

Not yet approved by UNDCP 30-3-98



UNITED NATIONS INTERNATIONAL DRUG CONTROL PROGRAMME

PROJECT DOCUMENT

Project Number and Title: AFG/98/EX1 -- **Helmand Major Irrigation Schemes Rehabilitation Planning Project**

Duration: 18 months (May 1988 - October 1999)

Drug Control Field: Supply Reduction

Executing Agency: UNDCP

Associated Agencies: UN Office for Project Services (UNOPS)
Food and Agricultural Organization of the UN (FAO)

Estimated Start: 15 May 1998

UNDCP and cost sharing financing		Government inputs: (local currency, if applicable)	
UNDCP	\$ 674,000	(in kind)	
Cost-sharing		(in cash)	
Government	\$ 0		
Third Party	\$ 0		
<hr/>			
UNDCP & cost-sharing			
Total	\$ 674,000		

Brief description: The project will prepare plans for the permanent elimination of poppy cultivation on the irrigation schemes served by the Boghra, Shamalan, Nahr-e-Saraj and Darweshan canals in Helmand province through the restoration of these schemes to fully functional production systems. The project will address the rehabilitation and development needs of all components of these systems, the main ones being irrigation, drainage, agriculture, agro-industry (cotton-milling) and management. The communities served by these schemes will be involved in the planning, but the project will not address community infrastructure needs which are not directly related to the production systems, other than drinking water supplies. After two months the planning team will produce a project document for initiating the desilting of the main canal system. If planning resources allow, they will additionally prepare one or more subprojects to full feasibility level ready for funding. The main output will be a comprehensive rehabilitation plan (CRP) for the schemes and a Drug Control Action Plan comprising components of the CRP to be funded by UNDCP, together with a schedule for the elimination of poppy cultivation in the project areas. Most components of the CRP and DCAP are expected to require further planning inputs before they are fully ready for funding. Finally, the project will produce a project document and TOR for a planning team to prepare the detailed DCAP with all components prepared to full feasibility level ready for funding. In the longer term UNDCP will encourage other agencies to implement CRP components excluded from the DCAP. UNDCP office and resthouse facilities will be established for the planning and implementation teams' use over 18 months.

On behalf of	Signature	Date	Name/Title
UNOPS			
UNDCP			

United Nations official exchange rate at date of last signature of project document: \$1.00 =

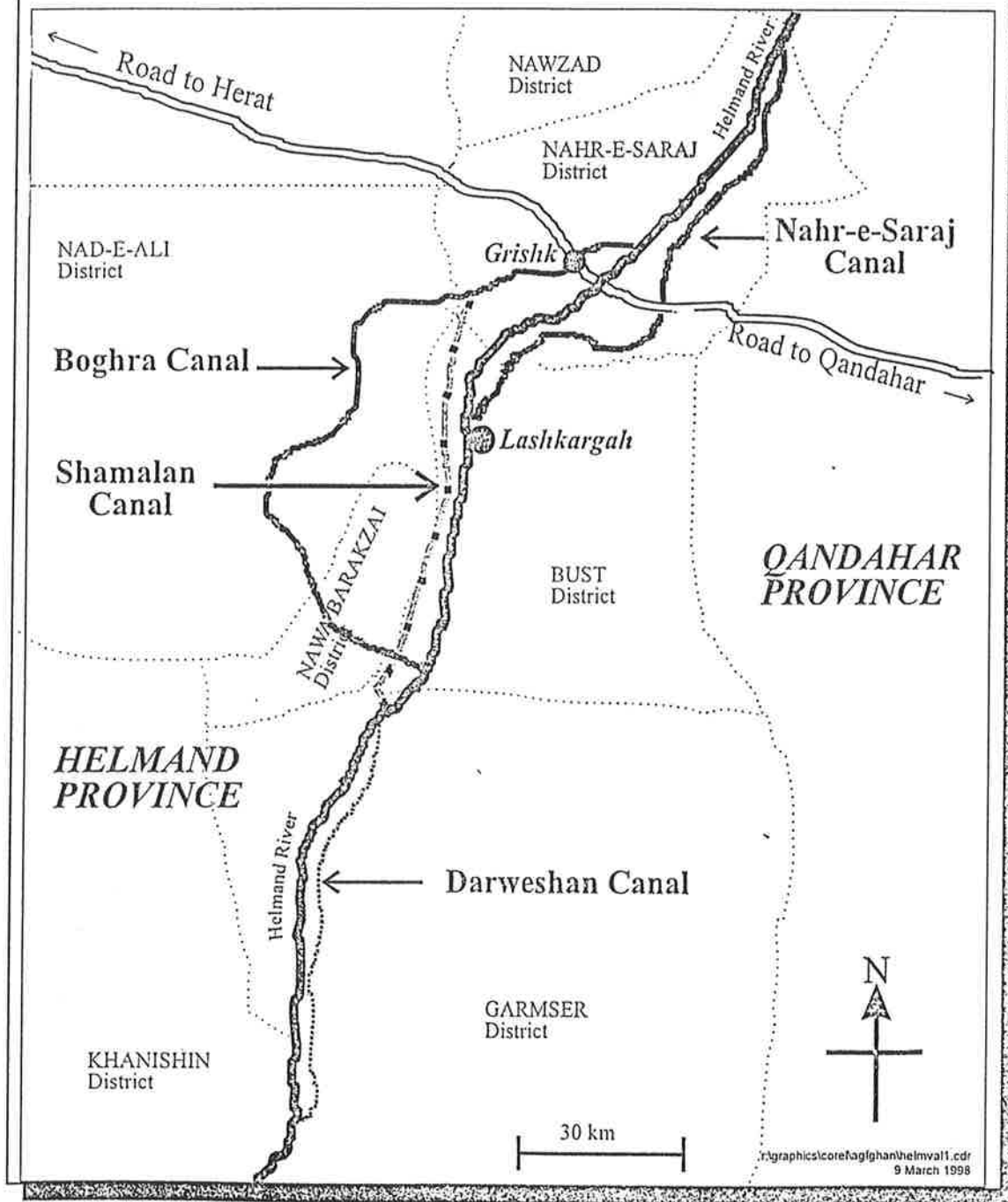
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MAP 1: Afghanistan

Major Canal Irrigation Systems in Helmand Province



A. CONTEXT

1. General drug control situation *(for more detail see Annex 3)*

Drug control framework:

1. Afghanistan is party to the 1961 UN Single Convention on Narcotics Drugs, the 1971 UN Convention on Psychotropic Substances and the 1988 UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. In addition to international treaties, Afghanistan has enacted the following laws in an effort to control narcotics:

- a) a 1957 law against illicit trafficking;
- b) a 1969 law on the prevention of smuggling (amended in 1989 to include more severe penalties);
- c) a 1991 law for the prevention of illicit cultivation of narcotic crops.

However, strict enforcement of these laws has not been pursued since the start of hostilities in 1979.



Illicit opium cultivation:

2. Estimates of the world's illicit opium production range from less than 3,500 tons to more than 4,500 tons. Afghanistan is currently the world's top-ranking producer of illicit opium. In 1972 -- before the foreign intervention and ensuing civil war -- the total annual illicit opium production was estimated by INCB to be 200 metric tons from an estimated 6,000

hectares of poppy fields. The most recent opium poppy survey was completed by UNDCP in July 1997. The survey results indicate that during the 1996-97 growing season, approximately 58,416 hectares were reported to be under opium poppy cultivation. The areas with the highest opium poppy concentration are in Helmand and Nangarhar provinces, which account for approximately 75% of all opium production in Afghanistan and thus for about one-third of the total global illicit opium output. Other provinces where opium poppy is cultivated are, Uruzgan, Qandahar, Farah, Badakhshan, Balkh, Baghlan, Zabul, Nimroz, Herat. Helmand province accounted for 29,400 Ha of poppy in the 1996-97 growing season. The long tradition of both production and use of opium in some areas of Afghanistan, the effects of the war and the financial attraction of the crop have all contributed to this dramatic increase in opium production. The absence of an effective central government and the lack of any national or provincial anti-narcotics programmes have permitted the spread of illicit crops, drug trafficking and abuse to remain virtually unchecked. At the same time, economic pressures in the wake of the protracted armed conflict have prompted large numbers of Afghan farmers to resort to opium poppy cultivation. At present, more than 200,000 families in nearly 4,000 villages or hamlets engage in this relatively lucrative, illegal trade.

Processing of Opium:

3. Heroin processing laboratories are now widespread in the border areas of Pakistan and Afghanistan. There are a few well-fortified "permanent" laboratories capable of producing several hundred kilos of heroin daily. But most of the laboratories are small mobile operations and most of them are located in the southern border districts of Nangarhar, Helmand, Qandahar and Nimroz and in the northern border districts of Badghis which lie adjacent to the Turkmen border. There are confirmed reports of heroin laboratories operating in Helmand.

Trafficking patterns:

4. Heroin is trafficked to western Europe and the United States through Pakistan, India, Iran and the Central Asian Republics. A sizeable quantity -- possibly more than half of the opium equivalent produced in the region -- is also consumed within Pakistan and Iran. The smuggling routes selected depend on the destination and on the commodity being smuggled (see Map on page 1).

Drug abuse:

5. Historically, domestic use of opium for medicinal purposes has been widespread. Abuse of opiates is concentrated mainly in certain geographical pockets and is believed to involve only a small fraction of the population. No systematic surveys of drug abuse have been undertaken in Afghanistan. Nonetheless, despite the easy availability of narcotics, the prevalence of drug abusers is believed to be considerably less than in neighbouring Pakistan.

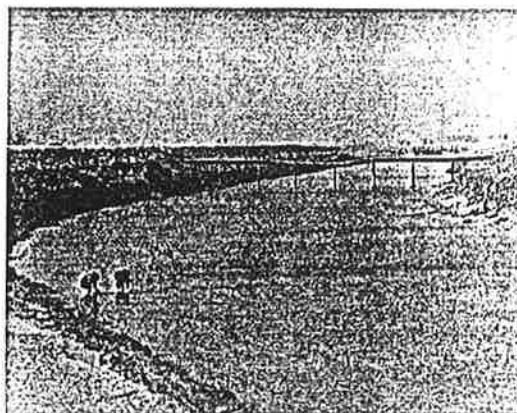
2. Specific drug control field or target area of action

6. The project is concerned with opium supply reduction. The project outputs will allow UNDCP to prepare a Drug Control Action Plan, which, if funded and implemented and its

poppy elimination schedule adhered to, will result in the elimination of the 12,000 ha of poppy grown on the major irrigation schemes targeted in Helmand province.

3. Government policy, strategy and plans for the specific field or target areas of action

7. Approximately 96% of the poppy area in Afghanistan is under the control of Taliban. On 10 September 1997, the State High Commission for Drug Control issued the following declaration through the Taliban's Ministry of Foreign Affairs. *"The Islamic State of Afghanistan informs all compatriots that as the use of heroin and hashish is not permitted in Islam, they are reminded once again that they should strictly refrain from growing, using and trading in hashish and heroin. Anyone who violates this order shall be meted out a punishment in line with the lofty Mohammad and Sharia law and thus shall not be entitled to launch a complaint"*. This declaration was amended by a clarification issued on 20 October 1997 which specifically banned cultivation and trafficking of opium. However, in other reported statements and discussions with UNDCP, the Taliban authorities have made it clear that the actual enforcement of the ban on opium cultivation will depend on farmers getting assistance from the international community to help them switch to alternative crops. In November 1997 Taliban signed a Drug Control Action Plan for Shinwar district in return for assistance from UNDCP which requires Shinwar farmers to grow no poppy from the 1999-2000 season onwards. The Taliban is expected to sign a Drug Control Action Plan for Qandahar province within the first quarter of 1998, again in return for UNDCP assistance, which requires Qandahar province farmers to grow no poppy from the 1998-99 season onwards.



View of the Boghra Canal

The Boghra canal currently experiences a water throughput at its headworks considerably less than what it was designed to take. In addition, very little water control is possible and most of the drainage system is blocked with consequent serious water-logging. UNDCP's programme of assistance to Helmand province has the overall aim of ensuring that the double-cropped area and yields of both summer and winter crops will be increased, thereby relieving the farmer of heavy dependency on a single high-profit winter crop -- poppy. (Photo: UNDCP ROSWA, Feb 1998).

8. It is expected that the Taliban will be prepared to make a similar agreement with UNDCP, with an appropriate timeframe, to enforce a ban on poppy in the Helmand irrigation scheme area in return for the Drug Control Action Plan to be prepared on the basis of the work of this Planning Project.

4. National Institutional Framework

9. On account of the situation described above, effective national institutional arrangements for the planning and coordination of drug control efforts in general are not in place. In Kabul, the Taliban authorities have little operational capacity due to continuing civil conflict, and the framework for a national administration is yet to be put in place.

10. The State High Commission for Drug Control in Kabul possesses overall responsibility for drug control matters in Afghanistan. Since the Taliban captured Kabul and took over the State High Commission, it has issued official declarations on drug policy. In practice, the possibility of application of these declarations is limited to the area of the country controlled by Taliban. The State High Commission also signs Drug Control Action Plans on behalf of the central authorities.

11. Through UNDCP project AFG/97/C26, UNDCP is supporting the State High Commission for Drug Control and Drug Control Coordination Units (DCCUs) in Nangarhar and Qandahar. DCCUs are planned to be established later in Herat and Balkh provinces. The objective of the DCCUs is to give the authorities technical capacity in drug control matters. The project planning team will normally liaise with the Qandahar DCCU through UNDCP. The Taliban leadership based in Qandahar has considerable influence on drug policy and is likely to be involved in policy matters related to the rehabilitation project.

5. **Prior and current co-operation in the same fields or target areas of action** (for additional details see Annex 1)

12. In the late 1980s, there was a consensus among the UN agencies that the potential for increase in illicit opium production in Afghanistan was very high and action needed to be taken to avert this potential from becoming a reality. The following projects have had an impact on the current project target area:

- * *Afghanistan Drug Control and Rural Rehabilitation Phase II* (AD/AFG/89/580). Duration 1988-96. Cumulative budget US\$9.2 million. what?
- * *Monitoring of Poppy Cultivation in Afghanistan* (AD/AFG/94/873-874). Duration 1994-96). Cumulative Budget US\$195,000.

13. In 1997, UNDCP commenced the implementation of a new four-year Afghanistan drug control programme which is initially composed of four modules including capacity building for drug control (AFG/97/C26), drug control monitoring (AFG/97/C27), poppy crop reduction (AFG/97/C28) and demand reduction (AFG/97/C29). While the target area of the poppy crop project is limited to Nangarhar and Qandahar Provinces, the three other projects are designed to implement activities in a greater number of provinces, including Badakhshan.

