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# ARAL SEA BASIN PROGRAM

## PHASE 1

### PROGRESS REPORT NO. 1

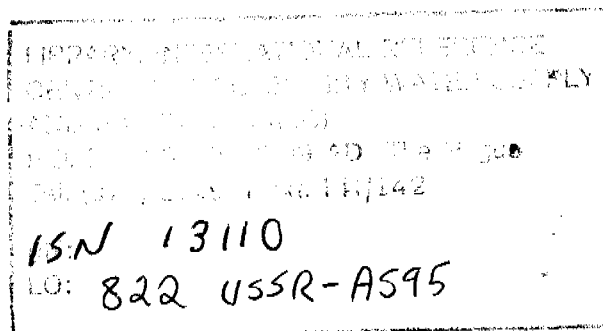
Europe and Central Asia Region  
Country Department 3  
Aral Basin Unit  
The World Bank, Washington D.C.

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## ABBREVIATIONS

|          |  |
|----------|--|
| ASBPU    | Aral Sea Basin Program Unit  |
| BITS     | Swedish Bank for Investment and Technical Support  |
| BVOs     | River Commissions (of Amu and Syr Dar'ya)  |
| EC       | Executive Committee of the ICAS  |
| EU       | European Union   |
| FIAHS    | Fund for Innovative Approaches in Human and Social Development   |
| FSU      | Former Soviet Union  |
| GEF      | Global Environment Facility  |
| ICAS     | Interstate Council for the Aral Sea  |
| ICSDSTEC | Interstate Commission for Socioeconomic Development and Scientific, Technical and Ecological Cooperation |
| IFAS     | International Fund for the Aral Sea  |
| MIS      | Management Information System  |
| MOU      | Memorandum of Understanding  |
| NATO     | North Atlantic Treaty Organization   |
| NGO      | Non-Governmental Organization  |
| NL       | Netherlands  |
| PG       | Program Groups   |
| PHRD     | Japan Population and Human Resources Development with the World Bank                                     |
| UNDP     | United Nations Development Programme   |
| UNEP     | United Nations Environment Programme   |
| UNESCO   | United Nations Education, Scientific and Cultural Organization   |
| USAID    | United States Agency for International Development   |



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## EXECUTIVE SUMMARY

1. Following the independence of the five Aral Sea Basin states and their requests for assistance on the Aral Sea crisis, UNDP, UNEP and the World Bank supported the Basin States in the development of a plan of action to address the crisis. The plan included actions to mitigate the impacts of environmental degradation, development of sustainable strategies for the medium term and development of the regional institutions. Following the endorsement of the Program by the five Basin States, as well as the international donor and NGO community, seven priority programs (consisting of 19 projects) were identified to be implemented as a first phase of the Aral Sea Basin Program.

2. The purpose of this report is to summarize the progress in the implementation of the Phase 1 preparatory activities. The report will focus on three specific aspects of the Program: Institutional Aspects; Status of Donor Support; and Status of Program Implementation.

### *Institutional Aspects*

3. The regional institutions established by the Heads of States include the Interstate Council for the Aral Sea (ICAS), the Executive Committee (EC) and the International Fund for the Aral Sea (IFAS). A Chart summarizing the structure of the regional agencies is attached under Annex 1. Since their creation, these apex institutions have developed consistently and are taking fully transnational shapes. The two river basin authorities (BVOs), which were established prior to the Program, operate under difficult conditions. A workshop is planned to discuss and address the structural and operational constraints of the BVOs, and enable these organizations to act as regional water authorities. Following requests by the international community, an Ecology Commission has recently been set up, to ensure that environmental, economic and social dimensions are given full recognition in the design and implementation of the Program. The Commission plans to meet shortly to discuss its terms of reference and activities.

4. Program Groups, consisting of representatives from all basin states, have already been appointed for all seven programs. These multi-country committees act as consulting bodies to the EC to review policy issues and advise the technical Working Groups on the various projects and studies within that program. Working Groups are now being set up to act as local consultants for the various projects.

5. Issues of concern remain the appointment of a full-time chairman for the EC and the lack of subscription payments from Turkmenistan and Tajikistan, which is preventing IFAS from playing fully its envisaged role in financing the local costs of the Program.

### *Donor Support*

6. A matrix presenting the status of donor support to each Program/Project is attached under Annex 2, showing that all but two programs are fully funded. Funding gaps exist under Programs 5 and 7 and contacts are underway with a number of donors to address this problem.

7. Significant efforts have been made in the last few months by the donors to coordinate their involvement in the various programs to avoid duplication of effort. This intensive coordination exercise has allowed a clear division of labor among those donors who have already initiated their

respective interventions; and identified areas for assistance by donors who have not yet decided on specific activities.

8. As requested by the donors at the Paris meeting, a Memorandum of Understanding has been concluded between UNDP, UNEP and the World Bank, to identify the areas of primary and joint responsibility of each institution. A copy of the MOU is attached under Annex 3.

9. The World Bank has set up an Aral Sea Basin Program Unit (ASBPU) to provide technical backstopping and coordinate the various program activities and donor support. The ASBPU also acts as a focal point to establish a common dialogue between the Bank, UNDP and UNEP. Task Managers have been assigned to each Project from the Bank's relevant sectoral divisions to assist the regional and national authorities in project execution and donor coordination. In addition, the Bank's Regional Mission in Tashkent has been strengthened to allow for supervision and coordination at the field level. This structure is also enhancing the preparation of World Bank lending for projects under the Aral Sea Basin Program. In fact, the Bank's lending program for this region already includes five investment operations in the Aral Basin within the next three years, totalling more than \$200 million in planned lending volume.

#### *Progress of Program Implementation*

10. Progress since the Paris meeting has been generally satisfactory, particularly on the technical aspects of the Program.

11. With the commencement of Program 1.1 (Regional Water Strategy), which is in many ways the centerpiece of the whole program, the overall Program has made a good start. Programs 2, 3, 4, 5 and 6, as well as the Capacity Building Program, have been initiated and will be in full implementation within the next 2-3 months. Disbursements have already started under the Supplementary Program for Capacity Building and will begin very soon for Projects 1.1, 3.1, 4.1, 5.1, 5.2 and 5.3. Funds committed toward other projects are also expected to disburse within the next few months. Overall, the Bank is very optimistic about the progress of Program implementation to date, and the efforts of the regional authorities to launch the Program.

12. It is expected that this preparatory phase will be largely completed by the end of 1995. A Donors' Meeting is planned to be held in September 1995 in the Aral Basin Region, immediately following the planned UN Conference on the Aral Sea.

## **ARAL SEA BASIN PROGRAM - PHASE 1**

### **PROGRESS REPORT No. 1**

#### **Background**

1. Following the independence of the five Aral sea Basin states and their requests for assistance on the Aral Sea crisis, UNDP, UNEP and the World Bank developed a plan of action to address the crisis, which included a three-phase approach, as well as the strengthening and development of the regional institutions. In April 1993, an international seminar was organized in Washington to mobilize the support of donor countries and international agencies for the proposed program.

2. Following the endorsement of the Program, seven priority programs (19 projects) were identified to be implemented as a first phase of the Aral Sea Basin Program. The Program was approved by the Heads of States of the Aral Basin Republics in January 1994. In broad terms, the 19 projects comprise three projects intended to initiate steps for improving the environment around the sea and the river deltas, seven projects aimed at improving the conditions in the disaster zone and nine projects related to managing the water resources of the basin. Each project includes a capacity-building component, and the Program itself includes a separate capacity-building program for the regional institutions.

3. The preparatory studies required to implement phase I were proposed to the international donor community for financing in Paris in June 1994. Regional and international NGOs also attended the meeting and endorsed the scope of the preparatory phase as developed by the Basin States. Following the endorsement by the international donor and NGO community, and substantial donor support, the implementation of Phase 1 has started.

4. The purpose of this report is to inform the donors of the progress in the implementation of Phase 1. The report -- the first of a series to be published on a six-monthly basis - will focus on three specific aspects of the Program. Each section will provide a background and status segments, and will highlight next steps. A final section on "Related Activities" will highlight recent events associated to the Program. The three focal themes are:

- Institutional Aspects;
- Status of Donor Support; and
- Status of Program Implementation.

## Institutional Aspects

### **Background**

5. The regional institutions established by the Heads of States include the Interstate Council for the Aral Sea (ICAS), the Executive Committee (EC) and the International Fund for the Aral Sea (IFAS). A Chart summarizing the structure of the regional agencies is attached under Annex 1. Whereas the ICAS is a body of 25 high level representatives from the five states that meets only twice a year to review policy issues; the key organization for developing and implementing policies and programs is the ICAS Executive Committee (EC). Under its Charter, the EC has the status of a sovereign government with full powers to plan and implement projects approved by ICAS.

