: The cost estimates of the Program reflect the staged-implementation and capacity building strategies. The total estimated cost of stage 2 operations amounts to about US\$41 million. A substantial part of this amount is for technical assistance and capacity building. The estimates cover the cost of staff, consultants, travel, equipment, and training for carrying out the work, but they do not include the costs of offices and housing, and other local costs which will be funded by IFAS. The stage 2 operations will take 6 to 30 months to complete depending on the nature of the projects. The probable costs of the stage 3 activities would be about US\$220 million. All projects and strategic studies will be completed in this stage and action plans will be prepared for the next phase except for some major infrastructure projects such as the collector drains, the remodeling of the Syr Dar'ya river bed, and the automatic control systems, which involve large investment. Construction of these projects will be deferred to Phase 2.

14. Issues Raised in the Aide Memoire: The Aide Memoire raised several issues concerning policies, overall Program coordination, implementation, procurement, capacity building, cost-sharing, maintenance and operation, local currency costs, financing, and other aspects of the proposed Phase 1 Program. The project briefs also discuss the issues specific to each project. At the wrap-up meeting on March 19, 1994, the EC accepted the Aide Memoire's recommendations on all issues except the one concerning the need to keep Afghanistan, a co-riparian, informed about the Aral Sea Program.

Program Prospects, Issues, and Risks

15. Program Prospects: The Aral Sea Program - Phase 1 has major inherent strengths that are not usually found in international programs of this kind. These strengths, which are outlined below, provide favorable opportunities and prospects for achieving the Program's objectives and ensuring its success.

- The Program is consistent with all previous agreements between the five states. It is supportive of the objectives of the Water Agreement signed by the Heads of States on February 18, 1992 to utilize and manage the water resources of the Amu and Syr Rivers for the benefit of all the five states. It is also consistent with the Protocols and Resolutions adopted by the five states during April - August 1992 for cooperation on management and protection of the water resources of the Amu and Syr Rivers and for the solution of the Aral Sea problems. The Program is reinforced by the agreement reached by the Heads of States on March 26, 1993 confirming their commitment to cooperate to address the Aral Sea crisis.
- The Program objectives, concepts, designs, and institutions are based on the decisions made by the ICAS on July 13, 1993 and confirmed by the Heads of States on January 11, 1994. The projects included in the Program have been prepared by the EC teams and approved by the EC. The Bank Mission's assistance was useful for enhancing the quality of the EC teams' outputs and provided an acceptable basis for carrying out the next steps.
- The priority of selected projects is assured by the fact that they are consistent with the priorities and Program framework endorsed by the basin states, the donors, the international agencies, and the Bank at the international seminar organized jointly by the Bank, the UNEP, and the UNDP on April 26, 1993. The selected projects are also consistent with those identified by the Bank-UNEP-UNDP mission in May 1993.
- The Aral Sea crisis has attracted worldwide attention. International agencies and donor countries have indicated keen interest in supporting the basin countries' cooperative efforts to address the crisis.
- Despite their differences on other matters, the basin countries have demonstrated their commitment to cooperate. The prospects for sustaining the cooperative efforts are reinforced by the increasing awareness that the economic development of the individual states is inexorably dependent on the addressing of the Aral Sea crisis.

16. Development Impact: The main focus of the Program is the sustainable economic development of the region as well as of the basin states. The basin states are endowed with huge water and land resources, extensive irrigation systems, rich reserves of oil, coal and gas, large hydropower bases, important minerals, and a considerable labor force. The exploitation and realization of the full potential of these resources depends largely on regional cooperation.

The Aral Sea Program is designed precisely to promote this regional cooperation. Each of the 19 projects in the Program provides direct benefits and is economically viable. In addition, the Program will enhance the efficiency of investments of the individual states in the related economic sectors.

17. Program Issues: The Program is large, complex, multi-sectoral, multi-country and long term. It involves redressing decades of mismanagement of water resources and destruction of the environment. The technical problems are formidable, the riparian issues are sensitive, and the institutional difficulties are daunting. While the Program's policies, concepts, priority projects, and institutional structures are sound, the implementation issues are serious. Successful implementation is essential to sustain the commitment of the basin countries to cooperate, to reinforce their willingness to make the hard choices and to encourage them to assign as high a priority to regional interests as they do to their own. Successful implementation is also essential for sustaining the international community's long-term support for the Program. The two key strategies -- staged implementation and capacity building assistance-- are designed to ensure successful implementation.

18. Risks: Although the prospects for success are favorable and the measures proposed to address the issues could prove effective, the Program has major risks. The main risks relate to the possible failure of the basin states to cooperate, the unwillingness of the states to delegate adequate powers to the EC and the IFAS to carry out their responsibilities, and the lack of longer-term international support for the Program.

19. The basin states have successfully demonstrated their cooperation to date. However, disputes may arise from differences on water rights, inequitable distribution of Program benefits, and disagreements on cost-sharing. These risks would be minimized by the international community's proactive nurturing of cooperative efforts of the basin countries and the realization of the latter that international support for the Program depends on their continuing cooperation. The powers delegated to the EC and IFAS are extensive and are adequate to carry out their responsibilities effectively. The capacity-building project will be designed to ensure that the EC and IFAS are protected against undue interference in the management of the approved policies and programs and that they are encouraged and supported in carrying out their delegated powers fully and effectively. The staged-implementation and capacity building strategies are designed to reduce implementation risks. They have certain built-in safety factors. Because no activity can start until implementation conditions are satisfactory, it would not be possible to start all projects at the same time. The implementation schedules will have significant staggering to reduce bunching of projects and provide the opportunity and time for capacity building. However, the implementation plan needs careful and continuous review and adjustment to ensure its success.

Program Financing

20. Financing Requirement: The Aral Sea Crisis Report discussed at the previous meeting of the donor countries and international agencies in Washington on April 26, 1993 proposed a fund of about US\$50 million to finance the first phase of the Program. The Report also recommended substantial grant financing. The Phase 1 Program formulated now has a larger scope and would take about five years to complete. Its financing requirements for the pre-investment/feasibility studies stage amount to about US\$41 million while completion of projects in the next stage would require about US\$220 million. When both stages are financed, 15 of the 20 projects, including preparation of new projects and action programs to be considered in Phase 2, will be completed as planned. The remaining 5 are large infrastructure projects whose feasibility studies will be completed for investment decisions in Phase 2. The preparation for Phase 2 is thus built the Phase 1 and the continuity of the efforts to address the Aral Sea crisis will be maintained.

21. Financing Options: Donor countries and international agencies have two options to support the Program (1) to confirm their commitment to finance the estimated cost of US\$ 41 million for initiating the pre-investment/feasibility studies; (2) to confirm their commitment to finance the activities stated above and in addition indicate their interest in financing the project activities in the next stage. The second option has many advantages. The continuity of the operations will be assured and the donors will be fully involved in all activities of the projects planned in Phase 1. Expression of interest in financing the activities in the next stage does not mean commitment, but it helps forward planning. Some projects in this stage would require co-financing and may involve more than one donor. The Bank, UNEP and UNDP prefer option (2) and recommend that donors and international agencies give due consideration to it. As a lender of last resort, the World Bank will consider financing those projects that lack adequate financing commitment and interest of the donor countries and other international agencies.

22. Local Cost Financing: The Program involves two categories of local costs: (1) The local costs included in the amount of US\$41 million for preinvestment/feasibility studies which amount to an equivalent of about US\$7 million, and (2) The management and operation costs of the regional organizations - ICAS, IFAS, EC, ICWC, ICSDSTEC, BVOs and PIUs. The estimated local costs of US\$7 million equivalent include salary costs of local staff, local travel, and other local expenditures of the implementing agencies. They do not include management and operation costs of the regional organizations mentioned above. The estimates for the regional institutions' management and operation costs have not yet been prepared. They would be particularly heavy in the initial years. The IFAS should finance these requirements. The Aide Memoire recommended that the decisions of the Heads of States regarding the contributions of each state to the Aral Sea Fund should be effectively implemented.

23. While it is important to insist that the management and operation costs of the regional organizations be financed by the IFAS, this paper recommends that the local costs amounting to US\$7 million required for initiating the pre-investment/feasibility studies be financed by grant funds. Grant

financing of these activities is necessary to avoid possible delays in cost-sharing decisions. It is hoped that the ICAS will establish the regional principles and criteria for cost-sharing before the start of the project operations in the next stage.

24. Modalities of Financing: The IFAS is an institution for channeling financial resources provided by the basin states as well as by donors and international financing agencies for implementing the Aral Sea programs. The IFAS and EC are the funding and executing organizations respectively of the Aral Sea Program. Channeling grants/loans/credits through the IFAS has certain important advantages. It enhances the essence and regional characteristics of the Program and strengthens regional cooperation. The states will have the incentive and compulsion to contribute their share to the IFAS. Questions of who benefits and how the project costs should be shared could be dealt with separately by the ICAS more easily because the external support agencies' contributions to the IFAS would be for the region, not for any particular state. The leverage of the financing agencies to introduce policy and institutional improvements would be more effective. The IFAS would be able to introduce financial discipline into the EC's operations more effectively if the EC receives the funds through the IFAS. In view of these advantages, the Bank is also considering various methods of channeling loans/credits through the IFAS. The Bank, UNEP and UNDP recommend that financing agencies should channel their assistance through the IFAS.

25. Administration of Financial Assistance: The financial assistance of donors and international agencies to the Program could be administered in three ways. Donors and international agencies may: (a) contribute to the IFAS separately and establish their own procedures and arrangements for using their funds for implementing the projects; (b) establish a trust fund to be administered by the IFAS; or (c) establish a trust fund and designate an administrator to channel the proceeds of the fund through the IFAS.

26. This paper does not recommend option (a) because the IFAS and the other regional organizations are new; they are not used to international agreements and procedures and need substantial capacity-building before they could effectively administer donors' funds. Moreover, separate and uncoordinated assistance would not be as effective in achieving the objectives of the Program as an integrated and coordinated effort. Options (b) and (c) have merits. Option (b) has some of the disadvantages of option (a) in view of the inexperience of the IFAS. Option (c) would be most effective because the administrator would ensure effective use of the fund, assist the IFAS in introducing sound financial management procedures and build the capacity of the IFAS to administer future trust funds independently. Option (c), therefore, is highly preferable, particularly in the early phases of the Aral Sea Program.

27. If the donors and international agencies decided to follow option (c), then the choice of the administrator of the trust funds could be: (a) the Bank-UNEP-UNDP which have been collaborating to date in helping the basin states to formulate the policies, institutions, and programs; (b) some other arrangements for administering the trust funds that could be equally effective as administration by a Bank-UNEP-UNDP collaborative effort.

Recommendations

28. The Bank, UNEP, and UNDP recommend that the donor countries and international agencies:

- commend the basin countries' cooperative efforts and express the hope that the basin countries will continue their cooperative efforts to address the difficult tasks that lie ahead
- support the Aral Sea Program - Phase 1, the institutional arrangements, the staged-implementation, and the capacity-building strategies to achieve the Program goals
- agree to provide grant financing amounting to US\$41 million (including local currency financing of about US\$7 million equivalent) to initiate the work on the pre-investment/feasibility studies and also indicate interest in the project operations in the next stage
- channel financial assistance to the Program through the IFAS; decide on the options for establishing a trust fund; and decide on the arrangements for administering the fund.

29. The Bank, UNEP and UNDP also recommend that the donor countries and international agencies stress the need for the basin countries to implement the Aide Memoire recommendations and, in particular, to contribute their share to IFAS; establish the modalities of coordination of the activities of the IFAS and the EC; appoint the Chairman of the EC and the Executive Director of the IFAS on a full time basis with a tenure of at least three years; establish ICSDSTEC; and keep Afghanistan informed about the Program.

Next Steps

30. If the donor countries and international agencies support the recommendations of the Bank, UNEP and UNDP outlined above, then the designated Administrator of the proposed trust fund should: (a) Prepare a draft trust fund agreement defining the objectives of the fund, and procedures for its administration, and the obligations of the administrator, the financing agencies, and the basin countries; and (b) send a mission to the region as soon as possible to follow up on the arrangements for implementing the Program.

ARAL SEA PROGRAM - PHASE 1

Objective and Scope of the Paper

1. The main objective of this paper is to provide a briefing to the donor countries and international agencies on the Aral Sea Program - Phase 1 which was formulated by the Executive Committee (EC) of the Interstate Council of the Aral Sea (ICAS) with the assistance of a World Bank Mission. It will be discussed at the donors' meeting scheduled for June 23-24, 1994 in Paris. The paper is organized in seven sections: Background, Aral Sea Program - Phase 1, Program Prospects and Issues, Risks, Program Financing, Recommendations, and Next Steps. The paper discusses the Program and its issues in sufficient detail to enable donors to indicate their support.

2. The paper is based on the World Bank Mission's Aide Memoire (Volumes 1 and 2), which provides more detailed information on specific projects. It includes, however, additional information. For example, it explains the implementation plan in greater detail, updates the cost estimates, discusses the Program's prospects, issues, risks and financing options, and proposes the next steps for follow-up actions.

A. BACKGROUND

The Aral Sea Crisis

3. The Aral Sea basin covers an area of 690,000 km². Its principal riparians are the five states of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The other riparian, Afghanistan, covers very little drainage area. The basin has three distinct ecological zones: the mountains, the deserts, and the Aral Sea with its deltas. The Tian Shan and Pamir Mountains in the south and southwest are characterized by high altitudes (peaks over 7,000 m) with average annual precipitation ranging from 800 to 1600 mm. In the foothills and valleys, soil and temperature conditions are favorable for agriculture. The lowland deserts cover most of the basin area and are characterized by low precipitation (under 100 mm/year) and high evaporation rates. The 1989 population of the basin is estimated to have been 35 million, with population growth rates averaging 2.54 percent. Uzbekistan, with 19.9 million, has the largest population, while Kazakhstan is second with a population of 16.5 million, of which 2.5 million live in the basin area.

4. The Aral Sea lies between Kazakhstan and Uzbekistan in a vast geological depression in the Kyzylkum and Karakum Deserts. In 1960, the Aral Sea was the fourth largest inland lake in the world. Since then, however, it has shrunk to less than half its original size because of the nearly total cutoff of river inflow from the Amu Dar'ya and Syr Dar'ya Rivers as a result of heavy withdrawals for irrigation. The desiccation of the Sea resulted in the loss of its fishing industry, the destruction of the ecosystem of the Sea and the deltas, the blowing of salts from the exposed seabed which are toxic to humans and deleterious to crops, and the depressed economy of the areas close to the Sea. Indiscriminate use of water for non-agricultural purposes, inefficient irrigation practices, excessive use of chemicals for growing cotton and rice

crops, and lack of adequate drainage caused extensive waterlogging and salinity and polluted the groundwater and drainage inflows to the rivers and the Sea. Water pollution from urban and industrial wastes has further aggravated the pollution problems.