14. Also in 1997, UNDP launched its Afghanistan P.E.A.C.E. initiative which targets 23 districts and six urban centres for integrated rural development assistance. The P.E.A.C.E. Initiative is an integrated rural development programme funded by UNDP but executed by other UN agencies such as FAO and UNOPS, with a strong emphasis on community participation and empowerment. Five of the 23 operational districts are located in Qandahar province, but none are adjacent to the rehabilitation project's target area. The duration is May 1997 - April 1999. Not Helmand

15. Mercy Corps International, an American based NGO, is implementing a project funded by the Narcotics Affairs Section of the US Embassy in Islamabad to rehabilitate the headworks of the Boghra canal. The objective is a substantial increase in water flow into the canal. Must not be alone

16. Some minor projects implemented by NGOs and in most cases funded by UN agencies have also been carried out in the rehabilitation project target area. More details will be made available by this project, following its commencement.

17. A number of subprojects have been implemented by UNOPS under the Afghanistan Rural Rehabilitation Project (1995-1997) and its predecessor to improve the irrigation system along the Arghandab river in Qandahar province.



Prior and ongoing assistance

Mercy Corps International, an American-based NGO, is implementing a project funded by the Narcotics Affairs Section of the US Embassy in Islamabad to rehabilitate the headworks of the Boghra canal. The objective is a substantial increase in water flow into the canal. The photograph shows bulldozer desilting operations at the headworks of the Boghra canal. (Photo: UNDCP ROSWA, Feb 1998)

6. Description of the Project Target Area

18. Map 1 shows the four canals in relation to the Helmand river and district boundaries. There are two towns, Lashkargah built largely to serve the Boghra and Shamalan schemes and Girishk, on the main road from Qandahar to Herat. The area currently cropped in the winter (the poppy season) may not differ much from the 1977 projections for the Boghra, Shamalan and Darweshan, but is likely to be much less for Nahr-e-Saraj where the cropped area was only 5,900 ha in 1986. However the winter flow in the Boghra, of which the Shamalan is a tributary, has been reduced to about half its 72 cu. m. capacity, and licit winter crops are short of water. With even less water available in the summer and high evapo-transpiration the potential area for double cropping is much reduced. On the Boghra / Shamalan system, not only is the waterflow at the headworks half that designed, but very little water control is possible and most of the drainage system is blocked with consequent serious water-logging. Due to a shortage of irrigation water farmers in some areas block the main drains to back up the drainage water and re-use it for irrigation, adding further to salinity. Current work by MCI on the Boghra headworks may increase the flow in the canal and begin to relieve the problem. The Darweshan canal is reported to in a better state of repair than the Boghra / Shamalan. (For additional details see Annex 1.)

B. JUSTIFICATION

1. Drug Problem to be Addressed

19. Afghanistan is now the world's major single source of illicit opiates. Cultivation levels of opium poppy have increased considerably as a result of a number of social and economic factors exacerbated by the continuing civil war. This has resulted in a massive misallocation of the country's land, labour and capital resources. Approximately 580 km², or close to 1 per cent of the total arable land in Afghanistan, is devoted to opium production. A substantial

proportion of the opium poppy is grown on fertile land and benefits from fertiliser and irrigation.

34. The UNDCP survey of the 1996/97 opium poppy crop estimated 58,400 ha of poppy in Afghanistan, of which 29,400 ha were grown in Helmand province and 12,000 ha were grown on the irrigation schemes to be targeted under the planning project. Yields of licit crops on these schemes have been reduced by shortage of irrigation water and increased salinity caused by poor drainage. Poppy has now replaced cotton as the main cash crop. Rehabilitating the irrigation and drainage system will allow farmers to return to a productive poppy-free cropping system that provides them with an adequate livelihood. Through provision of assistance conditional on community agreement to a poppy elimination schedule, stiffened with an agreement by the authorities on its enforcement, rehabilitation of the productive system should bring poppy cultivation on the schemes to an end.

A question on the survey and.

2. Expected End-of-Project Situation

20. At completion of the project, the UNDCP, other potential donors and the Taliban authorities will possess the required instruments to initiate a comprehensive development programme of alternative development as part of a Drug Control Action Plan -- also to be developed under the project -- which will permit a reduction to zero of opium poppy cultivated in the main project target areas within the time period specified in the DCAP. In addition, certain of the actual alternative development works will most likely have also commenced according to the agreed details of an initial DCAP. Finally, at the end of the 18 month project duration the UNDCP presence will be firmly established in the project area and the office and resthouse will be available for the ongoing UNDCP programme. The project's main output -- the Comprehensive Rehabilitation Plan (CRP) -- will have been widely disseminated and other agencies may have started to take up components excluded from the DCAP.

3. Intended Beneficiaries

21. The intended beneficiaries of the rehabilitation project will be the farming communities (landowners, sharecroppers and landless labourers) living in the scheme areas. Particular attention will be paid to the needs of vulnerable groups (sharecroppers and landless labourers) most at risk from giving up poppy and to the needs of women. UNDCP has estimated that currently 22,000 farming families are dependent on irrigation by the four target canals. However this figure is not reliable and will be re-estimated by the planning team. The direct beneficiaries of this planning project will be potential donors, NGOs, the Helmand Arghandab Valley Authority and the civil authorities interested in the rehabilitation of the schemes.

4. Project strategy and implementation arrangements

22. UNDCP's alternative development strategy for Afghanistan is characterized by three phases:

- (i) The Pilot Programme (AFG/97/C28 Poppy Crop Reduction Project, supported by C26 and C27) whose target area is Qandahar province and Shinwar district in Nangarhar province. Objective: to produce replicable methodologies for future programmes of

poppy reduction through sustainable rural development activities with zero growth in the target areas by project end. Duration: 1997-2001.

(ii) The Helmand major irrigation scheme rehabilitation programme, initiated by this planning project. This Expanded Phase constitutes a series of large-scale, high-impact, capital-intensive interventions occurring simultaneously with and parallel to the Pilot Programme. It is intended to co-exist with the Pilot Programme. It seeks to maximize a "window of opportunity" which is currently seen to exist principally in the Helmand area whereby, in the context of UNDCP's positive conditionality approach, 12,000 hectares of poppy will be eradicated in the short-to-medium term. Its overall aim is to ensure that the double-cropped area and yields of both summer and winter crops will be increased, thereby relieving the farmer of heavy dependency on a single high-profit winter crop -- poppy. Commencement: 1998.

*but extensive
use of hand
labor,*

(iii) Following the year 2001, UNDCP will commence a Replication Phase. Taking the 1997 figure of 58,000 hectares as a base annual cultivation, and assuming that in the period 1997-2001 UNDCP will be able to secure the reduction in the annualized figure of 5,000 and 12,000 hectares (under the Pilot and Expanded Programmes respectively) the Replication Phase will target the remaining 41,000 hectares drawing heavily upon lessons learned during the Pilot Programme. The UN's objective is to ensure that Afghanistan is poppy-free by the year 2008. The expansion of multisector rural development programmes into the remaining main poppy growing areas -- southern Uruzgan province and the remainder of Helmand and Nangarhar provinces -- is envisaged. These programmes will be planned in cooperation with UNDP and will draw on lessons learned through UNDCP's pilot programme and UNDP's ongoing P.E.A.C.E. Initiative programme.

*on large
irrigation,
central authority
important.*

Kandahar?

23. In the context of the Strategic Framework, UNDCP will work with the UN Coordinator for Afghanistan to secure sufficient geographical coverage for the international development programme to support a countrywide ban on poppy cultivation by the civil authorities and counter any tendency towards recidivism in new areas. This will be particularly important in the third -- or replication -- phase designed to lead to the complete elimination of poppy by 2008.

24. As indicated, Phase (ii) will overlap with (i). While the nature of the phase (i) and (iii) programmes will be similar -- mostly small scale interventions at village level -- most of the phase (ii) expenditure will be on much larger scale engineering works expected to give a major boost to licit agricultural production, inducing early elimination of about 20% of Afghanistan's poppy cultivation. The lessons learnt from village level interventions in phase (i) will be highly relevant to phase (iii) but less so to phase (ii), justifying the commencement of phase (ii) before the completion of phase (i).

right!

25. By the time the planning project starts, phase (i) will have been underway for a year and the phase (ii) planning process will continue to benefit by ongoing lessons -- wherever relevant -- being learnt by phase (i). This process will be facilitated by the proximity of Helmand to Qandahar, the main phase (i) target area. Despite the engineering emphasis of phase (ii), the planning team's TOR stress the involvement of the community in the planning. The CRP and

?

DCAP are likely to include the need for community involvement in management, particularly to achieve better on-farm water management. *Original water users groups are to some extent functioning.*

26. The phase (ii) work on the major irrigation schemes should assist communities in northern Helmand by providing employment on rehabilitation works. The planning team will explore the possibility of using labour intensive methods for rehabilitation to create labour shortages for poppy growers, facilitating the elimination of poppy under phase (iii) activities in northern Helmand. Rehabilitation of the cotton ginneries under phase (ii) should also benefit northern Helmand farmers, providing a better market and price for cotton. *Maybe*

*Yes, as traditionally
And more money in their pockets.*

27. Elimination of poppy will not be achieved by development activities alone. The authorities will also need to enforce bans on poppy cultivation according to agreed schedules, and to interdict processing and trafficking. They will be in a much better position to do this if they can demonstrate major progress in the alternative development field such as the Helmand major irrigation scheme rehabilitation programme. *yes.*

Specific strategy for the rehabilitation programme

28. A planning team of international and national staff will undertake the activities required for this project from their base in Lashkargah, working closely with the Helmand Arghandab Valley Authority. Terms of Reference for the planning team are given in Annex 1. The calendar of activities is shown in Annex 5. By the end of the project, the following planning documents and implementation tools will be in place:

Desilting project document (July 1998): A project document will be available about two months after planning starts for a project for initiating desilting of the Boghra / Shamalan canal system, provision of management training for the Helmand Arghandab Valley Authority (HAVA) staff and rehabilitation of the Helmand Construction Corporation workshop facilities needed to support desilting operations. The preparation of the desilting initiation project early in the planning process will -- if subsequently funded -- help to get some practical rehabilitation work started ahead of the mobilisation of funds for the full Drug Control Action Plan. This should build trust with the farmers and authorities and help in securing their agreement to the poppy crop elimination schedule to be included in the Drug Control Action Plan.

Recruitment + salaries?

Action not plan.

Comprehensive Rehabilitation Plan (CRP) and initial Drug Control Action Plan (DCAP) (October 1998): Five and a half months after the planning team starts work, a comprehensive rehabilitation plan (CRP) will be available for restoring the irrigation systems served by the Boghra, Shamalan, Nahr-e-Saraj and Darweshan canals to fully functional production systems within the limits of economic feasibility. The CRP will indicate components to be executed by UNDCP through an initial Drug Control Action Plan (DCAP) and those to be executed by other agencies requiring separate funding. The initial DCAP will contain a schedule for elimination of poppy plus a list of the projects which will be developed to full feasibility and funded by UNDCP. The DCAP for the Helmand major irrigation scheme area will include a schedule for the elimination of poppy cultivation on the land irrigated from the four canals. Agreement by the community representatives to the schedule and by the civil authority to enforce

it will be a condition for funding the DCAP. In the longer term, in order to reinforce regional economic recovery and sustain the poppy free economy, UNDCP will encourage other agencies to implement CRP components excluded from the DCAP.

Project document / TOR for feasibility studies of selected projects to support the DCAP (October 1998): Within six months of starting planning, and once the CRP and initial DCAP have been prepared, a project document will be available with TOR for a further planning input to produce a more detailed DCAP with all components planned to full feasibility level ready for submission to donors for funding. This second planning input will be a separate project to that described by this project document.

Fully operational UNDCP project office in Lashkargah: The project will continue for a further period to complete the 18 months total duration, but during this latter period the only activity will be running the office and resthouse for use by the later planning and implementation teams for the follow-on UNDCP projects, funded separately to this planning project. At the end of the 18 months project duration the UNDCP presence will be firmly established in the project area and the office and resthouse will be available for the ongoing UNDCP programme.

Other possible outputs: If the resources available to the planning team permit and certain potential subprojects prove to be of a sufficiently straightforward nature, such subprojects will also be planned to full feasibility level, thereby yielding additional interventions ready for early funding. The selection of such projects will be discussed with UNDCP before planning them in greater depth.

29. At the end of the project's 18-month duration, if funding has been secured, the desilting subproject will be nearing completion and will already have made some improvement to irrigation water supply and drainage. Other subprojects may be underway and the planning to complete the detailed DCAP will be finished. The CRP will by then have been widely disseminated and other agencies may have started to take up components excluded from the DCAP. ?

Implementation arrangements

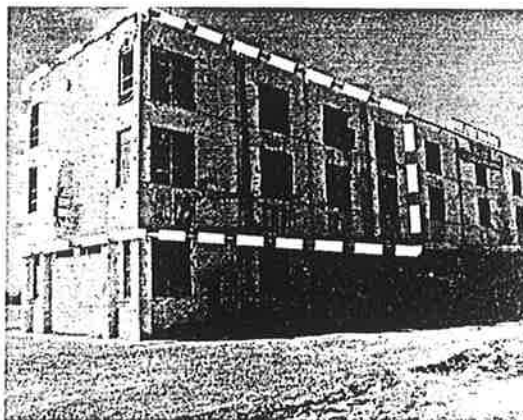
30. The planning project will be funded by UNDCP. The Executing Agency for the planning component will be UNDCP with FAO as Associated Agency. UNDCP will provide monitoring and strategic guidance. The reporting channel will be from the Team Leader to the Representative of UNDCP ROSWA through the ROSWA-based Alternative Development Advisor. The planning work for the cotton ginneries will either be implemented by FAO or by UNIDO through an inter-agency agreement with FAO. The Executing Agency for the provision of office and resthouse accommodation for the planning team will be UNDCP with UNOPS as Associated Agency.

31. The planning team will work closely with HAVA who will be a party to the planning. Liaison with the civil authorities will be normally be carried out through, or facilitated by, UNDCP staff. Both the Comprehensive Rehabilitation Plan and Drug Control Action Plan will *limited.*

require endorsement by the civil authorities. The Team Leader will assist UNDCP in obtaining this endorsement before the end of the planning period.

5. Reasons for assistance from UNDCP and selected execution modality

32. Within the United Nations system, UNDCP holds the exclusive responsibility for coordinating and providing effective leadership for all UN drug control activities. The UNDCP advises and assists governments and specialized agencies on the implementation of the international drug control treaty system. Afghanistan is a major producer of illicit opiates and, due to continuing political and military conflict, it lacks the required resources to effectively tackle drug problems. It, therefore, requires external financial assistance and technical expertise. The type and nature of assistance envisaged under this project is not currently being provided by any other UN agency.



Proposed UNDCP project office in Lashkargah: The building depicted above suffered significant but superficial damage during the civil war as can be seen. It currently serves as the offices for the Helmand Argandhab Valley Authority (HAVA). It is proposed that the portion of the building indicated above be renovated for use by UNDCP as a base for the project and subsequent activities. (Photo: UNDCP ROSWA, Feb 1998)

33. In November 1997 the Secretary General of the United Nations endorsed a "Global Plan for the Elimination of Illicit Drug Crops" proposed by the Executive Director of UNDCP (subsequently referred to as SCOPE -- "Strategy for Coca and Opium Poppy Elimination", see Output 3). The aim of this plan is to eliminate opium and coca crops worldwide in ten years. As a contribution to this Global Plan, UNDCP is planning an expanded programme in Afghanistan to eliminate opium poppy within ten years at a total cost of US\$250 million. UNDCP plans to implement an appropriate part of the Helmand irrigation rehabilitation project as the first major project in its Expanded Programme. It will be followed by integrated rural development projects to move the programme into the remaining major poppy growing areas of Afghanistan -- Helmand, Nangarhar and the southern part of Uruzgan province. The latter projects will be planned and implemented in cooperation with UNDP and will incorporate lessons learned from both agencies' ongoing rural development programmes. The rehabilitation project target area might be included in one of these integrated rural development projects to address socio-economic sectors such as health and education outside the scope of the rehabilitation project.