6. The IFAS has been established to finance the Aral Sea Program. The Fund is intended to channel financing from the five basin countries (1% of the countries' respective GDP), and the donors for the Aral Sea Program. In addition to the above Apex institutions, there is an Interstate Commission for Water Coordination (ICWC) and its two River Commissions (BVOs), one for the Syr Darya and the other for the Amu Darya.

7. An Interstate Commission for Socioeconomic Development and Scientific, Technical and Ecological Cooperation (ICSDESTEC), known as the "Ecology Commission," has also been established.

### **Status**

8. As requested by the Heads of States, Program Groups consisting of representatives from all the region have already been appointed by the Chairman of the EC for all seven programs. These multi-country committees are seen as consulting bodies to the EC to review policy issues related to the program theme and to establish Working Groups for the various projects and studies within that program. The setting up of the Working Groups is well underway and is expected to be completed by the end of March. The Working Groups will act as local consultants to work jointly with foreign consultants and should be funded as far as possible by the donors. Workshops to launch the implementation of each Program or major project are planned, and have in fact already been held for Program 6, and Projects 1.1 and 3.1.

9. The EC is expanding its staffing and engaging its first staff member from outside Uzbekistan. However, EC staff totals only four so far. It is also considering establishing small branch offices in Nukus and in the other states, for liaison purposes, for supporting consultants and facilitating workshops. Office equipment is being purchased under competitive bidding. Technical assistance and training to support the EC's activities will be provided after the needs are assessed in detail by consultants within the next two months.

10. The ICAS is presently chaired by the Minister of Water of Turkmenistan of Uzbekistan, but his term is ending shortly. An issue of concern remains the appointment of a full-time chairman for the EC. In view of the requirements of the Program, the World Bank has proposed that a full-time Chairman be appointed for the EC with a term of at least three years. As

the lack of a full-time Chairman is already hampering the Committee's day-to-day operations, it is expected that this issue will be discussed at an upcoming meeting of the Heads of State to be held in March in Tashauz.

11. The IFAS is also in the process of recruiting its first interstate staff and acquiring office equipment. IFAS's technical assistance and training needs in areas such as management, accounting and legal affairs will be assessed shortly and met through existing grant financing (from the World Bank's Special Grant Program). Subscription payments from Kazakhstan, Uzbekistan, and the Kyrgyz Republic have been received; Tajikistan has indicated its willingness to contribute but funds have not yet been received by IFAS. The lack of contributions from Turkmenistan and Tajikistan is preventing IFAS from playing its envisaged role in financing the local costs of the Program. Turkmenistan officials strongly argue that their support of EC and other activities in the Aral Sea Basin should be seen as an adequate substitute for an IFAS contribution. However, the EC will be unlikely to solve its acute budgetary shortage and develop into a fully regional organization without a shared commitment from all the Basin States.

12. The recent formation of the Ecology Commission is a very positive step. The Commission has had its first meeting on December 6. The meeting discussed primarily logistical matters such as the site and size of its secretariat and a possible scientific center. The Uzbekistan delegation offered to prepare a summary paper on these subjects and circulate it within two weeks to the other states for their comments. The next meeting will be in the period March to May 1995.

13. The two BVOs, which are the "old" institutions under the Aral Sea Basin regional structure, operate under difficult conditions. In addition to the technical needs that the BVOs have for modernizing their operations, it appears that they also lack sufficient authority to enforce water sharing agreements. Moreover, they are not staffed on an interstate basis, and are inadequately funded. A workshop is planned to develop an Action Plan on these issues.

#### Next Steps

14. Consideration at the highest level of the proposal for a full-time Chairman of EC is essential. Further efforts are also needed to ensure contributions from Turkmenistan and Tajikistan in order that the EC and IFAS may develop as fully independent regional organizations. Technical assistance and training programs should also be developed to support the activities of the EC and IFAS. The objectives of strengthening the BVOs (as presented under Program 7) need to be reviewed to include capacity building, rehabilitation of civil works and automatic control systems. These revisions will be discussed with the regional authorities and finalized for submission to donors for financing.

15. The EC intends, in coordination with the other agencies concerned, to set up an office in Nukus plus representative offices in the other four capitals that would, inter alia, support the work of consultants on various projects, provide logistical support to workshops and conferences, and act as a primary channel of communication with the government concerned.



## Donor Support

### **Background**

16. Of the total requirements estimated at about \$41 million for the preparation of phase 1, commitments of about \$31 million were announced in June 1994 in Paris during the first Donors' Meeting. At the Paris meeting, the donors requested that a Memorandum of Understanding (MOU) be prepared to identify the areas of responsibility of each of the three sponsoring institutions, namely UNDP, UNEP and the World Bank, in the implementation of Phase 1, including their role in coordinating donor efforts.

### **Status**

17. A matrix presenting the status of donor support to each project is attached under Annex 2. Whereas the bulk of the donor financing will be committed and disbursed towards the Program on a bilateral basis; in some cases, the funds will be channelled through the World Bank and UNDP under trust fund arrangements.

18. Significant efforts have been made by the donors to coordinate their involvement in the various programs to avoid duplication of effort. The European Union has worked very closely with the regional authorities, UNDP, UNEP and the World Bank to finalize the scope of its assistance, including a series of meetings in Washington and New York in January. Similar steps have been taken by the Kuwait Fund, USAID and a number of other donors to tailor their funding to the requirements of the Program. Arrangements for a Netherlands Trust Fund with the Bank have been completed, allowing consultant selection for Projects 1.1, 3.1, 4.1 and 4.3 to begin. Similar arrangements are being finalized with the Swiss authorities, so as to support the implementation of Projects 2.1 and 5.1 and with Finland for Program 6. This intensive aid coordination exercise has allowed a clear division of labor among those donors who have already initiated their respective interventions; and identified areas for assistance by donors who have not yet decided on specific activities.

19. The matrix suggests an important funding gap under Projects 5.4, 5.5, and Program 7. Proposals are being made to the Japanese, German, US and Turkish Governments for financing these Programs.

20. Disbursements have already started under the Supplementary Program for Capacity Building and will begin very soon for Projects 1.1, 3.1, 3.2, 4.1, 5.1, 5.2 and 5.3. Funds committed toward other projects are expected to disburse within the next few months. Most projects are now ready to utilize the planned donor assistance.

21. As requested by the donors at the Paris meeting, a Memorandum of Understanding has been concluded between UNDP, UNEP and the World Bank, to identify the areas of primary and joint responsibility of each institution. A copy of the MOU is attached under Annex 3. Cooperation between the Bank and UN missions in Tashkent, Bishkek and Almaty is also being strengthened. Under the MOU, the administrative arrangements within UNDP, UNEP and the World Bank have been made as follows:

- i) UNDP will contribute to the Program primarily in the field of institution and capacity building, including coordination between the international donor and lending institutions within Central Asia.
- (ii) UNEP will provide technical expertise and will ensure that the Aral Sea Program benefits from new knowledge arising from regional water resource programs in other parts of the world.
- (iii) The World Bank will coordinate the activities of specific projects and provide necessary guidance to ensure consistency in policies, approaches and procedures relating to the Program as a whole.

22. In view of the increasing volume of activities under the Aral Sea Basin Program, the World Bank set up an Aral Sea Basin Program Unit (ASBPU) on October 1, 1994. It now has three higher-level staff plus support personnel. A seconded staff member from Denmark is under discussion. Besides its technical and coordination role, the ASBPU acts as a focal point to establish a common dialogue between the Bank, UNDP and UNEP. Task Managers have been assigned to each of the Projects to assist the regional and national authorities to execute the projects and to coordinate donor efforts (a list of task managers is attached under Annex 4). The Bank's Regional Mission in Tashkent is setting up a unit of one regular bank staff, two local staff and a seconded expert from the Netherlands.

23. In addition to its grant funding to support the preparatory phase of the Program, the World Bank anticipates an initial group of five lending operations within the next three years under the Aral Basin Program, totalling about \$200 million. Of these, three projects will focus on providing drinking water to the population in the disaster zone.

24. The World Bank has also set up an Independent Advisory Panel of international experts to provide advice and guidance to the Director, EC3 on issues such as water resources management, international waters, irrigation and drainage, international water law and riparian issues, water supply and sanitation, environment, health and nutrition, social participation, and other sensitive issues of relevance to the Program.

