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**Aral Sea Basin Program
Phase 1**

Progress Report No. 3

February 1996

The World Bank

**Aral Sea Basin Unit
Country Department 3
Europe and Central Asia Region**

822-USSR-AS96-15231

ABBREVIATIONS

ASBPU	Aral Sea Basin Program Unit
BVOs	River Commissions (of Amu and Syr Darya)
EC	Executive Committee of the ICAS
EU	European Union
GFF	Global Environment Facility
ICAS	Interstate Council for the Aral Sea
ICSDSTEC	Interstate Commission for Socioeconomic Development and Scientific, Technical and Ecological Cooperation
ICWC	Interstate Commission for Water Coordination
IFAS	International Fund for the Aral Sea
JICA	Japan International Cooperation Agency
KFAED	Kuwait Fund for Arab Economic Development
NGO	Non-Governmental Organization
NL	Netherlands
OSCE	Organization for Security and Cooperation in Europe
PG	Program Group
PHRD	Japan Population and Human Resources Development with the World Bank
SDC	Sustainable Development Commission (formerly ICSDSTEC)
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Education, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WG	Working Group
WHO	World Health Organization

ARAL SEA BASIN PROGRAM

PHASE 1

PROGRESS REPORT NO. 3

**Europe and Central Asia Region
Country Department 3
Aral Basin Unit
The World Bank, Washington, D.C.**

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Executive Summary

1. Following the independence of Aral Sea Basin states, the five republics -- Kazakstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan -- requested assistance from the international community in addressing the Aral Sea Basin crisis. In January 1994, the five Heads of State approved a Program and in June 1994 in Paris, the donor and NGO community pledged to support the preparatory stage of the Program.

2. The purpose of this report is to inform the donors of the progress of the implementation of Phase 1, with the focus on developments since the second Progress Report prepared in September 1995. The report should be read in conjunction with the forthcoming Briefing Paper, which deals with future issues affecting the Program.

Institutional Aspects

3. The regional institutions continue to increase in capability, though the overall pace of capacity development has been slow. The Heads of State convened last March in Dashkhovuz, Turkmenistan, to discuss issues pertaining to the implementation of the Aral Sea Program. At the meeting, the leaders again confirmed their commitment to the united approach necessary for securing international support for the Program. At the UN Conference in Nukus in September, the leaders met for a fourth time and signed the Nukus Declaration (President of Turkmenistan was absent but signed later), renewing their commitment to the Program on all levels, from sustainable development to institutional development to the upholding of international agreements.

4. The Interstate Council of the Aral Sea (ICAS) postponed its November meeting to take place in March, and is expected to address pending issues such as the appointment of a permanent chairman of the Executive Committee (EC) and the status of the regional institutions. The apex institutions, the EC and IFAS, continue to take on more responsibility, yet they remain in need of considerable support to ensure their successful sustainability.

Donor Support

5. The preparation of Phase 1, then estimated to cost \$41 million, was launched with commitments of \$31 million announced at the June 1994 Donors Meeting. As a precursor to a second donors' meeting, a technical meeting, to provide a forum for discussion among local and foreign technical specialists will be held in March. The second formal Donors Meeting will be held in spring/early summer to report to the donors on the progress of the implementation of Phase 1 and to discuss the prospects and requirements for the investment stage of the Program.

6. It has been estimated by the Regional authorities and the World Bank that the implementation of the planned projects will cost about US\$ 470 million over the next three to

four years. The Bank is reviewing an initial group of five lending operations, three of which will focus on the provision of drinking water for the population in the disaster zone.

7. Members of the Aral Sea Basin Program team have met regularly with representatives each of UNDP, UNEP, USAID, the EU, and less frequently with other donors to share project reports and updates, and to ensure closer coordination and planning. A local donor group has met several times in Tashkent. Such meetings will continue.

Progress of Program Implementation

8. With the increasing capacity of the regional institutions and funding mechanisms in place, the Program as a whole is advancing steadily. Annex 5 shows that most of the projects will be prepared this calendar year. Of notable importance is the Regional Water Resources Management Strategy, for which the preparation report will be completed and available in early March. Furthermore, two of the three water supply projects --Kazakstan and Turkmenistan-- will be ready for appraisal by Fall 1996, while the third, in Uzbekistan, will be ready by February 1997.

Aral Sea Basin Program - Phase 1 Progress Report No. 3

Background

1. Following the independence of Aral Sea Basin states, the five republics -- Kazakstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan -- requested assistance from the international community in addressing the Aral Sea Basin crisis. In January 1994, the five Heads of State approved a Program and in June 1994 in Paris, the donor and NGO community pledged to support the preparatory stage of the Program.

2. 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. The Program adopted a three-phased approach, and is currently in its first Phase, which is estimated to cost \$ 470 million. Phase 2 is expected to begin after three or four years and is likely to focus on implementing actions agreed under the Regional Water Resources Management Strategy (Project 1.1) and include inter alia further investments in irrigation and drainage facilities, drinking water supply, and the stabilization of the upper watersheds. Phase 3 will expand and continue the Program through the year 2015.

3. The purpose of this report is to inform the donors of the progress of the implementation of Phase 1, with the focus on developments since the second Progress Report prepared in September 1995. Each section of the report -- Institutional Aspects, Status of Donor Support, and Status of Program Implementation -- provides a background and current status segment, and highlights the next steps. The report should be read in conjunction with the forthcoming **Briefing Paper**, which deals with future issues affecting the Program.

Institutional Aspects

Background

4. The cornerstones of the Program are the regional institutions established by the Heads of State: the Interstate Council for the Aral Sea (ICAS); the Executive Committee (EC) of the ICAS; and, the International Fund for the Aral Sea (IFAS) (Chart 1). Whereas the ICAS is a body of 25 high level representatives from the five states that meets to review policy issues, the ICAS Executive Committee (EC) serves as the key organization for developing and implementing policies and programs. Under its Charter, the EC has the status of a sovereign government with full powers to plan and implement projects approved by ICAS (see, however, para. 13).

5. The IFAS has been established to aid in financing the Aral Sea Program. The Fund is intended to channel financing from the five basin countries, as well as the from donors, to the Program. In addition to the above apex institutions, there is an Interstate Commission for Water Coordination (ICWC), consisting of the Water Resources Ministers of the five states, and its two River Commissions (BVOs), one for the Syr Darya and the other for the Amu Darya. The BVOs, which implement the interstate water allocation agreements for the Syr Darya and the Amu Darya rivers and the Aral Sea, are older institutions under the Basin's regional infrastructure, pre-dating the dissolution of the Soviet Union. The ICWC was established in 1992.

6. An Interstate Commission for Socioeconomic Development and Scientific, Technical and Ecological Cooperation (ICSDESTEC), also formerly known as the "Ecology Commission," now is called the Sustainable Development Commission (SDC). This organization has been established based on the recognition of the need to give equal emphasis to economic, social and environmental factors as to technical issues in the future development of the basin. SDC has fifteen members, comprising three representatives from each state.

Status

7. The five Heads of State convened last March in Dashkhovuz, Turkmenistan, to discuss issues pertaining to the implementation of the Aral Sea Program. At the meeting, the leaders confirmed their commitment to the united approach necessary for securing international support for the Program. They also agreed to appoint an EC Board, consisting of one representative from each state, and again expressed their overall continued support for the Program. They set a deadline for all countries to contribute to IFAS, which was met when Tajikistan released its initial contributions in September. At the UN Conference in Nukus in September, the leaders met for a fourth time and signed the Nukus Declaration (President of Turkmenistan was absent but signed later), renewing their commitment to the Program. The

Declaration puts forth a commitment to wide-ranging issues, from sustainable development to international agreements, with specific reference to institutional development. In this vein, the leaders affirmed their belief in the regional organizations and their commitment to provide support to "strengthen and empower" them. A copy of the Declaration is attached under Annex 6. It is expected that the next ICAS meeting will take follow-up actions in these areas.

8. The last meeting of ICAS was in July 1994. The institution had planned to meet in November 1995 however, the meeting has been postponed to March 1996. This meeting is expected to take concrete steps to implement the decisions of the Heads of State.

9. In 1995, the Interstate Commission for Water Cooperation (ICWC) successfully participated in the establishment of new water allocations for and the strengthening of the recent agreement between the Kyrgyz Republic, Kazakstan, and Uzbekistan for the former to increase releases from the Toktagul Reservoir in exchange for increased deliveries of gas from Uzbekistan and coal from Kazakstan this winter. The five water ministers visited Brussels in November on the invitation of the European Union. They visited the Commission, met with officials from EU TACIS, and went on a study tour to Italy and Germany. The trip resulted in a reaffirmation of the EU's support to the ICWC under Project WARMAP; a commitment by the Ministers to directly participate in the coordination of WARMAP activities; and a request by the Ministers for increased support for MIS capabilities and pilot projects in water use technology for irrigated agriculture.