6. Special considerations

34. **Human Rights and Gender:** UNDCP fully adheres to UN policies and guidelines for Afghanistan regarding human rights and gender issues. In addition, the project will arrange training on gender awareness and related issues for project staff. Through recruitment of international and national female staff, UNDCP will strengthen its capacity to access women and involve women in planning, implementation, monitoring and evaluation of projects where

applicable. In order to pursue the drug control objective of the programme, UNDCP is obliged to enter into working relationships with the Taliban authorities at the district and provincial level. UNDCP ensures and takes the necessary care that such interaction does not imply recognition of the authorities as long as they are not recognised by the UN system. ?

35. The TOR for the planning team require an initial environmental impact assessment and a social impact and gender analysis to be carried out. The social and gender analysis will identify the project's stakeholders, assess the impact of the project on each group and propose project design approaches which maximise benefits and minimise problems for vulnerable groups, such as sharecroppers, landless labourers and women, without compromising the poppy elimination goal.

7. Coordination arrangements

36. The planning team leader will keep the UN Regional Coordinator Qandahar informed of project progress. Early in the planning process the planning team will meet with the Regional Coordinator and UN agencies and NGOs active in the region to explain the planning project and solicit relevant ideas and information derived from their experience of the area. UNHCR, FAO, the UNDCP Poppy Crop Reduction Project (AFG/97/C28) and the NGO Mercy Corps International (MCI) are expected to contribute. Assisted by UNDCP, the planning team leader will brief the DCCU at the start of the planning project and keep the DCCU informed of progress. During the planning process the team will collaborate closely with the Helmand Arghandab Valley Authority. UNDCP will keep the planning team leader informed of developments in the formulation of the Common Assistance Strategy for Afghanistan to make sure that the plans developed are consistent with the Strategy.

8. Counterpart support capacity

37. Some limited technical support is expected from the Helmand Arghandab Valley Authority from the staff listed in Appendix C of Annex 1 which details the TOR for the planning team. The DCCU is expected to support the planning process by representing the views of the civil authority, particularly on drug control related aspects of the planning, but this representation will normally be done at joint meetings with the planning team and a UNDCP representative.

C. DRUG CONTROL OBJECTIVE

"To substantially reduce the production, trafficking and abuse of drugs in and from Afghanistan."

D. IMMEDIATE OBJECTIVES, OUTPUTS AND ACTIVITIES

Immediate Objective:

"To establish a Comprehensive Rehabilitation Plan for the restoration of the irrigation schemes served by the Boghra, Shamalan, Nahr-e-Saraj and Darweshan canals in Helmand province to fully functional production systems as a precondition for the elimination of poppy in the target area through an agreed Drug Control Action Plan."

Achievement Indicators: - Outputs produced on time and accepted by UNDCP and the civil authorities

Output 1: UNDCP office and resthouse accomodation established in Lashkargah and operational for the project duration

Activity 1.1 UNOPS rehabilitates premises allocated to UNDCP by civil authorities for office and resthouse accomodation for the duration of the irrigation scheme rehabilitation programme.

Activity 1.2 UNOPS procures vehicle and procures and installs furniture and equipment.

Activity 1.3 UNOPS recruit staff.

Activity 1.4 UNOPS runs office and resthouse for duration of the project for use by project staff, including planning and implementation personnel.

Output 2: Planning team established in the field and started work

Activity 2.1 FAO identifies and contracts planning team, either individually or through a consultancy firm.

Activity 2.2 FAO procures equipment, makes arrangements for transport and establishes planning team in Lashkargah.

Activity 2.3 Team starts planning work according to their terms of reference (Annex 1).

Output 3: By end of May 1998, an Outline of the Comprehensive Rehabilitation Plan and Drug Control Action Plan, with an estimate of their total costs, as an input to the preparation of the global "Strategy for Coca and Opium Poppy Elimination (SCOPE)".

Activity 3.1 UNDCP advises planning team on the deadline for submission of the outline.

Activity 3.2 Planning team drafts outline on the basis of a rapid assessment of the scope of the rehabilitation work involved and its benefits and submits to UNDCP.

Activity 3.3 Planning team finalises outline after receipt of UNDCP's comments on the draft.

Activity 3.4 UNDCP ROSWA forwards outline to UNDCP HQ in Vienna.

Output 4: Within two months of the start of the planning project, a project document for a sub-project, prepared to full feasibility level for separate funding, for initiating desilting of the canals and drainage system. This sub-project is outlined at Appendix A to Annex 1.

Activity 4.1 Planning team designs the subproject to achieve quick impact, incorporating, in consultation with the Helmand Arghandab Valley Authority and UNDCP, any modifications needed in the light of progress in developing the CRP.

Requires some equipment

Activity 4.2 UNDCP ROSWA forwards outline to UNDCP HQ in Vienna to commence the process of securing earmarked funding.

Output 5: A Comprehensive Rehabilitation Plan (CRP) for the Helmand major irrigation schemes, indicating components to be executed by UNDCP through a Drug Control Action Plan (DCAP) and those to be executed by other agencies requiring separate funding. The CRP will be prepared to pre-feasibility level and most components are expected to require a further planning input before they are ready for funding.

Activity 5.1 Planning team carries out the planning work to produce this output according to their terms of reference.

Activity 5.2 Planning team consults with UNDCP on the components of the CRP suitable for incorporation into a coherent Drug Control Action Plan and on an appropriate poppy elimination schedule.

Activity 5.3 Planning team submits draft output to UNDCP and FAO.

Activity 5.4 Planning team finalises output after receiving comments of UNDCP and FAO.

Output 6 A Project Document / TOR for feasibility studies to be carried out on selected components of the CRP to be funded by UNDCP under an integrated DCAP which includes a schedule for the elimination of poppy cultivation. (Most components of the DCAP are expected to require a further planning input before they are ready for funding.)

Activity 6.1 Planning team carries out the planning work to produce this output according to their terms of reference.

Activity 6.2 Planning team submits draft output to UNDCP.

Activity 6.3 Planning team finalises output after receiving comments of UNDCP.

Activity 6.4 UNDCP ROSWA forwards Project Document / TOR to UNDCP HQ in Vienna to commence the process of securing earmarked funding for follow-up feasibility studies.

Output 7 Project documents for priority sub-projects of the DCAP sufficiently straightforward to have been planned to full feasibility level ready for funding. (Will only be produced if planning resources allow).

Activity 7.1 Planning team carry out the planning work to produce this output according to their terms of reference.

Activity 7.2 Planning team submits draft output to UNDCP.

Activity 7.3 Planning team finalises output after receiving comments of UNDCP.

Activity 7.4 UNDCP ROSWA forwards Project Documents to UNDCP HQ in Vienna to commence the process of securing earmarked funding for project(s).

E. INPUTS

Local Inputs

38. The Helmand Arghandab Valley Authority will provide the staff listed in Appendix C to Annex 1 to assist the team in its work. It will make available relevant technical documents in its possession, including those listed in Appendix B to Annex 1 and provide space in its main office for the planning team. The Helmand Arghandab Valley Authority and the communities in the project area will contribute to the planning process as described in the planning team's terms of reference.

UNDCP Inputs -- Provided through FAO as Associated AgencyInternational Personnel

39. Some 21.5 person months of international professional staff and 68 months of local professional and support staff months are determined to be necessary for the completion of project outputs. In addition the staff listed in Appendix C of Annex 1 from the HAVA will be available to work with the Planning Team. As regards international staff, two weeks' input will be that of the Team Leader working on Output 6, starting up to 6 weeks after submission of Output 5. If another team member does not have this experience, a former international staff member with extensive experience working with HAVA in the 1970s will be added to the team listed below for one month to provide institutional memory, increasing the input to 22.5 person months.

- * Irrigation and Management Specialist (Team leader)
- * Irrigation Engineer
- * Drainage Engineer
- * Cotton Ginnery Expert
- * Agricultural-Economist
- * Social Development Specialist

Heavy Equipment specialist ?

Woman but not young.

National Staff *Not HAVA*

40. A total of 68 person-months of input by the staff below, divided between them as determined by the Associated Agency:

- * Irrigation Engineers
- * Mechanical Engineer
- * Administrator/Accountant
- * Secretary
- * Community Liaison Officers/ Social Survey Assistants
- * Draftsmen
- * Surveyors
- * Assistant Surveyors
- * Rodmen
- * Chainmen

Equipment and Materials: As determined by the implementing agency as necessary for the planning team's work (survey equipment, satellite imagery, expendables, etc.). See also Annex 4 entitled "Budget Explanatory Notes". Non-expendable equipment procured under budget line 4200 will remain the property of UNDCP and be used for follow-up planning and implementation. Office equipment procured by UNOPS for the UNDCP Lashkargah office will be available for sharing with the planning team.

Travel and Transport: It is envisaged that the planning team will hire the transport needed for their work.

vehicles ?

Contingencies: Miscellaneous inputs.

UNDCP Inputs -- Provided through UNOPS as Associated Agency

Staff Programme Assistant
 Driver
 3 Guards

Equipment	<u>Office</u>	<u>Resthouse</u> (2 houses)
4WD double cab pickup	1	-
Furniture	Set	Set
Generators	1	1
Air conditioners (24,000 units)	3	2
Desert coolers	11	14
Photocopiers	2	-
Desktop computers	2	-
Laptop computer	1	-
Uninterruptable Power Supply	2	-
Voltage stabilisers	5	-
Laser printers	2	-
Satellite telephone	1	-
Parafin heaters	1	7

F. PROJECT RISKS

41. Fighting may break out in the target area, preventing the planning team doing its work. Risk assessed as low as the front lines are currently (March 1998) far away in the North of Afghanistan.

42. The planning team, the HAVA and the civil authorities are unable to agree on the plans being made. Risk difficult to assess. If this proves a problem UNDCP will try and help the parties reach a consensus acceptable to UNDCP.

43. The Planning Team may be established late. As a result inputs may be produced late and it may not be possible to produce Output 3 in time to contribute to the the Global Plan for the Elimination of Illicit Drug Crops. Risk is considered high.

G. PRIOR OBLIGATIONS AND PREREQUISITES

44. The civil authorities and the Helmand Arghandab Valley Authority must agree in writing to the implementation of this project and to cooperate with the planning team and facilitate its work. These authorities must also agree in writing to make available the identified

office space in the HAVA building for use by the project for its duration and to allow such repairs as are deemed necessary to permit a functional office premises.

H. PROJECT REVIEWS, REPORTING AND EVALUATION

45. The Planning Team will produce an inception report within one month of the team leader's appointment, setting out how the work will be tackled. The team leader will be responsible for producing a report on the implementation of this project using the format of the Project Performance Evaluation Report (PPER). Summary Monthly Progress Reports will be submitted to the ROSWA-based UNDCP Alternative Development Adviser by the Team Leader.

46. UNDCP ROSWA will produce and submit semi-annual Project Progress Reports and Annual Reports in accordance with UNDCP requirements.

I. LEGAL CONTEXT

47. This project document shall be the instrument (*therein referred to as the plan of operations) envisaged in Article I, paragraph 2 of the Agreement between the Government of Afghanistan (*therein called the Government) and the United Nations Fund Sector of the United Nations Development Programme concerning assistance under the Special Fund Sector of the United Nations Development Programme signed by the parties on 25 February 1960.

48. **General Provisions:** The project document may be modified by written agreement between the parties concerned. Any relevant matter for which no provision is made in the project document shall be settled by the parties concerned in accordance with the relevant resolutions and decisions of the appropriate organs of the United Nations. Each party shall give full and sympathetic consideration to any proposal advanced by the other party under this paragraph. It is understood by all parties that UNDCP is not liable to pay compensation in respect of any death or disability caused by injury to members, consultants or other persons employed on behalf of the UNDCP in the execution of this UNDCP-funded project.

J. BUDGET

BUDGET (US \$)

B/L	Description	1998	1999	Total
1000	Personnel			
1300	GSS Staff	2,700	2,700	5,400
1500	Duty travel	1,800	1,800	3,600
1700	NPPPs	5,400	5,400	10,800
1900	Personnel Total	9,900	9,900	19,800
2000	Sub-contracts			
2101**	Planning team	433,000	0	433,000
2102	Office & resthouse rehabilitation	25,000	0	25,000
2103	Employment of guards	2,700	2,700	5,400
2900	Sub-contracts Total	460,700	2,700	463,400
4000	Equipment			
4100	Expendable equipment	1,500	1,500	3,000
4201**	Non-expend. (planning team)	12,000	0	12,000
4202	Non-expend. (office/resthouse)	76,200	0	76,200
4900	Equipment Total	89,700	1,500	91,200
5000	Miscellaneous			
5100	Operation and maintenance	7,000	7,000	14,000
5300	Sundries	4,000	4,000	8,000
5900	Miscellaneous Total	11,000	11,000	22,000
9000	Project Total	571,300	25,100	596,400
9301	PSC: FAO (7.5%)	33,400	0	33,400
9302	PSC: UNOPS (7.5%)	9,500	1,900	11,400
9303	PSC: UNDCP (5.5%)	31,400	1,400	32,800
9399	PSC: Total (13%)	74,300	3,300	77,600
9900	Grand Total	645,600	28,400	674,000

** Indicates component is FAO-implemented as Associated Agency.

ANNEXES

- Annex 1 Terms of reference for the planning team for the rehabilitation of the Helmand valley major irrigation schemes in Afghanistan
- Appendix A Outline of a Project for Initiating Desilting and Management Training for the Helmand Major Irrigation Schemes
- Appendix B Availability of Documents
- Appendix C Availability of HAVA Staff to Assist the Planning Team
- Appendix D Facilities to be Provided by UNOPS to the Planning Team
- Appendix E Proposed Format for the Comprehensive Rehabilitation Plan Document
- Annex 2 Opium Production in Afghanistan (1996-97) Helmand
- Annex 3 Aspects of opium production, trafficking and abuse in Afghanistan
- Annex 4 Budget Explanatory Notes
- Annex 5 Schedule of Main Activities
- Annex 6 Irrigation System Maps (available only in hardcopy)

ANNEX 1: Terms of Reference for the Planning Team for the rehabilitation of the major Helmand Valley major irrigation schemes

1. Introduction

1. Afghanistan is now the largest producer of illicit opium in the world, with 58,400 ha under opium poppies in 1996/97. Of this 29,400 ha were grown in Helmand province, with about 12,000 ha grown on the irrigation schemes to be targeted under the rehabilitation project.
2. This document sets out the terms of reference for a planning team to prepare a Comprehensive Rehabilitation Plan, a Drug Control Action Plan and associated planning outputs for restoring the major irrigation schemes in Helmand province to fully functional production systems and eliminating opium poppy cultivation on these schemes. The schemes are served by the Boghra, Shamalan, Nahr-e-Saraj and Darweshan canals.

