

APPENDICES

With the Advice on Terms of Reference for EIA for
Wadi Surdud Project
-Yemen-

(Appendices 1 to 6)

APPENDIX 2

Letter of request for advice

16 JUL 2007

Republic Of Yemen
Ministry of Water and Environment

Minister's Office



الجمهورية اليمنية
وزارة المياه والبيئة
مكتب الوزير

Ref : 367.M.W.E

Date : 9-7-07

No. of Pages :

الرقم :

التاريخ :

عدد المرفقات :

Director
Netherlands Commission for Environmental Assessment
Utrecht
The Netherlands

July 8, 2007

Subject: Assistance-Request for preparation of Terms of Reference of EIA study

Dear Sir / Madam,

I would like to take this opportunity to convey my gratitude to your esteemed commission for the continuous support to environmental protection in Yemen.

With growing water scarcity, Yemen has engaged in a comprehensive program for the construction of "small" water structures (dams) in an effort to harvest rainfall for various uses. Recently a study on three "large" dams have been conducted (including feasibility studies and detailed designs) in the Wadies of Surdud, Hassan, and Al-Kharid. Although an EIA study was carried out, we feel that it suffers from many shortcomings and weaknesses, among which, a conflict of interest, since the same consultant who conducted the designs carried out the EIA study.

This situation forces us to reconduct the EIA study, with particular emphasis on solid ground information collected by an independent body. We would, therefore, kindly request your assistance to help the Environmental Protection Authority to prepare the TOR for the new EIA study of the three large dams in the Wadies of Surdud, Hassan and Al-Kharid.

Given the urgency of this issue your quick response is highly appreciated.

Sincerely yours,

Abdulrahman Fadhl Al-Eryani

Minister of Water and Environment



APPENDIX 3

Category: DAC code 140 Water supply and sanitation; CRS codes 14010 Water resources policy and administrative management; 14015 Water resources protection; 14040 River development

Project number: 076

Project information:

The Ministry of Agriculture and Irrigation in Yemen is planning to construct a large dam in Wadi Surdud. Wadi Surdud is one of the seven major wadis, which rise in the central highlands and flow westward across the Tihama towards the Red Sea. Only during exceptional floods (frequency not documented) the water flows into the Red Sea.

The Surdud dam project is a multi-purpose flood control and irrigation scheme for Wadi Surdud. The anticipated agricultural development project is located in the coastal part of the Surdud basin located in the Tihama plain. The most important part is the area of 17,200 hectare which has the right to irrigate using Wadi flows and the area that will be flooded by the reservoir. according to the plan the main objectives for rehabilitation and development project are: diversion of water to the land in controlled quantities; reduce scour damage to the field and the canals; reduce water losses and wastage; increase the area of land receiving irrigation water; increase recharge to decrease the rate of depletion of ground water resources; improve reliability of water supply.

Significant details:

The NCEA has reviewed the available information that was considered to be an EIA and concluded that this information does not meet the Yemeni EIA standards. In addition guidelines has been provided to develop an EIA following good practice principles.

Procedural information:

The advisory report was submitted to the Ministry of Environment on 2 January 2008. The report has become publicly available in June 2008. The report is also available in Arab.

Composition of the working group:

Chairman:

Prof. Klaas Jan Beek

Experts and their field of expertise:

Prof. Rien Bos: dams and irrigation

Dr. Jan Willem Foppen: (geo)hydrology

Dr. Roel Slootweg: ecology and integrated water resources management

Dr. Manal Eid: rural sociology, socio-economy

Technical secretary:

Mr. Arend Kolhoff

APPENDIX 4

Programme of the visit to Yemen and list of people met

(28 September – 6 October 2007)

During the site visit of the Commission to Yemen, three separate dams have been assessed. For that reason you will notice that Wadi Surdud, Wadi Hassan and Wadi Bana were visited.

Date	Meetings and visits	Comments
28 Friday (September)	09:45 Departure from Amsterdam 22:15 Arrival Sana'a Mr Beek, Mr Kolhoff, Mr Bos, Mr Foppen and Mr Slootweg 23.35 Departure Mrs Eid from Cairo	- Flights are confirmed - Pick up by Netherl. Embassy cars - Hotel Taj Sheba in Sana'a
29 Saturday	03.35 Arrival of Mrs M. Eid from Cairo 08.30 Pick up by rented cars 09:00 Netherlands Embassy; Mr Negenman & Mr Al-Aroosi 10:15-11:30 Minister of Water & environment 12:00-12:45 Min. of Agriculture 13:00-14:00 Min. of Planning	- Pick up by Netherl. Embassy car - Briefing together with local resource persons and Donor support group - Introduction of the working group and briefing about the objectives of the visit - Hotel Taj Sheba
30 Sunday	10:00-11:30 Environmental protection Authority 12:00-13:30 General Directorate of Irrigation 14:00-15:00 National Water Resources Authority	- Introduction of the working group, briefing about the objectives of the visit and gathering of information - Hotel Taj Sheba
1 Monday (October)	Visit to Wadi Surdud	- One day visit to Wadi Surdud overnight stay in Taizz - Hotel Sofitel, Taizz
2 Tuesday	10.00 Aden branch of Ministry of Agriculture & Irrigation	- Departure from Taizz overnight stay in Aden - Hotel Golden Tulip, Aden
3 Wednesday	Visit to Wadi Hassan and Bana 11.00 Meeting with vice-Governor of Abyan	- Hotel Golden Tulip in Aden
4 Thursday	Return to Sana'a Visit of World Bank funded project in Wadi Tuban	- Hotel Taj Sheba, Sana'a
5 Friday	No meetings	- Preparation of draft report - Hotel Taj Sheba, Sana'a
6 Saturday	13:00 -15.00 Meeting at the Ministry of Planning with Minister of Planning W&E and Agriculture & Irrigation 16:00-17:00 Debriefing Netherlands Embassy; Mr. Buffinga 19:00 Mr K.J. Beek Departure to Amsterdam	- Presentation of draft findings during meeting at the Min. of Planning
7 Sunday	05:35 Arrival in Amsterdam (Mr K.J. Beek) 01:45 Departure to Amsterdam (Mr A.J. Kolhoff, Mr M.G. Bos, Mr J. Foppen and Mr R. Slootweg) 10:35 Arrival in Amsterdam (Mr A.J. Kolhoff, Mr M.G. Bos, Mr J. Foppen and Mr R. Slootweg)	