10. The EC and IFAS have continued to increase their involvement in project management, through both increased desire and capability. A detailed update on the progress in their institutional development is found under paras. 73 and 74.

11. The SDC plans to begin drafting a work program with the assistance of the UNDP Environmental Expert in Turkmenistan. Once the institution's plans are outlined, the members will convene their next formal meeting.

12. With regard to the Program Groups, which are seen as the technical arms of the EC, after some initial success, some groups appear to have lost some momentum. Program Groups 1 and 3 are functioning well, while the rest are not fully operational, as a result of differing views on their role, as well as logistical difficulties in convening meetings and making payments. A Bank mission now in the field is reviewing options with the EC.

Issues and Next Steps

13. The March meeting of ICAS is considering the following four fundamental issues affecting the functioning of the interstate organizations:

- full recognition of the interstate status of EC and IFAS, allowing them to make payments in all regional and international currencies, to establish salaries commensurate with UN scales, and giving diplomatic status to their senior staff;

- appointment of a full-time Chairman for the EC, to be stationed in Tashkent for a term of at least three years; and,
- collection of IFAS full assessments from all states and clarification of IFAS' future role in project financing.

In addition, for the medium-term, the following issue will be of increasing importance: clarification and harmonization of the mandates of the interstate organizations to remove sources of conflict, provide an efficient decision-making structure and to lessen the need for the Heads of State to take decisions on minor procedural matters. Legal assistance on this question is provided in the WARMAP Project (para. 23).

14. It would be appropriate for the donors to review progress in the above areas at the next donors' meeting.

Donor Support

Background

15. The preparation of Phase 1, then estimated to cost \$41 million¹, was launched with commitments of \$31 million² announced at the June 1994 Donors Meeting. As a precursor to a second donors' meeting, a technical meeting, to provide a forum for discussion among local and foreign technical specialists will be held in March. The second formal Donors Meeting will be held in spring/early summer to report to the donors on the progress of the implementation of Phase 1 and to discuss the prospects and requirements for the investment stage of the Program.

16. Members of the Aral Sea Basin Program team have met regularly with representatives each of UNDP, UNEP, USAID, the EU, and less frequently with other donors to share project reports and updates, and to ensure closer coordination and planning. A local donor group has met several times in Tashkent. Such meetings will continue.

Status

17. An updated matrix representing the status of donor support to each project is attached under Annex 2. This matrix summarizes the revised and updated scope of activities under the preparation stage of Phase 1, which result from revisions made during the course of implementation of the activities.

18. It has been estimated by the Regional authorities and the World Bank that the implementation of the planned projects will cost about US\$ 470 million over the next three to four years. The Bank is reviewing an initial group of five lending operations, three of which will focus on the provision of drinking water for the population in the disaster zone, the other two being the Uzbekistan Drainage project (3.2) and the Syr Darya Project (4.4)³. Loan amounts are presently under review but are likely to total about \$ 285 million. While a large number of donor governments and agencies have already indicated an interest in financing parts of the Program, the participation of additional donors will be desirable to complete the financing requirements of Phase 1 at both the preparation and implementation stages - a major subject for the forthcoming donor meeting.

19. The Aral Sea Basin Program Unit (ASBPU) at World Bank headquarters (with three professional staff plus a network of Task Managers throughout the Bank) in Washington continues to serve as a coordinating unit among the donor community and to act as a focal point for dialogue

¹ With recent restructuring of some projects, the total cost is now estimated at \$ 27 million (Annex 2).

² The \$ 31 million in commitments includes \$7 million made by USAID in Paris which is not figured in to the estimated cost of Phase 1. Of the \$ 31 million, \$ 2 million is being allocated to the investment stage.

³ Initially it was thought that the Northern Aral Sea Project (4.2) would be the first project in the Syr Darya Basin. The pre-feasibility study for Project 4.4 has caused some revision of priorities (paras. 59 and 61).

between the World Bank, UNDP and UNEP. The Bank's Resident Mission in Tashkent has also been greatly strengthened with the appointment of a Senior Operations Officer, a Dutch-seconded Water Resources Specialist and two experienced local professionals.

20. In a January meeting with UNDP and Bank staff, an agreement was included to closely analyze overall capacity-building efforts and to take steps to ensure that there is appropriate coverage of support to the different institutions.

Multilateral Donors

21. EU's WARMAP Project held a one-day meeting in September in Tashkent to mark the completion of Phase 1. The objective of the meeting was to inform donors (existing and potential), local experts and representatives from cooperating institutions in the five republics, the media and other concerned parties, of the progress in the WARMAP Project during Phase 1 and the activities planned for Phase 2. The meeting was very well attended and generated a good deal of interest in the project.

22. The EU legal advisory team for WARMAP Subproject 1, which aims at strengthening the EC-ICAS and cooperating institutions, conducted legal training for local experts from October to the beginning of December. The training curriculum primarily consisted of: water law and administration, and a review and analysis of the international legal and institutional framework in the Aral Sea basin. In practice, the training included: lectures on selected topics, discussions among the participants and the EU legal experts; specific studies made by the participants in the training; and simulation exercises.

23. A workshop on legal and institutional aspects was held in Tashkent in December, which was attended by representatives of EC-ICAS, the five Central Asian Republics, ICWC and the World Bank Regional Office in Tashkent. A general agreement was reached on the work plan which will be implemented during Phase 2 of the WARMAP Project including: improvement and harmonization of the statutes of the main interstate organizations; and preparation of agreements concerning the use and protection of the water resources in the Aral Sea basin.

24. A study tour to Europe was arranged as part of the WARMAP Project training program (para. 9). Additionally, the core of a communication network was established through the supply of communication equipment to the water planning institutes of the five republics, to the BVOs and SIC-ICWC. These nodes are now linked with the EC-ICAS and the WARMAP Project office, although the quality of telecommunication is still poor in certain cases. During the set-up and testing operations priority problems have been identified which are now under consideration.

25. Subproject 2, Formulation and Analysis of Regional Strategies on Land and Water Resources, has as a principle component WARMIS, the management information system for water and land resources for the Aral Sea Basin. While Project WARMAP focuses on establishing a water information system, a project to address the environmental information needs is also being developed (para. 53). Stage 1 of the database was prepared during WARMAP phase 1 to provide an overview of the distribution of resources and their use. Stage 1 also instigated the procedures for discussion and

co-operation between national water resource planners and specialists from the five republics, and the regional team. Stage 2 of WARMIS will be the regional database to be accessed by all types of planning programs for the basin. Information will be brought together in a common format within a database with an interactive GIS interface. The database will be available on nodes of the WARMAP MIS in national and regional institutions. The conceptual design of WARMIS was agreed at the first design workshop (4-6 December, 1995), and the design is now being developed co-operatively through design assignments by national and regional working groups, and regular workshops, at which all groups meet. Separate meetings of computer specialists are simultaneously developing the technical design. Data will be input by each republic to the common database, and will be transmitted to and from each node through the WARMAP MIS.

26. Under Subproject 4, Irrigated Crop Production Systems, following submission of the Project Preparation Report at the end of Phase 1, two of the three proposals for Phase 2 activities have been accepted for financing under the WARMAP Project. These are: the Water Use and Farm Management Monitoring Survey (WUFMAS); and a study on New Irrigation Systems for Field Crops. Work has started on WUFMAS with the selection of a number of farms in each republic for field studies. A questionnaire to gather background information has been sent out to the farms by locally recruited enumerators and equipment procurement for the field work is now underway, locally and in the EU.

27. In addition to these activities already planned for the second phase of the project, the WARMAP team of experts are working in close cooperation with the local experts and the World Bank for the development of a new TOR for pilot projects in the region. The EU is ready to support such initiative with additional funds from the TACIS Program.

28. UNICEF recently launched the Aral Sea Project for Environmental and Regional Assistance (ASPERA) in the disaster zones of Kazakstan, Uzbekistan and Turkmenistan. Each project is valued at about \$ 3 million and includes components in health, nutrition, health education, water and environmental sanitation, and support to NGOs. The ASPERA will thus provide important support to Projects 5.1, 5.2, and 5.3, and to the proposed Immediate Impact Project. UNICEF designed the Program in collaboration with the national Governments; local authorities; local NGOs, scientists, medical workers and teachers; as well as international donor governments and agencies. Through this collaboration, the participants produced a detailed assessment of the situation of women and children and helped to identify the priority activities. Under the leadership of the Deputy Prime Ministers, coordination committees have been created for the implementation of ASPERA activities. UNICEF plans to develop modalities of collaboration with the World Bank, UNDP and UNEP and to continue working alongside bilateral donors and other international organizations to ensure continued international support for the planned activities. Furthermore, UNICEF plans to utilize its field offices in each of the three regions, and would welcome the presence and participation of other donors willing to cooperate on socially-oriented projects.

29. The focus of UNDP's Capacity Development Program (Project 8.3) includes capacity-building support for the regional and national institutions and NGOs, as well as support on the technical side in the form of training and workshops. UNDP has appointed a Chief Technical

Advisor and an Institutional Development Specialist, both of whom will be based in Tashkent, as well Environmental Experts who are located in all the countries with the exception of Tajikistan.