2. Background

Other relevant projects

3. UNDCP is currently implementing a programme consisting of four projects AFG/97/C26-29, duration 1997-2001. AFG/97/C28, the Poppy Crop Reduction project, targets Qandahar province with programmes in three districts, Maiwand, Ghorak and Khakrez and a provincial level programme to rehabilitate a wool factory near Qandahar. Taliban authorities have agreed to enforce a ban on opium poppy cultivation throughout Qandahar as a response to the implementation of the project. The project also operates in Shinwar district of Nangarhar province. A major project activity in Nangarhar is the rehabilitation of the Nangarhar canal.
4. AFG/97/C27, the Drug Control Monitoring project, carries out surveys and studies. In 1998 it will carry out a baseline and socio-economic survey in the C28 target districts. Every year it conducts surveys to estimate poppy area and yield; in Helmand this survey is carried out in April.
5. AFG/97/C26, the Capacity Building for Drug Control project, has established Drug Control Coordination Units (DCCUs) in Qandahar and Nangarhar provinces and supports the State High Commission for Drug Control in Kabul. DCCUs are planned to be established later in Herat and Balkh provinces. The objective of the DCCUs is to give the authorities in Kabul and the selected provinces in Afghanistan the capacity to carry out planning, coordination, implementation, monitoring and evaluation of drug control activities.
6. The fourth project in the programme is AFG/97/C29, Drug Demand Reduction Support project. This is expected to start in 1998, but will be of limited relevance to the comprehensive rehabilitation plan.

7. The PEACE (Poverty Eradication And Community Empowerment) Initiative is an integrated rural development programme funded by UNDP but executed by other UN agencies such as FAO and UNOPS, with a strong emphasis on community participation. It operates in 23 districts, including five in Qandahar province, but none adjacent to the rehabilitation project's target area. Duration is May 1997 to April 1999.

8. Mercy Corps International, an American-based NGO, is implementing a project funded by the Narcotics Affairs Section of the US Embassy in Islamabad to rehabilitate the headworks of the Boghra canal. The objective is a substantial increase in water flow into the canal.

9. Some minor projects implemented by NGOs and in most cases funded by UN agencies have also been carried out in the rehabilitation project target area. More details will be made available at the start of the planning project.

10. A number of sub-projects have been implemented by UNOPS under the Afghanistan Rural Rehabilitation Project (1995-1997) and its predecessor to improve the irrigation system along the Arghandab river in Qandahar province.

Description of the Target Area

Map 1 shows the four canals in relation to the Helmand river and district boundaries. There are two towns, Lashkargah built largely to serve the Boghra and Shamalan schemes and Girishk, on the main road from Qandahar to Herat. Elevation is about 780 m asl and annual rainfall only about 90 mm per annum. In June to September maximum temperature averages about 40 C. In January average maximum temperature sinks to about 13 C.

BASIC DATA ON FOUR CANALS IN TARGET AREA					
	Boghra	Shamalan	Darweshan	Nahr-e-Saraj	Total
Length (kms)	75	66	50	88	279
Original capacity cu. m per sec.	72.3	21.2	28.3	22.7 (11.3 in 1986)	123.3
Projected winter crop area (ha) in 1977	26,500	16,200	15,500	11,000	69,200
Potential irrigable winter crop area (ha)	30,700	17,200	20,000	25,500	93,400
Est. farming families in 1998	10,000	5,000	5,000	2,000	22,000

Sources: Length and capacity: Govt. of Afghanistan / USAID, 1976, Helmand River Basin Soil and Water Survey Study Report, Part 1.

Crop areas: A.R. Baron, 1972, Helmand Arghandab Project Area Analysis, HAVA.

Farming families: Derived by UNDCP from crop area and farm size estimates (not reliable and need to be re-estimated by the planning team).

11. The area currently cropped in the winter (the poppy season) may not differ much from the 1977 projections for the Boghra, Shamalan and Darweshan, but is likely to be much less for Nahr-e-Saraj where the cropped area was only 5,900 ha in 1986. However the winter flow in the Boghra, of which the Shamalan is a tributary, has been reduced to about half its 72 cu. m. capacity, and licit winter crops are short of water. With even less water available in the summer and high evapotranspiration the double cropped area is much reduced.

amounts
about the
same but
some in
different
locations.

12. The main crops grown on the schemes before they deteriorated were wheat in the winter and maize and cotton in the summer. Cotton was the main cash crop. Currently wheat and poppy are grown in the winter, with a smaller area cropped with maize and cotton in the summer when the shortage of irrigation water is most acute. Yields are reduced due to shortage of irrigation water and increased salinity caused by poor drainage. Poppy has now replaced cotton as the main cash crop. Rehabilitating the irrigation and drainage system will allow farmers to return to a productive poppy-free cropping system that provides them with an adequate livelihood. Through provision of assistance conditional on community agreement to a poppy elimination schedule, supported by an agreement with the authorities on its enforcement, rehabilitation of the productive system should bring poppy cultivation on the schemes to an end.

13. Landholdings are reported to vary between about one hectare near the headworks of the Boghra canal to 2-6 hectares in the main settlement areas of the Boghra and Shamalan canals and 2-4 hectares on the Darweshan canal. A significant proportion of farmers are sharecroppers who only receive about 20% share of the wheat they grow but 50% of the poppy. In the case of poppy the sharecropper also pays for 50% of the cash inputs.

14. Construction of the main part of the Helmand Irrigation system, the **Boghra** canal and its offshoot the **Shamalan**, began in 1935 with Japanese support to the government of Afghanistan, but world war II brought a halt to construction. At the end of 1945 the government of Afghanistan, with the support of USAID delivered through the Morrison Knudsen company, signed an agreement to improve and extend the system network and develop the Helmand project for irrigation and power production. The Helmand Arghandab Valley Authority (HAVA) was set up to manage the irrigation systems on the Helmand river and its major tributary, the Arghandab. The Kajaki dam, upstream of the target canal inlets, was constructed to develop hydro-power. The Darweshan canal was constructed in 1954/55. The **Nahr-e-Saraj** canal had been constructed much earlier between 1903 and 1924. It had deteriorated over the years, but some rehabilitation was done in the 1960s and 1970s. The Boghra, Shamalan and Darweshan canals were fully operational in the 1970s, with more farmers being settled and improvements being made to the drainage systems. However during the war with the Russian backed regime and the subsequent civil war, the scheme structures suffered severe damage, equipment was looted and the management system collapsed. Many farmers evacuated the area and some of these refugees have yet to return from Pakistan. Many of the farmers remaining on the schemes took up poppy cultivation in response to economic problems and the absence of authorities prepared to enforce the law. + recruitment?

funded
by

1954

first
water
control
power
came
later.

15. On the Boghra/Shamalan system not only is the waterflow at the headworks half that designed, but very little water control is possible and most of the drainage system is blocked with consequent serious water-logging. Due to shortage of irrigation water farmers in some areas block the main drains to back up the drainage water and re-use it for irrigation, adding further to salinity. Current work by MCI on the Boghra headworks may increase the flow in the canal and begin to relieve the problem. The reduction in water flow in the Darweshan canal is less severe than in the Boghra and Shamalan canals.

3. Planning Project Outputs

(Note: Output numbers correspond to those in the UNDCP planning project document)

Output 3: By end of May 1998, an Outline of the Comprehensive Rehabilitation Plan and Drug Control Action Plan, with an estimate of their total costs, as an input to the preparation of the global "Strategy for Coca and Opium Poppy Elimination (SCOPE)".

16. UNDCP will give the deadline for submitting the outlines. The planning team will draft them on the basis of a very rapid assessment of the scope and benefits of the rehabilitation work involved.

If the planning team can not be established in time, then this output will be produced in summary form by UNDCP.

Output 4: Within two months of the start of the planning project, a project document for a sub-project, prepared to full feasibility level for separate funding, for initiating desilting of the canals and drainage system. This sub-project is outlined at Appendix A to Annex 1.

17. The planning team will design the sub-project to achieve quick impact, incorporating, in consultation with the Helmand Arghandab Valley Authority and UNDCP, any modifications needed in the light of progress in developing output 5.

Output 5: A Comprehensive Rehabilitation Plan (CRP) for the Helmand major irrigation schemes, indicating components to be executed by UNDCP through a Drug Control Action Plan (DCAP) and those to be executed by other agencies requiring separate funding. The CRP will be prepared to pre-feasibility level and most components are expected to require a further planning input before they are ready for funding.

Output 6 A Project Document / TOR for feasibility studies to be carried out on selected components of the CRP to be funded by UNDCP under an integrated DCAP which includes a schedule for the of poppy cultivation. (Most components of the DCAP are expected to require a further planning input before they are ready for funding.)

Outut 7 Project documents for priority sub-projects of the DCAP sufficiently straightforward to have been planned to full feasibility level ready for funding. (Will only be produced if planning resources allow).

18. The project documents for these outputs will be prepared according to UNDCP format. All outputs will be submitted to UNDCP in draft form for comment before finalisation. Drafts for Outputs 5 and 6 will be submitted in time for acceptance by UNDCP.

4. Scope of the Comprehensive Rehabilitation Plan (CRP) Document and the Work Involved in its Production

19. The CRP will address the rehabilitation and development needs of all components of the production systems dependent on the irrigation schemes served by the Boghra, Shamalan, Darweshan and Nahr-e-Saraj canals. The main components are irrigation, drainage, agriculture, agro-industry (cotton-milling) and management. The communities served by these schemes will be involved in the planning and to an extent to be assessed, the management of the schemes, but the project will not address community infrastructure needs which are not directly related to the production systems, other than drinking water supplies.

20. The CRP will be a reconnaissance level report which will provide an evaluation of the costs and benefits of the proposed plan in financial, economic and social terms and in terms of the project's ability to meet the UNDCP's poppy eradication objectives. The study report will prioritise development packages which will maximise the above returns and for which donor assistance to progress the schemes may be sought independently. The study will be undertaken on the basis of a review of the available documentation (detailed in Annex B), a review of the siltation, war damage and other factors which have reduced the capacity of the systems and sample sociological, system, agricultural, land use and soil capability surveys.

21. The planning team leader will discuss and agree a format for the CRP with UNDCP. A proposed format is given at Appendix E to these TOR. The following topics will be covered in either the main body of the plan or annexes.

Drug Control Action Plan, Priorities and Phasing

22. In consultation with UNDCP the team will select those parts of the CRP to include in a Drug Control Action Plan for UNDCP funding conditional on compliance with a poppy elimination schedule. Appropriate priorities and phasing for the components of the DCAP and the rest of the CRP will be indicated in case full funding can not be secured from the start.

Schedule for the Elimination of Poppy Cultivation in the Target Area

23. As a condition for funding the Drug Control Action Plan UNDCP will require poppy cultivation to cease once substantial improvements have been made to each severely damaged irrigation scheme. The team will consider when such improvements can be expected and draft a

schedule for poppy elimination which reflects their impact on the beneficiaries, paying particular attention to vulnerable groups such as sharecroppers. After agreeing the schedule with UNDCP, the team will discuss it with the beneficiaries' representatives whilst UNDCP discusses it with the civil authorities. UNDCP will only go ahead with planning the detailed DCAP if both parties have agreed to the elimination schedule.

Physical Rehabilitation

24. Assessment of the rehabilitation needs of the following, followed by surveys and designs sufficiently accurate for costing to pre-feasibility level, together with a an implementation plan for the rehabilitation work which should include a recommendation for a feasible degree of community involvement and resource contribution:

- Intake rehabilitation and any river channelling necessary. This will include checking the design and work being done by Mercy Corps International on the Boghra canal intake.
- Canal structures (siphons, banks, flood protection structures, etc.).
- Water control structures.
- Desilting canals (primary and secondary).
- Cross drainage works.
- Desilting drains (primary and secondary) and removing obstructions such as unplanned causeways
- In-field drainage. In 1976 a three-year programme of drainage improvement was planned and the team will need to find out how much was completed. Consideration must be given to the possible need for improving on these designs for additional drainage.
- Provision of communication facilities necessary for the operation of the water control system
- Rehabilitation or building of offices and other buildings necessary for the operation of the schemes
- Repair and setting to work of the cotton ginneries at Lashkargah and Girishk. This will be contingent on the outcome of a study to be undertaken by the planning project of the feasibility of their rehabilitation and operation. If the outcome is negative, then recommendations will be made for alternative arrangements for ginning the cotton output from the schemes, such as building two replacement ginneries or a decentralised system of smaller ginneries
- Rehabilitation of roads essential for the schemes

- Repair of Helmand Construction Corporation and other HAVA workshops and existing machinery. The assessment of rehabilitation need should be related to the expected demand for the services of these workshops and not merely to their previous undamaged condition.
- Provision of drinking water to communities in the scheme areas.

Installation of the Kajaki Dam Spillway Gates

25. It was intended that these gates would be installed in the 1970s to increase the storage capacity of the dam from 1,700,000,000 to 2,730,000,000 cubic metres. The materials are reported to be on site at the dam, but the installation was interrupted by the 1978 revolution and outbreak of war. The CRP should analyse the possible benefits of completing the installation for the target irrigation schemes, e.g more water available in the summer for double cropping, and advise whether such benefits justify mounting a feasibility study for the gate installation. Such a study would take other benefits into account such as the possibility of installing greater electricity generating capacity and developing the 2,900 ha West Kajaki irrigation scheme proposed by a 1975 Asian Development Bank study.

Construction Methods and Packages

26. The report should consider alternative project implementation and construction methodologies taking into account current conditions in Afghanistan and local resources. Alternative construction methodologies to be considered include international and national contractors and direct labour and machinery organisations, including the HAVA, and opportunities for farmers organisations to participate in the development.

27. There may be scope for using the project rehabilitation work to create labour shortages for farmers wishing to grow poppy both on the schemes and in the major poppy growing areas in the rest of Helmand Province. The project plan will therefore include alternative and more labour intensive methods of carrying out the rehabilitation works, where these are considered likely to create labour shortages for poppy growers and discourage poppy growing. The plan will indicate the increased costs of following such a policy, both in terms of finance and possible management problems.

Point of putting extra income in farmers hands.

A Plan for the Sustainable Management, Operation and Maintenance of the Schemes

28. This will include a recommendation on basic principles such as whether the management should be by a public or private body, the role of HAVA, the prospects for the beneficiaries taking on the management of all or parts of the system, the commercial autonomy of the scheme, financing the cost of scheme operation and maintenance and services provided to farmers (e.g. by a revenue system such as water charges). The management system and organisation to be adopted. Training of staff and institution building. An assessment of technical assistance needed (if any) and a plan for providing it.

Survey of Existing Machinery and Spare Parts and Purchase of Machinery and Other Items

29. The existing machinery and spare parts in the Helmand Construction Corporation and other HAVA workshops will be inspected and classified as worth repairing, keep for spares or sell (mostly as scrap). A needs assessment, specification and cost estimates for machinery, spare parts and other items required, particularly for operation and maintenance, will be prepared. A recommendation on whether to carry out the rehabilitation work (e.g. desilting) with the machines subsequently to be used for maintenance will be made.