#### **Next Steps**

- Earlier indications of interest by donors and unallocated funding will be confirmed and committed to specific projects.
- Attempts to bridge the existing financing gap under Programs 5 and 7 will be pursued with various donors.
- ASBPU will continue to coordinate the donor assistance to the Program to avoid overlap and duplication of effort.
- The staff secondment options will be finalized to provide adequate technical support to the Program's implementation.

- A meeting of the Independent Advisory Panel will be held in March in Tashkent to discuss various implementation aspects of the Program.

### **Progress of Program Implementation**

25. The overall progress since the Paris meeting has been satisfactory, particularly on the technical aspects. The establishment of the Program and Working Groups and the holding of Launch Workshops are expected to accelerate the preparation process and generate the needed momentum and regional collaboration required to ensure a harmonious and sustained implementation phase.

26. **Project 1.1 (Regional Water Strategy)** is in many ways the centerpiece of the whole program, as it will result in a new strategy for water management which balances economic, environmental and social objectives and which can be adopted by the leaders of the five states to guide their water programs in the medium term. The project was launched at a workshop for the Program Group in Tashkent in early February. The workshop aimed at setting the detailed objectives and work plan for the Group, determining the needs for external assistance and finding ways to ensure that all the needed disciplines are made available to the group. The EC organized this event with the assistance of the Bank. Donor support, from the GEF, UNDP, UNEP, EU, Netherlands, and the United States, already greatly exceeds the \$375,000 estimated for the preparation phase of six months and is approaching the \$5 million estimated cost of the implementation phase of three years. The February meeting began the process of integrating and coordinating the various sources of assistance. At the moment, the GEF assistance (executed by the EC) is supporting the development of a detailed work program, while EU-supported studies in irrigated crop production systems, cost of delivering water, and international water sharing are about to begin.

27. The preparation of **Projects 1.2 (Improving Efficiency and Operation of Dams)** and **1.3 (Sustainability of Dams and Reservoirs)** is progressing and was briefly discussed at the February workshop. Funding has been secured for both studies from BITS (Sweden). Given the strong desire of upper riparian countries to increase hydro-electric generation, an early start to Project 2.1 would be beneficial in providing a basis for analyzing tradeoffs between power and irrigation objectives, with a strong focus on economic evaluation. Project 1.3 has strong links to Program 6.

28. Under **Program 2**, priority has been given to **Project 2.1 (Hydrometeorological Services)**, where the main objective is to restore the functioning of these services. To this end, the principal donors - Switzerland and the UK - are providing a study tour of facilities in their respective countries, including a short planning workshop, during February. As experience is gained under Project 2.1, the design of **Project 2.2 (Data Base and MIS for Water Quality and Environment)** will be fine-tuned and donor support firmed up in the course of April. The EU will support work in land and water resources utilization, while UNDP's program of capacity building will be available shortly.

29. The preparation of **Projects 3.1(a) (Water Quality Assessment and Management)** and **3.1(b) (Agricultural Water Quality)** is well underway. Working Groups have been established and a preparatory workshop has been held in early February in Tashkent, in parallel with that for Project 1.1, to determine the detailed terms of reference and prepare a work program for the next 6 months. GEF support (executed by EC) funded this preparation work, while implementation of both sub-projects will be funded by the Netherlands, with additional support from UNEP and Turkey.

30. Recent discussion within the Bank suggests that the scope of **Project 3.2** (originally called Collector Drain but now proposed to be called Uzbekistan Drainage) needs to be broadened to look at all feasible alternatives for addressing problems of waterlogging and salinity. In February, the Task Manager discussed this approach with the Uzbekistan authorities and the need to mount an initial phase of additional data collection. This data would be analyzed during a workshop of local experts and decisions made on the subsequent development of a project for World Bank consideration. Funding for the data collection and feasibility study is available under a Japan Grant, while Netherlands funding would be used for the environmental assessment of the project, which will need to be particularly rigorous in this case, given the magnitude of the potential project and the world-wide interest that such projects typically generate.

31. Using Italian trust funds, the Bank recently awarded a contract for a pre-feasibility study for **Project 3.3** (originally called Remodelling of Syr Darya River Bed and Shardarinsk Control Units but now simplified to Syr Darya Control and Delta Development Project)<sup>1</sup> and consultants are expected to start work in March. Additional assistance has been offered by Turkey and Egypt.

32. Consultant proposals for **Project 4.1** (Wetland Restoration) have recently been received and will be funded with Netherlands support. Field work on the feasibility study (including environmental review) should start by April.

33. **Project 4.2** (Restoration of the Northern Part of the Aral Sea) is under consideration for World Bank lending and funding is available from a Japan Grant for project preparation. Initial discussions with the Kazakhstan authorities indicate that, with the present availability of water from the Syr Darya, a stable northern lake would have a level considerably below the 1960 level (not reaching Aralsk) and the benefits of such a project would be limited. If other projects indicate that greater volume of water may be released to the Aral Sea, the feasibility of Project 4.2 could be enhanced; thus, the two studies need to be closely linked. Further discussions were held in late-January.

34. **Project 4.3** (Environmental Studies) consists of at least the five studies described in the Paris documents plus environmental assessments of Projects 3.2 and 4.2 (to proceed in parallel with the respective feasibility studies). Other studies can be added by mutual agreement. Donor interest - from UNEP, the Netherlands, UK, Denmark, Turkey and Finland - is very strong and the Bank is about to propose an appropriate division of labor between donors, to facilitate an early start to several of the studies.

35. Basin states have suggested that priority be given by donors to urgent problems of clean drinking water in the Aral Sea disaster zone. Support has therefore been strong for **Projects 5.1, 5.2 and 5.3** (Clean Water, Sanitation and Health in Uzbekistan, Turkmenistan and Kazakhstan respectively). All three projects have been programmed for World Bank consideration and are likely to be similar in scope, with components to ensure the safety and reliability of drinking water, to improve basic sanitation and for health education. All three projects are being closely coordinated with the ongoing US program and are paying careful attention to the expressed needs of the

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<sup>1</sup> EC proposes to renumber this project as 4.4, in view of its close linkages with Project 4.2 (Restoration of the Northern Part of the Aral Sea).

population. The EU-supported study on Willingness to Pay will provide additional data for project design. Under its Fund for Innovative Approaches in Human and Social Development (FIAHS), The World Bank has approved funding to engage local social scientists to execute a rapid social assessment of stakeholders in the projects, as well as focused follow-up studies, as needed; and conduct participatory workshops to discuss findings of the studies and explore their implications for project design. A first workshop to evaluate the experience in social assessment on these projects will be held in March 3-4 in Tashkent. A workshop on drinking water standards has been proposed for April.

36. In Uzbekistan, a comprehensive set of project preparation activities has been agreed, following a major mission in October (with Netherlands trust fund support) - a feasibility study, funded by the Kuwait Fund (for which consultant proposals will be invited shortly), a pilot demonstration program, originally expected to be funded by Switzerland<sup>2</sup>, and supporting studies in social assessment, hand pumps, and rehabilitation of desalination equipment, which the Netherlands will fund.

37. In Turkmenistan, preliminary discussions on the proposed project were held in late-1994; a major mission (including a social assessment team) will visit the field in February-March, to define the project scope in detail. A Japan grant is available for project preparation.

38. For Kazakhstan, a mission (with Netherlands trust fund support and including a social assessment team) to complete the drafting of TORs for project preparation is in the field. Funds from the Kuwait Fund and a Japan Grant are available and Turkey has expressed interest.

39. Once Projects 5.1, 5.2 and 5.3 are under preparation, it will be appropriate to give more emphasis to **Project 5.4** (Medium-Term Provision of Water Supply) and **Project 5.5** (Long-Term Water Supply and Wastewater Management). The Bank has initiated discussions with JICA (Japan) aimed at re-orienting an ongoing study towards medium-term objectives and thus take the place of Project 5.4. Some work originally envisaged under Project 5.4 on demand estimates, water quality standards and the functioning of the Tuyumuyun and Kaparas reservoirs, will now be undertaken under Project 5.1. For Project 5.5, the strategy is to wait for initial development of Project 1.1 on regional water strategy to see whether a separate project on drinking water development is still needed, before making another approach to donors.

40. A launch workshop was held for **Program 6** in Bishkek on January 10-13, and was attended by the Program Group as well as donors to Program 6; UNEP, UNDP, Finland, Sweden, the US and Turkey. The workshop, funded by UNDP, enabled the four upstream countries, the Kyrgyz Republic, Tajikistan, Kazakhstan and Uzbekistan to produce a Protocol containing an initial draft on Work Group identification and scope of work for the six-month preparatory period. Functional areas needing international technical assistance were highlighted. Strong donor support has produced full funding of estimated costs with supplemental technical assistance available. A follow-up meeting to further refine the scope of work has been scheduled for March.