30. At the initiative of the UNDP Country Office in Uzbekistan and partially sponsored by UNDP's Capacity Building Program, a Conference on the Aral Sea Basin was held in Nukus in September. The primary goal was to generate international awareness of and commitment to the Aral Sea crisis and to further improve the sustainable development of the region. More than 200 national and international participants were invited to discuss the problems and ongoing activities which have been established to deal with the crisis. Through the adoption of the text of the Nukus Declaration (Annex 6) the five Heads of State showed renewed political commitment to addressing the problems and the strengthening of the regional institutions.

31. UNDP has recently sponsored several workshops and training programs. Subsequent to the workshop on Water Modeling held in August 1995 in Tashkent, UNDP and the Dutch Institute for Infrastructure, Hydraulics and Environment (IHE), jointly organized a workshop on Environmental Impact Assessment and Environmental Guidelines, which was held in November in the Kyrgyz Republic. The latter was attended by members of different Working Groups and members of the Sustainable Development Commission (SDC). Presentations were given on multilateral activities in the region, Environmental Impact Assessment and GIS techniques. IHE also worked with UNDP in developing an outline for an International Training Network pilot phase to include a participation component, which would form part of UNDP's strategy to improve the management of the utilities for drinking water and sanitation.

32. A workshop on Integrated Pest and Pesticides Management was held in October in the Kyrgyz Republic, in cooperation with FAO and the UNDP Country Office. The workshop produced a two-level strategy which conforms to Project 3.1b. The strategy is being formulated into a project proposal and will be submitted to the donor community. A program has been developed for Pesticide Management in the FAO member countries (Tajikistan, Kyrgyz Republic, and Turkmenistan). Additionally, a proposal for the improvement and harmonization of pesticide legislation might be considered.

33. UNDP is preparing an English language training proposal for the Central Asian countries. Also in regard to communication issues, a project is currently being developed to analyze the basic infrastructure and needs and create an information network for the Aral Sea Basin States, a proposal first put forth by UNESCO.

34. In view of the importance of social and environmental aspects of the issues in the Aral Basin, UNDP has continued to be active in strengthening the capacity of the Sustainable Development Commission (formerly the Ecology Commission). UNDP will offer the services of the Environmental Expert based in Ashgabad to assist the Commission in drafting its workplan, and also will support the Commission's third meeting in Bishkek in the spring.

35. Subsequent to an August visit to Kazakstan, Uzbekistan and Turkmenistan, an assessment has been made regarding the national and regional institutional capacity in land-

desertification issues and a project is being developed targeting the appropriate areas of assistance. This activity will be included as part of a proposed GEF Project.

36. With regard to health issues, WHO prepared two proposals to be further developed into a health strategy: a capacity-building for laboratory quality management and interlaboratory comparison in water quality laboratories; and a capacity-building in environmental health impact assessment with a component examining the health situation in the disaster zone.

37. NOVIB, with the support of UNDP, is organizing two seminars to identify new partner organizations; to assess their existing capacity; and to work on new strategies for NGO involvement. This effort will be followed by pilot studies. Additionally, NOVIB will provide an individual to serve half-time as a focal point for local NGOs working in Tashkent.

38. UNEP has reconfirmed its commitment to conduct a biodiversity assessment under Project 4.3, to be undertaken in Uzbekistan, Turkmenistan, Kyrgyz Republic and Tajikistan, complementary to UNDP's assessment in Kazakstan. UNEP also is preparing a proposal for identification and assessment of environmental "hot spots" in the Aral Sea Basin. Within the context of this latter assessment, UNEP also will be re-evaluating the Aral Sea proposed work program, with the goal of determining the extent to which the environmental problems identified in UNEP's original Diagnostic Study are being addressed. Finally, UNEP is forming an in-house team to prepare a proposal for integrated management of the upper watersheds, within the framework of Program 6.

Bilateral Donors

39. The United States continues to be active in supporting activities under the Program, which are aimed primarily in the water and sanitation sectors with some activities addressing environmental health and regional cooperation in water management. The workplans for continuing activities are in the final stages of development. These activities are projected to be completed by January 1997. A workshop was held on water pricing in Bishkek in November, which led to the identification of follow-up actions including analyses of country-specific experiences and the establishment of a water pricing committee to carry out the activities.

40. In Turkmenistan, full-scale start-up of the potable water treatment, packaging and dispensing system began in January, with an operation and maintenance manual available for use in training. In Uzbekistan, installation of chlorinating equipment was completed at two water treatment plants, with further equipment being proposed for later this year. In addition, a draft scope of work was developed for a proposed risk assessment to determine if exposure levels from contaminants such as pesticides and metals in the raw water are great enough to justify adding advanced treatment processes at the water treatment plants. In Kazakstan, consultants completed the installation of chlorinating equipment at eight pump stations. In the coming months, seminars and workshops are planned on topics pertaining to regional cooperation in water management along with applied research and partnership arrangements on these subjects. Wellfield and transmission system improvements and public health education and sanitation activities are planned for Kazakstan. Water treatment plant operator training, development of a water distribution plan, public health education, and sanitation activities are planned for Turkmenistan. Continued technical assistance in water

treatment plant operation, transmission system improvements, water quality monitoring, public health education, and sanitation activities are planned for Uzbekistan. Details on all these activities are being finalized.

41. USAID environmental health activities in the Aral Sea region have included a workshop on "Pesticides--The Environment--and Human Health" held in Tashkent, Uzbekistan, October 30 - November 3, 1995. The objectives were first, to strengthen the capacity of the relevant institutions in Uzbekistan responsible for environmental exposure assessment and human health surveillance to contribute to the pesticide regulatory process; and second, to promote a rational balance between agriculture and health protection by developing draft recommendations for regulatory reform. Seven policy reform measures were outlined by the participants (scientists, physicians and researchers), who were drawn from the government and the private sector. Technical assistance was provided by the Office of Health and Nutrition's Environmental Health Project (EHP).

42. The Netherlands continues to play a critical role in support of Programs 1, 3, 4, 5 and 8 through a trust fund with the Bank and UNDP. These activities are reported in the appropriate sections.

Next Steps

43. The next Donors' Meeting is expected to take place in late spring/early summer. The agenda will include discussion of the status of the preparatory stage for Phase 1, the funding needs for the completion of project preparation, and the prospects and requirements for the investment stage. A full Briefing Paper on these issues is under preparation. An additional matrix, attached as Annex 3, indicates the probable cost of implementation of the investment stage of the Program.

Progress of Program Implementation

Background

44. With the increasing capacity of the regional institutions and funding mechanisms in place, the Program as a whole is advancing steadily. Annex 5 shows that most of the projects will be prepared this calendar year. Of notable importance is the Regional Water Resources Management Strategy, for which the preparation report will be completed and available in early March.

Status

45. **Project 1.1, Regional Water Resources Management Strategy**, forms the centerpiece of the whole Aral Sea Basin Program. With GEF support, the Program Group and its associated five national and five regional (thematic) working groups finalized the preparatory stage by submitting in January 1996 to the EC five national reports and a summary regional report (in Russian). The English translation of all six reports and their synthesis, specially prepared for review by the donors, will be available in February 1996. This work was assisted by World Bank specialists and consultants, with the help of training under UNDP and USAID funding and close cooperation with Project WARMAP. Before the project enters its next stage, a process will be developed to involve stakeholders and all potential future contributors in the evaluation of work already completed.

46. The national reports "Basic Provisions for Development of a National Water Management Strategy" have been prepared in recognition that each state is sovereign and will evaluate regional water strategy in the light of its own interests and priorities. The reports identify key national water-related strategic issues and summarize national positions concerning regional strategy. The summary report "Basic Provisions for Development of a Regional Water Management Strategy in the Aral Sea Basin" reviews each country's perspective on the national and regional issues, identifies differences and similarities, and presents a program for the next stage of work. The strategy will seek to expand the "win-win" space in the riparian states and in the region. The process of bringing national and regional goals closer together has been initiated by region-wide circulation and review of the reports completed in the preparatory stage.

47. In the next stage, central to the strategy development process will be consideration of ways to improve water use efficiency, especially in agriculture and recommendations on ways in which the water saved could be beneficially used, whether for economic or environmental purposes. Water quality needs being addressed under Project 3.1 will be managed simultaneously with quantity. Development of legal instruments and institutions at the regional and national levels will be important inputs. Economic instruments, which played little role in the past, will be extensively investigated and pricing of water and

mechanisms for financing investments developed. Different criteria and procedures will be investigated for sharing transnational water resources, with their quantity, quality and variability taken into account. Close cooperation will be maintained with the WARMAP project, UNDP, UNEP, USAID and programs supported by other agencies.