In past, 2 sets of equipment, I think

Agricultural Plan for the Schemes

30. A plan will be made for the development of agricultural activities on the schemes. The input of the communities and HAVA into this planning will be particularly important. The FAO Afghanistan crop and livestock projects will also be consulted. The plan will cover the need for and organisation as appropriate of agricultural extension, applied research, input supply, marketing, credit, seed multiplication and animal production and veterinary facilities, all or most of which existed before the war. Recommendations will be made about regulations needed, in particular whether cropping patterns should be determined by farmers or regulated by HAVA. Alternative cropping patterns will be recommended and returns calculated.

Not a question

Financial and Economic Analysis

31. Financial and economic analysis shall be prepared for both the comprehensive rehabilitation plan (CRP) and the Drug Control Action Plan and for discreet components where required to assess the need to include them. The financial and economic analysis, together with the social impact analysis, shall also be used for prioritising CRP components. The reliability of the analysis should be assessed through a sensitivity analysis. The impact on landowners and tenants should be assessed separately. Only components which are financially and economically viable shall be included in the CRP.

Beneficiaries

32. The target beneficiaries will be all those dependent on the schemes. A socio-economic profile of these beneficiaries will be provided, based on participatory rural appraisals or surveys undertaken in sample areas which will determine the social organisation, existing system of community representation and decision making and its effectiveness, ability and willingness to organise and contribute to the operation and maintenance of the system, land tenure system and size of land holdings, cropping patterns, marketing channels and assets. Advice from UNDCP's Drug Control Monitoring System Project AFG/97/C27 will be sought on the conduct of investigations required to obtain this information. The survey working papers will be handed over to UNDCP ROSWA. An estimate will be made of the total number of beneficiary families and their composition. The estimate given in Section 2 above (22,000 families directly benefitting) is not deemed to be reliable.

Inputs and Budget

39. The inputs provide by donor funding, by the civil authorities, by the communities and by the private sector (if any) should be shown separately.

5. Content and Format of the Drug Control Action Plan (DCAP)

40. The DCAP will comprise parts of the CRP selected to form a coherent plan to achieve sufficient development to get the beneficiaries and civil authorities to agree to and implement a schedule for the elimination of poppy. At the same time the DCAP should have sufficient impact through the demonstration of substantial economic progress in the region to support the enforcement of present and future bans on poppy cultivation in nearby districts outside the project area. In Maiwand and Ghorak districts of Qandahar province a ban on poppy cultivation is due to come into force from November 1998, supported by UNDCP's Poppy Crop Reduction Project. In northern Helmand UNDCP plans to mount a major project under the replication phase of its Afghanistan programme from about 2001.

41. The poppy elimination schedule will be an integral part of the DCAP. Much of the analysis and plan content will already be in the CRP, which will be a companion volume to the DCAP. Where appropriate, rather than repeating CRP text wholesale, the DCAP will summarise it and refer to the CRP for more detailed treatment. Thus, Output 5 will indicate the components of the CRP to be included in the DCAP. The DCAP will be presented in this output in summary form, focussing on sub-projects, outputs, activities and the poppy elimination schedule. The planning team will produce a Pushtu translation of the summary DCAP for agreement with the beneficiaries and civil authorities. The finalized DCAP -- to be prepared through the feasibility studies specified in Output 6 -- will be formulated in greater detail and be supported by one or more project documents.

6. ^{NO} Planning Project Methodology

42. The planning team leader will be briefed by UNDCP and FAO staff in Islamabad. The team will search for all relevant documents relating to the schemes, including those that may be available with USAID and Morrison Knudsen, the American firm involved in the management of the scheme in the 1970s. The team will establish a temporary base in Lashkargah, where HAVA has its head office and UNDCP will also establish an office. A list of facilities to be made available to the team in Lashkargah is included as Annex D. The planning team will plan its own working methodology. This will be presented to the Executing Agency either as part of the bidding process or in the inception report if the planning team is formed without submission of bids. The methodology will provide for involvement of the communities through a representative body or bodies as well as HAVA in the planning process. The plan for formation of bodies representing the communities and involving them in the planning will be presented to UNDCP for approval early in the planning process.

43. The planning team leader will keep the UN Regional Coordinator Qandahar informed of project progress. Early in the planning process the planning team will meet the Regional Coordinator and UN agencies and NGOs active in the region to explain the planning project and solicit relevant ideas and information derived from their experience of the area. UNHCR, FAO, the UNDCP Poppy Crop Reduction Project (AFG/97/C28) and the NGO Mercy Corps International (MCI) are expected to contribute. Assisted by UNDCP, the planning team leader will brief the DCCU at the start of the planning project and keep the DCCU informed of progress. During the planning process the team will collaborate closely with the Helmand Arghandab Valley Authority.

7. Implementation Arrangements

44. The planning project will be funded by UNDCP. The Executing Agency for the planning component will be UNDCP with FAO as Associated Agency. UNDCP will provide monitoring and strategic guidance. The reporting channel will be from the Team Leader to the Representative of UNDCP ROSWA through the ROSWA-based Alternative Development Advisor. The planning work for the cotton ginneries will either be implemented by FAO or by UNIDO through an inter-agency agreement with FAO. The Executing Agency for the provision of office and resthouse accommodation for the planning team will be UNDCP with UNOPS as Associated Agency.

45. The planning team will work closely with HAVA who will be a party to the planning. Liaison with the civil authorities will be normally be carried out through, or facilitated by, UNDCP staff. Both the Comprehensive Rehabilitation Plan and Drug Control Action Plan will require endorsement by the civil authorities. The Team Leader will assist UNDCP in obtaining this endorsement before the end of the planning period.

8. Personnel and Other Inputs

See project document Section E.

9. Terms of Reference for Planning Team Members (International Staff)

See overleaf.

Irrigation and Management Specialist

Duration 6 months

Duties .

- Planning project manager and team leader.
- Coordinate all work, ensuring specialists work as a team, and act as the primary contact between the planning project, UN Agencies and the Helmand Arghandab Valley Authority.
- Ensure that communities and HAVA participate in the planning and other team members involve them as appropriate.
- With the other team experts, define the topographic, soil, agricultural and participative rural appraisal survey requirements to be undertaken under the study, agree these with UNDCP and implement them.
- Confirm the availability of water resources for the scheme on the basis of historic hydrological records and the operating regime for Kajaki dam.
- Define the priorities and phasing of the CRP and DCAP and agree with UNDCP and HVA any sub-projects to be planned to full feasibility level ready for funding.
- Define, in consultation with UNDCP, the components of the CRP to be included in the DCAP and the draft poppy elimination schedule.
- Plan the sustainable management and operation of the schemes.
- Ensure that all team members pay adequate attention to gender issues and this is reflected in outputs.
- Assisted by other team members, draft the project outputs and be responsible for their contents.
- Be responsible for the project's resources and financial accounting.

Qualifications Required

At least 10 years professional experience in developing countries, with at least five years in the field of large-scale irrigation and at least five years in planning and management. Highly skilled in team leadership, analysis, planning and report writing in English. Degree in relevant subject. Knowledge of project area and Pushto or Dari an advantage.

Irrigation Engineer

Duration 16 weeks (implementing partner may propose variation)

Duties

- Plan the physical rehabilitation of the following. This will include assessing the rehabilitation needs, surveying, design and cost estimates.
 - Intakes, including any river channelling necessary
 - Canal structures (syphons, banks, flood protection structures, etc.)
 - Water control structures.
 - Desilting of primary and secondary canals.
 - Provision of communication facilities necessary for the operation of the water control system.
 - Confirm the CCAs of each sub project area
 - Assess the crop water requirements for alternate cropping patterns and on the basis of this assess canal capacities required.
 - Command area development works
 - Rehabilitation or building of offices and other buildings necessary for the operation of the schemes.
 - Rehabilitation of roads essential for the schemes
 - Repair of Helmand Construction Unit workshop and existing machinery
- With advice from the Drainage Engineer and Social Development Specialist, design the system for supplying the communities in the scheme area with drinking water, through rehabilitation of existing systems or provision of new facilities.
- Supervise the national staff Mechanical Engineer's inspection and classification of existing machinery and spare parts.
- Together with the Drainage Engineer, make an assessment of the need for purchase of new machinery, together with specifications and cost estimates.
- Contribute to the plan for the sustainable management and operation of the schemes, paying particular attention to maintenance needs.
- Together with the Agricultural Economist devise ways of improving on farm water management.
- Pay adequate attention to gender issues and reflect this in outputs.
- Contribute drafts for inclusion in the planning project outputs.
- Carry out such other work as the planning project manager directs.

Qualifications Required At least 7 years professional experience in developing countries, with at least 5 in the field of large scale irrigation engineering and adequate experience of providing drinking water supplies. Degree in engineering with specialisation in irrigation. Knowledge of project area and Pushto or Dari an advantage.

Drainage Engineer

Duration 12 weeks (implementing partner may propose variation)

Duties

- Plan the physical rehabilitation of the drainage system. This will include assessing the rehabilitation needs, surveying, design and cost estimates for:
- Desilting the primary and secondary drains and clearing obstructions, e.g. unplanned causeways.
- In-field drainage, considering the possible need for improvement on the original design of the drainage system.
- Together with the Irrigation Engineer, make an assessment of the need for purchase of new machinery, together with specifications and cost estimates.
- Contribute to the plan for the sustainable management and operation of the schemes, paying particular attention to maintenance needs.
- Pay adequate attention to gender issues and reflect this in outputs.
- Contribute drafts for inclusion in the planning project outputs.
- Carry out such other work as the planning project manager directs.

Qualifications Required

At least 7 years professional experience in developing countries, with at least 5 in the field of large scale irrigation scheme drainage. Degree in engineering with specialisation in irrigation or drainage. Knowledge of project area and Pushto or Dari an advantage.

Cotton Ginnery Expert

Duration 1.5 months (implementing partner may propose variation)

Duties

- Carry out a study of the feasibility of the repair and operation of the cotton ginneries at Lashkargah and Girishk. If the outcome is positive, produce a plan for their repair, operation and management. The plan will include, *inter alia*, specifications and cost estimates of all spare parts required to be purchased as well as staff training required.

If the outcome is negative, then plan alternative arrangements for ginning the cotton output from the schemes, such as building two replacement ginneries or a decentralised system of smaller ginneries.

- Contribute to the plan for the sustainable management and operation of the schemes, drafting the section on cotton ginning.
- Pay adequate attention to gender issues and reflect this in outputs.
- Contribute drafts for inclusion in the planning project outputs.
- Carry out such other work as the planning project manager directs.

Qualifications Required

At least 7 years professional experience in developing countries, with at least 5 in the field of cotton ginning and cotton seed oil extraction. Knowledge of the equipment installed in the two ginneries in Helmand an advantage. Degree in engineering. Knowledge of project area and Pushto or Dari an advantage.

Agricultural Economist

Duration 4 months (implementing partner may propose variation)

Duties

- Together with the Social Development Specialist design and carry out the participatory rural appraisals/surveys and draft the socio-economic profile of the beneficiaries.
- Prepare the agricultural plan, including:
 - a review and update of present land use and cropping,
 - a review and up date of the soils data and land capability,
 - develop crop husbandary and farm budgets,
 - review the potential for changes/improvements,
 - recommend strategies for the promotion of changes,
 - design with project alternative cropping patterns,
 - estimate with and without project crop yields and intensities,
 - estimate the overall incremental production for sub-projects,
 - review the adequacy of the supply of inputs and make recommendations to ensure their adequacy,
 - review and recommend the need for extension (including on-farm water management advice), applied research, marketing, credit, seed production, animal production and veterinary facilities and other support services and formulate plans for the provision of those needed.
 - recommend regulations needed, if any, in particular whether cropping patterns should be determined by farmers or regulated by HVA.
- Carry out the financial and economic cost-benefit analysis
- Assist the Social Development Specialist in carrying out the social and gender analysis.
- Pay adequate attention to gender issues and reflect this in outputs.
- Carry out the initial environmental assessment, with assistance from other team members as necessary.
- Contribute to the plan for the sustainable management and operation of the schemes, paying particular attention to community involvement.
- Advise the team leader when improvements can be expected in production systems substantial enough to facilitate farmers switching out of poppy into alternative crops.
- Contribute drafts for inclusion in the planning project outputs.
- Carry out such other work as the planning project manager directs.

Qualifications Required

At least 7 years professional experience in developing countries, with at least 5 in the field of irrigated agriculture. Must have a good grasp of broad agricultural development needs and be experienced and skilled in cost-benefit analysis. Masters Degree in Agricultural Economics or equivalent combination of degrees in agriculture and economics. Knowledge of project area and Pushto or Dari an advantage.

Social Development Specialist

Duration 3 months (implementing partner may propose variation).

Duties

- Carry out the social and gender analysis outlined above.
- Together with the Agricultural Economist, design and carry out the participatory rural appraisals/surveys and draft the socio-economic profile of the beneficiaries.
- Pay adequate attention to gender issues and reflect this in outputs.
- Plan and implement the system for involving the communities in the planning, including the formation or endorsement of a body or bodies to represent them and act as a planning and development partner.
- In consultation with UNHCR, assess the need for any special measures to encourage the return of refugees and, if appropriate, plan any interventions required.
- Contribute drafts for inclusion in the planning project outputs.
- Carry out such other work as the planning project manager directs.

Qualifications Required

At least 7 years professional experience in developing countries, with an aggregate of at least 5 in the fields of social and gender analysis and beneficiary participation in development planning .

Masters Degree in Sociology or other relevant discipline.

Whilst other team members may be male or female, the Social Development Specialist, who will talk directly to women, must be female.

Knowledge of Afghan rural society, the project area and Pushto or Dari an advantage.

10. Planning Duration

The final report and Outputs 3 to 7 will be produced within six months of the start of the planning team leader's contract.

APPENDIX A:**OUTLINE OF A PROJECT FOR
INITIATING THE DESILTING AND
MANAGEMENT TRAINING FOR THE
HELMAND MAJOR IRRIGATION
SCHEMES**

Question of
timing and
what can be
done.

Summary

- Activities:
- Purchase of machinery and spare parts for initiating desilting of the Boghra/Shamalan canal system and main drains.
 - Twelve months desilting operations. ? Not likely
 - Rehabilitation of the Helmand Construction Corporation Workshop facilities required to support desilting operations
 - Initial training of Helmand Arghandab Valley Authority personnel in scheme management and maintenance.

Target population: Population dependent on the Boghra/Shamalan canal system.

Implementing Agencies: FAO through an Inter Agency Agreement with UNOPS

Timeframe: 18 months (third quarter 1998 to second quarter 1999)

Objectives: Increase in the availability of irrigation water and improved drainage the Boghra/Shamalan canal system.

The project will form part of a comprehensive development plan for the rehabilitation of the Helmand Major Irrigation Schemes within the overall objective of ensuring sustainable and sustained alternatives to poppy cultivation.