5. Numerous reports and articles have been written by experts, both national and foreign, during the past decade on this crisis and have attracted worldwide attention. The main thrust of these reports has been to save the Aral Sea. The solutions suggested have included: diverting water from other river basins (the Caspian Sea, the Ural River, and the rivers flowing to the Arctic Sea); and saving a part of the water currently used for irrigation to increase the flow to the Aral Sea by investing in such schemes as reduction of cotton and rice areas, water management, and canal lining. The UNEP carried out a "Diagnostic Study for the Development of an Action Plan for the Aral Sea" in July 1992. The report presented a comprehensive analysis of the basic causes of the Aral Sea crisis and stated that, in terms of its ecological, economic, and social consequences, the Aral Sea is one of the most staggering disasters of the twentieth century. The report did not recommend specific solutions, but it provided a sound basis for the analysis of strategies for addressing the crisis.

The World Bank Mission - September 1992

6. In response to requests for assistance from the five Aral Sea states, a Bank Mission visited the region in September 1992. After a review of existing reports, field visits, and discussions with the ministers and local officials of the region, the Mission presented an Aide Memoire recommending four major thrusts to address the crisis: (1) stabilizing the environment of the Sea; (2) rehabilitating the disaster zone around the Sea; (3) undertaking comprehensive management of the international waters; and (4) building the regional institutions to plan and implement the above programs. Following the basin states' acceptance of the Mission's recommendations, the Bank prepared a program framework to be carried out in three phases. The first phase, to be implemented in three years, involved meeting the urgent needs of the region in the four areas mentioned above and preparing projects for the second phase.

Donors' Meeting - April 1993

7. In collaboration with the UNEP and the UNDP, the Bank organized an international seminar in Washington on April 26, 1993 to mobilize the support of donor countries and international agencies for the proposed program for addressing the crisis. Ministerial level representatives of the five Aral Sea basin states presented their respective Heads of states' messages requesting international support for the program and confirmed their strong commitment to cooperate to address the Aral Sea crisis. Encouraged by the Heads of States' commitments and by the decisions already taken by them on March 26, 1993 to establish the required regional organizations (the Interstate Council, the Executive Committee, and the Aral Sea Fund) to implement the proposed plan, the donors strongly supported the Bank's proposal to establish a "Fund" with substantial grant financing to start work on the first phase of the program.

The World Bank-UNEP-UNDP Mission - May 1993

8. A joint World Bank-UNEP-UNDP Mission visited the region in May 1993 to identify the Program's Phase 1 projects. After several weeks of discussions and field visits, the Mission presented its Aide Memoire on June 18, 1993 at a joint meeting of the ministers of the basin states identifying a "Needs Program" comprising 19 urgent projects for consideration. The Interstate Council subsequently met on July 13, 1993 to review the Mission's recommendations and made far-reaching strategic decisions on the policies, concepts, programs, and regional organizations for addressing the crisis. These decisions were consistent with the Mission's views and recommendations. The Council submitted its decisions for approval by the five Heads of States, who met at Nukus on January 11, 1994 and approved the Council's recommendations. They also appointed the Chairman of the Executive Committee and broadly defined eight programs for the Aral Sea Program - Phase 1, to be completed in three to five years. The objectives and scope of the approved policies, institutions, and programs were consistent with the Mission's views and recommendations.

The World Bank Mission - February 1994

9. Following the decisions of the Heads of States, the Bank was requested to assist the Executive Committee (EC) in identifying and preparing specific projects for the Aral Sea Program - Phase 1. A Bank Mission visited the region in February 1994 in response to this request. The Bank invited the UNDP and UNEP to participate in this Mission but they were not able to do so. The Mission assisted the teams established by the EC in identifying priority projects to achieve the objectives of the programs approved by the Heads of States, in preparing project briefs and terms of reference (TORs) for carrying out the pre-investment studies, and in formulating the overall Phase 1 Program. On completion of its work, the Mission presented an Aide Memoire at a wrap-up meeting with the EC on March 19, 1994. The Aide Memoire was in two volumes. The first volume included an overview of the Phase 1 Program and the Mission's main recommendations and findings; the second volume included project briefs and terms of reference for pre-investment/feasibility studies of the proposed projects. The EC agreed with the Aide Memoire and its recommendations at the wrap-up meeting. Subsequently, the ICAS approved the Phase 1 Program and the Aide Memoire recommendations.

World Bank-UNEP-UNDP Collaboration

10. On its return to Washington, the Mission held a two-day meeting with representatives of the UNDP and UNEP to discuss the Aide Memoire. The UNDP and UNEP representatives agreed with the priority projects included in the Phase 1 Program and supported the findings and recommendations of the Aide Memoire. The modalities of future Bank-UNEP-UNDP collaboration were discussed and agreed upon, and it was decided that the proposed donors' meeting on June 23-24, 1994 in Paris would be jointly sponsored by the three organizations.

B. ARAL SEA PROGRAM - PHASE 1

Program Objectives

11. The Program has four major objectives: (1) to stabilize the environment of the Aral Sea Basin; (2) to rehabilitate the disaster zone around the Sea; (3) to improve the management of the international waters of the Aral Sea basin; and (4) to build the capacity of the regional institutions to plan and implement the above programs. In addition, the Program is intended to assist riparian states to cooperate and adopt sustainable regional policies for addressing the crisis, and provide a framework for selected national macroeconomic and sectoral policies to achieve sustainable land, water, and other natural resources management and appropriate development.

Program Formulation

12. The EC established teams of local experts to identify and prepare specific projects to be included in the programs approved by the Heads of States. It assigned overall responsibility for formulating the Program to the Scientific Information and Research Center (SIRC) headed by the Central Asian Scientific Research Institute for Irrigation (SANIIRI), a consortium of research and design institutions of the five states established by the Interstate Commission for Water Coordination (ICWC). During the May 1993 joint Bank-UNEP-UNDP Mission, the lack of a clear definition of regional and national projects caused delays in the selection of projects. This issue was resolved by reaching an understanding with the EC on the definition of an Aral Sea project as that approved by the ICAS, executed by the Executive Committee (the operational organ of the ICAS) directly or through the ministries and local organizations of the states, and financed by the International Fund for the Aral Sea (IFAS) with or without external assistance. This approach facilitated consideration of projects such as the collector drains and watershed management projects which were previously considered by some states as national projects.

13. In its first meeting with the EC on February 26, 1994, the Mission made the following main points:

- (a) The Mission concurs in general with the decisions made by the Heads of States and will assist the EC in implementing them.
- (b) It is the Bank's policy to encourage riparian countries to resolve their differences through cooperation. The Bank will not interfere with the existing water agreements and rights.
- (c) Afghanistan, a co-riparian, should be kept informed about the Aral Sea basin activities.
- (d) Grant funds administered by the Bank for project preparation and capacity building would be channeled through IFAS, but lending modalities for Bank loans and credits should be consistent with Bank policies and the needs and challenges of the specific projects.

- (e) Procurement of goods and services should be in accordance with the Bank's standard procedures and the needs and challenges of the specific projects.
- (f) The Chairman of the EC should be a full-time chairman.
- (g) The Aral Sea Program is not just a water program; it is also a program for rehabilitation of the devastated environment. The Interstate Commission for Socio-economic Development and Scientific, Technical and Ecological Cooperation (ICSDSTEC) approved by the Heads of States should be established as soon as possible.

14. There was agreement on all the above points except on that concerning Afghanistan. The EC gave several reasons for its position, such as: Afghanistan is a co-riparian only on the Amu Dar'ya, not on the Syr Dar'ya; the Aral Sea Program is only at a conceptual stage and it would serve no purpose to notify Afghanistan at this stage; and the conditions in Afghanistan are not appropriate for any communication. However, the Mission continued to press the Afghanistan issue. A Memorandum of Understanding was signed by the EC and the Mission, recording the above points and describing the arrangements for project identification and preparation.

15. The EC and the Mission also agreed on the projects to be considered in the Phase 1 Program. With very few exceptions, the selected projects were the same as the ones identified by the joint Bank-UNEP-UNDP Mission in May 1993 and included in the "Needs Program." The agreed Phase 1 Program covered the first seven programs approved by the Heads of States and included 20 projects that were identified by the EC teams with the assistance of the Mission (Annex 1). Subsequently, the number of projects was reduced to 19 by combining some and adding other projects. In addition, a separate Capacity-Building Project for the apex institutions (EC and IFAS) was included.

16. The eighth program approved by the Heads of States envisaged the preparation of a feasibility study for diverting water from the Arctic rivers or pumping water from the Caspian Sea to fill the Aral Sea -- a proposal which was considered unrealistic by the first Bank Mission in September 1992. According to the preliminary estimates prepared by SIRC/SANIIRI, Program 8 would probably cost US\$22.5 billion. Aside from its huge cost, the political, environmental, and economic feasibility of this program was questionable. Therefore, it was not included in the program.

Project Briefs and TORs

17. The EC teams prepared the project briefs and TORs with the assistance of the Mission. Except for Program 2 (Hydromets) and Program 5 (water supply, sanitation, and health), there were no significant differences between the EC teams and the Mission regarding the objectives, scope, cost estimates, and other aspects of the projects. The differences in Program 2 were more on how the data would be managed than on the substance of the project. On Program 5, however, there was a prolonged discussion on whether the long-term strategy for water supply should be prepared under Program 5 (as suggested by the EC team) or whether it should be a part of the regional water strategy to be prepared under Program 1. The Mission accepted the EC team's suggestion.

18. While the project briefs were prepared for all projects, the TORs were prepared only for nine projects. The nine projects for which TORs have not been prepared are: (1) Regional Water Strategy, (2) Efficiency of Dams, (3) Sustainability of Reservoirs, (4) Hydromet Services, (5) Water Quality Management, (6) Collector Drains, (7) Remodeling Syr Dar'ya, (8) Long-Term Water Supply, and (9) Management of Watersheds.

19. The TORs for Collector Drains are being prepared separately as is explained in the next paragraph. The project for remodeling the Syr Dar'ya river bed was introduced after the wrap-up meeting. A review of the project issues in this case is necessary before preparing the TORs. In the case of other projects, the EC and the Mission agreed that the preparation should be carried out with the active participation of all stakeholders because sensitive interstate issues were involved. However, the project briefs provided adequate information and guidelines for preparing the TORs for these projects.

20. Collector Drains was one of the important projects included in the Heads of States' approved Program 3. The ultimate solutions for water quality management, salinity and waterlogging, and a host of environmental problems would depend on the provision of effective drainage through the construction of major collector drains. Considerable work on this project was carried out by the former Soviet Union (FSU), but this work was not pursued after the independence of the states because of lack of funds. The project brief for this project is not included in the Aide Memoire because a review of the work done, including preparation of TORs for carrying out the feasibility studies of the collector drains, particularly along the Amu Dar'ya, is being undertaken by the Bank with financial assistance from the Government of the Netherlands. However, this project is an important part of the Aral Sea Program - Phase 1.

21. Detailed project briefs and TORs of all projects except the ones mentioned above are included in Volume 2 of the Aide Memoire. A one-page summary of the project brief for each project is included in Volume 1 of the Aide Memoire.

Program Institutions

22. The Heads of States established the regional institutions for addressing the Aral Sea crisis on March 26, 1993 (Annex 2A) and presented the institutional arrangements at the International Seminar held in Washington on April 26, 1993. At its meeting on July 13, 1993, the ICAS defined the functions of the EC, the operational organ of the ICAS, and recommended its organization structure (Annex 2B). The Heads of States established these arrangements on January 11, 1994. The approved regional institutions for implementing the Program and addressing interstate coordination are basically sound.

23. The Mission was concerned, however, with the overemphasis of the EC and ICWC on the water aspects of the Aral Sea Program and the apparent lack of appreciation of the gravity of the environmental issues. The Mission therefore developed a chart (Annex 2C) delineating the responsibilities for the various programs to ICWC and ICSDSTEC, and describing the EC's project

management responsibilities (e.g., overall coordination of program preparation and implementation activities, and quality control of outputs of the proposed project implementation units to be established in the ICWC and ICSDSTEC). The EC agreed with these proposals.

24. The project implementation units (PIUs) will be responsible for managing the programs approved by the Heads of States as indicated in Annex 2C. They are, therefore, program rather than project implementation units. Each PIU will manage the projects included in its program. The projects which will be implemented by the state and local organizations or through specially established task forces such as the ones proposed for the Regional Water Strategy Project. Because the activities of the programs continue in Phases 2 and 3, the PIUs are virtually permanent organizations of the EC. The selection of PIU managers and staff should take into consideration their management functions and the longevity of these organizations.

Implementation Plan

25. The Program is large and complex. None of the identified projects is ready for investment decisions. Pre-investment and feasibility studies, therefore, are essential to ensure sound investments. The Program is multi-sectoral, and each project is unique and requires a different mix of expertise and implementation arrangements. The regional institutions are new; they have not been adequately staffed, and many have not been established as yet. Their capacities to plan, manage, and implement projects have to be developed. Although the EC is an operational organ of the ICAS and has been delegated extensive powers to plan and implement the projects approved by the ICAS, it is not as yet fully developed and at present lacks the capacity to manage the Program. The Program contains too many diverse activities which are too widely scattered for the EC to implement by itself. The EC will need to use and depend on the existing state and local organizations to implement the project activities on its behalf. This will avoid the need to create a large EC bureaucracy, will provide opportunities for the states to participate in the regional programs, and will improve regional cooperation. But it will also tremendously increase the EC's task of managing and coordinating the diverse activities of several widely scattered implementing agencies.

26. The Program's implementation problems are formidable and cannot be addressed in a short time. The Program is too important and urgent, however, for its implementation to be delayed until all problems are resolved. The Program, therefore, envisages simultaneous action on all fronts, such as establishing the institutions; building their capacity; carrying out the pre-investment work; building a pipeline of high priority projects; and implementing the strategic studies necessary to improve policies, reform institutions, and develop action programs for subsequent phases of the Aral Sea Program. This approach has risks. However, these risks will be minimized by following two key strategies -- to implement the Program in stages and to provide substantial capacity building assistance to the implementing units as well as to the apex institutions of the EC and IFAS for managing the Program. The first strategy envisages implementation of the Phase 1 Program in three stages, each stage providing a sound foundation for taking up the next stage. The proposed stages are outlined below:

Stage 1: Heads of States' approval of the programs and institutions; identification of specific projects; preparation of project briefs and TORs; formulation of the Phase 1 Program; presentation of the Aide Memoire's findings and recommendations; and EC's acceptance of these recommendations.

This stage has been completed.

Stage 2: Staffing the EC and IFAS; establishing the implementing units and agencies; building the capacity of the apex institutions of EC and IFAS as well as of the implementing units and agencies; completing TORs; procuring the services of advisors and consultants; initiating the pre-investment/feasibility studies of projects and the strategic studies.

This stage will take 6 to 30 months depending on the nature of the projects. The proposed donors' meeting on June 23-24, 1994 is intended to seek financial support for operations in this stage.

Stage 3: Selecting priority projects based on the completed pre-investment/feasibility studies; preparing the detailed design and tender documents of major investment projects; continuing the capacity-building operations of the apex institutions and the implementing units and agencies; mobilizing financing for projects that are ready for investment and implementing them; and improving policies and institutions for achieving the goals of the Program effectively.