List of key persons from governmental sector met with the Dutch working group
(29 September - 6 October 2007)

1. Sana'a Governorate

Ministry of Water and Environment

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|----------|---------------------------------|-----------------------------------|
| 1 | H.E Eng. Abdul Rahman Al-Eryani | Minister of Water and Environment |
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Resource persons:

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| 2 | Salem Baquhaizel | D.G of EIA- Environment Protection Authority |
| 3 | Amer Al-Ghorbany | Deputy D.G for Env. Policies and Programmes |
| 4 | Moahmood Sultan | Head of Study and Planning – NWRA |
| 5 | Qahtan Al-Asbahi | IWRM program Officer UNDP-NWRA |
| 6 | Helal Al-Riashi | EIA unit – EPA |
| 7 | Senan Mhosan | EIA unit - EPA |

Ministry of Agriculture and Irrigation

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|----------|-----------------------------|--|
| 1 | H.E Dr. Mansour Al-Hawshabi | Minister of Agriculture and Irrigation |
| 2 | Abdul Elah Hotrom | Director of Irrigation Improvement Project |
| 3 | Motahar Zaid | D.G Irrigation |
| 4 | Aiz Addin Al-Gunied | Director of Large Dams Unit |
| 5 | Dr. Yousof Fara'a | Director of Wadi Hassan Dam Unit |
| 6 | Mostafa Saieed Al-Absi | Director of AL-Khared Dam Unit |
| 7 | Habib Abbas | ACE PVT ltd. |
| 8 | Khaled | Ghayth Aquatech Ltd |

Ministry of Planning

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|----------|--------------------------------|--|
| 1 | H.E Mr. Abdul Kareem Al-Arhabi | Deputy Prime Minister – Minister of Planning and International Cooperation |
| 2 | Khalid Mohamed Saeed | D.G of Agriculture Projects Planning |

2. Hodiedah-Mahweet Governorate

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|----------|---------------------|--|
| 1 | Mr. Abdul-Latif | Head of Local council – Bani Saad district-Mahweet governorate |
| 2 | Omar Taha Fakeer | D.G of NWRA- Hodiedah Branch |
| 3 | Yasser Ghobair | D.G of EPA - Hodiedah Branch |
| 4 | Areef Hamoud | Env. Adviser- Wetland Expert- Marine Research Center – Hodiedah |
| 5 | Ibrahim Hakamee | Hydro-geologist –Tihama Development Authority |
| 6 | Fadhl A. Al-Nuzaili | spokesman of local farmers- khamis Bani Saad Mahweet Governorate |

3. Aden Governorate

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| 1 | Aidarous Al-Sulimani | D.G of Agriculture and Irrigation |
| 2 | Abdul Aziz Mahioub | D.G of NWRA – Aden Branch |
| 3 | Othman Hamid | Deputy Manager of Agriculture and Irrigation |
| 4 | Habib Hassan | Manager of Irrigation Projects |
| 5 | Gameel Al-Kadasi | EPA- Aden Branch |
| 6 | Khaled Bal-Edi | NWRA – Abyan Coordinator |
| 7 | Mansour Ga'far | NWRA Monitoring Network Engineer |

4. Abyan Governorate

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|-----------|------------------------------------|--|
| 1 | Nasser Al-Fadhli | Vice Governor- General Secretary of Local Council |
| 2 | Omar Al-Saiari | D.G of Agriculture and Irrigation |
| 3 | Dr. Khaled Balam | D.G Agriculture Research & Extension – Al-Koud
Research Center |
| 4 | Kasim Shandak | D.G of Zingobar district |
| 5 | Ahmed Garfoush | D.G of Khanfar district |
| 6 | Dr. Abdlh Al-Moa'lem | Secretary General of Local Council- Khanfar district |
| 7 | Saleh Al-Badili | Director of Irrigation Works |
| 8 | Mohamed Al-Saidi | EPA Coordinator in Abyan – Head of Environmental
Society in Abyan |
| 9 | Dr. Mansour Goma'a | Governor's Adviser – Member of Abyan Water
Basin Committee |
| 10 | Mahdi Al- Hamid | Head of Service Committee – Local Council |
| 11 | Members of Yemen Women Union | |
| 12 | Members of Water Users Association | |

APPENDIX 5

Selected additional information

- Bos, M.G. e.o. (2005): Irrigation and drainage performance assessment. Practical guidelines.
- Douglas, I. e.o. (2004): Small dams and social capital in Yemen. How assistance strategies affect local investment and institutions. International Water Management Institute. Research report 76.
- Gun, J. v.d. (1990): Wadi Surdud: A case study on integrated water resources management. Paper presented at the seminar on "Economic and social issues in Water Resources Development and management in the Yemen Republic" 27-29 May 1991, Sana'a, Republic of Yemen.
- Noaman, A. A. (2005): Ecohydrological erosion model for semi-ardi mountain catchment using GIS techniques: A case study – Wadi Surdud catchment, Republic of Yemen. In: the Arabian Journal for Science and Engineering, Volume 30, No. 2c, December 2005.