Estimated cost US\$ 2,560,000

Problem to be Addressed

The UNDCP Afghanistan Opium Poppy Survey 1997 revealed that approx. 200,000 farmers cultivated 58,400 hectares of opium poppy, producing approx. 2,800 metric tons of dry opium. With 29,400 hectares allocated to opium poppy cultivation, Helmand province is by far the largest cultivator and producer of opium in Afghanistan.

Approx. 12,000 hectares of opium poppy in Helmand province are cultivated in the command area of the Boghra and three other major canals built before the war. Due to war damage and absence of repair and maintenance during the internal conflict, the canal gates ceased functioning, the inlet and the distribution and drainage systems became blocked by silt. All this caused a considerable decrease in the availability of irrigation water, water-logging, increasing salinity, less area cropped and lower yields. As a consequence, farmers turned to crops which need only little or no irrigation water, the most commonplace of which is poppy. Cotton was the major cash crop in Helmand prior to the internal conflict but now relatively little is grown and opium poppy has largely replaced it as the main source of cash.

Project Objectives

The objective of this project is to increase the availability of irrigation water from the Boghra canal and decrease waterlogging and salinity problems. The project will allow an early start on the desilting work and thereby build trust with the farmers and authorities, essential for securing their compliance with a phased ban on poppy cultivation. This project forms the initial phase of a larger programme which is expected to continue over a number of years with the aim of restoring the irrigated agricultural system fed by the Boghra and other major canals and to eliminate opium poppy cultivation in the affected areas.

Additional outputs are:

- A Helmand Construction Corporation workshop with facilities to support desilting operations.
- Improved management skills of Helmand Arghandab Valley Authority personnel. *Recruit & train new people*

Project activities will be monitored and supervised from the UNDCP project office in Lashkargah, Helmand province.

Project Impact

The increase in irrigation water and related development activities envisaged under the wider programme, including the provision of agricultural inputs in the form of improved seeds, fertilizers and marketing facilities, will enable the farmers to substitute opium poppy with alternative crops, thereby complying with a ban on opium poppy cultivation which will form part of the Drug Control Action Plan for the area.

Linkage with Previous or Ongoing Programmes

The project will be part of a joint UNDP/UNDCP development concept and plan for the Helmand Valley. The project will complement work done by MCI financed by the US in the Boghra canal inlet to increase the water flow into the canal. In addition, Afghan refugees who own agricultural land in the command area of the Boghra Canal and its subsidiaries are likely to be encouraged to return when they learn of the rehabilitation work which is being done.

Financial Summary

<u>Items/ activities</u>	<u>US \$</u>
3 draglines and their spareparts	1,500,000
Spareparts for one existing dragline	50,000
Transport	35,000
Desilting operations (3 new and 1 old draglines working for twelve months)	200,000
Repair of Helmand construction unit workshop including spareparts for equipment	100,000
Training of Helmand Arghandab Valley Authority in scheme management and maintenance	60,000
International personnel	238,000
National personnel	30,000
Contingencies	52,500
Project support costs (13%)	294,500
Total:	2,560,000

→ CSU ?

APPENDIX B: AVAILABILITY OF DOCUMENTS

1. Location and Type of Documents Available with the Helmand Arghandab Valley Authority (HAVA) and the Helmand Construction Corporation (HCC)

The material, e.g. Engineering Drawings, reports books and Topographic Aerial Photos (black and white) of the Helmand irrigation scheme and surrounding area, mostly dated before 1978, are available in the following departments of HAVA and HCC:

1992 (?) study + images?

Engineering Drawings e.g. detailed technical drawings of irrigation and drainage canals, such as long and cross sections of canals, structures on canals (intakes, syphons, road culverts, spillways, outlets, intake structures), detailed technical drawings of all type of buildings located on the schemes, water supply, sewerage, electrification systems and other miscellaneous public works of Lashkar Gah town, standard design and base drawings are available in the following departments of HAVA and HCC:

HAVA

- Engineering department (Key person for filing of drawings is Mr. Abdul Rahman)
- Irrigation departments
- Drainage departments
- Soil Department
- Hydrology Department
- Water regulation department
- Agriculture department
- Planning department / Library (The key person in the library is Amir Mohamad)
- Other departments of HAVA

HCC Engineering department (in Chah-e-Anjir)

Reports and Books e.g. general subjects, different types of survey, soil and water, salinity problems, feasibility study reports, development projects, operation and maintenance manuals, agricultural reports, hydrographic and sedimentary reports etc. are available in the following places:

- Library of HAVA (main location)
- Office of the president of HAVA
- Other departments of HAVA.

Aerial Topographic Photos of the schemes and other parts of southwest region in different stages, various years, are available in the engineering department, soil laboratory and library of HAVA.

2. List of Available Detailed Drawing Series in Engineering Department of HAVA

<u>Project Name</u>	<u>Project No.</u>
Khan Neshin land development	650
Darweshan land development	750-754
Shamalan land development	755-759
Central Arghandab land development	760-763
Tarnak land development	764
Marja land development	766
Nade Ali land development	767
Zamindawar land development	768
Seraj land development	770
Lashkar Gah city miscellaneous public works	775
Forms, graphs, schedules, maps covering more than one project area	776
Standard design and base drawings	777
Chakhansur area project	94

3. Key Documents and Their Location

Afghanistan Gov.& USAID, 1976	<i>Helmand River Basin Soil and Water study Report, Part 1.</i> Government of Afghanistan in collaboration with US Agency for International Development. Kabul, 1976. <u>Available with:</u> HAVA Library/ Helmand and FAO/ Peshawar.
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Asian Development Bank, 1975	<i>Agricultural Development Plan Upper Helmand Valley Afghanistan.</i> Manila, Philippines, Dec. 1975. <u>Available with:</u> HAVA Library / Helmand and FAO/ Peshawar.
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- Asian Dev. Bank, 1971 *Feasibility Study for Installation of Spillway Gates at Kajakai Reservoir, Afghanistan, Philippines, April 1971.*
Available with: HAVA Library / Helmand.
- IEC, INC. USA & Gov. Afg. 1958 *Grishk Power Development Project Operation and Maintenance Manual, Afghanistan 1958.*
Available with: HAVA Library / Helmand.
- F. A. Dale (date not recorded) *Report on Grishk, Afghanistan Hydropower Plant, New York*
Available with: HAVA Library / Helmand.
- USA Geo. Sur.&Gov. Afg.1972 *Shallow Ground Water in the Zamin Dawar area Helmand Province, Afghanistan, Open file report, Jan.1972.*
Available with: HAVA Library / Helmand.
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- L. Pickett, M. Qasem, 1968 *Bibliography of the material dealing with Agriculture in Afghanistan*, Technical Bulletin No.8, Kabul March 1968.
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APPENDIX C: **AVAILABILITY OF HAVA STAFF TO ASSIST**
THE PLANNING TEAM

HAVA agreed to make available the heads of the following HAVA departments on a 50% time basis to assist the team, primarily in giving information about the present and past condition and manner of operation of the schemes and discussing planning ideas:

Planning

Engineering

Machinery

Irrigation

Surveys

Agriculture

Agricultural Extension

APPENDIX D: FACILITIES TO BE PROVIDED BY UNOPS TO THE PLANNING TEAM

Funded by UNDCP under the Planning Project, UNOPS will provide the following facilities to the planning team:

- Furnished resthouse accomadation in Lashkargah for both international and national staff, expected to include about six double and four single bedrooms, plus two large living rooms.

- Office space in the HAVA headquarters building, with electricity, water supply and toilet facilities, air conditioners or desert coolers, two photocopiers, two computers, two laser printers and a satellite phone. Furniture will also be supplied, with desks and drawing tables lent by HAVA. More details at Annex 5.

APPENDIX E: **PROPOSED FORMAT FOR THE**
COMPREHENSIVE REHABILITATION
PLAN (CRP) DOCUMENT

- (i) **Executive summary**
1. **Introduction.** *Interalia* explaining relationship of CRP to DCAP, and scope and purpose of both.
 2. **Description of the target area.** Expand in an annex which will also cover the earlier development of the schemes.
 3. **Outline of CRP components.** Indicating what is to be executed by UNDCP through the DCAP and what by other agencies needing separate funding. Include priorities.
 4. **Strategy.** Including construction methods and system of management, operation and maintenance and their financing.
 5. **Immediate objectives, outputs, activities, inputs and costs for:**
 - (a) DCAP
 - (b) Other outputs, indicating related outputs to be implemented through the DCAP.
 6. **Beneficiaries and Social Analysis.**
 7. **Budget**
 8. **Financial and Economic Cost-benefit analysis for DCAP and each of the other components suitable for separate funding.**
 9. **Risks.**

ANNEX 2: Opium production in Afghanistan, 1996-97 (Helmand)

Province	Poppy Area (hectares)	Production of Dry Opium (metric tonnes)	Share of Total Production (%)
Badakhshan	2,902	66.30	2.36
Baghlan	328	12.80	0.46
Balkh	710	20.95	0.75
Farah	568	23.54	0.84
Herat	38	1.55	0.06
Jawzjan	0	0	0
Kunar	0	0	0
Kunduz	0	0	0
Nangarhar	14,567	634.15	22.61
Nimroz	642	28.30	1.01
Oruzgan	4,587	293.52	10.47
Paktia	0	0	0
Paktika	0	0	0
Qandahar	4,521	210.15	7.49
Sari Pul	0	0	0
Takhar	0	0	0
Zabul	154	5.74	0.20
Helmand District			
Baghran	2,754	134.29	4.79
Bust	1,325	44.08	1.57
Garmser	1,993	77.46	2.76
Kajaki	3,904	247.65	8.83
Musa Qala	4,360	272.00	9.70
Nad-e-Ali	5,102	301.13	10.74
Nahr-e-Saraj	4,807	195.36	6.97
Naw Zad	1,585	78.03	2.78
Nawa Barakzai	722	37.24	1.33
Sarban Qala	1,971	91.09	3.25
Washir	877	29.16	1.04
Provincial Total (Helmand)	29,400	1507.49	53.75
National Total	58,416	2804	100

NOTE: Districts covering rehabilitation project target area.

ANNEX 3: Aspects of Opium production, trafficking and abuse in Afghanistan

46. Afghanistan has become one of the world's major sources of illicit opium. The cultivation levels of opium poppy and cannabis have increased considerably as a result of a number of social and economic factors exacerbated by the continuing civil war. This has resulted in a massive misallocation of the country's land, labour and capital resources and runs counterproductive to current rehabilitation efforts as land used for poppy and cannabis cultivation will not produce food or other cash crops. Approximately 550 km², or close to 1 per cent of the total arable land in Afghanistan, is devoted to opium production. A substantial proportion of the opium poppy is grown on fertile land and benefits from fertiliser and irrigation.

47. Since 1990, three million refugees have returned to Afghanistan. In addition, a large number of internally displaced persons have returned to their homes since the fall of the Najibullah government in 1992. The returnees have very limited means at their disposal and are in need of resources to re-establish their homes and communities. The high value of opium and its ease of marketing is undoubtedly a tempting option to refugees returning to Afghanistan.

48. The most recent opium poppy survey was completed by UNDCP in July 1997. The survey results indicate that during the 1996-97 growing season, approximately 58,416 hectares were reported to be under opium poppy cultivation. Compared with the year before, it shows a slight increase of 2.8% in the land under poppy cultivation. This area yielded an amount of opium estimated at 2,804 metric tonnes of dry opium gum. This figure would suggest an increase in opium production of approximately 25 % from the 1996 total of 2,248 metric tonnes.

49. In Afghanistan, opium poppy cultivation, processing, trafficking and abuse are generally seen as being contrary to the moral tenets of Islam. However, while the cultivation of opium poppy is nowhere considered an honorable form of work, it is viewed by those who cultivate it to be less dishonorable than being unable to maintain one's family. In addition, with few exceptions, poppy growers in Afghanistan rarely use opium themselves or suffer any serious social problems as a result of its use or its by-products. They, therefore, do not assume any responsibility for its abuse by others, especially non-Afghans.

50. The long tradition of both production and use of opium in some areas of Afghanistan, the effects of the war and the financial attraction of the crop have all contributed to this dramatic increase in opium production. The absence of an effective central government and the lack of any national or provincial anti-narcotics programmes have permitted the spread of illicit crops, drug trafficking and abuse to remain virtually unchecked. At the same time, economic pressures in the wake of the protracted armed conflict have prompted large numbers of Afghan farmers to resort to opium poppy cultivation. At present, more than 200,000 families in nearly 4,000 villages or hamlets engage in this relatively lucrative, illegal trade.

51. Opium poppy happens to be the only crop for which credit is readily available. The high value of opium resin and ease of storage make opium poppy very attractive to the farmer while its ease of transportation and concealment facilitate trafficking. As a result of these factors and

developments in the global illicit drug market, opium has become Afghanistan's major export. However, despite the considerable retail value of opiates derived from it, only a small proportion of the total revenue is fed back into the Afghanistan economy. A significant amount of the foreign currency earnings stays outside the country and has not been available for the reconstruction of Afghanistan's devastated economy.

Poppy Cultivation in Afghanistan, 1994-1997 (Hectares)				
Province	1994	1995	1996	1997
Badakhshan	1,714	2,970	3,230	2,902
Baghlan	n/a	n/a	n/a	328
Balkh	n/a	n/a	1,065	710
Farah	n/a	9	630	568
Helmand	29,579	29,753	24,909	29,400
Herat	n/a	n/a	n/a	38
Jawzjan ¹	n/a	n/a	n/a	0
Kunar	115	152	19	0
Kunduz	n/a	n/a	n/a	0
Nangarhar	29,081	15,722	15,643	14,567
Nimroz	682	119	136	642
Oruzgan	6,211	2,573	7,777	4,587
Paktia	n/a	n/a	n/a	0
Paktika	n/a	n/a	n/a	0
Qandahar	4,034	2,461	3,160	4,521
Sari Pul	n/a	n/a	n/a	0
Takhar	n/a	n/a	n/a	0
Zabul	54	n/a	255	154
Total	71,470	53,759	56,824	58,416

¹ Only cultivation of minimum 1 ha is reflected in the table. As the area under opium cultivation in the provinces of Jawzjan and Kunar, respectively, was less than 1 ha in 1997, the figures indicated in table 1 for these two provinces are consequently 0.

Source: UNDCP, Afghanistan Opium Poppy Survey 1997.

52. Since 1990, three million refugees have returned to Afghanistan. In addition, a large number of internally displaced persons have returned to their homes since the fall of the Najibullah government in 1992. The returnees have very limited means at their disposal and are in need of resources to re-establish their homes and communities. The high value of opium and its ease of marketing is undoubtedly a tempting option to refugees returning to Afghanistan.

Trafficking patterns:

53. Heroin is trafficked to western Europe and the United States through Pakistan, India, Iran and the Central Asian Republics. A sizeable quantity -- possibly more than half of the opium equivalent produced in the region -- is also consumed within Pakistan and Iran. The smuggling routes selected depend on the destination and on the commodity being smuggled (see map on page 1). Although rarely refined to a high degree of purity within the region, when high grade heroin is produced, it is usually destined for the European and North American markets and is transported by air via Karachi or the Central Asian Republics. Crude heroin or "Brown sugar" is smuggled increasingly into the Central Asian Republics. Opium for the Pakistan market enters through Baluchistan (Quetta) and the North West Frontier Province (Peshawar). Morphine and heroin base is usually smuggled through Pakistan and Iran bound for Turkey for further refining. Raw opium remains primarily within the region for local consumption in Pakistan and Iran. Cannabis (hashish) is usually transported from Afghanistan through Baluchistan to the Makran Coast and from there by ship to Europe. Increasingly, it is also transported by rail through the Central Asian Republics.