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<sup>2</sup> A problem of eligibility has recently been identified. Other funding sources may be explored.

41. The objective of **Program 7** is to strengthen the two BVOs and modernize their operations. Initial review by the Bank indicates that the problems faced by the BVOs may be broader than originally thought, including questions of mandate and enforcement authority and their ability to function on a truly interstate basis. Further discussion to clarify these questions and to determine the scope of the proposed studies would be worthwhile before another approach is made to donors. Nevertheless, the governments of Germany, Japan, the US and Turkey have expressed initial interest in financing parts of Program 7.

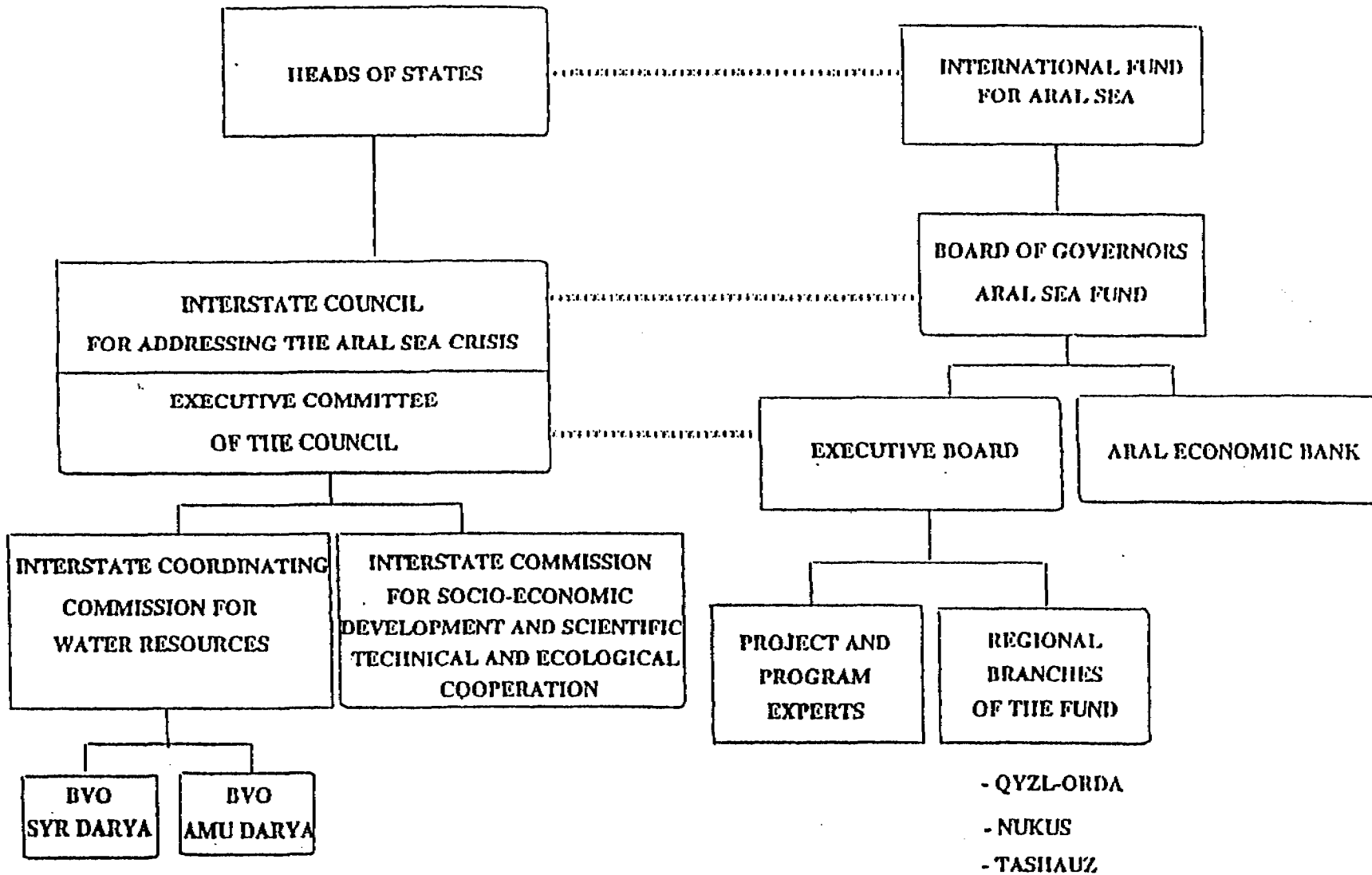
42. **Supplementary Program on Capacity Building.** Various steps are underway to strengthen the structure and operation of the regional institutions. The capacity building needs of these agencies have been assessed by UNDP and specific assistance proposals are being formulated. The EU contractors "Aquatec" have agreed to post one permanent resident advisor in the EC to coordinate with the Bank, UNDP and UNEP on designing the scope and implementation schedule of the regional and national capacity-building activities. At present, IFAS and EC are reviewing consultant proposals to provide technical assistance required to improve their operations. Meanwhile, suggestions have been made by EC to go beyond EC and IFAS and provide technical assistance and capacity-building to other agencies such as the BVOs and national missions of ICAS.

#### **Related Activities**

43. A "NATO Advanced Research Workshop" was held in the Netherlands between January 4-7, 1995. The workshop was entitled "The Inter-Relationship between Irrigation, Drainage and the Environment in the Aral Sea Basin" and involved 32 technical experts, 14 of which were from the former USSR countries. Thirty two papers related to Aral Sea were presented and they will soon be distributed in a published proceedings document.

44. UNESCO is executing a program of 22 subprojects in ecological research and monitoring in the Amyu and Syr Darya deltas, with funding from Germany and involving scientists from a variety of local institutes. Initial results will be reviewed at an International Symposium on Hydrological Research and Water Management Strategies in Arid and Semi-Arid Zones to take place in Tashkent in September 1995.

**ARAL SEA BASIN  
REGIONAL ORGANIZATION  
ORGANIZATION CHART**



## ARAL SEA BASIN PROGRAM - FIRST PHASE: DONOR INDICATIONS AS OF 11/15/94

AMOUNTS in US\$000

| NAME OF PROGRAM/PROJECT   | ESTIMATE<br>COST | COMMITMENTS  |       | GAP   | COMMENTS   |
|---|------------------|--|-------|-------|--|
|   |                  | SOURCE   | TOTAL |       |  |
| <b>Program 1</b>  |                  |  |       |       |  |
| 1. Regional Water Resources Management Strategy                     | 375              | GEF/375/NL/400<br>EU(1)/UNDP(2) and UNEP Interest          | 875   | (500) | Funding from NL, US (\$4.8 mill), EU and other donors allocated to implementation  |
| 2. Improving Efficiency and Operation of Dams                       | 200              | SWEDEN(BITS)/200   | 200   | 0     |  |
| 3. Sustainability of Dams and Reservoirs                            | 200              | SWEDEN (BITS)/200  | 200   | 0     |  |
| SUB-TOTAL PROGRAM 1   | 775              |  | 1,275 | (500) |  |
| <b>Program 2</b>  |                  |  |       |       |  |
| 1. Hydrometeorological Services                                     | 1,510            | UK/250/SWISS/1,500/EU (1)<br>UNDP Interest (2)             | 1,750 | 770   | US Commitment of \$2.2 mill. for implementation phase under review.  |
| 2. Data Base and MIS for Water Quality and Env.                     | 1,010            | UNDP Interest (2)  |       |       |  |
| SUB-TOTAL PROGRAM 2   | 2,520            |  | 1,750 | 770   |  |
| <b>Program 3</b>  |                  |  |       |       |  |
| 1. Water Quality Management   |                  |  |       |       |  |
| a) Water Quality Assessment and Management                          | 125              | GEF/125/TURK/UNEP Interest                                 | 125   | 0     |  |
| b) Agricultural Water Quality                                       | 290              | NL/200   | 290   | 0     |  |
| 2. Collector Drains   | 250              | NTF/250  | 250   | 0     | Initial study completed. PHRD to possibly \$1.0 mill. of additional financing for detailed feasibility study.  |
| 3. Remodelling of Syr Darya river bed/<br>Shardarinsk Control Units | 520              | ITA TF/520/TURK Interest<br>EGY to finance 3 tech. experts | 520   | 0     |  |
| SUB-TOTAL PROGRAM 3   | 1,185            |  | 1,185 | 0     |  |
| <b>Program 4</b>  |                  |  |       |       |  |
| 1. Wetland Restoration  | 950              | NL/600   | 950   | 0     |  |
| 2. Restoration of Northern Part of the Aral Sea.                    | 720              | PHRD/720   | 720   | 0     |  |
| 3. Environmental Studies in the Aral Sea Basin                      | 1,100            | UK/120/NL/450/DK/250<br>UNEP/550/TURK/FINNIDA (3) Interest | 1,580 | (480) | NL funding includes environmental assessment of Programs 3.2 and 4.1.<br>FINNIDA preference for aquatic biological issues.<br>Germany funding project on Environmental Monitoring of the Aral Sea Disaster Zone (implemented by UNESCO). |
| SUB-TOTAL PROGRAM 4   | 2,770            |  | 3,250 | (480) |  |