48. The modalities for grant funding by the Swedish Government for **Project 1.2, Improving the Efficiency and Operations of Dams**, have been agreed and consultants have been selected. However, the EC has proposed that a new Steering Group be established between the Water and Energy Ministries of the states concerned. When this is done a meeting of the Steering Groups will be held with consultant participants to finalize the project's Terms of Reference; draft working-group task assignments and prepare a project budget. This Project is of critical importance to all states as it will be the initial step in evaluating water allocation scenarios. Each state will have its unique viewpoint and objectives. Separate studies will be undertaken in each of the two major river basins in the region. A completed report on the preparation phase, containing a detailed work plan for the implementation phase, is expected in June.

49. **Project 1.3, the Sustainability of Dams and Reservoirs**, focuses on dam safety and lake and reservoir sedimentation. A related study on **River Stability**, addressing the erosion and sedimentation of major rivers, streams and canals, has been given its own identity as Program 1.4. Funding for 1.3 was recently made available by Sweden and consultants selected. A Working Group will now be established and will conduct its first joint meeting with their report targeted for June.

50. **Program 2** now has two activities - Project 2.1 on Hydrometeorological Services, and Project 2.2 on Regional Environmental Systems. A Project 2.3 on Geographical Information Systems is proposed as an enhancement activity. Project 2.1 is making good progress, Project 2.2 description is being reformulated to make it more attractive for donor funding, and Project 2.3 is in the process of being prepared.

51. With regard to **Project 2.1**, the UK has now delivered and installed Low Resolution Remote Sensing Technology (LARST) and digitizing equipment at the Tashkent Hydrometeorological Service (Hydromet). This equipment will assist the other Hydromets with the measurement of snow fields for estimating annual freshwater availability. The Hydromets of Turkmenistan, Kazakstan, the Kyrgyz Republic and Tajikistan have been supplied with digitizing equipment as well, and the LARST is intended to transmit images directly from Tashkent to them electronically. The Project has also provided training for the Hydromet staff from all five countries in the use of the new technologies.

52. The UK has sent hydrological experts to the Hydromets to determine the degree of assistance which will be required to improve the historical data bases in preparation for the installation of new software. Additionally, the UK offer of an English Language Training course for scientific communication has been accepted by the EC, and arrangements for implementation are under discussion. As a result of the August Mission to Central Asia, Swiss

funding for Project 2.1 has been agreed and steps have been taken to send a long-term consultant to Tashkent for about 9 months as project manager for the preparation of the general hydrometeorological pre-investment study. The Terms of Reference for this work have taken into consideration the work already executed and programmed by the UK and the EU's WARMAP. It is expected that one or two priority projects will be ready for implementation by the end of 1996.

53. Following the difficulty in obtaining funding for Project 2.2, the EC reformulated the project description to make it more attractive to the international donor community. This was completed in the Fall. The resulting project description is now very clear and well presented. However, in order to maintain the spirit of the Nukus Declaration, which stipulates that water and environment information sharing is a prerequisite to economic recovery and the sustainable development of the region, the project outline still needs to be updated to reflect the comments of the State Committees and Ministries of the Environment. It is expected that this coordinating exercise will be completed shortly. As soon as it is ready it will be distributed to the donor community. The water information system component is well advanced through the WARMIS project (para. 25) but the environmental system component has not yet begun and therefore will require concentrated effort from donors to accelerate its implementation. The resulting water and environmental databases will comprise two integrated sub-bases thus allowing both sets of data to be accessed by all authorized users. The cost of the preparation stage is still estimated at \$250,000.

54. **Program 3** is responsible for analyzing the water quality and developing a regional water quality management plan for the entire Aral Sea Basin. Because of its size and complexity, this task was separated into two projects: non-agricultural (3.1a) and agricultural (3.1b), which are separately funded but cooperatively managed.

55. **Project 3.1a**, funded by the GEF, has been organized into a country team in each state, contracted to deliver an assessment of its water quality and related institutions, with recommendations on priorities and implementation tasks. Their initial draft reports are scheduled for this month. A separate drafting team is responsible for merging the five assessments and the agricultural quality products from Project 3.1b into a single report outlining conditions, priorities and next steps from the regional and international perspectives. The final regional report is anticipated to be available by June 1996. Consultants from the Tennessee Valley Authority, USA, are providing assistance.

56. Under **Program 3.1b, Agriculture Water Quality Improvement**, a contract financed by the Netherlands for preparing the program for agricultural water quality improvement was signed with the International Institute for Land Reclamation and Improvement (ILRI). An Inception Report has been prepared and a Midterm Report is under preparation and expected to be completed by the end of February. These reports are being prepared with significant inputs by the local technical staff in the Central Asian countries. The Final Report is expected by the end of March. The report will specify potential investments to be made over a three year period and will include pilot projects and studies. Pilot projects will be coordinated

with the special Pilot Project Program being initiated. Efforts will be made to develop appropriate on-farm control, treatment and disposal methods to improve environmental conditions in the Basin.

57. Consultants have been invited to prepare proposals for **Project 3.2, the Uzbekistan Drainage Project**. This activity has experienced delays due to some administrative problems. The studies will include an environmental component supported by the Netherlands, and a technical assessment supported by Japan. In the first phase of the work, all potential means of reducing salt inflows to and outflows from irrigated lands and managing drainage water at the farm and regional level will be reviewed. The most feasible options will be selected in the second phase, while the third phase would constitute a feasibility study for the most promising option for a first project. A Steering Committee, chaired by the Water Minister, has been formed to oversee the work. This project has been included in the World Bank's lending program.

58. **Program 4** deals with environmental issues, especially those in and around the Aral Sea itself. Program Group 4 consists of nine members, three from each affected country, Kazakstan, Turkmenistan, and Uzbekistan, with a rotating chairmanship. With support from the Netherlands, preparation of **Project 4.1, Wetlands Restoration**, is nearing completion. The consultants have submitted their draft final report which consists of two main reports, one proposing a strategy for further development of wetlands in the Amu Darya delta, and one for a Pilot Project, together with eight supporting documents. The draft reports were presented at a workshop in Tashkent on January 30 and in Nukus a week later. Progress was made in reconciling the existing designs and ideas of the design institutes in Tashkent with the approach as proposed by the consultants. This may stem in part from the fact that the initiative and involvement focuses on Karakalpakstan, where there seems to be much more support for the present plans.

59. With regard to **Project 4.2, Restoration of the Northern Part of the Aral Sea**, as reported earlier, the feasibility of creating a freshwater lake in the Northern Aral depends critically on the availability of water in the Syr Darya - the subject of Project 4.4. As reported below, the pre-feasibility study for 4.4 recommends inclusion of the northern sea dike in the Syr Darya investment project (but in later years). A Bank mission in April-May will review the appropriate sequencing of investments and the best uses of the funds allocated to Project 4.2.

60. Under **Project 4.3, Environmental Studies**, experts in Central Asia have drafted TORs on basinwide biodiversity assessment, climate change and salt/dust storms and limnology of the Aral Sea. For climate change and limnology, the UK Know How Fund will shortly send technical experts to finalize the TORs with the local experts. On the salt and dust study, Delft Hydraulics Institute is preparing a proposal for possible Netherlands support. UNEP has reaffirmed its commitment to undertaking a comprehensive biodiversity assessment. As it will be undertaken within the context of country programs within the GEF, the preparatory activities are well underway, and it is anticipated that they will be completed within the next several months.

61. The draft Final Report for **Project 4.4, Syr Darya Control and Delta Development Project** has been completed with the support of Italy (Electroconsult/Italconsult). The report presents a reconnaissance study for a 15-year development program that would involve the following activities: (i) hydraulic works in the Syr Darya basin in Kazakstan between Chardara dam and the delta, including but not limited to modifications to the Chardara dam to avoid spills to the Arnasai depression and increase the Syr Darya flow; rehabilitation of the irrigation and drainage infrastructure (including on-farm works) to conserve water; construction of new bridges to increase the carrying capacity of the Syr Darya; and construction of dikes for flood protection; and (ii) in the delta, improving the major hydraulic infrastructure and the environment; other measures to benefit the population and the environment are proposed as well.

The water savings under (i) may be sufficient to undertake not only the improvements under (ii) but also to create a Small (Northern) Aral Sea. Total cost of these investments has been estimated at about US\$ 535 million, including the costs for the dike needed to establish the Small Aral Sea. An amount of about US\$ 20 million would eventually be required for complementary studies and investigations. Follow-up discussions are being scheduled in April-May with the Government of Kazakstan on the phasing of the program and the requirements for further project preparation.

62. Under **Project 5.1, Uzbekistan Water Supply**, the feasibility consultants Binnie and Partners (UK) have produced their Inception Report after one and a half months in the field and have agreed to work plans and schedules with local Uzbekistan consultants and institutes for tasks to be completed under the feasibility study. A Project Implementation Unit has been set up under Goskomprognostat in Tashkent with full time staff as well as computing and office equipment. A regional PIU Manager has also been hired for the Nukus PIU office which will be jointly operated with the EC. Helvitas/Swiss Red Cross/SKAT have negotiated a contract with Goskomprognostat for the Community Based Sanitation, Health and Hygiene Pilot Projects in Karakalpakstan and Khorezm Oblast and will begin implementation of these pilot projects by the end of February 1996. KfW have approved funding of 1.5 million DM for several community-based water supply and distribution pilot projects in the project area and it is anticipated that their consultants will begin implementation of these pilot projects in March 1996.