ANNEX 4: Budget Explanatory Notes

B/L Description

1000 Personnel

1300 GSS staff:

1 Driver \$ 300 per month

1500 Duty travel

Programme Officer and driver: each \$100 per month

1700 NPPPs

Programme Officer \$ 600 per month

2000 Sub-contracts

2101 Planning team

US \$

International staff 22.5 months at \$ 15,000 337,500

National staff

Irrigation Engineers 6.5 months x \$ 1,000 6,500

Mechanical Engineer 1 month x \$ 1,000 1,000

Community Liaison/Agriculturalists 12 x \$ 1000 12,000

Unallocated 0.5 month x \$ 1,000 500

Administrator/Accountant 5 x \$ 700 3,500

Secretary 5 x \$ 500 2,500

Draftsmen 18 x \$ 500 9,000

Surveyors 5 x \$ 250 1,250

Assistant Surveyors 5 x \$ 200 1,000

Rodmen 5 x \$ 150 750

Chainmen 5 x \$ 150 750

Total national staff	38,750
<u>Vehicle Hire and operation (with driver)</u>	
Vehicle months at \$ 700:	
Survey teams: 4 vehicles for one month	3,500
6 vehicles for 5 months	21,000
4 vehicles for 3 months	8,400
Equipment: expendable and non-expendable. \$ 10,000 of equipment also provided for planning team's use under B/L 4201. Provision for laptop computers with software for international staff for duration of contract is included in their monthly rate of \$ 15,000.	8,000
Contingencies	15,850
2102 <u>Office and Resthouse Rehabilitation</u>	
Office [space allocated to UNDCP]	4,400
Office [priority parts of rest of building used by HAVA]	6,500
Resthouse (two buildings)	14,100
2103 <u>Employment of Guards</u>	
3 guards at \$ 100 per month	
4000 Equipment	
4100 Expendable equipment for UNDCP office (Allowance made for planning teams expendable equipment under B/L 2101)	
4201 <u>Non-expendable Equipment for Planning Team</u>	
Survey equipment	7,000
Other, including satellite imagery (Most of the required drawing equipment	5,000

will be made available by HAVA)

4202 Non-expendable Equipment for Office and Resthouse

<u>Item</u>	<u>Office</u>	<u>Resthouse</u>	<u>US \$</u>
4WD double cab pickup with radio	1	-	20,000
Base radio	1	-	6,000
Furniture (in addition, desks and drawing tables for office will be provided by HAVA)	Set	Set	5,000
Generators	1	1	20,000
Air Conditioners (24,000 units)	3	2	2,500
Desert coolers	11	14	3,750
Photocopiers	2	-	5,000
Desktop computers (+ Wordperfect, Excel)	2	-	2,200
Laptop computer (+Wordperfect, Excel)	1	-	3,000
Uninterruptable power supplies	2	-	800
Voltage stabilisers	5	-	500
Laser printer (HP Laserjet 5)	1	-	2,000
Laser printer (HP Laserjet 6L)	1	-	650
Printing sharer device	1	-	500
Satellite telephone	1	-	3,500
Parafin heaters	1	7	800
Total			76,200

5000 **Miscellaneous**

5100 Operation and Maintenance

	<u>US \$</u>	
	<u>1998</u>	<u>1999</u>
Vehicle	1,500	1,500
Electricity	1,500	1,500
Equipment	2,500	2,500
Buildings	1,500	1,500
Sub-total	7,000	7,000

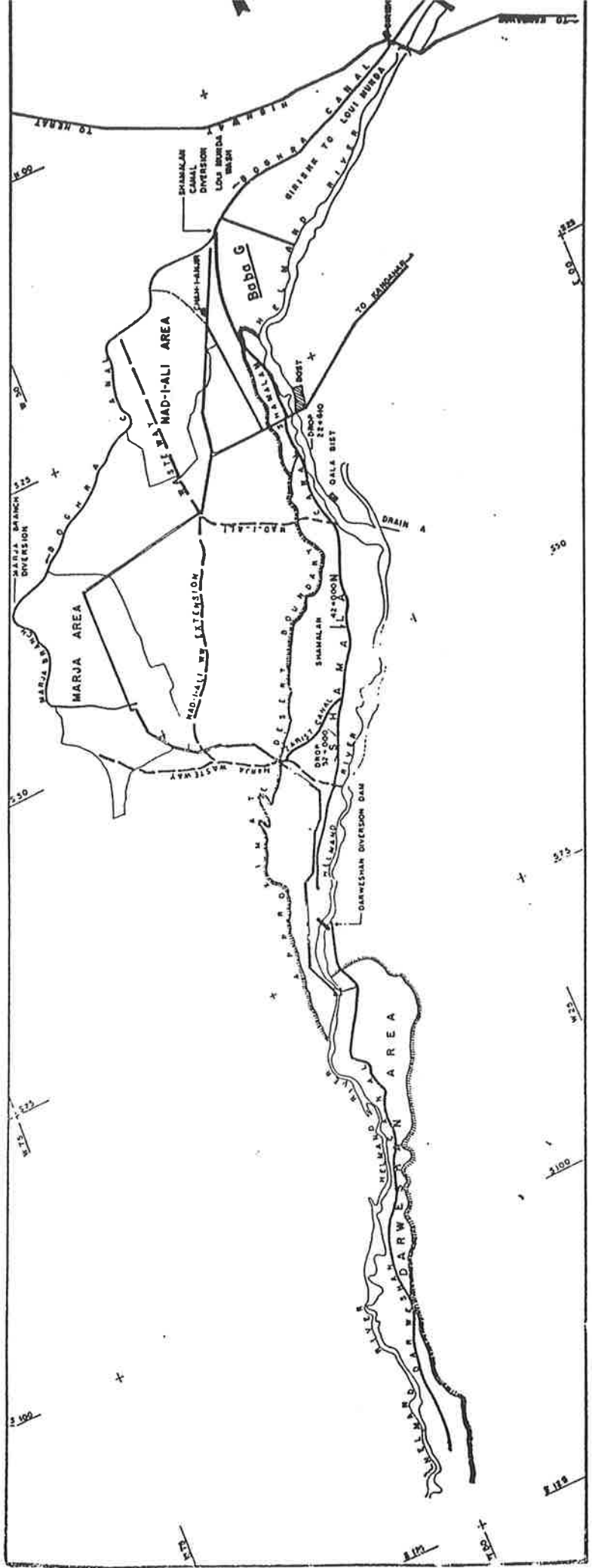
Allocation of Budget Lines:

FAO	2101	Planning team sub-contract
	4201	Non-expendable equipment for planning team's use
UNOPS		Rest of the budget lines B/L 1300 to 5300
UNDCP/FAO/UNOPS	9300	Project support costs divided according to UN practice

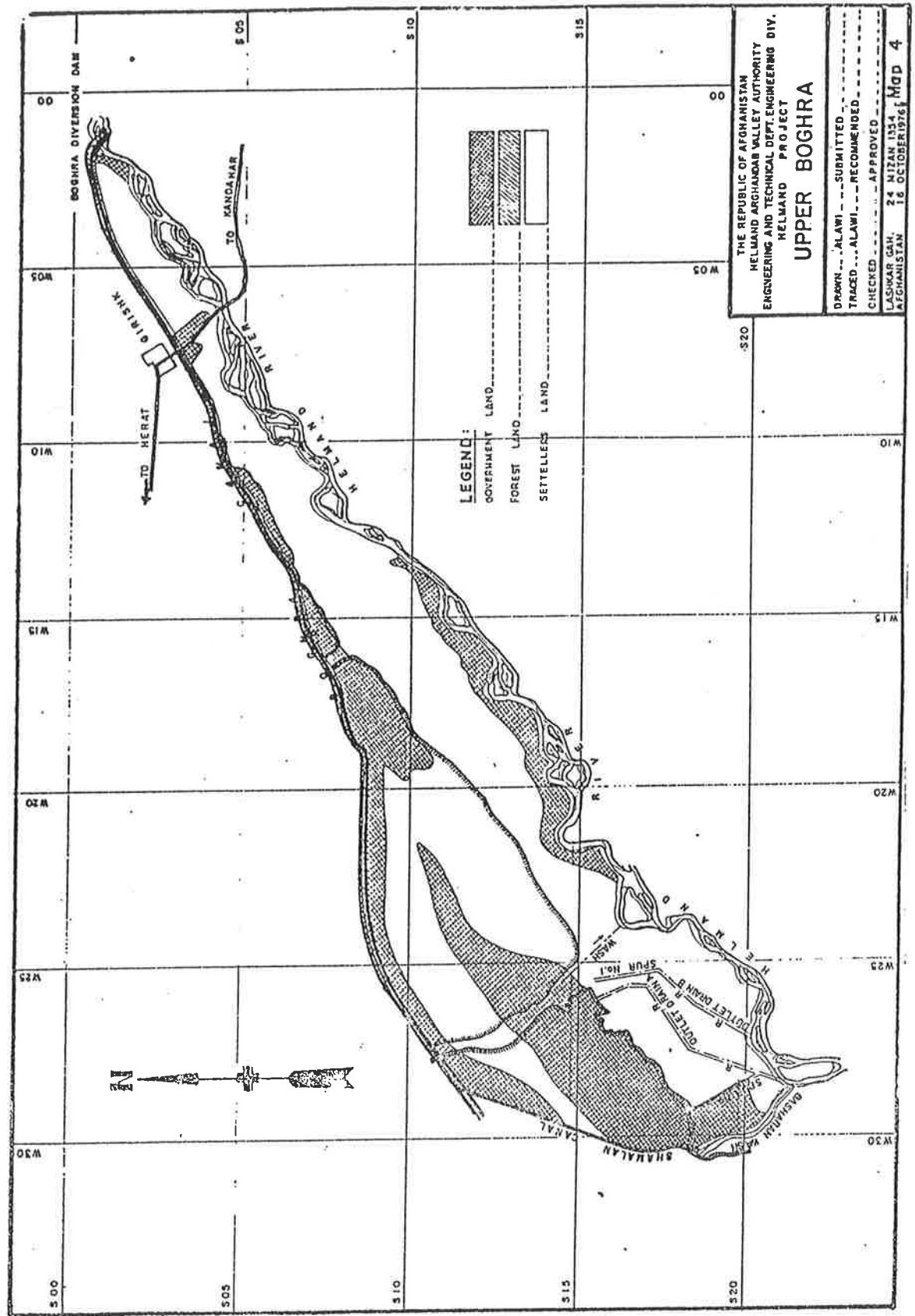
ANNEX 5: Schedule of Main Activities

Annex 5 Schedule of Main Activities		1998												1999												2000											
		M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D		
ID	Task Name																																				
1	Rehabilitate premises, establish office and resthouse (output 1)	[Gantt bar: M, A, M, J, J, A, S, O, N, D]																																			
2	Run office and resthouse (output 1)	[Gantt bar: M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D]																																			
3	Recruit & establish planning team (output 2)	[Gantt bar: M, A, M, J, J, A, S, O, N, D]																																			
4	Produce output 3 (CRP and DCAP outlines)	[Gantt bar: M, A, M, J, J, A, S, O, N, D]																																			
5	Produce output 4 (desilting project document)	[Gantt bar: M, A, M, J, J, A, S, O, N, D]																																			
6	Implement desilting project	[Gantt bar: M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D]																																			
7	Produce output 5 and 6 (CRP and DCAP)	[Gantt bar: M, A, M, J, J, A, S, O, N, D]																																			
8	Produce output 8 (product and TOR for further planning input for DCAP)	[Gantt bar: M, A, M, J, J, A, S, O, N, D]																																			
9	Plan DCAP to full feasibility level	[Gantt bar: M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D]																																			
10	Implement DCAP	[Gantt bar: M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D]																																			

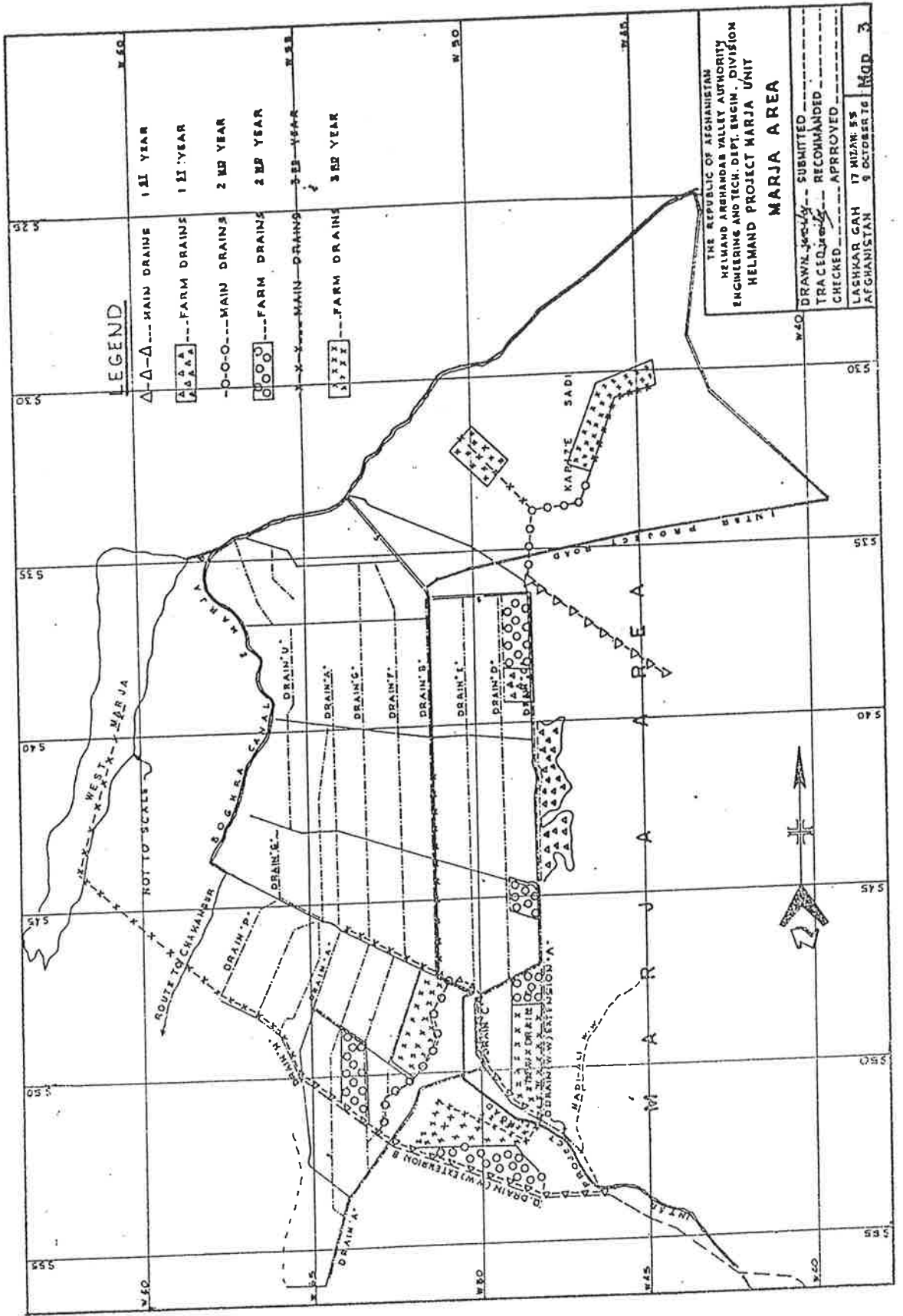
Annex 6: Map 1
Boghra, Shamalan and
Darweshan Canals