|  |               |   |              |               |   |
|--|---------------|---|--------------|---------------|---|
| <b>Program 5</b>   |               |   |              |               |   |
| 1. Clean Water, Sanitation/Health - Uzbekistan   | 830           | NTF/390/SWISS/440/<br>KFAED/830/NL/160                                      | 1,820        | (990)         | Project scope is being expanded to incorporate additional donor funding available. US commitment of \$2.7 mill. to implementation phase likely. |
| 2. Clean Water, Sanita./Health - Turkmenistan  | 800           | PHRD/800/UNDP Interest  | 800          | 0             | US Commitment of \$5.3 mill. to implementation likely.  |
| 3. Clean Water, Sanitation/Health - Kazakhstan   | 1,260         | NTF/500/PHRD/760<br>KFAED/1,250<br>TURK/UNDP Interest                       | 2,510        | (1,250)       | Project scope is being expanded to incorporate additional donor funding available. US commitment of \$4.9 mill to implementation phase likely.  |
| 4. Medium-term Provision of Water Supply   | 8,250         | UNDP and GERMAN<br>Interest   | 0            | 8,250         |   |
| 5. Long-term Water Supply and Wastewater Mgt.  | 7,000         | UNEP Interest   | 0            | 7,000         |   |
| <b>SUB-TOTAL PROGRAM 5</b>   | <b>18,140</b> |   | <b>5,130</b> | <b>13,010</b> |   |
| <b>Program 6</b>   |               |   |              |               |   |
| 1. Integrated Land/Water Management in the Upper Watersheds                            | 200           | UNEP/200/EU(1) SWEDEN,<br>FINNIDA(3), TURK Interest                         | 200          | 0             | US commitment to implementation phase likely (Kyrgyz Rep. only)   |
| <b>Program 7</b>   |               |   |              |               |   |
| 1. Automatic Control Systems/Civil Works<br>Capacity Building for the Amu Darya Basin  |               | USTDA Interest  |              |               |   |
| - Feasibility Study  | 750           |   | 0            | 750           |   |
| - Technical Design   | 1,250         |   | 0            | 1,250         |   |
| - Capacity Building  | 1,000         |   | 0            | 1,000         |   |
| 2. Automatic Control Systems/Civil Works/<br>Capacity Building for the Syr Darya Basin |               | USTDA Interest  |              |               |   |
| - Feasibility Study  | 750           |   | 0            | 750           |   |
| - Technical Design   | 1,250         |   | 0            | 1,250         |   |
| - Capacity Building  | 1,000         |   | 0            | 1,000         |   |
| <b>SUB-TOTAL PROGRAM 7</b>   | <b>3,000</b>  | <b>EGY - 7 experts to above 2 projects<br/>so support technical aspects</b> | <b>0</b>     | <b>3,000</b>  |   |

1/ A problem of eligibility has recently been identified. Other funding sources may be explored.

|   |        |   |        |        |   |
|---|--------|---|--------|--------|---|
| <b>Supplementary Program</b><br>Capacity Building for EC and IFAS   | 9,100  | WORLD BANK/2,00/NL/120, UNDP (2)<br>UNEP, EU (1), OECD, NATO Interest | 2,500  | 6,600  | NATO to finance workshop on interaction between environment and drainage. Workshop to be held in NL Jan 9-12, 1995. |
| <b>ARAL SEA BASIN PROGRAM FIRST PHASE COSTS</b>   | 40,690 |   | 14,730 | 25,960 |   |
| <b>OTHER:</b>   |        |   |        |        |   |
| NGO Support/Secondment  |        | UK  | TBD    |        |   |
| EU Contract to cover above activities totals ECU 4.75 mill (\$5.0 equiv.)   |        | EU  | 5,000  |        |   |
| Of the total allocation of \$6.00 mill, about \$2.00 mill will possibly be earmarked to capacity building and other activities to be discussed with UNDP.   |        | NL  | 2,000  |        |   |
| US anticipates a total allocation of about \$33 mill. toward project preparation and implementation, of which \$12 mill. is already earmarked to Program 5 in addition to the amounts shown above. Of the total amount, approx \$7 mill. is expected to be earmarked to preparation activities. |        | US  | 7,000  |        |   |
| Specific allocations for UNDP funds to be determined.   |        | UNDP  | 2,500  |        |   |
| Secondment/Capacity-Building.   |        | DK  | 250    |        | Amount to finance a secondment to the Aral Basin Unit in Washington   |
| Allocations to be announced   |        | FR,GER, JAPAN   | TBD    |        | Commitments to be firmed up   |
| <b>GRAND TOTAL COSTS</b>  | 40,690 |   | 31,480 | 9,210  |   |

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Legend:

|        |  |
|--------|--|
| DK:    | Government of Denmark  |
| EC:    | Executive Committee of the Interstate Council for the Aral Sea |
| EGY:   | Government of Egypt  |
| EU:    | European Union   |
| FINNI: | Finnish National Aid Agency                                    |
| FR:    | Government of France   |
| GEF:   | Global Environment Facility                                    |
| GER:   | Government of Germany  |
| IFAS:  | International Fund for the Aral Sea                            |
| ITAT:  | Italian Trust Fund   |
| JICA:  | Japan International Cooperation Agency                         |
| KFAE:  | Kuwait Fund for Arab Economic Development                      |
| NATO:  | North Atlantic Treaty Organization                             |
| NL:    | Government of Netherlands                                      |
| NTF:   | Netherlands Trust Fund   |
| OECD:  | Organization for Economic Cooperation and Development          |
| PHRD:  | Japanese Policy and Human Resources Development Fund           |
| TURK:  | Government of Turkey   |
| UK:    | Government of United Kingdom                                   |
| US:    | Government of United States                                    |
| USTDA: | United States Trade and Development Agency                     |

Note:

- (1) The EU's total allocation to the Program is ECU 4.75 mill. (\$5.0 mill. equivalent).
- (2) UNDP committed to allocate \$2.5 m to the program, part of which could be earmarked to this program.
- (3) FINNIDA has not committed an amount but its funding is likely to be in the order of \$500,000.

**ARAL SEA BASIN PROGRAM - PHASE I**

**MEMORANDUM OF UNDERSTANDING**

**ON WORLD BANK, UNEP AND UNDP COLLABORATION**

**Europe and Central Asia Region  
Aral Sea Program Unit  
Washington, D.C.  
November 30, 1994**

## **ARAL SEA BASIN PROGRAM Phase I**

### **Memorandum of Understanding on World Bank, UNEP & UNDP Collaboration**

#### Purpose and Scope

1. This Memorandum of Understanding (MOU) prepared jointly by the World Bank, the United Nations Environment Program (UNEP) and the United Nations Development Program (UNDP) defines the roles of the three organizations in respect to the Aral Sea Basin Program - Phase I. The MOU gives a brief background of the Bank-UNEP-UNDP collaboration on this Program, defines the objectives of future collaboration, and outlines the structure and modalities of collaboration for assisting the regional institutions established by the Aral Sea states to implement the Program.

2. The MOU is a working document that reflects the spirit of the coordination, characteristics of the dialogue, and cooperation between the three organizations, a spirit well captured in intergovernmental negotiations on the GEF instrument that defined the responsibility of each Implementing Agency as follows:

- a) UNDP playing the primary role in ensuring the development and management of capacity building programs and technical assistance projects;
- b) UNEP playing the primary role in catalyzing the development of scientific and technical analysis and in advancing environmental management in GEF-financed activities;
- c) the World Bank playing the primary role in ensuring the development and management of investment projects.

The scope of this MOU covers activities described in Phase 1 of the Aral Sea Program in the Aide Memoire prepared for the Donor meeting. A new MOU may be prepared by the three organizations for the next stage, which involves implementation of the projects prepared during the current stage.