63. Several social surveys are in various stages of completion. These include a hand pump survey, water vendor survey, salinity taste tolerance survey and a rural credit component feasibility study. Reports on the findings of these studies are expected to be completed by March 1996.

64. The next Bank preparation mission is expected to be in Uzbekistan during the first two weeks of March, while it is currently anticipated that the Bank's preappraisal mission will begin in mid-May 1996 following the completion of the interim feasibility study report.

65. With the support of Japan, the Government of Turkmenistan has selected Electrowatt Engineering Services (Switzerland) to conduct preparation work for **Project 5.2, Turkmenistan Water Supply**. The consultants will begin the nine-month feasibility study and three demonstration projects in March, 1996. The Bank is planning to preappraise the project in

July, 1996, with appraisal scheduled for November, 1996. The preparation will include three demonstration projects in the Dashkhovuz region: (i) installation of suitable taps on public standpipes in a selected community to reduce waste and increase pressure in the system and duration of supply; (ii) an artificial recharge experiment; and (iii) a school sanitation, hygiene and health education demonstration in two schools. Currently, the Project Implementation Unit for the World Bank's Institutional Development/Technical Assistance project is assisting with the Water Supply and Sanitation Project. Funding is being sought to establish a PIU specifically for Project 5.2.

66. A workshop was held in Ashgabat in October 1995, by World Bank staff, members of the project Working Group, and local social scientists, to present World Bank operations, the Water Supply and Sanitation Project, and results of the Needs Assessment to national and local authorities and decision makers. NGOs, local experts, and donors also participated. The Social Needs Assessment was completed in September-October, 1995, when fourteen focus group discussions were conducted in *etrap* centers and rural communities in Dashkhovuz. The results are available both in English and in Russian. A stakeholders' workshop to review results of the assessments and to discuss project preparation will be held in March, 1996, in Dashkhovuz.

67. Under **Project 5.3, Kazakstan Water Supply and Sanitation**, a mission visited Kazakstan in November to accelerate project preparation. Special attention was given to the selection of the pilot projects and the design of their implementation, so as to better meet the expressed need of the people to get immediate works on the ground. To this end, a stakeholders seminar took place in Kyzyl Orda in November, which presented the findings of the social assessments, and included case studies and discussions. The seminar participants, who included government officials, endorsed the proposed project scope and components and the concept of maximizing community participation and local employment creation during implementation.

68. Donor coordination on Project 5.3 is very strong, with the primary support coming from Kuwait, Japan and the Netherlands. In addition, the project is receiving UNDP and UNICEF support for the implementation of the pilot income generation activities and the preparation of the health component, respectively.

69. Given the extended timeline in preparing the project, the Government authorities and experts requested special consideration for two critical works: refurbishing part of the main pipeline, and finishing the pumping station in Novokazalinsk (No. 3). The PIU has been established in the office of the Deputy Director of the oblast in charge of Water and Sanitation Systems, and will begin updating the design of the priority works and preparing documents to procure works under procedures satisfactory to the Bank, the latter with the aid of an international procurement specialist.

70. A public health specialist has been hired by the Bank under a Netherlands Trust Fund to support the development of health awareness components under Projects 5.1, 5.2, and 5.3.

71. After some delays on **Program 6, Integrated Land and Water Management in the Upper Watershed**, due to difficulties in funding and securing the full range of skills needed in each of the four Country Teams, the land and water assessments are finally getting underway.

After extensive discussions on their problems and needs, the original natural resource focus has been broadened by each Team to add economic and sociological expertise deemed necessary for a more relevant country assessment. Capacity building continues to rank as probably the greatest need of the local participants. Consequently, current program emphasis is on integrating the development of new skills with the production of new documents. The initial capacity building requirements are for communication equipment and training in comprehensive planning and evaluation paradigms. Due to the size of these requirements, additional donor support in funds or in-kind services is being sought.

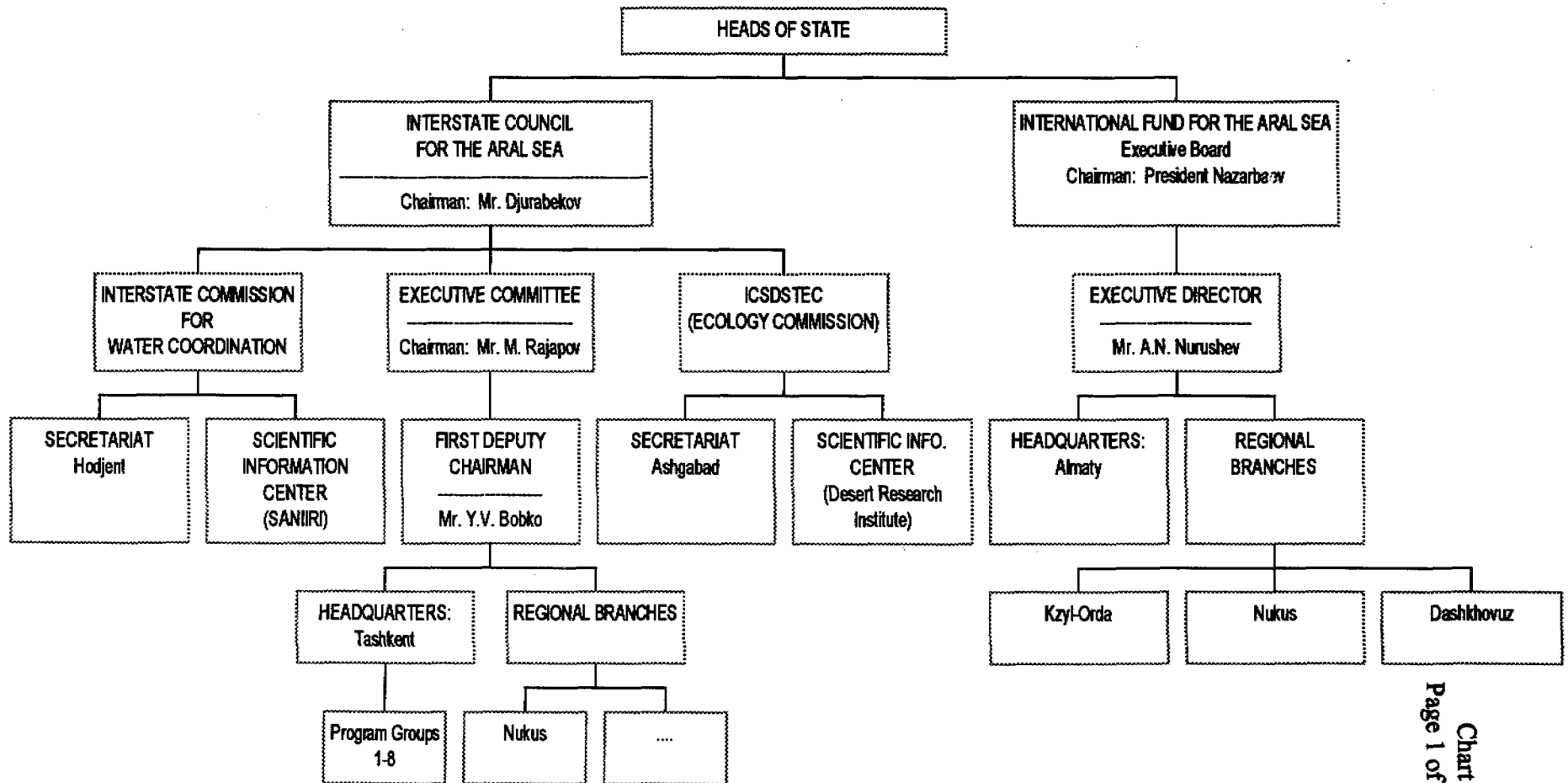
72. Given the breadth of problems faced by the BVOs, with the support of Canada, the scope of **Program 7** has been reformulated to focus on priority areas for improvement. The scaled-back preparation cost is now estimated at \$300,000. The project scope comprises the following priorities: management infrastructure improvements; communications; data collection and monitoring; controls and automation - each of which has a capacity building component. Each of the four components has been identified as a stand-alone activity so as to increase the attractiveness of the project to potential donors.

73. **Program 8 on Capacity Building** reports overall progress in the development of the apex institutions, the EC and the IFAS. Both institutions have expressed an increased desire to be assertive and have been increasingly proactive in taking on responsibilities. They have established a contracting system for local consultants, and have utilized the assistance of external consultants in project management. The institutions have prepared and implemented, with the assistance of international consultants, accounting systems and audits. The institutions are coordinating productively and effectively with their three primary partners in capacity-building - the EU, UNDP and the Bank⁴, and, in this process, organized a meeting in October to discuss the status of the EC and its operations. Of notable importance is IFAS' first direct project funding, made recently in support of Project 4.4 (Syr Darya Control and Delta Development).