This stage will take up to three years after completion of stage 2 depending on the nature of the projects. A donors' meeting will be convened to seek financial assistance for operations included in this stage.

27. There will not be a clearly defined division between stages 2 and 3. Decisions on implementing projects will be taken as soon as possible after the feasibility studies are completed, taking into account their relative priorities and the interests of donor countries and international financing agencies in supporting them. The staged-implementation plan may appear time-consuming, but it is realistic, effective, and expeditious to achieve the objectives of capacity building, ensure successful implementation of projects, and build the future project pipeline.

Capacity-Building Assistance

28. The capacity-building strategy is particularly important because the existing implementation practices in the region are different from international practices. The apex institutions of the EC and IFAS as well as the project implementation units of the ICWC and ICSDSTEC would require

substantial technical and capacity-building assistance for planning and implementing the projects. Each project includes provision for capacity building. In addition, the Program includes a separate capacity-building project for the EC and IFAS. Capacity-building assistance does not merely involve the provision of technical experts, hardware, and training. It requires developing the institutions, enhancing their values and commitment to quality, improving their practices and increasing their accountability for the results. Helping the institutions carry out the tasks themselves and providing supervisory assistance and support are essential to ensure the effectiveness of capacity-building efforts.

Cost Estimates and Time Schedules

29. The cost estimates of the Program given in Annex 3 reflect the staged-implementation plan. Annex 3A gives a summary of cost estimates and time schedules for completing the stage 2 operations. They include pre-investment work on 19 projects. The cost estimate of the collector drains project is shown as nil because its initial work has already been funded. Annex 3A includes capacity building of the apex institutions of EC and IFAS. The total estimated cost of stage 2 operations amounts to about US\$41 million. A substantial part of this amount is for technical assistance and capacity building (Annex 3B). The estimates cover the cost of staff, consultants, travel, equipment, and training for carrying out the work, but they do not include the costs of offices and housing, and other local costs which will be funded by IFAS. For example, Uzbekistan has agreed to provide office facilities to the EC as a part of its contribution to IFAS. Kazakhstan is doing the same for IFAS. The offices and housing for local staff of the implementing units and agencies will have to be provided by the concerned states as a contribution to IFAS or their costs have to be financed directly by IFAS.

30. Annex 3C gives the probable cost estimates and time schedules for completing or continuing the activities on the 19 projects in stage 3. Some projects such as hydromet services, wetland restoration, North Sea dyke and short-term clean water, sanitation, and health projects will be completed in stage 3. Strategic studies such as regional water strategy and environment assessment will also be completed and action plans will be prepared. However, major infrastructure projects such as the collector drains, remodeling Syr Dar'ya river bed, and automatic control systems, which involve huge investments, will still be at the stage of selection of optimum options, detailed designs, and preparation of tender documents. Annex 3D shows the status of completion of Phase 1 projects after the investments indicated in Annexes 3A and 3C have been incurred. The total estimated cost of stage 3 operations amounts to about US\$220 million.

Issues Raised in the Aide Memoire

31. The Aide Memoire raised several issues concerning policies, overall Program coordination, implementation, procurement, capacity building, cost-sharing, maintenance and operation, local currency costs, financing, and other aspects of the proposed Phase 1 Program. A summary of the Aide Memoire findings and recommendations is attached (Annex 4). The project briefs also

discuss the issues specific to each project. At the wrap-up meeting on March 19, 1994, the EC accepted the Aide Memoire's recommendations on all issues except the one concerning Afghanistan.

C. PROGRAM PROSPECTS AND ISSUES

Program Prospects

32. The Aral Sea Program - Phase 1, formulated by the EC with the assistance of the Mission, has major inherent strengths that are not usually found in international programs of this kind. These strengths, outlined below, provide favorable opportunities and prospects for achieving the Program's objectives and ensuring its success.

- The Program is consistent with and supportive of the objectives of the Water Agreement signed by the Heads of States on February 18, 1992 to utilize and manage the water resources of the Amu and Syr Rivers for the benefit of all the five states. The Program is also consistent with the Protocols and Resolutions adopted by the five states during April - August 1992 for cooperation on management and protection of the water resources of the Amu and Syr Rivers and for the solution of the Aral Sea problems. It is also consistent with the agreement reached by the Heads of States on March 26, 1993 confirming their commitment to cooperate and develop policies and programs to address the Aral Sea crisis and to establish the regional institutions to implement these policies and programs.
- The Program objectives, concepts, designs, and institutions are based on the decisions made by the ICAS on July 13, 1993 and confirmed by the Heads of States on January 11, 1994. The projects included in the Program have been prepared by the EC. The Bank Mission's assistance to the EC teams in selecting projects, and preparing project briefs, TORs, cost estimates, implementation schedules, organization, and other details was useful for enhancing the quality of the EC teams' outputs and provided an acceptable basis for carrying out the next steps.
- The priority of selected projects is assured by the fact that they are consistent with the Program framework endorsed by the basin states, the donors, the international agencies, and the Bank at the international seminar organized jointly by the Bank, the UNEP, and the UNDP on April 26, 1993 to address the Aral Sea crisis. The selected projects are also consistent with those identified by the Bank-UNEP-UNDP mission in May 1993 for priority consideration.
- The Aral Sea crisis has attracted worldwide attention. The urgency of rehabilitating the devastated environment and ameliorating the hardships of the people living in the disaster zone is recognized by the basin states as well as by external support agencies. International agencies and donor countries have indicated keen

interest in supporting the basin countries' cooperative efforts to address the crisis.

- Despite their differences on other matters, the basin countries have demonstrated their commitment to cooperate in the Aral Sea Program. While their decision making process has been slow, their decisions on policies, programs, and institutions have been sound. The sustainability of the cooperative efforts is reinforced by the increasing awareness that the economic development of the individual states is inexorably dependent on the addressing of the Aral Sea crisis.
- The basin countries have responded positively to date to the advice and recommendations of the Bank and the UNEP and UNDP on the Aral Sea Program. The prospects of maintaining such a productive relationship for addressing the challenges of the Aral Sea crisis are good.

Development Impact

33. The main focus of the Program is the sustainable development of the region as well as of the basin states. The Program's main thrusts -- redressing the environmental damage caused by the desiccation of the Sea, rehabilitating the disaster zone, and managing the basin's water resources efficiently -- are designed to develop the regional policies, institutions, systems, and conditions that will foster and sustain the development efforts of the individual states.

34. The basin states have considerable economic potential. They are endowed with huge water and land resources, extensive irrigation systems, large hydropower bases, important minerals, and a considerable labor force. The sustainable development and realization of the full potential of these resources depends largely on the cooperation of the states, particularly for the following reasons:

- The states are land-locked countries and require cooperation and good neighborly relations to import goods from and export products to the outside world in order to develop their economies. The regional institutions established for the Aral Sea Program provide a useful forum for discussing Aral Sea issues as well as other economic issues.
- Water is essential to sustaining life and all economic activities in these desert countries. While water resources are considerable water demands are also very large. Acute water scarcity and seasonal shortages that adversely affect agricultural and energy production are unavoidable. Moreover, water in most areas of the region is so polluted that it cannot be used for human consumption or for agricultural production. These problems can be addressed effectively only through joint efforts and cooperation.

- The basin states have signed an agreement on the allocation and use of their common international waters; however, the potential for disputes is substantial. The states could resolve their differences and avoid potential adverse economic consequences through regional cooperation.
- The degradation of the basin's environment has reached disastrous levels and the adverse impact of this degradation on the economic development of the states is serious. The solution to these problems is difficult and costly and can only be addressed through the combined efforts of all the states.

35. The Aral Sea Program is designed precisely to promote regional cooperation to address the above problems. Each of the 19 projects in the Phase 1 Program provides direct benefits and is economically viable. In addition, the Program will enhance the efficiency of investments of the individual states in the related economic sectors.

36. Although the basin states are rich in resources and have considerable economic potential, they are suffering from declining agricultural outputs, substantial unemployment and underemployment, increasing health hazards, and a deteriorating quality of life, owing to decades of mismanagement of the land and water resources and neglect of the environment. The problems are too formidable to be addressed unilaterally by any state; they require the cooperative efforts of all the states. Failure to cooperate would result in continuing economic hardship and possible interstate disputes, which would adversely affect economic development. The Aral Sea Program aims to avoid these issues and to foster regional cooperation.

Program Issues

37. The proposed Program is large, complex, multi-sectoral, multi-country and long term and involves redressing decades of mismanagement of water resources and destruction of the environment. The technical problems are formidable, the riparian issues are sensitive, and the institutional difficulties are daunting. While the Program's policies, concepts, priority projects, and institutional structures are sound, the implementation issues are serious. However, successful implementation and achievement of the Program goals are essential to sustain the commitment of the basin countries to cooperate, to reinforce their willingness to make the needed sacrifices, and to encourage them to assign as high a priority to regional interests as they do to their own. Successful implementation is also essential for sustaining the international community's long-term commitment to and support for the Program. The existing and potential issues that could adversely affect the successful implementation of the Program are discussed below:

Program Size

38. At the International Seminar held in Washington on April 26, 1993, the donors were informed that grant financing of about \$50 million would be required to meet the urgent needs of the Phase 1 Program and to prepare the projects for Phase 2. At that time, Phase 1 was to be completed in about

three years. The scope of the Programs approved by the Heads of States, however, is larger and the implementation period envisaged is three to five years. The Mission did not attempt to reduce the size of the Program because it was the EC's program for implementing the decisions of the Heads of States. Moreover, the Mission was satisfied with the priority of the selected projects. The projects are designed to constitute an integral part of a single program for addressing the Aral Sea crisis. Each project contributes to the solution, but its linkages with other projects are so strong that implementation of the other projects is essential to optimize the contribution of a single project. For example, water quality management (Program 3) cannot be achieved without a regional water strategy (Program 1) and vice versa. The long-term solution of the water supply problem in the disaster zone (Program 5) is not possible without the water quality management and collector drains projects (Program 3). The plans for discharging major collector drains (Program 3) into the Aral Sea envisage the use of flow-through wetlands (Program 4) in the dry bed of the Sea to improve water quality and assure better vegetation growth. The hydromet services project (Program 2) has linkages with almost all the other projects. Even the watershed management project (Program 6) is a necessary element of the water resources strategy and water quality management (Programs 1 and 3). Maintaining the integrity of the Program is necessary to optimize the benefits accruing from the strong linkages between the Program's project components.

39. However, the final size of the Phase 1 Program would be determined by such factors as the capacity of the EC to organize and carry out the feasibility studies, the availability of grant financing, the willingness of the countries to borrow, and the priorities determined by the results of feasibility studies. For the present, the main issue is whether the project preparation and feasibility studies of 19 projects, and the capacity building of the apex institutions requiring funds amounting to US\$41 million, should be taken up as proposed by the EC. This paper recommends that this should be done because the projects have a high priority and because they are also needed for building up the pipeline for the donors' and financial institutions' consideration in Phase 2.

Institutional Issues

40. The IFAS: The management issues of the apex institutions (EC and IFAS) have been discussed in Volume 1 of the Aide Memoire. The IFAS was established a year ago. It presently has nine members on its staff, but it is practically inactive. It is supposed to finance some Aral Sea projects without external assistance but the states have not yet contributed their share of the fund and there is also no program to finance. Moreover, the operational role of the IFAS and the extent of its involvement in project implementation, and procurement are not yet clearly defined. The IFAS is looking to the international community for guidance. The Aide Memoire made some suggestions on the coordination of IFAS and EC activities (Annex 5). A formal document defining the respective roles of the EC and the IFAS and the modalities for coordination of their activities is necessary to avoid possible jurisdictional disputes.

41. The EC: The institutional issues concerning the EC are more serious. The Aide Memoire recommended that the EC should have a full-time Chairman and that the tenure of this post should be at least three years. A large and complex program cannot be managed efficiently if the Chairman is not fully involved in the policies, programs, and direction of the EC's work. The Aide Memoire defined its concepts of the Chairman's role. Under its Charter the EC has been given the status similar to that of the State with full authority to plan and implement policies and programs approved by the ICAS and the Heads of States. The EC Chairman has the status to discuss regional issues directly with the Heads of States if necessary. The EC staff have diplomatic immunity and are given the same facilities as those enjoyed by state officials of their levels. Given these favorable conditions, the EC could probably attract competent managers and staff to its organization from all of the states. However, this has not happened. The EC staff is all Uzbek; the EC teams assigned for preparation of the program were all Uzbek; the IFAS staff is all Kazakh. The Mission was informed that it would be difficult for people from other states to give up housing, education, and health facilities available to them in their respective states and join the EC. If this is correct, the regional organizations of the EC and IFAS will not be truly regional and their policies and programs may be viewed by other states as biased in favor of the state where their headquarters is located. Because most Program works are located in Uzbekistan and the headquarters of the ICAS, EC, BVOs and SIRC/SANIIRI are also in Uzbekistan, the lack of participation of other states in planning and implementing the Program could adversely affect regional cooperation. The EC and IFAS should provide the facilities and incentives to attract managers and staff from all of the states. The Aide Memoire raised this issue. A full-time Chairman with a strong commitment to the goals of the EC could ensure effective participation of all the states in the Program activities.

42. The ICAS: The ICAS is not a board of management. It is a body of 25 high level representatives from the five states that meets twice a year to hold discussions, reconcile the views of member states, make compromises, and decide on the policies, programs, and institutional proposals recommended by the EC. The key organization for developing the policies and programs, therefore, is the EC. Decision-making is so highly centralized and the tendency to escalate issues to higher levels appears so great that delays in Program implementation would be unavoidable. Only a courageous EC Chairman, one who is prepared to take the "risk" of using his delegated powers fully could make the difference. To do this, the Chairman would need the strong support of the international community.

Local Technical Expertise

43. During the present as well as previous visits, the Mission explored the availability of competent staff for planning and implementing the Aral Sea Program. The Mission was informed that many competent and experienced Russian staff have left the design and research institutions and that this trend was continuing. The EC teams included some of the most senior and experienced staff of SANIIRI and Uzbekistan's design bureaus, but Mission members who assisted them in preparing the project briefs and TORs reported that, while some members of the EC teams were very competent, they lacked knowledge and

experience in such fields as strategic planning, economic analysis, and water quality management, and lacked the ability to identify and analyze options to ensure sound investments. The Program involves numerous implementation activities to be carried out by various ministries and local organizations. Their staff are likely to be less experienced and competent than the EC teams. Capacity-building assistance, therefore, is critical to the Program's success.

Project Issues

44. In view of the complexity of the projects, the current socioeconomic and institutional conditions prevailing in the region, and the lack of experience of the regional institutions, the feasibility and design study of projects should be carefully reviewed by the EC, the international community, and the Bank before investment decisions are made. In some cases, it may be necessary to appoint panels of experts to review the recommendations of the feasibility reports. Some projects such as the regional water resources strategy, potable water for the disaster zone, and automation systems for regulation of gates, discussed below, illustrate the difficult technical and political issues involved in the projects.