#### Objectives of Collaboration

3. The international community is committed to contribute to a successful implementation of a strategy which will satisfy "the fresh water needs of all countries for their sustainable development," as defined under the specific chapter on Fresh Water of Agenda 21. To achieve such an objective, Agenda 21 specifies that "water must be seen as an integral part of the

ecosystem, a natural resource and a social and economic good, whose quantity determines the nature of its utilization." To this extent, four objectives should be pursued as follows:

- a) To promote a dynamic, interactive, iterative and multisectoral approach to water resource management, including the identification and protection of potential sources of freshwater supply that integrates technological, socio-economic, environmental and human health considerations;
- b) To plan for the sustainable and rational utilization, protection, conservation, and management of water resources based on community needs and priorities within the framework of national economic development policy;
- c) To design, implement and evaluate projects and programs that are both economically efficient and socially appropriate with clearly defined strategies, based on an approach of full public participation...and local communities in water management policy-making and decision-making;
- d) To identify and strengthen or develop the appropriate institutional, legal, and financial mechanisms to ensure that water policy and its implementation are a catalyst for sustainable social progress and economic growth."

4. The main objective of the Bank-UNEP-UNDP collaboration is to optimize the effectiveness of their assistance to the Aral Sea Basin states so that they are able to:

- a) introduce the essential policies and institutional reforms and develop effective strategies for addressing the Aral Sea crisis;
- b) coordinate the regional and the complementary national policies and programs to ensure consistent policies and efficient management of the water resources and protection of its environment;
- c) organize, staff and build the capacities of the regional institutions, particularly the apex institutions of the International Fund for the Aral Sea (IFAS), the Executive Committee (EC) of the Interstate Council for the Aral Sea, the Commission for Socio-Economic Development and Scientific, Technical and Ecological Cooperation (ICSDESTEC), and the Program and Working Groups to plan and execute the Program activities with due regard to efficiency and economy; and to
- d) ensure efficient and speedy transition of the prevailing inadequate systems and practices used by the Former Soviet Union (FSU) for planning and implementing projects, decision making, procurement of works, goods and services, accounting,

auditing, monitoring and evaluation, to more efficient internationally accepted systems and practices.

5. Because the Program for addressing the Aral Sea problems is complex and long-term, the magnitude of capacity building and investments required to redress decades of mismanagement of the water resources and environment is very large. Moreover, the interstate water issues are politically sensitive. The Bank, UNEP and UNDP believe that, in addition to adequate capacity and institution building components at the national and local levels, to be handled by UNDP, early emphasis should be placed on establishing and strengthening the new regional institutions. Therefore, in their joint programming activities the Bank, UNEP and UNDP will give high priority to assisting the regional institutions, which are expected to assume full responsibility for executing the Program, external assistance constituting only a small part of the required total effort on a longer term. The Bank, UNEP and UNDP agree that their role would be to coordinate the international community's assistance, administering their funds where appropriate, to ensure that they are used efficiently for the intended purposes, and to assist the relevant institutions to carry out their executing agency responsibilities and functions most efficiently. Although the Bank, UNEP and UNDP may not be involved in administering all donor funds, they will monitor the progress of the Program as a whole so that the Program objectives and the effects of strong linkages between the Program components are realized to the maximum extent.

6. The EC is establishing Program Groups (PGs) for implementing the seven programs approved by the Heads of States which form the basis of the Aral Sea Basin Program - Phase 1. Some projects (e.g. strategic regional studies) may be implemented directly by the PGs while others may be implemented through the state ministries and local institutions. In either case, the PGs will be responsible for ensuring successful implementation and project quality and will report to the EC.

#### Structure and Modalities of Collaboration

7. The Bank-UNEP-UNDP collaboration framework envisages promoting and strengthening the commitment and cooperation of the five Basin states through such interventions at the highest levels as may be necessary and appropriate to achieve the goals of the Aral Sea Basin Program. It involves two clusters of coordinating activities. One cluster concerns the joint activity of the three organizations toward achieving the Program's overall success, and meet their responsibilities to the donors and the five basin countries. The second cluster of coordinating activities relates to the individual responsibilities of each of the three organizations in regard to specific projects included in the Program for achieving their efficient and timely implementation. The responsibility of each organization is limited to those activities for which it is individually or jointly responsible.

#### Joint Activity for the Overall Program

8. a) Assistance to the Regional Institutions (EC, IFAS and ICSDSTEC):

- i. It includes assistance to the institutions to achieve the objectives defined in paras 3 and 4 most effectively;
  - ii. For capacity building of the regional institutions, including the legal infrastructure to plan, implement and manage the Program efficiently;
  - iii. For coordinating the regional activities funded by the donors and international agencies under the Aral Sea Basin Program and the complementary national development plans financed by the respective Governments and the external agencies, to ensure consistency and complementarity for addressing the Aral Sea crisis;
  - iv. To establish the policies and procedures for procurement, implementation, disbursements, contract administration, progress reporting, accounting auditing, etc., to be followed by the Regional institutions and to build their capacity to implement them effectively;
  - v. To IFAS, to establish the procedures to be followed for reporting progress on the contributions of the five Basin states to the Aral Sea Fund and the status of the Fund's assets and liabilities; and
  - vi. To monitor progress, identify implementation constraints and assist the executive agency to address the constraints successfully.
- b) Donor Coordination and Reporting:
- i. Preparing and submitting progress reports periodically to the donors, and the Interstate Council, the IFAS, the EC and the five Basin states and keeping them informed about the progress, the constraints and the measures proposed to address them;
  - ii. Preparing financial reports to keep the donors, the IFAS, the EC, the Interstate Council and the five Basin states informed about status of donors' commitments, disbursements, and changes in cost estimates etc;
  - iii. Organizing donors' meetings as necessary.
- c) Public Information:
- i. Organizing seminars to keep the NGOs and the media informed about the program and to seek their comments and suggestions;



- ii. Publishing documents and preparing audio-visual materials to inform the public about the progress of the Program.

#### Administration of Specific Projects:

9. The specific projects of the Phase I Program which concern the UNEP, UNDP and the Bank are indicated in the Annex. The Program consists of seven program categories and 20 specific projects, including capacity-building activities. Donor funding in support of these projects is being sought. The Bank, UNEP and UNDP have agreed to assume responsibility for administering those projects which donors want them to administer on their behalf.

10. The Bank, UNEP, and UNDP will designate their respective task managers for dealing with the specific projects of concern to them. The designated task managers will assist their respective counterparts, PGs, and the concerned state and local implementing agencies. The designated task managers will have adequate authority to ensure that the policies and procedures approved by the Bank, UNEP and UNDP are followed by the PGs and the agencies executing the projects.

11. The Bank, UNEP and UNDP recognize the crucial role their regional/country offices are playing in assisting the new regional institutions which require help at almost every step in the beginning to understand the procedures to be followed for implementing the Program. The assistance of resident missions will be particularly valuable in handling the correspondence between the ASBPU and the regional institutions and in monitoring and assisting the implementation of the Program. Their availability to the regional institutions for consultation on issues concerning the Program is important for the success of the Program.

#### Steering Committee

12. A Steering Committee of the Bank, UNEP and UNDP will be responsible for the overall coordination of the activities of the three institutions. The Steering Committee will include the Bank's Country Director for Europe and Central Asia, the UNDP's Regional Director for Europe and the CIS, the UNEP's Deputy Assistant Executive Director, and would also include the Manager of the ASBPU as Secretary. The Steering Committee will meet at least twice a year, or more frequently if necessary.

#### Administrative Arrangements Within the Bank, UNEP and UNDP

a) World Bank:

13. In view of the increasing activities of the Aral Sea Basin Program, the Bank approved in February 1994 the creation of an Aral Sea Basin Program unit (ASBPU) with three staff positions

and an appropriate consultancy budget in the Office of the Director, Europe and Central Asia Country Department 3 (EC3). Some donors have also indicated interest in seconding experts to this Unit. The ASBPU will coordinate the activities of the Bank task managers dealing with specific projects and provide necessary guidance to ensure consistency in policies, approaches and procedures. The ASBPU within the Bank will serve as a focal point to establish a common dialogue with UNEP and UNDP, in particular, by liaising with their Regional Offices and with the Steering Committee members.

14. The Bank has also established a Review Panel comprising senior Bank staff with experience in such subjects as water resources management, environment, international waters, irrigation and drainage, international water law and riparian issues, water supply and sanitation to advise the Director (EC3) and assist in reviewing the policies, strategies and effectiveness of the Program activities.