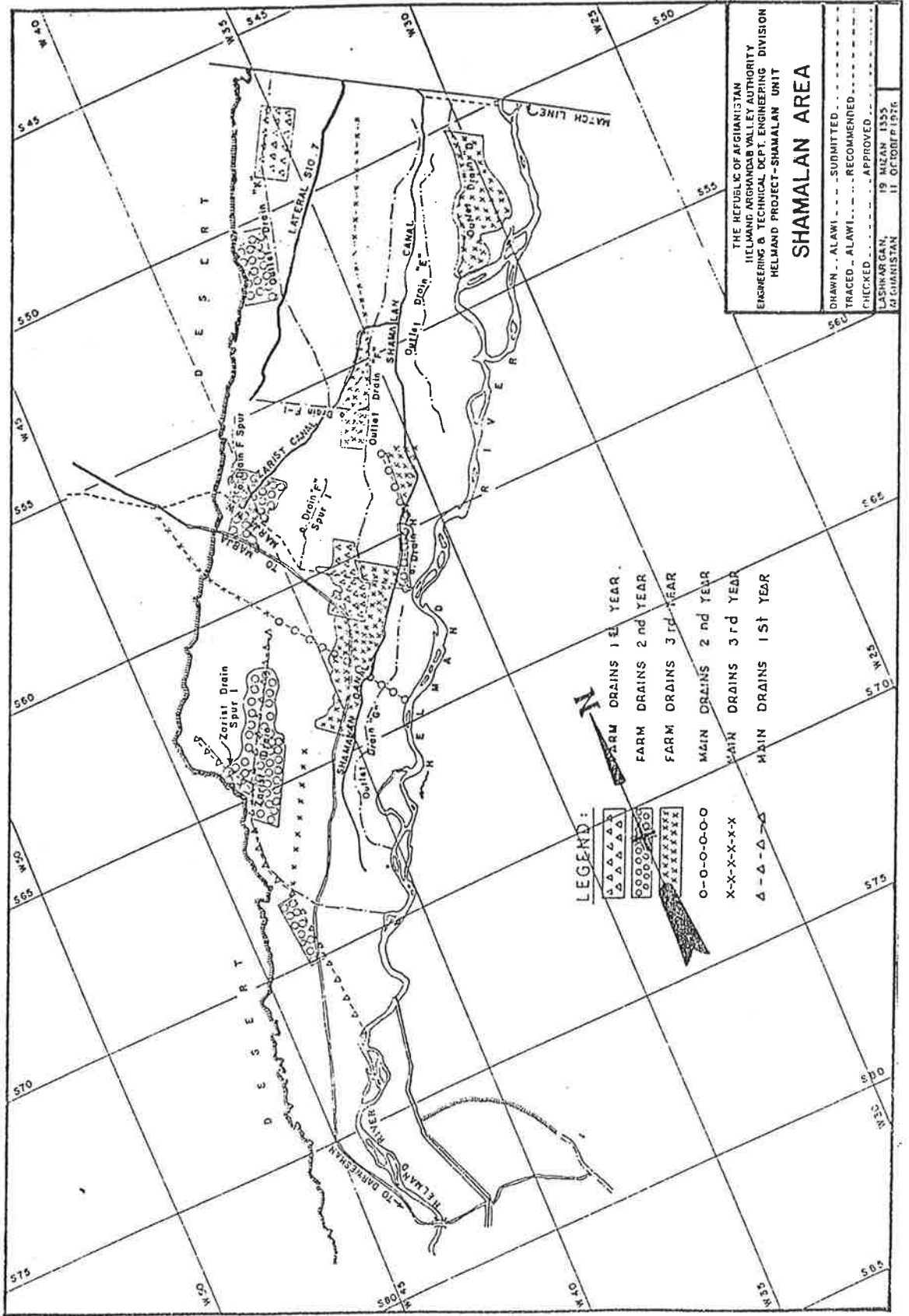


Annex 6: Map 2 Boghra Canal: Upper Part

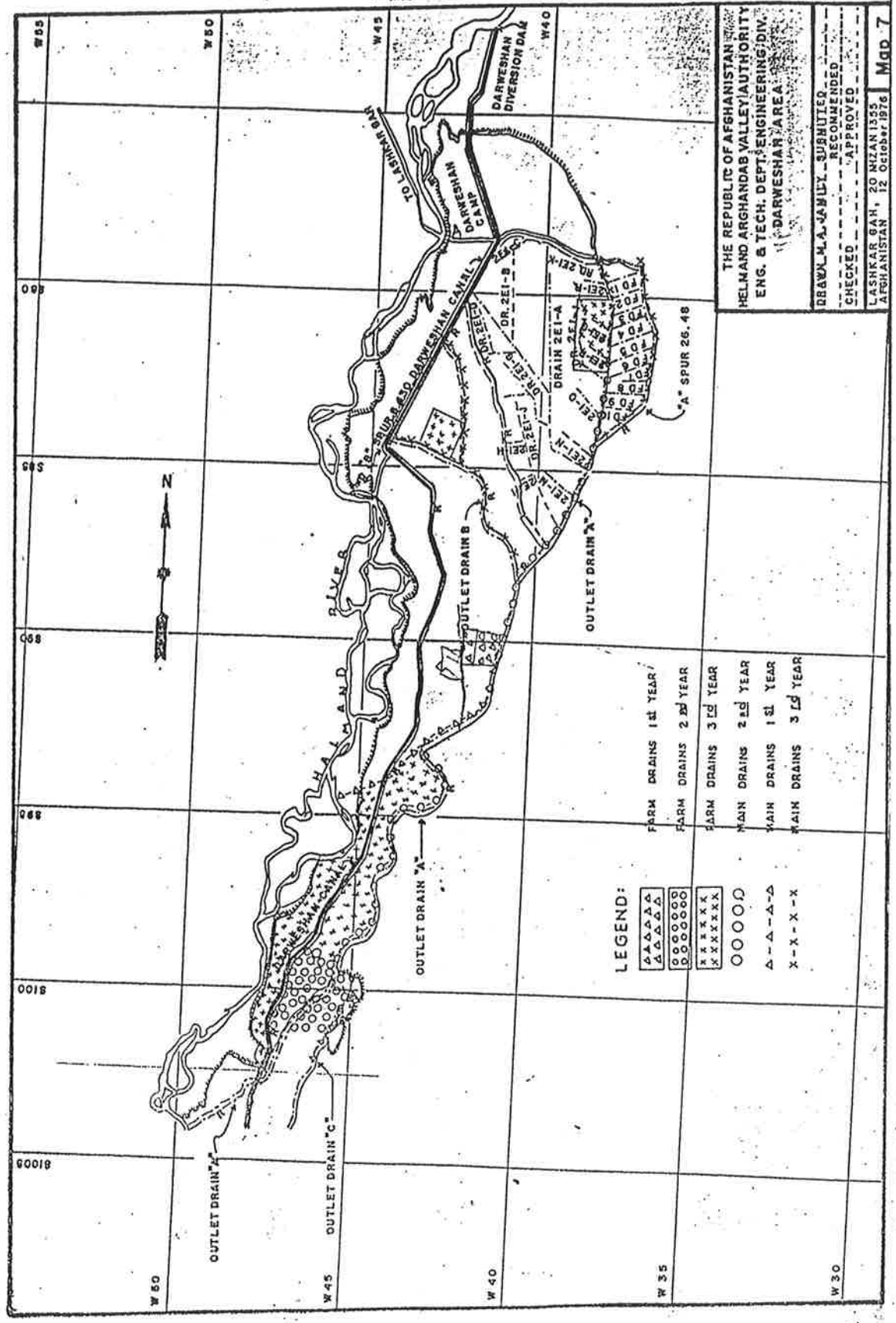


Annex 6: Map 4 Boghra Canal: Marja Area

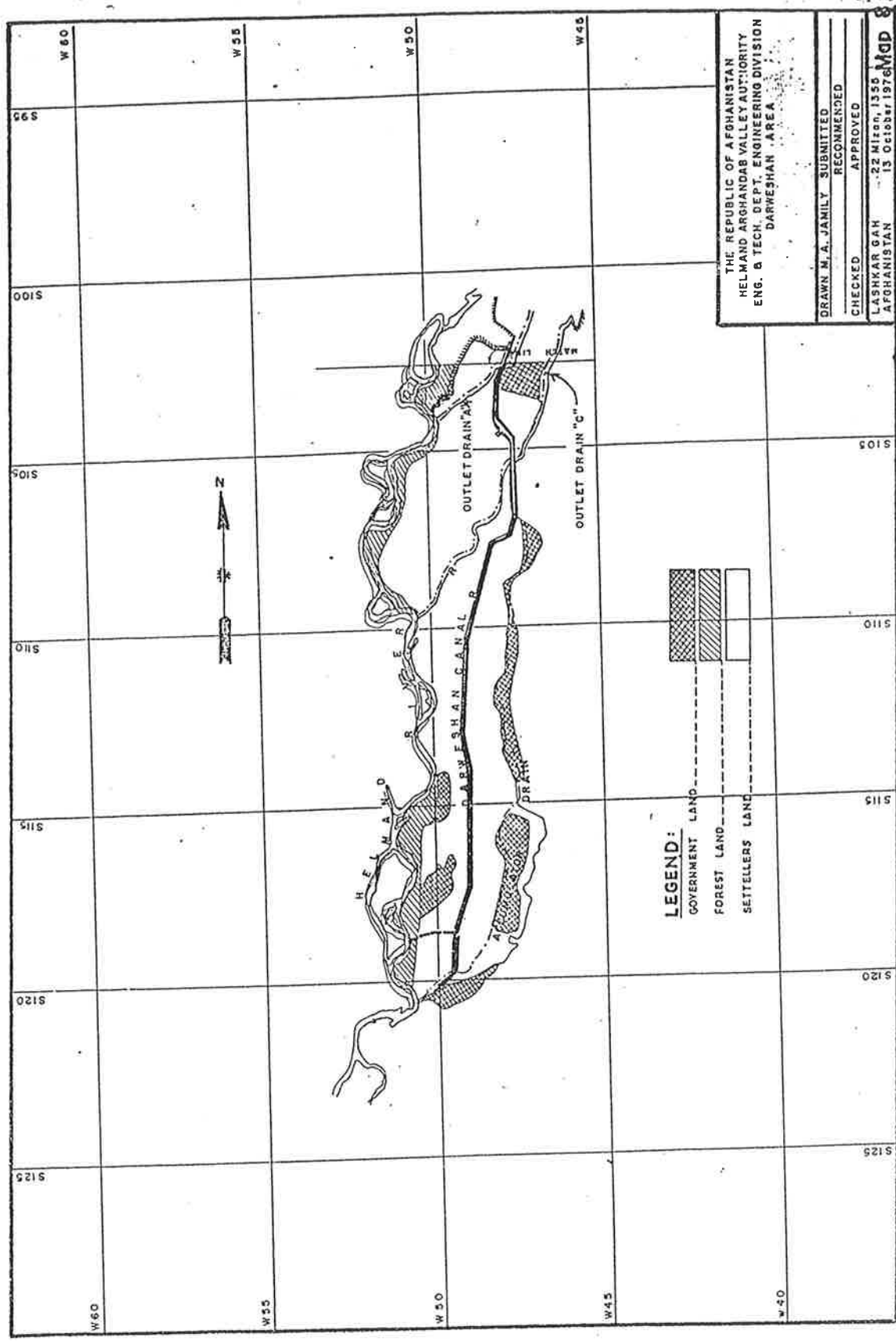




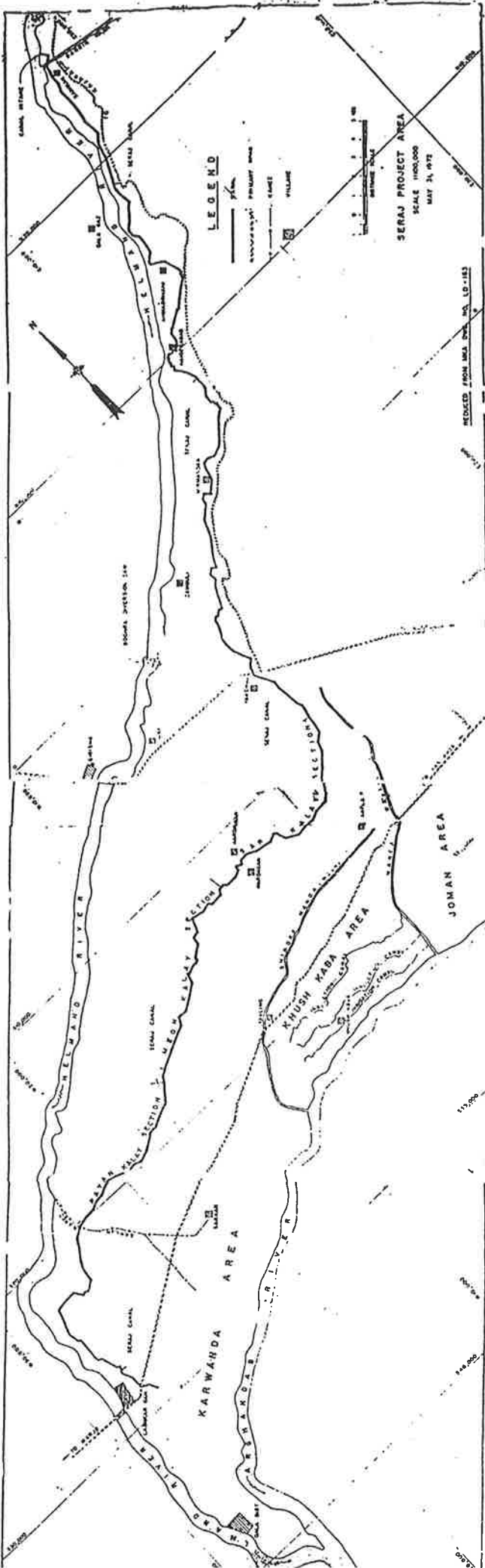
Annex 6: Map 6 Darweshan Canal: Upper Part



Annex 6: Map 7 Darweshan Canal: Lower Part



Annex 6: Map 8 Nahr-e-Saraj Canal



Annex 6: Map 3 Boghra Canal: Nad-i-Ali Area