45. There is strong support for the proposed Regional Water Resources Strategy Project. However, everyone seems to have a different perception of what it will or should achieve. Some hope that it will provide a good opportunity to illustrate practical implementation of the recommendations of the Bank's Water Policy Paper. It has been suggested by some that the study should review the efficiency and economics of current water allocations. This is a politically sensitive issue. The Mission made it clear at the outset that while the Bank stands ready to assist, if requested by all the states, it would not want the existing agreements on water rights to be disturbed.

46. The expectation of many that the project would reduce the current wastage of water, improve water quality and the environment, and ensure efficient management of water resources is logical but it may be premature. Development of the regional water strategy is a long and iterative process. Strategies for the management of international waters should be acceptable to all riparians. They should be effective, implementable, and sustainable. These requirements cannot be met easily and quickly. Moreover, the data are not often available to arrive at indisputable conclusions. While the importance of the project is unquestionable, careful management will be required to avoid potential riparian disputes as well as expectations that may not be realized.

47. The Potable Water Supply Project in Program 5 is difficult because the quality of the surface water and groundwater in the disaster zone is unacceptable and hazardous to health. To date, an effective, economical, and sustainable solution to this problem has not been identified and developed. Questions have been raised about the effectiveness and sustainability of the small desalinization units that are being financed by some donor countries. Doubts have also been raised about the effectiveness and sustainability of the medium-term Kaparas Reservoir Project. Some local experts have suggested that a permanent solution lies in bringing better quality river water from hundreds of kilometers upstream through a canal or pipeline. None of these solutions

is easy. Careful evaluation of the effectiveness and sustainability of ongoing projects and studies is essential to develop a longer-term strategy for solving the water supply and wastewater problems of the disaster zone.

48. The Automated Control System Project in Program 7 is given high priority by the BVOs. It is intended to improve the efficiency of regulation to save water. A system of automatic gate operation was installed by the Syr Dar'ya BVO in the late 1980s but it is now proposed to replace it with a modern "real time automated system." The total cost of the program for both the Syr Dar'ya and the Amu Dar'ya is estimated at US\$315 million, but it is proposed to implement it in four stages. However, the priority of this project is debatable given the inefficiency and wastage of water in other aspects of water distribution and regulation indicated in the project brief of Program 7. A comprehensive review of all aspects of the BVO's water distribution and regulation facilities and systems is necessary to identify the areas of inefficiency and wastage so as to determine the priorities for action. This review will show the place of the proposed automated control system project in the order of the priorities. Feasibility studies should then be carried out for the project that has the highest priority for investment.

49. The three projects discussed above illustrate the need for comprehensive pre-investment and feasibility studies to ensure sound investment decisions. The internationally accepted standards of project identification, selection, preparation, and appraisal should be followed to ensure the efficiency and effectiveness of investments.

Procurement

50. The Program involves numerous activities that have to be carried out by ministries and local organizations of the states at widely dispersed locations. These organizations are used to a system of procurement that does not involve competitive bidding. Working conditions for foreign consultants and contractors, especially in rural areas, are difficult. Procurement and implementation delays in these conditions would be unavoidable unless procurement actions are designed to take into account the needs and challenges of each project. A paper on the factors to be considered in designing procurement has been prepared for further discussion with the EC.

D. RISKS

51. Although the prospects for the success of the Program are favorable and the measures proposed to address the Program issues could prove effective, the Program has inherent risks. The main risks relate to the following possible events which could delay the Program and adversely affect its success if they are not managed effectively and on time.

- (a) The failure of the basin states to cooperate and make the required sacrifices;

- (b) The unwillingness of the ICAS and the Heads of States to delegate to the EC and IFAS the powers they need to carry out their responsibilities effectively;
- (c) The failure of the EC and the IFAS to cooperate and coordinate their activities to achieve the Program goals most effectively; and their failure to ensure adequate participation of all the states in regional activities to reinforce regional cooperation;
- (d) The lack of long-term international support for the Program to ensure that the foundations for regional cooperation for addressing the Aral Sea crisis are sound and strong enough for the states to continue their cooperative effort in future without substantial external assistance;
- (e) The possibility that the Program proves too complex to succeed even if the risks outlined above are adequately addressed.

Failure of the Basin States to Cooperate

52. The basin states have made strong commitments to cooperate to address the Aral Sea crisis. They have successfully demonstrated this commitment to date. However, disputes may arise from differences on water allocations and water rights, inequitable distribution of benefits from the Program, and disagreements on cost-sharing of the projects. These risks would be minimized by the actions proposed in the following paragraphs.

53. The basin countries have an international water agreement which defines the rights of states and the cooperative arrangements for distribution of water and protection of water quality and the environment. The Aide Memoire has clarified the fact that the international community and the Bank would not want the existing agreements to be disturbed but would be willing to assist in resolving interstate differences if all the states ask for such assistance. The proposed Program is designed to pursue this policy and help achieve the objectives of the existing agreements more efficiently.

54. Although the projects are intended to address regional problems, their benefits to individual states would vary. Cost-sharing issues, therefore, could be sensitive, particularly for projects financed from loans and credits which have to be paid. The question of how much a project's costs could be attributed to all the states as a part of the regional efforts to address the Aral Sea crisis and how much to a given state which derives direct or indirect benefits in view of the project's location in that state, is difficult to address. To resolve cost-sharing issues and reduce the risks of disputes, the Aide Memoire has suggested that the ICAS should develop, with the assistance of the EC and IFAS, the principles and criteria for cost-sharing and that the basis for cost-sharing for each project should be decided upon as soon as the project's feasibility study has been completed.

Delegation of Powers to the EC and IFAS

55. The Heads of States' decisions on March 26, 1993 and the ICAS' decisions on July 13, 1993 which were approved by the Heads of States on January 11, 1994, describe regional institutions and define their responsibilities and their powers to plan and implement the approved programs. The powers delegated to the EC and IFAS are extensive and are adequate to carry out their responsibilities effectively. However, the possibility of interference with the delegated powers or the tendency of the EC and IFAS not to use them effectively and to escalate the issues for decision to a higher level cannot be ruled out. The capacity-building assistance project should be designed to ensure that the EC and IFAS are protected against undue interference in the management of policies and programs approved by the ICAS and the Heads of States and that they are encouraged and supported in carrying out their delegated powers fully and effectively.

Leadership of the EC and IFAS

56. The success of the Program depends on the management capacity and competency of the EC and IFAS and the effective coordination of the activities of these two key apex institutions. The leadership of the EC Chairman and the Executive Director of the IFAS and their commitment to the goals of the Program are the key to success. The Aide Memoire has recommended the need to appoint a full-time Chairman of the EC with a tenure of at least three years. A similar policy should be followed for the position of IFAS Executive Director. Moreover, the persons selected for these key positions should be those whose management competency, diplomatic skills, consensus-building abilities, and leadership qualities are recognized in the region. The Aide Memoire has also stressed the need for the participation of all the states in the regional organizations and activities and has suggested the arrangements for coordination of IFAS and EC activities to avoid possible jurisdictional disputes (Annex 5).

Long-Term Commitment of External Support Agencies

57. The external support agencies should appreciate the fact that their involvement in the Aral Sea crisis would entail an ongoing commitment, for a long period of time, to ensure the success of the Program. The risks of giving up in the middle of the Program are high because the commitment of the states to cooperate may collapse. The Program needs external support at least until the Aral Sea crisis is addressed to a level at which the regional organizations could continue the development process as a normal operation.

58. The Aral Sea crisis has attracted world attention, and the need to assist the basin states to address the crisis has been recognized by the donor countries and international agencies at the International Seminar held in Washington, D.C. on April 26, 1993. It is hoped that the proposed donors' meeting on June 23-24, 1994 will reiterate the international community's continuing support for the Program on a long-term basis.

Risks Due to the Program's Complexity

59. The Program has many activities and many implementing units and its implementation involves a host of difficult problems. But the projects included in the Program have high priority and strong linkages. The integrity of the Program, therefore, should be maintained to achieve optimal results. The staged-implementation and capacity building plans discussed in Section C are designed to reduce implementation risks. They have certain built-in safety factors. For example: the schedules given in Annex 3 indicate the time required to complete each activity in stages 2 and 3. Because no activity can start until the project implementation unit is adequately established, it would not be possible to start all projects at the same time. The implementation schedules of the projects will have significant staggering to reduce bunching of projects, provide the opportunity and time to plan and build the capacity of the implementing units and agencies, and minimize the risks. However, the proposed implementation plan needs careful and continuous review and adjustment to ensure its success.

E. PROGRAM FINANCING

60. The briefing paper (The Aral Sea Crisis - Proposed Framework of Activities, March 29, 1993) discussed at the previous meeting of the donor countries and international agencies in Washington on April 26, 1993 proposed a fund of about US\$50 million to finance the first phase of the Program. The paper recommended substantial grant financing and stated that specific activities to be included in the first phase would be determined by an identification mission.

Financing Requirements

61. The Phase 1 Program formulated now by the EC has a larger scope and would take about five years to complete. The proposed staged-implementation plan and its rationale have been discussed in Section B. The estimated financing requirements of the project activities to be completed in stages 2 and 3 are given in Annexes 3A and 3C and are summarized below:

<u>Stage 1:</u>	Project Identification:	Completed
<u>Stage 2:</u>	Pre-investment/Feasibility Studies:	US\$41 million
<u>Stage 3:</u>	Completion of feasibility studies and implementation of the planned projects:	US\$220 million

62. Annex 3D describes the status of completion of projects in the Phase 1 Program after both stages 2 and 3 activities are financed and implemented as per Annexes 3A and 3C. Annex 3D shows that 15 of the 20 projects will be completed as planned and in addition they will identify and prepare new projects or action programs to be considered in Phase 2. The remaining 5

projects are large infrastructure projects whose feasibility studies will be completed for investment decisions in Phase 2. The preparation for Phase 2 is thus built into the Phase 1 projects and the continuity of the efforts to address the Aral Sea crisis will be maintained.

Financing Options

63. Donor countries and international agencies have two options to support the Program:

- (a) To confirm their commitment to finance the estimated cost of projects up to stage 2 as shown in Annex 3A
- (b) To confirm their commitment to finance the estimated cost of projects up to stage 2 as shown in Annex 3A and also express their interest in considering financing the estimated cost of projects up to stage 3 as shown in Annex 3C.

64. The second option has many advantages. The continuity of the operations in stage 3 will be assured and the donors will be fully involved in all activities of the projects planned in Phase 1. Expression of interest in financing stage 3 activities at this time does not mean commitment, but it helps forward planning and preparation of a financing plan. Some projects in stage 3 would require co-financing and may involve more than one donor.

65. This paper prefers option (b) and recommends that donors and international agencies give due consideration to it. As a lender of last resort, the World Bank will consider financing those projects that lack adequate financing commitment and interest of donor countries and other international agencies.

Local Cost Financing

66. The Program involves two categories of local costs:

- (a) The local costs of Stage 2 operations shown in Annex 3A which amount to an equivalent of about US\$7 million
- (b) The management and operation costs of the regional organizations - ICAS, IFAS, EC, ICWC, ICSDSTEC, BVOs and PIUs.

67. The estimated amount of US\$7 million for local cost financing is intended to cover the salary costs of local staff, local travel, and other local expenditures for implementing the projects. It does not include management and operation costs of the regional organizations mentioned above which should be financed by the IFAS.

68. Prior to the establishment of the ICAS, IFAS, and EC, the only existing regional organization was the ICWC/BVOs. The budget of the BVOs was being financed by the five states in proportion to their respective water allocations. However, the May 1993 joint Bank-UNEP-UNDP Mission noted that the states were not meeting the budgetary needs of the BVOs adequately. The

May 1993 Mission recommended that the budgets of the BVOs should be financed in future by the IFAS so that the regional organizations of the BVOs do not have to go to each state for financing their operations. This procedure is also important to ensure the operational independence and objectivity of the BVOs. This policy should apply to all regional organizations of the Aral Sea Program.

69. The estimates of local cost financing required to meet the management and operation costs of the regional institutions (ICAS, IFAS, EC, ICWC/BVOs, ICSDSTEC, and PIUS) have not been prepared by the EC and IFAS yet. The regional organizations also need offices, housing, medical, educational and other facilities. These facilities are essential to attract competent managers and staff from all of the states to the regional organizations. The budgets of the regional organizations in the initial years, therefore, would be particularly heavy. The IFAS should finance these requirements. But the IFAS has no funds at present because the states have not contributed their share to the Aral Sea Fund. The Aide Memoire recommended that the decisions of the Heads of States regarding the contributions of each state to the Aral Sea Fund should be effectively implemented to meet the above needs and to ensure efficient implementation of the Program (Annex 4).

70. While it is important to insist that the management and operation costs of the regional organizations be financed by the IFAS, this paper recommends that the local currency costs amounting to US\$7 million required for the stage 2 project operations shown in Annex 3A be financed by grant funds. Grant financing of these local costs is necessary to avoid possible delays in cost-sharing decisions. It would take some time for the ICAS, EC, and IFAS to develop agreed criteria for cost-sharing of both foreign and local costs. It is hoped that the ICAS will establish the principles and criteria for cost-sharing before the stage 3 operations shown in Annex 3C are started. The need, if any, for local cost financing of project operations in stage 3 will be reviewed at the appropriate time.

Modalities of Financing

71. The IFAS is not a bank that lends money to the EC. It is an institution for channeling financial resources provided by the basin states as well as by donors and international financing agencies for implementing the Aral Sea programs approved by the ICAS and the Heads of States. The IFAS has an Executive Board headed by an Executive Director who reports to the Board of Governors of the Aral Sea Fund comprising the five Heads of States (Annex 2A). The IFAS and EC are the funding and executing organizations respectively of the Aral Sea Program. Aside from channeling funds, the IFAS has the responsibility to ensure financial discipline in the EC's operations. The IFAS has requested that the funds provided by the donors and international agencies for the Aral Sea Program be channeled through the IFAS, and asked the Bank for guidance on the modalities for doing this.

72. During its first meeting with the EC and IFAS on February 26, 1994, the Bank Mission recognized the need to discuss the modalities of channeling the donors' and international agencies' funds for the Aral Sea Program, and stated its preliminary views on this subject as follows:

- (a) During the project preparation and capacity-building phase, grant funds administered by the Bank would be channeled through the Aral Sea Fund to the EC and its implementing and other appropriate agencies under such technical and legal arrangements as may be necessary with the Aral Sea Fund and the said agencies.
- (b) For implementing a program of the magnitude and complexity of the Aral Sea program, lending modalities and instruments for World Bank loans and credits would be in accordance with the Bank's standard policies, practices and procedures and the needs and challenges presented by the specific projects.

73. This paper recommends that donor countries and international agencies should channel their financial assistance through the IFAS. Channeling grants/loans/credits through the IFAS has certain important advantages. It enhances the essence and regional characteristics of the Program and strengthens regional cooperation. The states will have the incentive and compulsion to contribute their share to the IFAS. Questions of who benefits and how the project costs should be shared could be dealt with separately by the ICAS more easily because the external support agencies' contributions to the IFAS would be for the region, not for any particular state. The leverage of the financing agencies to introduce policy and institutional improvements to ensure the success of the regional programs will be more effective. The IFAS would be able to introduce financial discipline into the EC's operations more effectively if the EC receives the funds through the IFAS. In view of these advantages, the Bank is also considering various methods of channeling loans/credits through the IFAS, such as having separate loan/credit agreements with each state but including in those agreements a provision that authorizes the Bank to channel the proceeds of the loan/credit through the IFAS; or having the states authorize the IFAS to borrow from the Bank and provide the guarantees that the loan/credit would be repaid according to certain agreed procedures.