15. The Bank's Regional Mission in Tashkent has been providing substantial advisory, liaison, and administrative support to the headquarters staff since the Aral Sea activities started in September 1992. For the future, its role will be enhanced by the recruitment of a Senior Operations Officer to support Program implementation, together with the secondment of a Senior Advisor from the Netherlands, and necessary local staff. The Regional Mission will be the field counterpart organization of the ASBPU for the Bank's activities. In addition, the Chief of Mission will maintain a dialogue at the policy-making level in the five basin states to ensure the successful implementation of the Aral Sea Basin Program.

b) The UNEP

16. UNEP became involved in the Aral Sea region in 1990, at the request of the former USSR. In cooperation with the USSR Center for International Projects and the riparian Governments, a project, entitled "Assistance for the Preparation of an Action Plan for the Rehabilitation of the Aral Sea" was developed. This project was developed in response to the significant environmental degradation that had occurred in the Aral Sea drainage basin since the 1960's. This degradation resulted primarily from the diversion of the waters of the Amu Darya and Syr Darya, the two main inflow rivers to the Aral Sea, for the purpose of irrigation of cotton. Because of the diversion of its primary inflow waters, the lake's surface area and depth have decreased significantly, its salinity has increased dramatically, its indigenous biological communities have been essentially destroyed, its initially substantial commercial fisheries have been destroyed, and the human health situation in the entire basin has deteriorated.

17. In response to this situation, UNEP facilitated the establishment of an international group of Government-designated experts, which worked closely with its Soviet counterparts. Based on extensive field missions and expert meetings, a comprehensive Diagnostic Study (state-of-knowledge report) was produced. The study evaluated a range of factors relevant to the demise of the Aral Sea, including technical issues such as hydrology and water balances, geology, flora and fauna, including fisheries, water pollution, irrigation and salinization, as well as relevant

socioeconomic variables, including demographics, public health, economic structure, education, labor, institutional capabilities, and political considerations. The Diagnostic Study was adopted in its final version at the last (4th) meeting of the expert group in September 1992, in Geneva, Switzerland. Based on the positive reception of this report from the Governmental representatives of the Aral Sea states, UNEP was requested to proceed with the facilitation of the development of a comprehensive management action plan for the integrated management of the freshwater resources of the Aral Sea drainage basin.

18. In producing the Diagnostic Study, UNEP attracted the attention of the donor community in the serious situation in the Aral sea basin. Subsequently, the World Bank and UNDP expressed their interest in collaborating with UNEP in developing the above-noted action plan for the region. Several subsequent joint missions and meetings have lead to a consolidated Action Program for the Aral Sea, developed with agreement of the five Aral Sea states. The Program was presented to a meeting of donors in June 1994, where it received financial support in the order of US \$32 million. UNEP subsequently has been involved with the World Bank and UNDP in the development of the first phase of the action plan.

19. UNEP intends to play an active role in the overall preparation and implementation of Phase I. As UNEP is not an implementing agency, it intends to play this role within the Steering Committee of the Program. UNEP will provide, as appropriate, its technical expertise and input towards the development of a Regional Water Strategy, including water quality management, wetlands restoration, and upper watershed management. Whenever possible it will participate with the Bank and UNDP in Joint Missions to the region. UNEP will also ensure that the Aral Sea Program benefits from new knowledge arising from other regional water resource programs it oversees as well as the global networks coordinated by UNEP and its regional and global components. Like this UNEP will fulfill its catalytic Role.

c) The UNDP

20. UNDP is proposing to contribute to the Aral Sea Program by developing activities along the following lines, in the field of institutions and capacity building, and the coordination between the international donor and lending institutions in Central Asia.

a) Networking: UNDP has established country offices in the five states of Central Asia. The offices in Kazakhstan and Uzbekistan, created first, have in particular strong and well established connections with the authorities, the civil society, and the donor community. Such connections with the five Republics provide a solid basis to initiate the difficult task which is needed.

b) Institution Building: While EC and IFAS have been established by the basin states, the necessary multidisciplinary which was planned on paper needs to be further enhanced. The Interstate Commission for Socio-economic Development and Scientific, Technical and Ecological Cooperation was established very recently and needs

substantial support. UNDP is proposing to support these institutions by identifying the detailed specific needs, proposing concrete answers, and promoting multidisciplinary in a perspective of sustainable development.

c) **Capacity Building:** Human resource development has been recognized to be a critical element in the capacity building of the water sector. In addition, the key objective of a sustainable strategy is to develop the financial viability of a water system. Capacity building should also include the development of financial discipline, to develop the mechanism to enable financial information to be made available in a timely fashion, and to develop collaboratively financial targets supported by the various socio-economic actors.

UNDP is proposing that, in the context of its continuous commitment to support the Aral Sea Program, and through its own as well as other sources to be raised, it will seek to employ five to six international Technical Advisers (water resources, environment, water supply and sanitation) as well as 15 national experts in Tashkent, Almaty, Ashgabad, and Bishkek. In addition, UNDP will provide five to ten UN Volunteers to answer to local training requests.

UNDP will first contribute to the exploration of training needs identification to facilitate the implementation of well-conceived strategies in coordination with the Bank and UNEP, as far as these needs are concerned under projects 1.1, 3.1b, 4.1, 4.3, 6, and the supplementary program on capacity building:

- i. Curriculum conceptualization and development;
- ii. Selection of a training delivery system: universities, post graduate and continuous education institutes, training institutes of ministries, local government, enterprises, NGOs, etc;
- iii. Prepare for local multiplication of delivery: training of trainers, follow-up of training, assessment and feedback;
- iv. Specialized workshops.

d) **Community Participation:** Community participation is the essential component of a project to be funded by Capacity 21 (Water and Civil Society in the Aral Sea Program), to be developed by the International Secretariat for Water, jointly with NOVIB, national experts, and NGOs. UNDP will ensure this component of the UNDP Aral Sea Program is closely associated with the previous elements of its strategy, as it is the principal component striving to improve health education, rural sanitation services, and the decentralized, "demand" water management concept as opposed to the existing mainly "supply," top-down system.

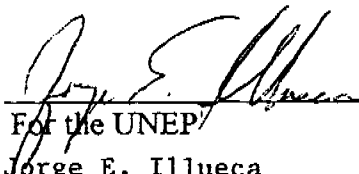
- e) Sustainable Human Development: As a result of an International meeting held in January 1994, the UNDP office in Uzbekistan has set up an "Sustainable Human Development Initiative." A conference, in coordination with ASBPU, will be organized for late April/early May 1995 in the Region on this issue.

21. The UNDP also intends to use its Resident Mission in Tashkent for assisting its New York Office in administering the specific projects for which UNDP is responsible. The Bank's and the UNDP's resident missions will work out the modalities of coordination of their activities to ensure consistency in policies and approach, and complement the directives as received from their respective headquarters into a harmonious, well coordinated approach to be shared with the Regional Institutions by the Regional Bank Representative in his role as coordinator for the Aral Sea Program. This involves both the overall coordination, the joint Programs, as well as the specific projects of each implementing agency.

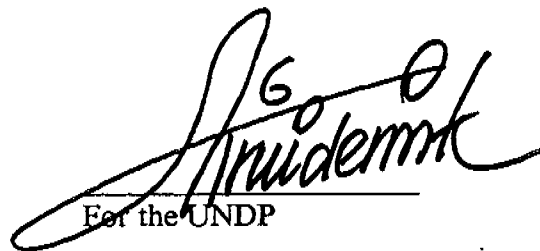
22. The Bank, UNEP and UNDP recognize that close cooperation between the three organizations is essential for the success of their efforts to assist the regional institutions created by the Heads of States to implement the Aral Sea Basin Program. The MOU reflects their determination to achieve their common objective.