74. As the institutions continue to evolve, further steps will be taken in the near future with regard to the following: hiring of additional international and technical staff, streamlining of payments arrangements; and beginning operations in the field (branches). Furthermore, the institutions will play a key role in the preparations for the forthcoming technical and donors' meetings.

⁴ More details on donor support are given in paras. 17 to 43.

ARAL SEA BASIN REGIONAL ORGANIZATION CHART



**Summary of Implementation Status
(January 1996)**

Project No.	Project Name	Last Completed Step(s)	Next Step(s)
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Program 1

1.1	Regional Water Resources Management Strategy	<ul style="list-style-type: none"> • Draft Preparation Report 	<ul style="list-style-type: none"> • Regional consultations • Final Preparation Report
1.2	Improving Efficiency and Operation of Dams	<ul style="list-style-type: none"> • Consultant selection 	<ul style="list-style-type: none"> • Field discussions to outline preparation report
1.3	Sustainability of Dams and Reservoirs	<ul style="list-style-type: none"> • Consultant selection 	<ul style="list-style-type: none"> • Field discussions to outline preparation report

Program 2

2.1	Hydrometeorological Services	<ul style="list-style-type: none"> • UK equipment installed • Staff trained • Swiss funding approved 	<ul style="list-style-type: none"> • Initiation of Swiss assistance program
2.2	Regional Environmental Information System	<ul style="list-style-type: none"> • TOR for implementation stage prepared by Working Group • WARMIS¹ developed under Phase I of WARMAP 	<ul style="list-style-type: none"> • Implementation

Program 3

3.1a	Water Quality Management	<ul style="list-style-type: none"> • Consultant mobilization • Drafting of TORs for national reports 	<ul style="list-style-type: none"> • Workshops on national reports
3.1b	Agricultural Water Quality	<ul style="list-style-type: none"> • Inception Report 	<ul style="list-style-type: none"> • Interim Report
3.2	Uzbekistan Drainage	<ul style="list-style-type: none"> • Invitation to shortlists of consultants for technical and environmental studies 	<ul style="list-style-type: none"> • Consultant selection

¹ Water Resources Management and Information System

**Summary of Implementation Status
(January 1996)**

Project No.	Project Name	Last Completed Step(s)	Next Step(s)
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Program 4

4.1	Wetlands Restoration	<ul style="list-style-type: none"> • Draft final feasibility study 	<ul style="list-style-type: none"> • Regional consultations • Final report
4.2	Restoration of Northern Part of the Aral Sea	<ul style="list-style-type: none"> • Decision to combine with 4.4 as one series of investments 	<ul style="list-style-type: none"> • Mission to Kazakhstan to discuss scope, timing, and preparation needs of first project.
4.3	Environmental Studies in the Aral Sea Basin		
4.3.1	Biodiversity Assessment	<ul style="list-style-type: none"> • Decision by UNEP to support 	<ul style="list-style-type: none"> • Mobilization of UNEP assistance
4.3.2	Salt/Dust Study	<ul style="list-style-type: none"> • Request for Netherlands assistance 	<ul style="list-style-type: none"> • Netherlands decision
4.3.3	Limnology Study	<ul style="list-style-type: none"> • UK to explore support 	<ul style="list-style-type: none"> • Visit by UK specialist
4.3.4	Climate Change Study	<ul style="list-style-type: none"> • UK to explore support 	<ul style="list-style-type: none"> • Visit by UK specialist
4.3.5	Water Quality Study	<ul style="list-style-type: none"> • Funding source needed 	<ul style="list-style-type: none"> • Decision on funding
4.4	Syr Darya Control and Delta Development Project	<ul style="list-style-type: none"> • Final pre-feasibility study 	<ul style="list-style-type: none"> • Regional consultations • Mission to Kazakhstan to discuss scope, timing, and preparation needs of first project.

**Summary of Implementation Status
(January 1996)**

Project No.	Project Name	Last Completed Step(s)	Next Step(s)
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Program 5

5.1	Clean Water, Sanitation/Health - Uzbekistan	<ul style="list-style-type: none"> • Feasibility Study - consultants mobilized • Demonstration Projects - consultants mobilized • Pilot Projects - KfW decision to fund 	<ul style="list-style-type: none"> • Inception Report • Inception Report • Consultant mobilization
5.2	Clean Water, Sanitation/Health - Turkmenistan	<ul style="list-style-type: none"> • Feasibility study - consultants mobilized 	<ul style="list-style-type: none"> • Inception Report
5.3	Clean Water, Sanitation/Health - Kazakhstan	<ul style="list-style-type: none"> • Feasibility Study - consultants selected 	<ul style="list-style-type: none"> • Consultant mobilization

Program 6

6.1	Integrated Land/Water Management in the Upper Watersheds	<ul style="list-style-type: none"> • Consultants selected • National Working Groups formed 	<ul style="list-style-type: none"> • Workshop on National Reports
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Program 7

7.1	Operational Water Resources	<ul style="list-style-type: none"> • Preliminary report by consultants and Working Group 	<ul style="list-style-type: none"> • Support being sought for institutional strengthening
7.2	Operational Water Resources	<ul style="list-style-type: none"> • Preliminary report by consultants and Working Group 	<ul style="list-style-type: none"> • Support being sought for institutional strengthening

**Summary of Implementation Status
(January 1996)**

Project No.	Project Name	Last Completed Step(s)	Next Step(s)
Program 8			
8.1	Support to EC and IFAS	<ul style="list-style-type: none"> • Management advisor posted • Auditors selected for EC and IFAS 	<ul style="list-style-type: none"> • Audit of 1995 accounts • IFAS budget for 1996 • Appointment of Senior Staff by EC • PG 2 and 5 meetings
8.2	Project WARMAP	<ul style="list-style-type: none"> • Progress Report Number 2 • Decision to fund pilot project • Workshop on legal issues 	<ul style="list-style-type: none"> • Farm survey • Initiation of pilot project
8.3	Aral Sea Basin Capacity Development	<ul style="list-style-type: none"> • Posting of advisors in UZB and KYR • Workshops on environmental assessment and post management 	<ul style="list-style-type: none"> • Posting of advisors to KAZ and TRK • Inception Report • Outline of Phase II

ARAL SEA BASIN PROGRAM - FIRST PHASE: DONOR INDICATIONS AS OF 1/31/96
AMOUNTS in US\$000

NAME OF PROGRAM/PROJECT	TOTAL ESTIMATED COST	COMMITMENTS			COMMENTS	
		SOURCE	TOTAL ALLOCATION	COMMITTED AS OF 1/31/96		BALANCE
Program 1						
1. Regional Water Resources Management Strategy	1,445	GEF EU NL	375 1,070	375 1,070	0 0	USAID is active in activities relating to Proj. 1.1.
2. Improving Efficiency and Operation of Dams	150	SWE	150	0	150	USAID is active in activities relating to Proj. 1.2.
3. Sustainability of Dams and Reservoirs	150	SWE	150	0	150	
SUB-TOTAL PROGRAM 1	1,745		1,745	1,445	300	
Program 2						
1. Hydrometeorological Services	2,040	UK SWISS EU	250 1,500 290	250 1,500 290	0 0 0	
2. Regional Environmental Information System	250		0			Preparation phase scaled back and updated. Donor support urgently needed. USAID is active in activities relating to Proj. 2.2.
SUB-TOTAL PROGRAM 2	2,290		2,040	2,040	0	
Program 3						
1. Water Quality Management						
a) Water Quality Assessment and Management	125	GEF NL	125 200	125 200	0	NL assistance allocated to implementation stage. USAID is active in projects relating to Proj. 3.1a.
b) Agricultural Water Quality	350	NL	350	350	0	
2. Uzbekistan Drainage						
a) Technical Studies	1,250	NTF PHRD	250 1,000	250 1,000	0 0	
b) Environmental Studies	500	NL	500	500	0	
SUB-TOTAL PROGRAM 3	2,225		2,425	2,425	0	

ARAL SEA BASIN PROGRAM - FIRST PHASE: DONOR INDICATIONS AS OF 1/31/96
AMOUNTS in US\$000

NAME OF PROGRAM/PROJECT	TOTAL ESTIMATED COST	COMMITMENTS			COMMENTS
		SOURCE	TOTAL ALLOCATION	COMMITTED AS OF 1/31/96	
Program 4					
1. Wetland Restoration	1,100	NL	1,100	1,100	0
2. Restoration of Northern Part of the Aral Sea					
a) Technical Studies	720	PHRD	720	0	720
b) Environmental Studies	150	NL	150	0	150
3. Environmental Studies in the Aral Sea Basin	990				
(1) Biodiversity Assessment		UNEP	500	0	500
(2) Salt/Dust Study		NL	250	0	250
(3) Limnology Study		UK	120	0	120
(4) Climate Change Study		UK	120	0	120
(5) Water Quality Study					
4. Syr Darya Control and Delta Development Project	520	ITA	520	520	0
		IFAS	20	20	0
SUB-TOTAL PROGRAM 4	3,480		3,500	1,640	1,860