Administration of Financial Assistance

74. The financial assistance of donors and international agencies to the Program could be administered in the following ways:
- (a) Donors and international agencies may contribute to the IFAS separately for financing projects of their preference and establish their own procedures and arrangements for using their funds for implementing the projects.
 - (b) Donors and international agencies may establish a trust fund to be administered by the IFAS for the purposes and according to the procedures specified in the trust fund agreement.
 - (c) Donors and international agencies may establish a trust fund and designate an administrator to channel the proceeds of the fund through the IFAS for implementing the Program according to the conditions and procedures specified in the trust fund agreement.

75. This paper does not recommend option (a) because the IFAS and the other regional organizations are new; they are not used to international agreements and procedures and need substantial capacity-building before they could effectively administer donors' funds. Moreover, separate and uncoordinated assistance provided at different times would not be as effective in achieving the objectives of the Program as an integrated and coordinated effort of the donors and international agencies. Some donors may wish to provide financial assistance to individual states for implementing projects (e.g., water supply, sanitation and health projects in the disaster zone) which complement the Aral Sea Program. The EC should welcome such assistance and take it into account in formulating its programs.

76. Options (b) and (c) have merits. Option (b) has some of the disadvantages of option (a) in view of the inexperience of the IFAS. Option (c) would be most effective because the administrator appointed by the donors and international agencies would ensure effective use of the fund, assist the IFAS in introducing sound internationally accepted financial management procedures and build the capacity of the IFAS to administer future trust funds independently. Option (c), therefore, is highly preferable, particularly in the early phases of the Aral Sea Program.

77. If the donors and international agencies decided to follow option (c), then the choice of the administrator of the trust funds could be:

- (a) Bank-UNEP-UNDP which have been collaborating to date in helping the basin states to formulate the policies, strategies and programs and build the regional institutions to address the Aral Sea crisis.
- (b) Some other arrangements for administering the trust funds that could be as effective as administration by a Bank-UNEP-UNDP collaborative effort.

F. RECOMMENDATIONS

78. It is hardly a year since a broad program framework was first prepared for addressing the Aral Sea crisis and supported by the donor countries and international agencies at the international seminar in April 1993. During this short period, the basin countries have made remarkable progress in formulating the policies, concepts and programs and establishing the regional institutions to implement them. True, the Bank, UNEP and UNDP have assisted the basin countries in achieving these results. But it was the basin countries' strong commitment and cooperation to redress decades of mismanagement of their water resources and degradation of their environment that led them to take concrete steps for addressing the Aral Sea crisis. Today the basin countries have a program and the regional institutions to implement it. The stage is now set for the donor countries and international agencies to support their cooperative efforts to address the Aral Sea crisis.

79. The Bank, UNEP and UNDP recommend that the donor countries and international agencies:

- commend the basin countries' cooperative efforts and the remarkable progress they have made in taking the first crucial steps for addressing the Aral Sea crisis;
- express the international community's hope that the basin countries will continue their cooperative efforts to address the difficult tasks of implementing the regional programs that lie ahead;
- support the Aral Sea Program - Phase 1 prepared by the EC, the institutional arrangements proposed to implement the Program, the staged-implementation strategy proposed to reduce possible risks, and the capacity-building plans to assist the regional institutions to achieve the Program goals;
- agree to provide grant financing amounting to US\$41 million (including local currency financing of about US\$7 million equivalent) to carry out the pre-investment/feasibility studies of the project operations shown in Annex 3A; also indicate interest in the project operations in the next stage (see Annex 3C) which they are likely to support;
- support the basin countries' request to channel financial assistance to the Program through the IFAS;
- decide on the options described in para. 74 for establishing a trust fund;
- decide on the options described in para. 77 for appointing the administrator for administering the proposed trust fund.

80. The Bank, UNEP and UNDP also recommend that the donor countries and international agencies stress the need for the basin countries and EC to implement the Aide Memoire recommendations (Annex 4) and, in particular, to take the following actions as soon as possible and that the implementation of the actions would be taken into account in the grant/credit/loan agreements and their effectiveness as appropriate.

- The basin States should contribute their share to IFAS according to the decisions already made by the Heads of States.
- The modalities of coordination of the activities of the IFAS and the EC for implementing the Program should be established.
- The Chairman of the EC and the Executive Director of the IFAS should be full time and the tenure of their posts should be at least three years. They should be selected based on their recognized abilities such as: capacity and competency to manage the Program, coordinate the related activities of the States, and deal effectively with the international community and donors. They

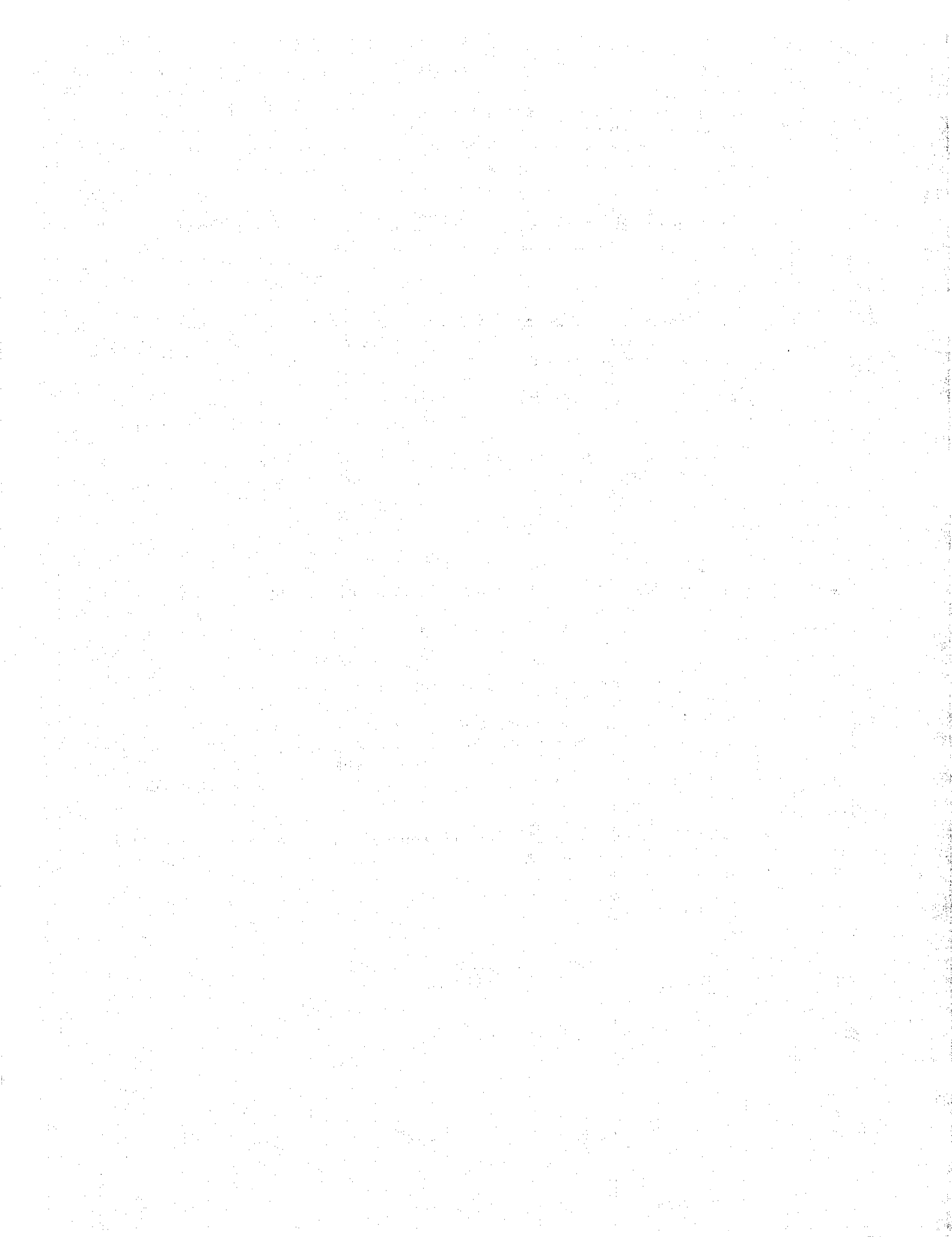
should have a strong commitment to the goals of the Program, the diplomatic skills to address interstate differences, and the ability and courage to take decisions consistent with the powers delegated to them. They should be high level managers of standing, not necessarily a specialist in a given sector.

- The Interstate Environment Commission (ICSDESTEC) should be established as approved by the Heads of States.
- The proposed project implementation units should be established.
- All States should be appropriately represented in the regional organizations of the IFAS, the EC and the BVOs. The selection of managers and staff to the regional institutions should be on merit and they should be given special incentives to make the regional organizations sufficiently attractive. (This process may take time to implement. At present a policy decision is required.)
- Afghanistan, a co-riparian, should be kept informed about the Aral Sea Program.

G. NEXT STEPS

81. If the donor countries and international agencies support the recommendations of the Bank, UNEP and UNDP outlined in Section F, then the designated Administrator of the proposed trust fund should take the following steps.

- (a) Prepare a draft trust fund agreement outlining: the objectives of the trust fund; the obligations of the administrator and the contributors to the fund; the conditions to be met by the IFAS, the EC and the five basin States for receiving the proceeds of the fund; the modalities for administering the fund; and the arrangements for coordination, reporting progress, monitoring and supervision of the Program and evaluation of the results.
- (b) Send a mission to the region as soon as possible to follow up the arrangements for implementing the Program; and to assist the EC and the IFAS in establishing the procedures and guidelines for procurement and implementation and taking the actions stressed by the donors and international agencies in Section F.



ARAL SEA BASIN PROGRAM - PHASE 1

**Projects Identified by the Executive Committee and the World Bank
Which Are Consistent with the Programs
Approved by the Heads of States**

**Programs Approved by the Heads of
States**

1. To prepare a general strategy of water distribution, rational water use, and protection of water resources in the Aral Sea Basin, and to prepare on the basis of this strategy draft intergovernmental legal and normative acts, which will regulate the issues related to the consumption and protection of water from pollution, and the social and economic development of the region.

To prepare and introduce quotas limiting water consumption for agricultural and industrial production, as well as for other technological needs.

2. To prepare and introduce a unified system of water availability and consumption measurement for the countries of the Aral Sea Basin, as well as a regional system of monitoring the environmental situation. To create databases, and to provide the relevant meteorological services with equipment and special devices.

**Projects Identified by the Executive
Committee and the Bank Mission**

- Regional Water Strategy;
- Improving the Efficiency of the Operations of the Existing Dams for Irrigation Releases and Hydropower;
- Sustainability of Dams and Reservoirs;

- Hydromet Services;
- Data Bank;
- Management Information System for Water Quality and Environment;

3. To work out principles of improving the water quality, and limiting pollution. To take measures aimed at reducing, and stopping in the future, the discharge of highly mineralized and polluted drainage water, and of unpurified water used for industrial purposes and in the communal sector, into rivers, water reservoirs, and onto the territories of the neighboring countries.

- Water Quality Management;
- Collector Drains;

To complete the construction of collectors along the Syr Darya and Amu Darya rivers, which will prevent the discharge of polluted water into these rivers. To undertake reconstruction and building of water cleaning facilities for inhabited areas, as well as for industrial and agricultural enterprises located in the Aral Sea basin.

To take measures aimed at increasing the water flow in the Syr Darya river bed, and in the discharge control units at the Shardarinsk hydroelectric station in order to provide an adequate amount of water into the Aral Sea.

To take appropriate measures in order to restore and preserve the Smaller Sea.

4. To undertake research work and to decide upon the existing engineering options, to prepare projects and to create artificially watered landscape ecosystems in the deltas of the Amu Darya and Syr Darya rivers and on the exposed Aral Sea beds. To undertake the required melioration work in order to restore the original environmental situation in the above-mentioned areas.

- Wetland Program;
- Soil Stabilization;
- North Sea Dyke;
- Environmental Assessment;
- Research on Salt Storms;

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5. To prepare and implement intergovernmental programs "Clean Water and Health," which provide for supplying the affected population in the Central Asian countries with good quality drinking water and improving sanitary and epidemiological situation in the region.

- Potable Water (Short-term);
- Water Supply (Medium-term);
- Sanitation and Sewerage;
- Health;

6. To undertake the required water and environmental research work, and on the basis of such work to take specific measures to improve the environmental situation in the zones of water flow formation.

- Watershed Management;

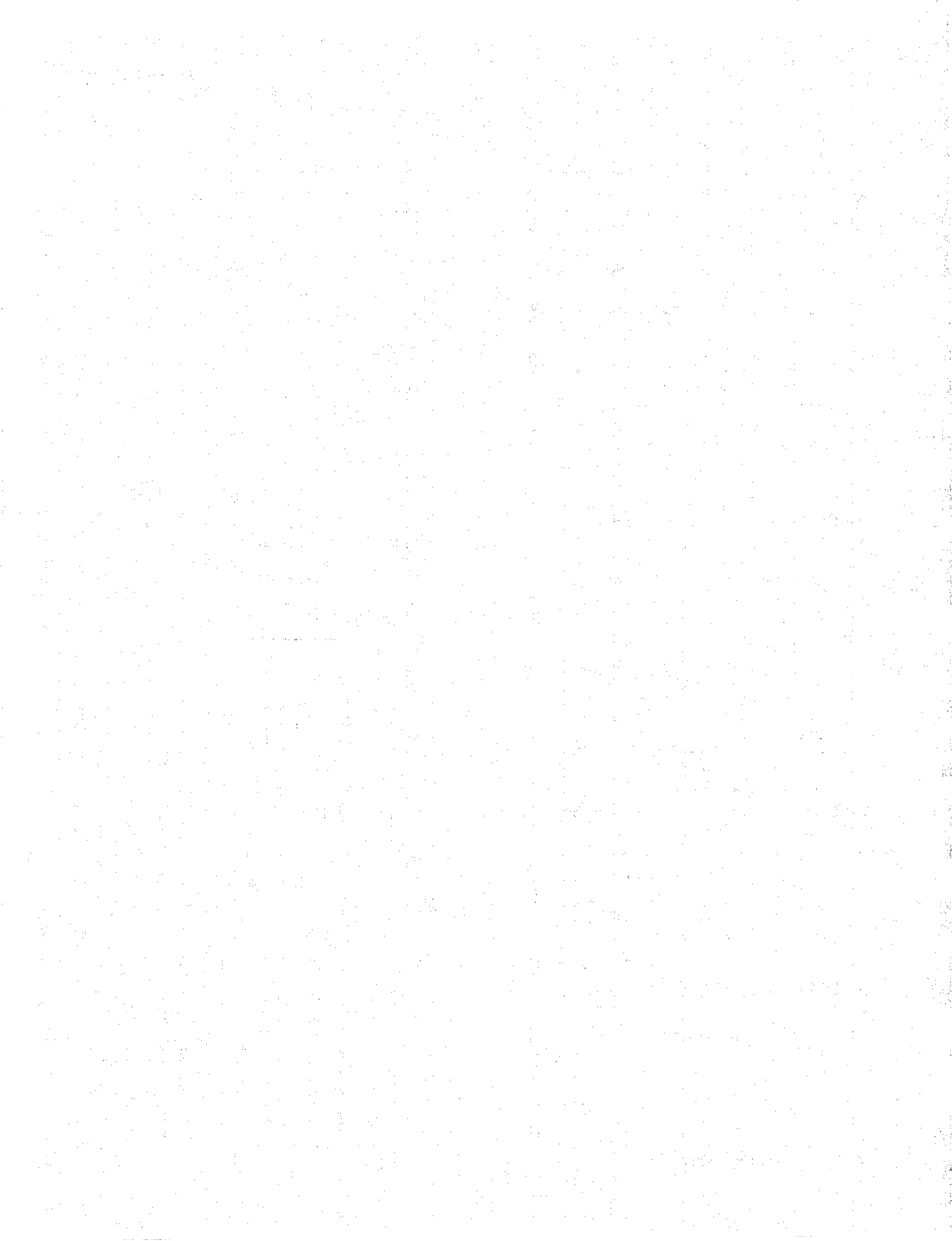
7. To provide Amu Darya and Syr Darya BVOs with the necessary technological equipment. To install at the above-mentioned BVOs automated systems for managing water resources, and to create information and forecasting centers there.