For the World Bank  
Russell J. Cheetham  
Director, Country Department III  
Europe and Central Asia Region



For the UNEP  
Jorge E. Illueca  
Assistant Executive Director  
Environmental Management



For the UNDP  
A. Kouiderink  
Director  
Division for Europe  
and the CIS

**ARAL SEA PROGRAM (PHASE 1)  
MEMORANDUM OF UNDERSTANDING - ANNEX**

| <u>NAME OF PROGRAM/PROJECT</u>  | <u>Cost<br/>Estimates<br/>(\$ million)</u> | <u>Current Funding Sources</u> | <u>Responsibility</u> |
|---|--|--------------------------------|-----------------------|
| <u>Program 1</u>  |  |                                |                       |
| 1. Regional Water Resources Management Strategy   | 0.38                                       | GEF/NL/EU/UNDP                 | Bank/UNDP/UNEP        |
| 2. Improving Efficiency and Operation of Dams   | 0.20                                       | BITS                           | Bank                  |
| 3. Sustainability of Dams and Reservoirs  | <u>0.20</u>                                | BITS                           | Bank                  |
| PROGRAM SUBTOTAL  | 0.78                                       |                                |                       |
| <u>Program 2</u>  |  |                                |                       |
| 1. Hydrometeorological Services   | 1.51                                       | } UK/Swiss/EU/UNDP<br>}        | Bank/UNDP             |
| 2. Data Base & MIS for Water Quality and Environment  | <u>1.01</u>                                |                                |                       |
| PROGRAM 2 SUBTOTAL  | 2.52                                       |                                |                       |
| <u>Program 3</u>  |  |                                |                       |
| 1. Water Quality Management   |  |                                |                       |
| a) Water Quality Assessment Management  | 0.13                                       | GEF/NL                         | Bank/UNEP             |
| b) Agricultural Water Quality   | 0.29                                       | NL                             | Bank                  |
| 2. Collector Drains   | 0.25                                       | NTF/PHRD                       | Bank                  |
| 3. Remodelling-Syr Darya river bed, Shardarinsk Control Units   | <u>0.52</u>                                | ITA/EGY                        | Bank                  |
| PROGRAM 3 SUBTOTAL  | 1.19                                       |                                |                       |
| <u>Program 4</u>  |  |                                |                       |
| 1. Wetland Restoration  | 0.95                                       | NL                             | Bank/UNEP             |
| 2. Restoration of Northern Part of the Aral Sea   | 0.72                                       | PHRD                           | Bank                  |
| 3. Environmental Studies in the Aral Sea Basin  | <u>1.10</u>                                | UK/NL/DK/UNEP                  | UNEP/Bank             |
| PROGRAM 4 SUBTOTAL  | 2.77                                       |                                |                       |
| <u>Program 5</u>  |  |                                |                       |
| 1. Clean water, Sanitation & Health - Uzbekistan (short-term)   | 0.83                                       | NTF/Swiss/KFAED/NL             | Bank                  |
| 2. Clean water, Sanitation & Health - Turmenistan (short-term)  | 0.80                                       | PHRD/UNDP                      | Bank                  |
| 3. Clean water, Sanitation & Health - Kazakhstan (short-term)   | 1.26                                       | NTF/PHRD/KFAED/                | Bank                  |
| 4. Medium-term Provision of Water Supply  | 8.25                                       | UNDP                           | Bank                  |
| 5. Long-term Water Supply and Wastewater Management   | <u>7.00</u>                                |                                | Bank                  |
| PROGRAM 5 SUBTOTAL  | 18.14                                      |                                |                       |
| <u>Program 6</u>  |  |                                |                       |
| Integrated Land, Water Management in the Upper Watersheds   | <u>0.20</u>                                | EU/BITS/FINNIDA/<br>UNEP       | Bank/UNEP             |
| PROGRAM SUBTOTAL  | 0.20                                       |                                |                       |
| <u>Program 7</u>  |  |                                |                       |
| 1. Automatic Control Systems & Civil Works for Amu Darya Basin, including Capacity Building for BVO Amu Darya | 3.00                                       |                                | Bank                  |
| 2. Automatic Control Systems & Civil Works for Syr Darya Basin, including Capacity Building for BVO Syr Darya | <u>3.00</u>                                |                                | Bank                  |
| PROGRAM 7 SUBTOTAL  | 6.00                                       |                                |                       |
| <u>Supplementary Program</u>  |  |                                |                       |
| Capacity Building for EC, IFAS, ICEDSTEC & Implementing Agencies  |  | WB/NL/UNDP/UNEP/<br>EU         | UNDP/Bank<br>/UNEP    |

**ARAL SEA PROGRAM (PHASE 1)**  
**MEMORANDUM OF UNDERSTANDING - ANNEX**

|                           |       |           |                    |
|---------------------------|-------|-----------|--------------------|
| <u>Donor Coordination</u> |       |           |                    |
| Progress Report           | -     | Bank      | Bank/UNDP/UNEP     |
| Financial Reports         | -     | Bank      | Bank/UNDP/<br>UNEP |
| Donor Meetings            | -     | Bank/UNDP | Bank/UNDP/<br>UNEP |
| <u>Public Information</u> |       |           |                    |
| NGO Seminars              | -     | UNDP      | UNDP               |
| Publications              | -     | Bank/UNDP | Bank/UNDP          |
| <hr/>                     |       |           |                    |
| Total                     | 40.70 |           |                    |

Legend: GEF-Global Environment Facility; NTF-Netherlands Trust Fund; PHRD-Japanese Trust Fund; NL- Netherlands; EU-European Union; BITS-Swedish Bank for Investment and Technical Support; ITA-Italy; KFAED-Kuwait Fund for Arab Economic Development.

## ARAL SEA PROGRAM: PHASE 1

### Projects - Managers - Consultants

| Name of Program Project                                       | Current Funding Sources           | Consultant Nationality                        | Task Manager | Phone Fax            |
|---|-----------------------------------|---|--------------|----------------------|
| <b>Program 1</b> *  | GEF<br>NL<br>EU<br>UNDP           | All<br>Dutch/other<br>EU<br>All               | Kindler      | 473-2253<br>477-1981 |
| 1. Regional Water Resources Management Strategy               |                                   |   |              |                      |
| 2. Improving Efficiency and Operation of Dams                 | Sweden                            | Swedish                                       | Parsons      | 473-1046<br>477-0968 |
| 3. Sustainability of Dams and Reservoirs                      | Sweden                            | Swedish                                       | Parsons      |                      |
| <b>Program 2</b>  |                                   |   |              | 473-0354             |
| 1. Hydrometeorological Services                               | Swiss                             | Swiss   | Matthews     | 334-8748             |
| 2. Data Base and MIS for Water Quality and Environment        | UK<br>UNDP                        | UK<br>All                                     | Matthews     |                      |
| <b>Program 3</b>  |                                   |   |              |                      |
| 1. Water Quality Management                                   |                                   |   |              |                      |
| a) Water Quality Assessment and Management                    | GEF                               | All   | Parsons      |                      |
| b) Agricultural Water Quality                                 | NL                                | Dutch/other                                   | Ochs         | 473-0357<br>334-8748 |
| 2. Collector Drains   | PHRD                              | All   | van Tuijl    | 473-2470<br>477-3274 |
| 3. Remodelling Syr Darya river bed, Shardarinsk Control Units | Italy                             | Italian                                       | van Tuijl    |                      |
| <b>Program 4</b> *  | NL                                | Dutch<br>other                                | Post         | 473-3400<br>477-0568 |
| 1. Wetland Restoration  |                                   |   |              |                      |
| 2. Restoration of Northern Part of the Aral Sea               | PHRD                              | All   | Garvey       | 473-2292<br>477-0711 |
| 3. Environmental Studies in the Aral Sea Basin                | UK<br>NL<br>DK<br>UNEP<br>Finland | UK<br>Dutch/other<br>Danish<br>All<br>Finnish | Post         |                      |
| <b>Program 5</b> *  | Swiss<br>Kuwait                   | Swiss<br>All                                  | Batstone     | 473-3116<br>477-3285 |
| 1. Clean Water, Sanitation & Health - Uzbekistan (short-term) |                                   |   |              |                      |



|  |                               |                                |          |                      |
|--|-------------------------------|--------------------------------|----------|----------------------|
| 2. Clean Water, Sanitation & Health - Turkmenistan (short-term)                      | PHRD                          | All                            | Mills    | 473-7870<br>477-0954 |
| 3. Clean Water, Sanitation & Health - Kazakhstan (short-term)                        | PHRD<br>Kuwait                | All<br>All                     | Garvey   |                      |
| 4. Medium-term Provision of Water Supply   | NA                            | --                             | Batstone |                      |
| 5. Long-term Water Supply & Wastewater Management                                    | NA                            | --                             | Kindler  |                      |
| <b>Program 6</b> ✱<br>Integrated Land, Water Management in the Upper Watersheds      | EU<br>Sweden<br>Finland<br>US | EU<br>Swedish<br>Finnish<br>US | Parsons  |                      |
| <b>Program 7</b>   |                               |                                |          |                      |
| 1. Control Systems & Civil Works for the Amu Darya Basin, with BVO Capacity Building | NA                            | --                             | Kindler  |                      |
| 2. Control Systems & Civil Works for the Syr Darya Basin, with BVO Capacity Building | NA                            | --                             | Kindler  |                      |
| <b>Supplementary Program</b><br>Capacity Building for EC and IFAS                    | Bank<br>NL<br>UNDP            | All<br>Dutch/other<br>All      | Iatsenia | 473-5234<br>477-3274 |

### Abbreviations

UNDP United Nations Development Program  
 UNEP United Nations Environmental Program  
 EU European Union  
 NL Netherlands  
 PHRD Japan Grant Fund  
 GEF Global Environmental Fund