ARAL SEA BASIN PROGRAM - FIRST PHASE: DONOR INDICATIONS AS OF 1/31/96
AMOUNTS in US\$000

NAME OF PROGRAM/PROJECT	TOTAL ESTIMATED COST	COMMITMENTS			COMMENTS	
		SOURCE	TOTAL ALLOCATION	COMMITTED AS OF 1/31/96		BALANCE
Program 5						
1. Clean Water, Sanitation/Health - Uzbekistan	2,350	NTF	390	390	0	Project scope is being expanded to incorporate more pilot work.
		PHRD	470	470	0	USAID is active in projects relating to Proj. 5.1.
		KFAED	830	830	0	UNICEF is active in projects relating to Proj. 5.1.
		NL	160	160	0	
		Additional funding sought	500	0	500	
2. Clean Water, Sanita./Health - Turkmenistan	1,080	NTF	280	280	0	USAID is active in projects relating to Proj. 5.2.
		PHRD	800	800	0	UNICEF is active in projects relating to Proj. 5.2.
3. Clean Water, Sanitation/Health - Kazakhstan	2,510	NTF	500	0	500	Project scope is being expanded to incorporate more pilot work.
		PHRD	760	0	760	
		KFAED	1,250	0	1,250	USAID is active in projects relating to Proj. 5.3. UNICEF is active in projects relating to Proj. 5.3.
4. Medium-term Water Supply	2,000					JICA is supporting water supply and sanitation projects in urban areas.
SUB-TOTAL PROGRAM 5	7,940		5,940	2,930	3,010	
Program 6						
1. Integrated Land/Water Management in the Upper Watersheds	500	FINNIDA	200	200	0	Procurement process is underway.
		EU	300	300	0	
		TURK	100			Use of funds under discussion.
Program 7						
1,2 Operational Water Resources Management	300	CAN	100	100	0	Project has been redesigned, with the preparation phase scaled back. Additional donor support urgently needed.
		Additional funding sought	200	0	200	
SUB-TOTAL PROGRAM 7	300		300	100	0	Egypt providing in kind technical support.

ARAL SEA BASIN PROGRAM - FIRST PHASE: DONOR INDICATIONS AS OF 1/31/96
AMOUNTS in US\$000

NAME OF PROGRAM/PROJECT	TOTAL ESTIMATED COST	COMMITMENTS			COMMENTS	
		SOURCE	TOTAL ALLOCATION	COMMITTED AS OF 1/31/96		BALANCE
Program 8: Capacity Building						
1. Support to EC and IFAS	9,100	WORLD BANK NL SWE	2,000 150	2,000 150	0 0 0	Unspent NL funds may be used for Immediate Impact Project. Selection of adviser underway.
2. Project WARMAP		EU	750	750	0	
3. Aral Sea Basin Capacity Development		UNDP	2,800	2,800	0	
SUB-TOTAL PROGRAM 8	9,100		5,700	5,700	0	
FIRST PHASE PREPARATION COSTS	27,580		22,250	16,780	5,470	
EU's Project WARMAP: Phase I to cover activities which support abovenoted programs. Project WARMAP Phase II will allocate an additional \$3.5 million to the implementation stage.						
The US has committed \$7 million to activities which support the preparation phase of the Program.						
TOTAL	<a 27,580	<b	29,250	23,780	5,470	

<a Cost estimate revised as a result of recent restructuring of some projects.

<b Commitment total revised as a result of some commitments being allocated to the investment stage.

Legend:

CAN:	Government of Canada
DK:	Government of Denmark
EC:	Executive Committee of the Interstate Council for the Aral Sea
EGY:	Government of Egypt
EU:	European Union (WARMAP: Water Resources Management and Agricultural Production)
FINNIDA:	Finnish National Aid Agency
FR:	Government of France
GEF:	Global Environment Facility
ITA:	Italian Trust Fund
JICA:	Japan International Cooperation Agency
KFAED:	Kuwait Fund for Arab Economic Development
NL:	Government of Netherlands
NTF:	Netherlands Trust Fund
PHRD:	Japanese Policy and Human Resources Development Fund
SGP:	World Bank Special Grant Program
SWE:	Government of Sweden
SWISS:	Government of Switzerland
TURK:	Government of Turkey
UK:	Government of United Kingdom
US:	Government of United States (USAID)

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NAME OF PROGRAM/PROJECT	ESTIMATED COST (AMOUNTS in US\$000)			DONOR INTEREST
	Total	Technical Assistance	Investment <1	
Program 1				
1. Regional Water Resources Management Strategy	9,000	8,000	1,000	GEF / EU / US / NL
2. Improving Efficiency and Operation of Dams	1,000	1,000		SWE
3. Sustainability of Dams and Reservoirs	1,000	1,000		SWE
SUB-TOTAL PROGRAM 1	11,000	10,000	1,000	
Program 2				
1. Hydrometeorological Services	19,500	2,000	17,500	SWISS
2. Regional Environmental Information Systems	8,000	3,000	5,000	GEF
SUB-TOTAL PROGRAM 2	27,500	5,000	22,500	
Program 3				
1. Water Quality Management				
a) Water Quality Assessment and Management	5,500	4,500	1,000	GEF / NL
b) Agricultural Water Quality	11,000	3,000	8,000	NL
2. Uzbekistan Drainage	125,000	5,000	120,000	BANK
SUB-TOTAL PROGRAM 3	141,500	12,500	129,000	
Program 4				
1. Wetland Restoration	33,000	3,700	29,300	GEF / NL
2. Restoration of Northern Part of the Aral Sea (see para. 59)				BANK
3. Environmental Studies in the Aral Sea Basin				GEF
4. Syr Darya Control and Delta Development Project <2	50,000	3,000	47,000	
SUB-TOTAL PROGRAM 4	83,000	6,700	76,300	
Program 5				
1. Clean Water, Sanitation/Health - Uzbekistan <3	90,000	5,000	85,000	BANK / KFAED / KfW / OECF
2. Clean Water, Sanitation/Health - Turkmenistan <3	37,500	3,000	34,500	BANK
3. Clean Water, Sanitation/Health - Kazakhstan <3	37,500	3,000	34,500	BANK
4. Medium-term Water Supply	8,300	2,000	6,300	
SUB-TOTAL PROGRAM 5	173,300	13,000	160,300	

NAME OF PROGRAM/PROJECT	ESTIMATED COST (AMOUNTS in US\$000)			DONOR INTEREST
	Total	Technical Assistance	Investment <1	
Program 6				
1. Integrated Land/Water Management in the Upper Watersheds	8,000	3,000	5,000	
Program 7				
1,2 Operational Water Resources Management for the Amu and Syr Darya Basins	25,000			
- Management Information Systems	1,000	500	500	
- Communications	1,500	500	1,000	
- Data Collection and Monitoring	1,500	500	1,000	
- Controls and Automation	21,000	---	21,000	
SUB-TOTAL PROGRAM 7	25,000	1,500	23,500	
Program 8				
Capacity Building				
PHASE 1: PROBABLE IMPLEMENTATION COSTS	469,300	51,700	417,600	

Notes:

- <1 Includes pilot projects and equipment
- <2 Size of first phase project to be determined during a mission in May-June 1996.
- <3 USAID funding parallel projects.

Legend:

- BANK: World Bank
- EU: European Union
- GEF: Global Environment Facility
- KfW: Germany
- KFAED: Kuwait Fund
- NL: Netherlands
- OECD: Japan
- SWE: Sweden
- SWISS: Switzerland

NAME OF PROGRAM/PROJECT	CURRENT FUNDING SOURCES	ELIGIBLE CONSULTANT NATIONALITY	BANK TASK MANAGER	PHONE / FAX
Program 1				
1. Regional Water Resources Management Strategy	GEF	All	Kindler	473-2253 / 477-1981
2. Improving Efficiency and Operation of Dams	Sweden	Swedish	Parsons	473-1046 / 477-3274
3. Sustainability of Dams and Reservoirs	Sweden	Swedish	Parsons	473-1046 / 477-3274
Program 2				
1. Hydrometeorological Services	Swiss UK	Swiss UK	Mathews Mathews	473-0354 / 334-8748 473-0354 / 334-8748
2. Regional Environmental Information Systems	N/A		Mathews	473-0354 / 334-8748
Program 3				
1. Water Quality Management				
a) Water Quality Assessment and Management	GEF	All	Parsons	473-1046 / 477-3274
b) Agricultural Water Quality	NL	Dutch/Other	Ochs	473-0357 / 334-8748
2. Uzbekistan Drainage	PHRD NL	All Dutch/Other	van Tuijl	473-2470 / 477-3274
Program 4				
1. Wetland Restoration	NL	Dutch/Other	Post	473-3400 / 477-0568
2. Restoration of Northern Part of the Aral Sea	PHRD	All	Garvey	473-2292 / 473-0711
3. Environmental Studies in the Aral Sea Basin	UNEP Denmark UK Finland	All Danish UK Finnish	Post	473-3400 / 477-0568
4. Syr Darya Control and Delta Development Project	Italy	Italian	van Tuijl	473-2470 / 477-3274
Program 5				
1. Clean Water, Sanitation/Health - Uzbekistan	NL Kuwait PHRD NTF	Dutch/All All All All	Batstone	473-3116 / 477-3285
2. Clean Water, Sanita./Health - Turkmenistan	PHRD NTF	All All	Klees	473-4186 / 477-0954
3. Clean Water, Sanitation/Health - Kazakhstan	PHRD NTF Kuwait	All All All	Donaldson	458-4080 / 477-3285
4. Medium-term Water Supply	NA	--		