- BVO Amu Darya (Civil Works and Automatic Gates);
- BVO Syr Darya (Civil Works and Automatic Gates);

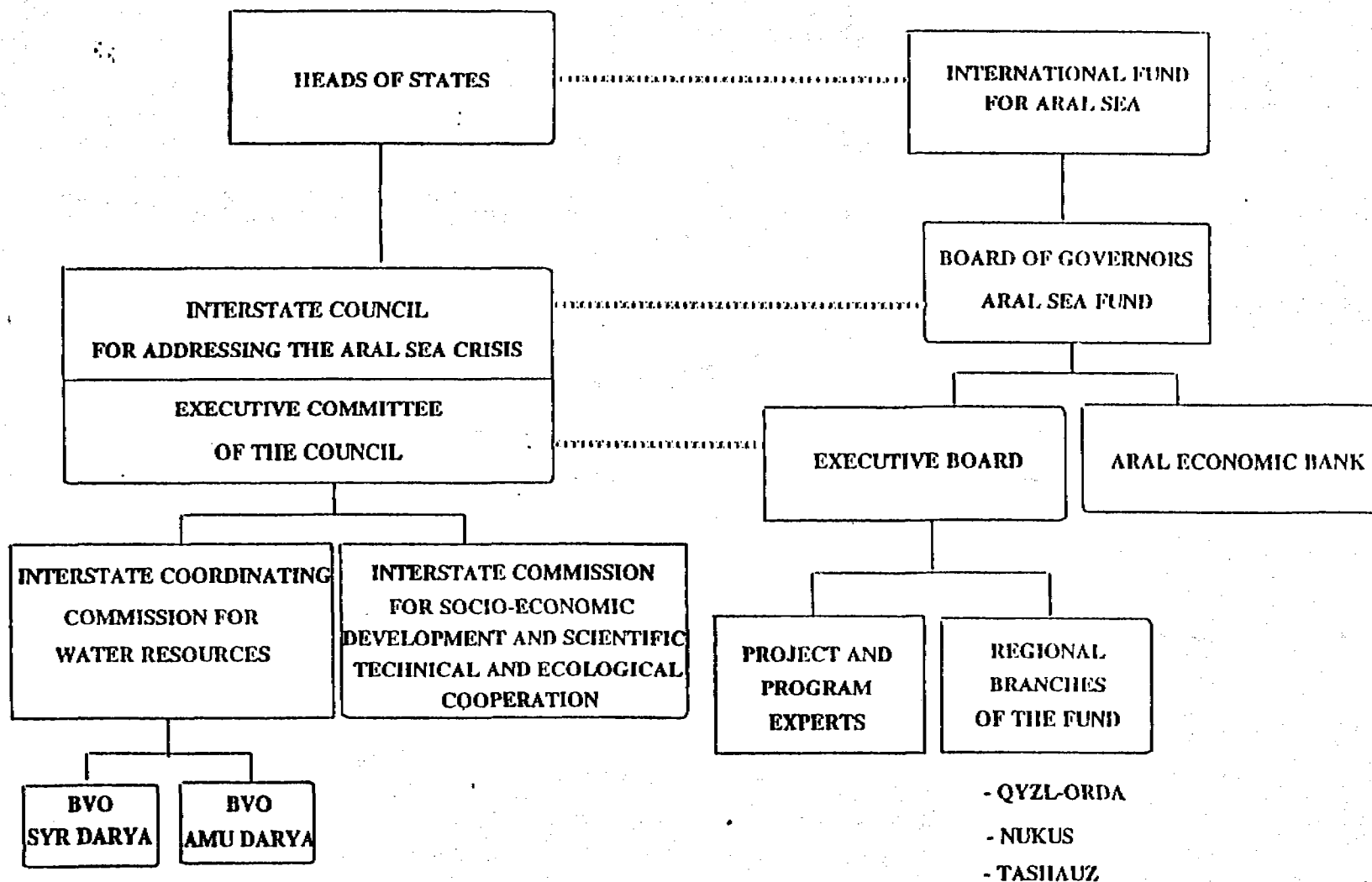
Implementation of the second stage of the ASUB Syr Darya Project and of the first stage of the ASUB Amu Darya Project.

* Assistance to regional institutions for planning, preparing and implementing the programs approved by the Heads of States.

- Capacity-building Project

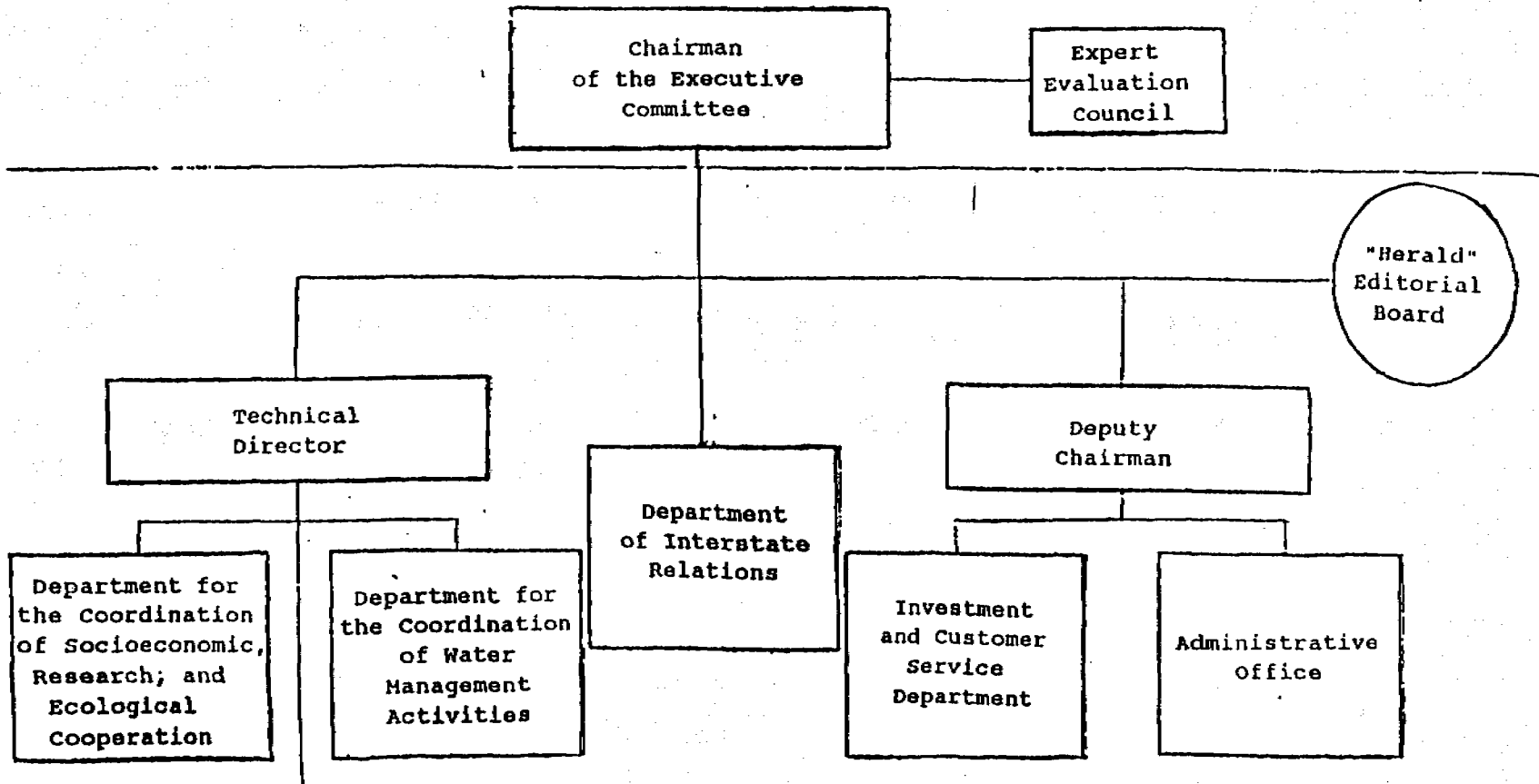


The Structure of Interstate Organization for Addressing the Aral Sea Crisis

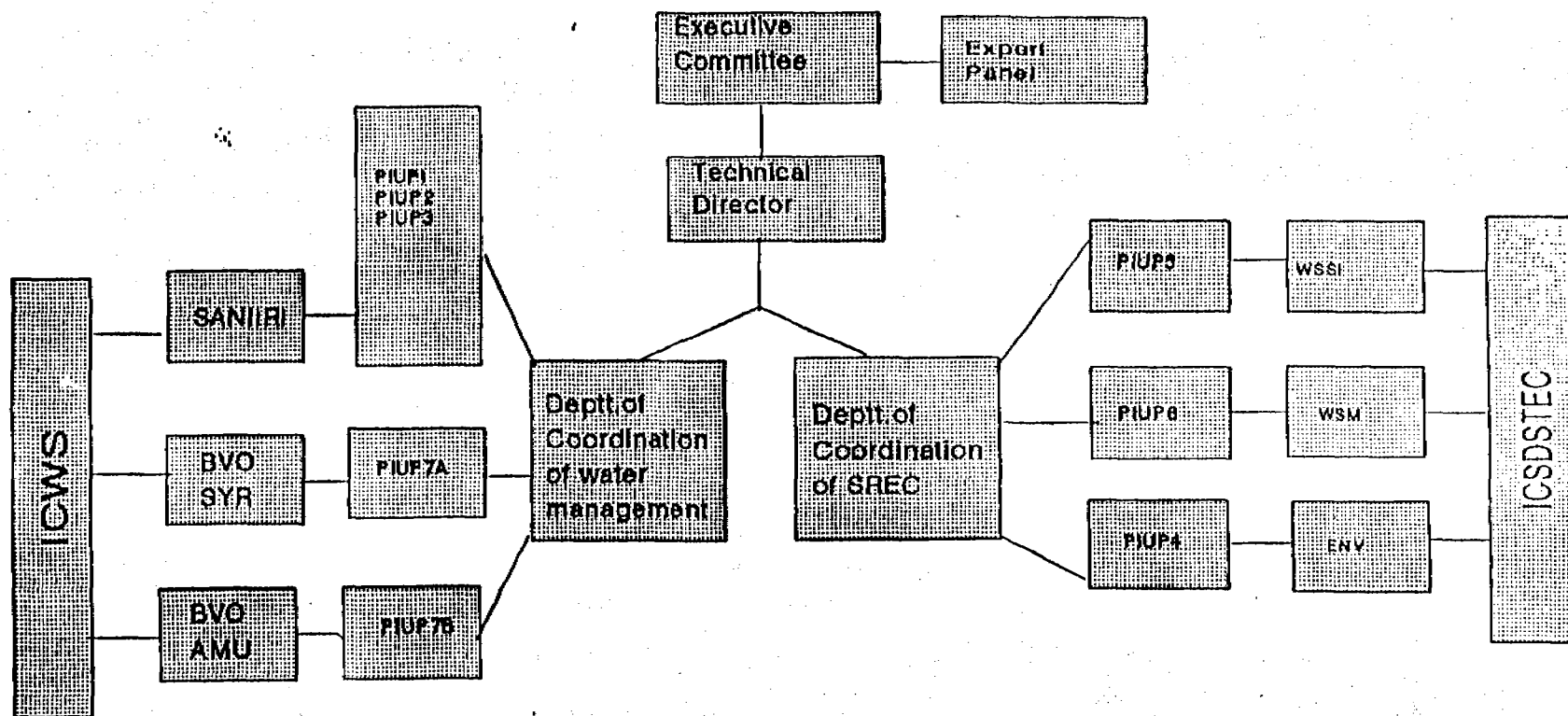


Structure of the Executive Committee

of the Interstate Council on the Problems of the Aral Sea Basin



ARAL SEA Program - Phase I Project Management Arrangements



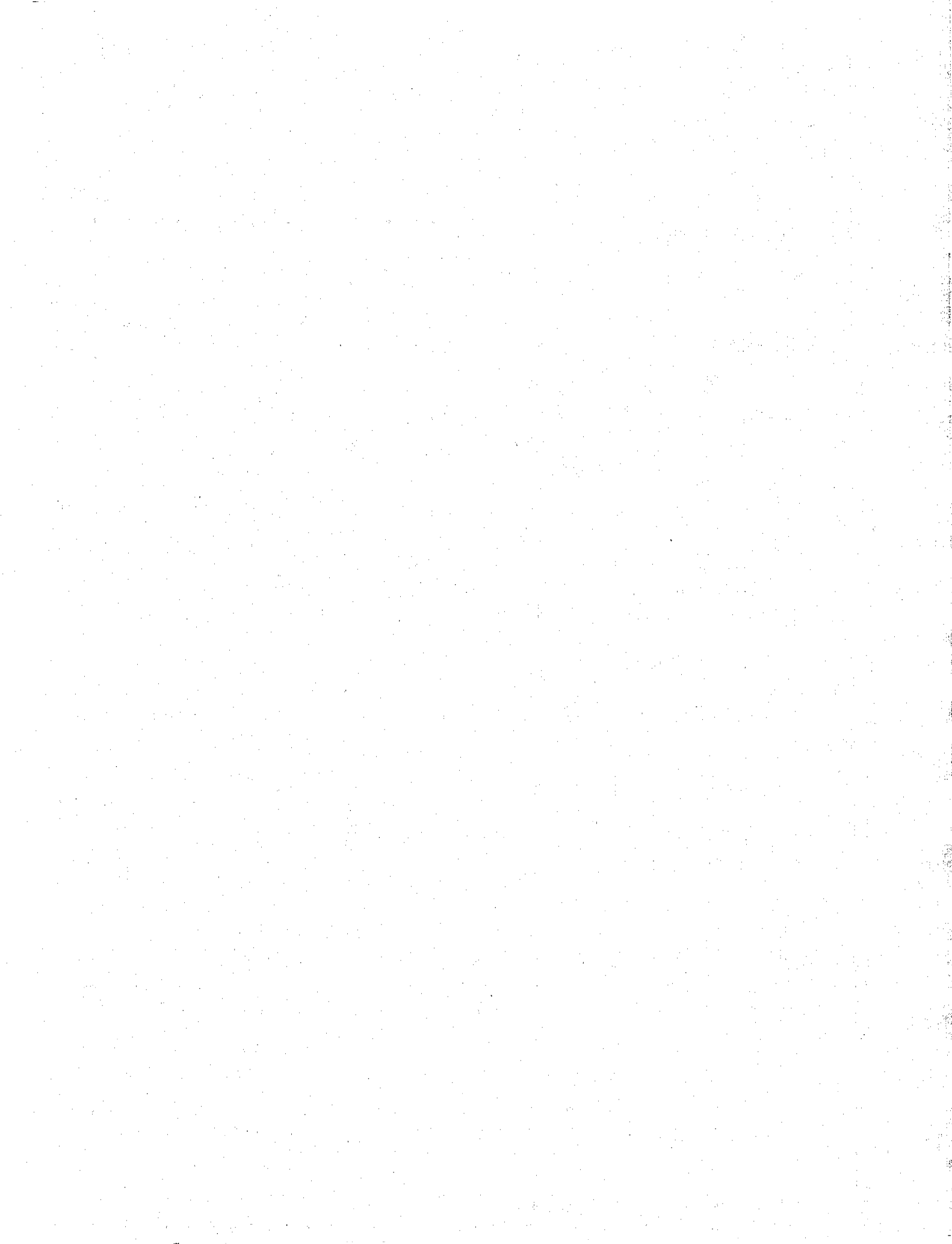
**SREC - Socio-economic Research
And Ecological
Cooperation**
ICWS - Interstate Coordination Water Commission

**PIU - Project Implementation
Unit**
ENV - Environment

Legend

WSSH - Water Supply, Sanitation and Health
**WSM - Watershed
Management**

**ICSDSTEC - Interstate Commission for
Socio-economic Development
and Scientific, Technical,
and Ecological Cooperation**



ARAL SEA PROGRAM (PHASE 1)

Summary of Cost Estimates and Time Schedules for Completing Project Preparation and Capacity Building

NAME OF PROGRAM / PROJECT	LOCAL	FOREIGN	TOTAL	PERIOD
	US \$ Million			months
Program 1				
1. Regional Water Resources Management Study	0.08	0.30	0.38	6
2. Improving Efficiency and Operation of Dams	0.04	0.16	0.20	6
3. Sustainability of Dams and Reservoirs	0.04	0.16	0.20	6
PROGRAM 1 SUBTOTAL	0.16	0.62	0.78	
Program 2				
1. Hydrometeorological Services	0.22	1.29	1.51	6
2. Data Base and MIS for Water Quality and Environment	0.13	0.88	1.01	6
PROGRAM 2 SUBTOTAL	0.35	2.17	2.52	
Program 3				
1. Water Quality Management				
a) Water Quality Assessment and Management	0.03	0.10	0.13	6
b) Agricultural Water Quality	0.09	0.20	0.29	6
2. Collector Drains (1)	---	---	---	6
3. Remodelling of Syr Darya river bed and Shardarinsk Control Units	0.10	0.42	0.52	6
PROGRAM 3 SUBTOTAL	0.22	0.72	0.94	
Program 4				
1. Wetland Restoration	0.10	0.85	0.95	8
2. Restoration of Northern Part of the Aral Sea	0.10	0.62	0.72	7
3. Environmental Studies in the Aral Sea Basin	0.14	0.96	1.10	12
PROGRAM 4 SUBTOTAL	0.34	2.43	2.77	
Program 5				
1. Clean Water, Sanitation and Health - Uzbekistan (short-term)	0.10	0.73	0.83	9
2. Clean Water, Sanitation and Health - Turkmenistan (short-term)	0.10	0.73	0.83	9
3. Clean Water, Sanitation and Health - Kazakhstan (short-term)	0.16	1.10	1.26	9
4. Medium-term Provision of Water Supply	2.00	6.25	8.25	24
5. Long-term Water Supply and Wastewater Management	0.70	6.30	7.00	30
PROGRAM 5 SUBTOTAL	3.06	15.11	18.17	
Program 6				
1. Integrated Land and Water Management in the Upper Watersheds	0.04	0.16	0.20	6
PROGRAM 6 SUBTOTAL	0.04	0.16	0.20	
Program 7				
1. Automatic Control Systems and Civil Works for the Amu Darya Basin, including Capacity Building for BVO Amu Darya	0.35	2.65	3.00	18
2. Automatic Control Systems and Civil Works for the Syr Darya Basin, including Capacity Building for BVO Syr Darya	0.35	2.65	3.00	18
PROGRAM 7 SUBTOTAL	0.70	5.30	6.00	
Supplementary Program				
Capacity Building for EC and IFAS	2.1	7.00	9.10	36
TOTAL COST PROGRAMS 1-7, PLUS SUPPLEMENTARY PROGRAM	6.97	33.51	40.48	

(1) Note: Stage 1 of the Collector Drains project has already been funded.

ARAL SEA PROGRAM (PHASE 1)
Capacity Building Assistance during Project Preparation

NAME OF PROGRAM / PROJECT	TRAINING	OFFICE	TECHNICAL	TOTAL
		TECHNOLOGY	ASSISTANCE	
	US \$ Million			
Program 1				
1. Regional Water Resources Management Study	0.07	0.02	0.21	0.30
2. Improving Efficiency and Operation of Dams	0.02	0.03	0.11	0.16
3. Sustainability of Dams and Reservoirs	<u> </u>	<u> </u>	<u>0.16</u>	<u>0.16</u>
PROGRAM 1 SUBTOTAL	0.09	0.05	0.48	0.62
Program 2				
1. Hydrometeorological Services	0.05	0.04	1.20	1.29
2. Data Base and MIS for Water Quality and Environment	<u>0.03</u>	<u>0.03</u>	<u>0.82</u>	<u>0.88</u>
PROGRAM 2 SUBTOTAL	0.08	0.07	2.02	2.17
Program 3				
1. Water Quality Management				
a) Water Quality Assessment and Management	0.01	0.01	0.08	0.10
b) Agricultural Water Quality	<u> </u>	<u> </u>	<u>0.20</u>	<u>0.20</u>
2. Collector Drains (1)	<u> </u>	<u> </u>	<u> </u>	<u> </u>
3. Remodelling of Syr Darya river bed and Shardarinsk Control Units	<u> </u>	<u>0.03</u>	<u>0.39</u>	<u>0.42</u>
PROGRAM 3 SUBTOTAL	0.01	0.04	0.67	0.72
Program 4				
1. Wetland Restoration	0.04	0.09	0.72	0.85
2. Restoration of Northern Part of the Aral Sea	0.04	0.09	0.49	0.62
3. Environmental Studies in the Aral Sea Basin	<u>0.03</u>	<u>0.09</u>	<u>0.84</u>	<u>0.96</u>
PROGRAM 4 SUBTOTAL	0.11	0.27	2.05	2.43
Program 5				
1. Clean Water, Sanitation and Health - Uzbekistan (short-term)	0.07	0.03	0.63	0.73
2. Clean Water, Sanitation and Health - Turkmenistan (short-term)	0.07	0.03	0.63	0.73
3. Clean Water, Sanitation and Health - Kazakhstan (short-term)	0.03	0.04	1.03	1.10
4. Clean Water, Sanitation and Health (medium-term)	1.20	0.50	4.55	6.25
5. Long-term Water Supply and Wastewater Management	<u>1.26</u>	<u>1.26</u>	<u>3.78</u>	<u>6.30</u>
PROGRAM 5 SUBTOTAL	2.63	1.86	10.62	15.11
Program 6				
1. Integrated Land and Water Management in the Upper Watersheds	<u>0.02</u>	<u>0.01</u>	<u>0.13</u>	<u>0.16</u>
PROGRAM 6 SUBTOTAL	0.02	0.01	0.13	0.16
Program 7				
1. Automatic Control Systems and Civil Works for the Amu Darya Basin	0.20	0.80	1.65	2.65
2. Automatic Control Systems and Civil Works for the Syr Darya Basin	<u>0.20</u>	<u>0.80</u>	<u>1.65</u>	<u>2.65</u>
PROGRAM 7 SUBTOTAL	0.40	1.60	3.30	5.30
Supplementary Program				
Capacity Building for EC and IFAS	1.40	2.10	3.50	7.00
TOTAL COST PROGRAMS 1-7, PLUS SUPPLEMENTARY PROGRAM	4.74	6.00	22.77	33.51

(1) Note: Stage 1 of the Collector Drain project has already been funded.

ARAL SEA PROGRAM (PHASE 1)

Probable Total Cost of Implementing the Projects After Completion of the Preparation

NAME OF PROGRAM / PROJECT	PROBABLE COST	PERIOD
	US \$ Million	years
Program 1		
1. Regional Water Resources Management Study	5.00	3
2. Improving Efficiency and Operation of Dams	1.00	3
3. Sustainability of Dams and Reservoirs	1.00	3
PROGRAM 1 SUBTOTAL	7.00	
Program 2		
1. Hydromet Services	19.50	3
2. Data Base and MIS for Water Quality and Environment	8.00	3
PROGRAM 2 SUBTOTAL	27.50	
Program 3		
1. Water Quality Management		
a) Water Quality Assessment and Management	4.00	3
b) Agricultural Water Quality	11.00	3
2. Collector Drains	10.00	36
3. Remodelling of Syr Darya river bed and Shardarinsk Control Units	10.00	36
PROGRAM 3 SUBTOTAL	35.00	
Program 4		
1. Wetland Restoration	25.00	3
2. Restoration of Northern Part of the Aral Sea	50.00	3
3. Environmental Studies in the Aral Sea Basin	—	
PROGRAM 4 SUBTOTAL	75.00	
Program 5		
1. Clean Water, Sanitation and Health - Uzbekistan (short-term)	18.00	3
2. Clean Water, Sanitation and Health - Turkmenistan (short-term)	18.00	3
3. Clean Water, Sanitation and Health - Kazakhstan (short-term)	25.00	3
4. Clean Water, Sanitation and Health (medium-term)	—	
5. Long-term Water Supply and Wastewater Management	—	
PROGRAM 5 SUBTOTAL	61.00	
Program 6		
1. Integrated Land and Water Management in the Upper Watersheds	2.00	1.5
PROGRAM 6 SUBTOTAL	2.00	
Program 7		
1. Automatic Control Systems and Civil Works for the Amu Darya Basin, including Capacity Building for BVO Amu Darya	6.00	3
2. Automatic Control Systems and Civil Works for the Syr Darya Basin, including Capacity Building for BVO Syr Darya	6.00	3
PROGRAM 7 SUBTOTAL	12.00	
Supplementary Program		
Capacity Building for EC and IFAS	—	
TOTAL COST PROGRAMS 1-7, PLUS SUPPLEMENTARY PROGRAM	219.50	

ARAL SEA PROGRAM (PHASE 1)
Status of the Phase I Projects after Investments
Indicated in Annexes 3A and 3C are Incurred

Name of Program / Project	Status of Project after Completion of Phase 1
<u>Program 1</u>	
<ol style="list-style-type: none"> 1. Regional Water Resources Management Study 2. Improving Efficiency and Operation of Dams 3. Sustainability of Dams and Reservoirs 	<p>Project completed as planned and action program prepared for consideration in Phase 2.</p> <p>Project completed as planned and action program prepared for consideration in Phase 2.</p> <p>Project completed as planned and action program prepared for consideration in Phase 2.</p>
<u>Program 2</u>	
<ol style="list-style-type: none"> 1. Hydromet Services 2. Data Base and MIS for Water Quality and Environment 	<p>Project completed and operational.</p> <p>Project completed and operational.</p>
<u>Program 3</u>	
<ol style="list-style-type: none"> 1. Water Quality Management <ol style="list-style-type: none"> a) Water Quality Assessment and Management b) Agricultural Water Quality 2. Collector Drains 3. Remodelling of Syr Darya river bed and Shardarinsk Control Units 	<p>Project completed as planned and action program prepared for consideration in Phase 2.</p> <p>Detailed feasibility studies completed for consideration of investment in Phase 2.</p> <p>Detailed feasibility studies completed for consideration of investment in Phase 2.</p>
<u>Program 4</u>	
<ol style="list-style-type: none"> 1. Wetland Restoration 2. Restoration of Northern Part of the Aral Sea 3. Environmental Studies in the Aral Sea Basin 	<p>Project completed as planned and the next project for Phase 2 prepared.</p> <p>Project completed as planned and the next project for Phase 2 prepared.</p> <p>Project completed as planned and action program prepared for consideration in Phase 2.</p>
<u>Program 5</u>	
<ol style="list-style-type: none"> 1. Clean Water, Sanitation and Health - Uzbekistan (short-term) 2. Clean Water, Sanitation and Health - Turkmenistan (short-term) 3. Clean Water, Sanitation and Health - Kazakhstan (short-term) 4. Clean Water, Sanitation and Health (medium-term) 5. Long-term Water Supply and Wastewater Management 	<p>Project completed as planned and the next project for Phase 2 prepared.</p> <p>Project completed as planned and the next project for Phase 2 prepared.</p> <p>Project completed as planned and the next project for Phase 2 prepared.</p> <p>Detailed feasibility studies completed for consideration of investment in Phase 2.</p> <p>Project completed as planned and action program prepared for consideration in Phase 2.</p>
<u>Program 6</u>	
<ol style="list-style-type: none"> 1. Integrated Land and Water Management in the Upper Watersheds 	<p>Project completed as planned and action program prepared for consideration in Phase 2.</p>
<u>Program 7</u>	
<ol style="list-style-type: none"> 1. Automatic Control Systems and Civil Works for the Amu Darya Basin, including Capacity Building for BVO Amu Darya 2. Automatic Control Systems and Civil Works for the Syr Darya Basin, including Capacity Building for BVO Syr Darya 	<p>Detailed feasibility studies completed for consideration of investment in Phase 2,</p> <p>Detailed feasibility studies completed for consideration of investment in Phase 2.</p>
<u>Supplementary Program</u>	
Capacity Building for EC and IFAS	Project completed and the next project for Phase 2 prepared.