NAME OF PROGRAM/PROJECT	CURRENT FUNDING SOURCES	ELIGIBLE CONSULTANT NATIONALITY	BANK TASK MANAGER	PHONE / FAX
Program 6 1. Integrated Land/Water Management in the Upper Watersheds	Finland	Finnish	Parsons	473-1046 / 477-3274
Program 7 Automatic Control Systems/Civil Works Capacity Building for the Amu and Syr Darya Basins	Canada	Canadian	Kindler	473-2253 / 477-1981
Program 8 Capacity Building 1. Bank, NL, Sweden	Bank NL Sweden	All Dutch/Other Swedish	Iatsenia	473-5234 / 477-3274
2. EU	EU	EU		
3. UNDP	All	All		

As EU and USAID programs are administered separately, they are not shown in the above table. The appropriate contact persons are:

EU: Giorgio Dona (phone: 322-299-0716)

USAID: Michael Kalinovsky (phone: 202-647-7062)

Legend:

GEF Global Environment Facility
 NL Netherlands
 PHRD Japan Grant Fund
 UNDP United Nations Development Programme
 UNEP United Nations Environmental Programme

NAME OF PROGRAM/PROJECT	ESTIMATED COMPLETION DATE OF PREPARATION STAGE			ESTIMATED DURATION OF IMPLEMENTATION STAGE (Months)
	1995	1996	1997	
Program 1				
1. Regional Water Resources Management Strategy		February		36
2. Improving Efficiency and Operation of Dams		March		36
3. Sustainability of Dams and Reservoirs		March		36
Program 2				
1. Hydrometeorological Services				36
2. Regional Environmental Information Systems				36
Program 3				
1. Water Quality Management				
a) Water Quality Assessment and Management		March		36
b) Agricultural Water Quality		March		36
2. Uzbekistan Drainage			December	tbd
Program 4				
1. Wetland Restoration	December			36
2. Restoration of Northern Part of the Aral Sea (see para.)				36
3. Environmental Studies in the Aral Sea Basin		December		tbd
4. Syr Darya Control and Delta Development Project	December			12
Program 5				
1. Clean Water, Sanitation/Health - Uzbekistan			February	48
2. Clean Water, Sanitation/Health - Turkmenistan		November		48
3. Clean Water, Sanitation/Health - Kazakhstan		August		48
4. Medium-term Water Supply			June < ^a	tbd
Program 6				
1. Integrated Land/Water Management in the Upper Watersheds		March		36
Program 7				
Operational Water Resources Management for the Amu and Syr Darya Basins		June < ^a		36
Program 8				
Capacity Building				

< a Provided donor support is secured within two months.

< b If the results of Project 4.4 indicate the likelihood of project feasibility.

NUKUS DECLARATION

of Central Asian states and international organizations on the problem of Aral sea basin sustainable development

Preamble

1.1 From century to century, the peoples of central asian region were making significant contribution into the development of world culture. Their achievements in the field of science, economic life, and art became the property of the whole mankind. Already in ancient times they learned how to build complex irrigation systems and constructions, create oases in the deserts. By their labour were created the architectural masterpieces which are unsurpassed even till now. The fundamental discoveries in mathematics, astronomy, medicine, engineering were created by their genius, but in the last days the population of the region is confronted with some serious problems related to ecological disaster and aggravated by political and economic difficulties of the transitional period. The Aral Sea crisis is a result of unsustainable policies towards the environment and use of natural resources. A principal cause has been the excessive withdrawal of water for irrigation along with courses of Amu Darya and Syr Darya rivers. This has led to the drying of the Aral Sea an unprecedented impact on the ecology of the Central Asian region and neighbouring states.

1.2 The growing shortage of water and its declining quality have resulted in the degradation of soils and vegetation, changes in flora and fauna, collapse of the fishing industry and declines in the efficiency of irrigated agriculture. The deteriorating ecological situation affects the quality of life of the 35 million inhabitants of the Aral Sea basin through direct and indirect health effects and disruption of economic activity, which together lead to increasing migration from the area. The crisis is worst in the river deltas and Aral Shore zone.

1.3 Regional bodies were established and proposed plan of action was agreed. This paved the way for increased international support and the development of the Aral Sea Programme. This Programme is based on the mentioned plan and aimed at sustainable development of this region. The scale and complexity of the problems related to water resources demand a unified multi-sectoral approach and require cooperation amongst the States and with the international community. The international assistance to the Aral Sea programme is coordinated by WB, UNDP, and UNEP. Donors are encouraged to substantially increase their support to the Aral Sea programmes which should address both the symptoms and the causes of the Aral Sea crisis.

Commitments

1.4 In light of the above and in consideration of the discussion during this international conference, we commit ourselves to future region-wide cooperation on the basis of mutual respect, good neighbourly relations, and determination to make significant progress in

resolving the human and environmental consequences of the Aral Sea crisis. We call upon the international community, national governments, and peoples of the world to join in our efforts.

Commitment to sustainable development

1.5 We state our commitment to sustainable development and to this end we acknowledge the need to reinforce and develop more sustainable policies and programmes for the resolution of the Aral Sea crisis, by:

- recognizing the environmental and economic importance of water, land, and biological resources as the basis for future sustainability;
- moving towards a more balanced and scientifically based system of agriculture and forestry;
- increasing the efficiency of irrigated agriculture through the use of economically-driven methods of water usage, and the use of improved technologies in irrigation and environmental protection;
- providing incentives for long-term land and water husbandry practice;

1.6 Attain the highest possible quality of life for our peoples without compromising the quality of life of future generations, by:

- encouraging and supporting initiatives aimed at improvement of health, income generation, and preservation of cultural heritage;

1.7 Improve the integrated management of regional natural resources by:

- establishing a system of ecological information sharing;
- harmonizing environmental quality standards and associated legislation.

1.8 We agree that the Central Asian states recognize the previously signed and operation agreements, treaties, and other legal documents which regulate their relations in the sphere of water resources in the Aral Sea basin and accept them for implementation.

Commitment to international agreements and conventions

1.9 We state our commitment to fully recognizing international agreements, in particular the 1992 Rio Declaration on Sustainable Development, World nature charter, and the international conventions on Combating Desertification, Global Climate Change, Biodiversity, and Protection of Transboundary Waters.

1.10 In addition to the above, there is a need for an international convention on the Sustainable Development of the Aral Sea Basin. This will incorporate water use and sharing arrangements, and updating and harmonization of environmental standards and associated legislation as priority issues. In this context, we call upon the UN agencies, and first of upon UNDP, to provide assistance and advice in the drafting of such convention.

Commitment to human development

1.11 While maintaining our commitment to health and social well-being as an integral part of the concept of sustainable development, we recognize that the immediate health and social consequences of the Aral Sea crisis require urgent and specific response.

1.12 We stand committed to dedicated national resources to address these priority issues and request the urgent assistance of the international community in this matter. We wish to increase the awareness of the international community regarding the causes and effects of the Aral Sea crisis, and resolve to increase the production and dissemination of information in order to contribute to the process of sustainable development.

1.13 As representatives and supporters of the new democratic countries of Central Asia we are committed to achieving the full participation of our peoples in the overall economic and political process and in the solution of their problems.

Commitment to the development of regional institutions

1.14 We affirm and reinforce our support for and belief in the regional bodies that have been established, the Interstate Council of the Aral Sea (ICAS) and its Executive Committee, the International Fund of the Aral Sea (IFAS) and its Executive Management. We are committed to strengthening and empowering these regional bodies.

1.15 To this end:

- we reaffirm our commitment to meeting the financial obligations of the regional bodies and to providing their staff with immunities and privileges comparable to those of UN staff and in having, as soon as possible, a permanent and full-time Executive Committee chairman (on the expiration of the term of office of the current one);
- we recognize the importance and need to encourage the strengthen of the Interstate Commission for Soci-Economic Development and Scientific, Technical, and Ecological Cooperation (Sustainable Development Commission).

1.16 Adopted by the Nukus International Conference on Sustainable Development of the countries of the Aral Sea Basin.