SUMMARY OF THE AIDE MEMOIRE FINDINGS AND RECOMMENDATIONS

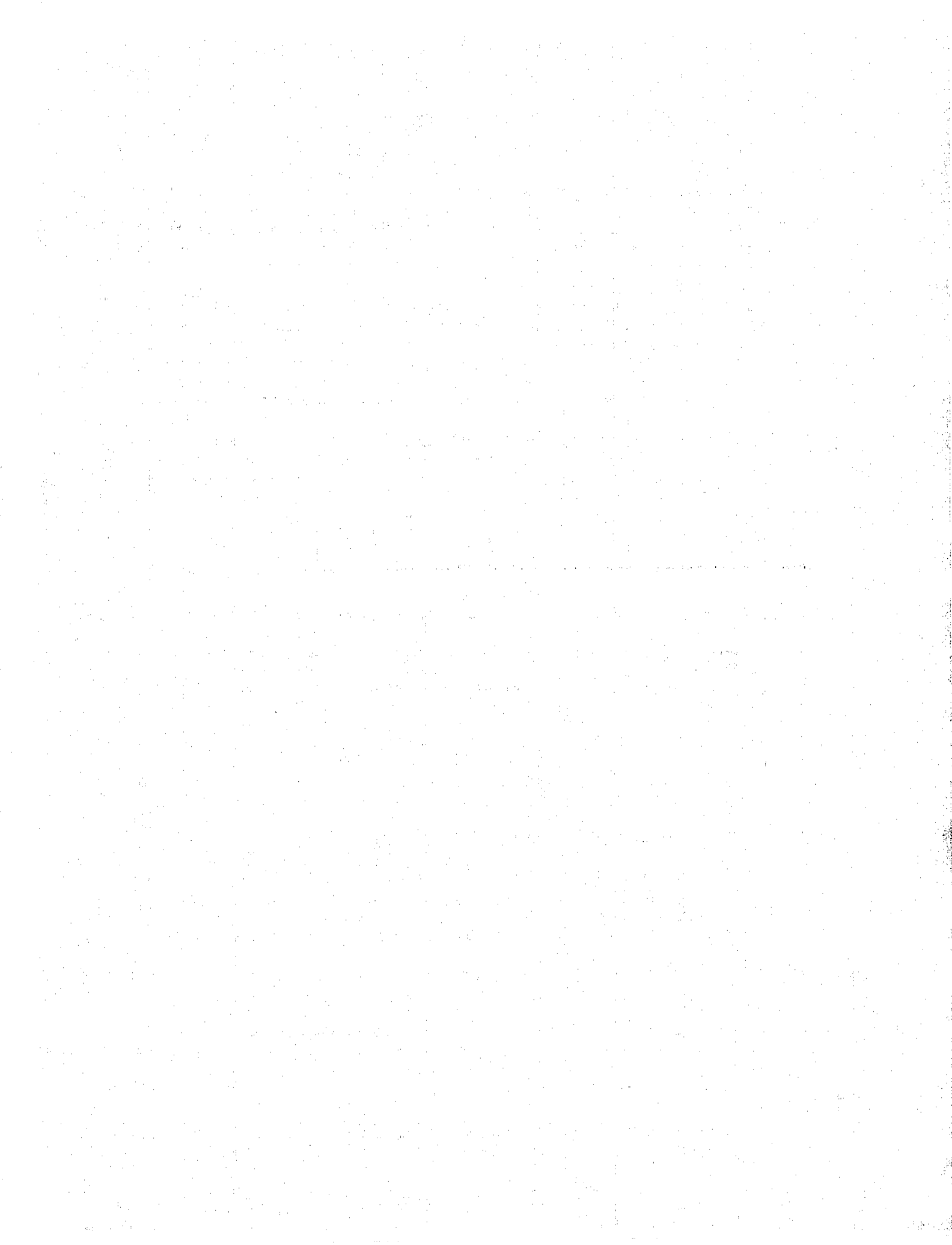
1. The project-brief for each project discusses the issues concerning the project, the sector and the institutions and makes recommendations to address them. These recommendations should be considered during project preparation and feasibility studies. The main Mission's findings and recommendations with respect to the overall program and its concepts, policies, institutions and management issues are summarized below.

- The Bank's policy encourages riparian countries to resolve their differences on water rights and water allocations through cooperation. While it stands ready to assist, if asked, the Bank will not interfere with the existing agreements on water rights.
- The Aral Sea Basin involves international issues. It is the Bank policy that all riparian countries should be kept informed of the proposed projects and activities concerning international waters. The Mission reiterates its recommendation that Afghanistan, a co-riparian, should be kept informed.
- The major issues in the Aral Sea Basin are comprehensive management of international waters and redressing the serious damage caused to the environment due to decades of neglect. The Heads of States decided to establish the water commission (ICWC) and the environment commission (ICSDESTC). The ICWC is operating effectively but the ICSDESTC has not been established yet although a major part of the basin's problems require management by this institution. The Mission recommends that ICSDESTC should be established without further delay. It hopes that the Interstate Council will be able to do this before the proposed donors meeting in early June 1994.
- The Executive Committee (EC) of the ICAS and the International Fund for Aral Sea (IFAS) are the key apex management organizations whose efficiency and performance determine the success of the Aral Sea Basin Program. It is a multi-sectoral, multicountry and one of the most complex and formidable programs in the world. The Mission has made a number of suggestions to help improve the management effectiveness of these two key apex institutions. They include:
 - (a) The need to have a full-time EC Chairman stationed at EC's headquarters.
 - (b) The tenure of the Chairman's position which is only one year, should be increased to at least 3 years to provide effective leadership, vision and drive to the organization and demonstrate accountability for the results.

- (c) The areas for coordination of the activities of EC and IFAS have been defined in their respective statutes approved by the Heads of States. But there is some confusion due to the lack of clarity on the extent of IFAS's involvement in procurement. The Mission has made certain suggestions to improve coordination and avoid possible jurisdictional conflicts. The Mission recommends that ICAS should give due consideration to these suggestions.
- (d) Both EC and IFAS need General Counsels to advise and ensure quality and precision in drafting interstate and international agreements, protocols, local and international contracts for implementing projects, statutes defining responsibilities of regional institutions, and standards established for controlling pollution and a host of other matters involving legal implications. The offices of the General Counsels should be established in the EC and IFAS early on in the process.
- (e) The EC needs a procurement unit to establish policies and procedures to be followed by the Project Implementation Units (PIUs), monitor and supervise procurement actions, deal with the international agencies and donors on the subject, and introduce competitive bidding to ensure economy and efficiency. The Bank's experience shows that the lack of adequate management of procurement is one of the major causes of delays in project implementation. The Mission recommends that the procurement unit be established in the EC early on in the process.
- The proposed Phase 1 Program is large. Because grant financing may be limited, a major part of the investment costs may have to be financed by loans and credits from the Bank and other sources. This factor should be considered in deciding the size of the Program. Moreover, differences and disputes on sharing the liabilities for loans and credits are inevitable. With the help of EC and IFAS, ICAS should establish the criteria and principles for cost-sharing as soon as possible. This is not only necessary to avoid delays in project financing but more importantly, it is essential to avoid disputes which may adversely affect regional cooperation.
 - The Phase 1 Program involves substantial local costs which require financing from the IFAS using funds proposed by the Basin States. The decisions of the Heads of States on the specified contributions from each state should be effectively implemented to ensure efficient implementation of the programs. The prevailing general impression of some officials that all local currency requirements would also be financed by grants and loans is not correct.

- In estimating salary costs of local staff, an average fee/salary of US\$400 per man/month has been assumed in the cost estimates. A policy decision by the ICAS on the salaries/emoluments of staff working for the Program is required for guidance in estimating local costs.
- The Mission recommends that the Executive Committee should not assume responsibility for operation and maintenance (O & M) cost of projects it finances and builds except for the facilities owned and operated by the regional organizations. Projects should be handed over to the concerned states and local authorities after completion.
- The tentative schedule for implementing the Program is tight. Without prompt decisions by the ICAS on the size of the program, project priorities, cost-sharing, strengthening the management of the apex institutions of EC and IFAS, and ensuring timely contributions by the States to IFAS, delays in program implementation will be inevitable.

2. The international community and the Bank will assist the EC and IFAS in managing the proposed program to the maximum extent possible. However, without the initiatives, timely decisions and effective actions by ICAS, EC and IFAS on a host of issues concerning formulation and implementation of the program, it will not be possible to achieve the program objectives successfully.



Aral Sea Program - Phase 1
Coordination of IFAS and EC Activities in
Planning and Implementing the Aral Sea Program

Introduction

1. The statutes of the International Fund for the Aral Sea (IFAS), the Interstate Council for Addressing the Aral Sea Crisis (ICAS) and the Executive Committee (EC) of ICAS approved by the Heads of States on March 26, 1993 and January 11, 1994 define the respective roles of these organizations. ICAS meets twice a year and EC is its operational organ which is responsible for recommending policies, preparing projects and implementing them. In brief, ICAS makes the decision, EC implements the approved programs and the IFAS provides the funds for implementing the programs. The objectives of EC and IFAS are the same. Their roles and functions are different, but they are complementary and essential for the success of the Aral Sea Program.

2. The international community and the Bank must be assured that the activities of EC and IFAS are closely coordinated. It is important, therefore, that the EC and IFAS fully understand their respective roles and avoid jurisdictional conflicts which cause delays and adversely affect the success of the Program.

3. This memorandum presents the Mission's understanding of the respective roles of EC and IFAS based on the statutes approved by the Heads of States. It is intended to seek clarification in view of the draft proposal by IFAS dated February 25, 1994 which caused some confusion with respect to the extent of IFAS' involvement in project implementation and procurement. Given its importance, this subject will be further reviewed to ensure close cooperation between the IFAS and EC and effective coordination of their activities.

Areas for Coordination and Joint Actions

4. The statutes of the EC clearly define EC's responsibilities to formulate policies, and prepare projects and programs and implement, supervise, and evaluate the performance of the Aral Sea Program as approved by ICAS. However, the statutes of the EC also define two additional responsibilities:

- (a) to prepare and select the projects and programs jointly with the Executive Directorate of the IFAS;
- (b) to coordinate international relations and participation of international organizations, foreign countries and donors on matters concerning solutions to the Aral Sea crisis and the execution of tasks as defined in the ICAS' decisions;

5. In the two areas outlined above, where IFAS also plays a role, the need for coordination is essential. In addition, IFAS has the important role of mobilizing financial contributions from member states in accordance with the Agreements approved by the Heads of States, securing financial support of international organizations and donors for funding the programs prepared by the EC, ensuring that the scope and size of the approved programs are consistent with the resources of the IFAS, and disbursing the expenditures of the approved programs efficiency without causing undue delays. All these activities require close and effective coordination between the EC and the IFAS.

6. The EC has identified 19 projects, including capacity building, to be included in the Phase 1 Program in consultation with the Bank Mission. Project briefs are being prepared for these projects by the EC teams with the assistance of the Bank Mission. The project brief of each project, defines cost for preparation/feasibility studies, proposes the methods for procurement and implementation, and proposes time schedule for completing the preparation work. It also indicates a rough estimate of the probable cost of completing the project when the funds for its implementation are secured.

7. The activities in the project cycles of each of the 19 projects involve several hundred decisions and actions concerning procurement of advisors and consultants; inviting bids and awarding contracts; addressing contractual disputes and claims; dealing with donors, international agencies and the Bank on issues concerning legal and project agreements; addressing interstate interests; reviewing and certifying expenditure statements and bills; and making payments on time. Obviously, both EC and the IFAS cannot be involved in all of these activities. There should be a clear delineation of their responsibilities and definition of those actions where their respective decisions are final and those where they need to act jointly. The following procedures would achieve the above objectives.

A. General Coordination and Respective Roles of EC and IFAS

(i) Activities Requiring Joint Actions:

According to the Regulations of EC and IFAS, the joint action of these two institutions is necessary in all stages of project processing and especially during the project selection and approval process. Based on the Regulations of the two institutions and the meetings, it is the missions' understanding that the coordination between EC and IFAS during the selection and approval of the projects will be as follows:

- EC would seek the agreement of IFAS on the list of projects to be prepared for seeking financial support before it submits this list to ICAS for approval.

- When the project preparation work is completed, EC should again seek the agreement of the IFAS before it invites the Bank to appraise the project.
- After the project is appraised, both IFAS and EC should participate in the negotiations in addition to the respective government authorities.
- When a project involves sharing of cost between the States, EC and the IFAS should provide the analytical basis to assist ICAS in resolving the cost allocation issue and seeking the agreement of the concerned States on their respective liabilities. It is the Bank mission's understanding that the local cost of the Projects will be financed by IFAS from 1% GDP contribution of the States.

It is the Bank mission's understanding that any conflict between IFAS and EC would be resolved by ICAS and the Board of Governors of IFAS.

(ii) Activities of EC

According to the Action Plan agreed by the ICAS on January 11, 1994, EC has the sole responsibility to plan and coordinate the activities and supervise the implementation of the projects. For this purpose, EC has been given the right to use the services of scientific, design and other kinds of organizations of the member States. Based on this decision and the Regulations that govern the functions of the EC, the activities for which EC is solely responsible can be summarized as follows:

- to prepare projects, feasibility studies, and research work of the quality and standards acceptable for international financing
- to implement and supervise projects efficiently
- to prepare and submit progress reports to IFAS and ICAS
- to procure works, goods and services in accordance with the agreed procedures
- to analyze bids for works and goods and award contracts
- to select and appoint advisors and consultants
- to keep proper accounts, have them audited, and supply reports as required
- to send copies of contracts for works, goods and services to IFAS

(iii) Activities of IFAS

IFAS is not a bank that lends money to EC. It is an institution for channelling the financial resources provided by the States and the international agencies to the EC for implementing the projects approved by the ICAS. IFAS' involvement in EC's activities mentioned in paragraph 7(ii), therefore, appears not only unnecessary but may dilute the responsibility of the EC and cause delays. Its agreement on the activities mentioned in paragraph 7(i) is intended to keep it informed of the proposed scope and financial implications of the projects and programs and to examine whether their financial requirements could be met from the resources of the IFAS. It is not intended to seek IFAS' approval of the need of the proposed projects because the approving authority is the ICAS. If the above understanding of the intent of joint actions outlined in paragraph 7(a) is correct, then IFAS' involvement in procurement of works, goods and services appears unnecessary.

B. Respective Roles of EC and IFAS Under Bank Projects

(i) Grant Funds

Granting a Project Preparation Advance from the Global Environmental Trust Fund for the preparation of the Water Resources Basin and Environmental Management Project is under consideration. If approved, these grant funds will be channelled through IFAS. Therefore, a Letter of Agreement would be signed between the Bank as the Trustee of the Global Environmental Trust Fund and IFAS. As the project preparation activities financed under the Grant would be implemented by EC, a separate project execution agreement would be signed between the Bank and EC. This agreement would specify the obligations of EC to implement the project preparation activities and to undertake the procurement of works, goods and services necessary for the execution of the grant. A Subsidiary Grant Agreement between EC and IFAS would specify the channeling of the grant funds from IFAS to EC for the implementation of the activities.

(ii) Bank Loans/Credits

The Bank's financing of the projects under the Aral Sea Program would be finalized after the donors' meeting and after the decision of ICAS. Bank's lending would be in accordance with the Bank's standard policies, practices and procedures and the needs presented by the specific projects. Although it is the intention of the Bank to enter into separate loan/credit agreements with individual States, the operations of the regional institutions created by the States would be taken into consideration.