

APPENDICES

**Advisory review of the Environmental
Statement Executive Summary
of the Ghazi Barotha Hydropower Project,
Pakistan**


(appendices 1 to 5)

APPENDIX 1

Letter of DGIS dated December 22nd 1994, in which the Commission has been asked to submit an advisory report

Ministerie van Buitenlandse Zaken

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	Commissie voor de m.e.r./OS
ingekomen	2 - JAN. 1995
nummer:	001 - 35
doos:	oig-1
kopie naar:	Sc/Rb/Sb/Kh

Commissie voor de m.e.r./OS
t.a.v. de heer drs. J.J. Scholten
Postbus 2345
3500 GH Utrecht

Directoraat-Generaal
Internationale Samenwerking

Datum: 22-12-1994

Onderwerp:
Ghazi Barotha hydropower
Act. nr. WW92850-vlgr 14,
irc nr. 93/381
(MER/94/014)

Kenmerk: DDI-DST
ML-94-629
(WEV)

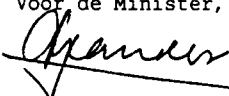
Op korte termijn zal bovengenoemd project in de Board of Directors van de Wereldbank worden behandeld. Ten behoeve van de oordeelsvorming van het DGIS wordt een toetsingsadvies van het EIA-summary van dit project op prijs gesteld.

Moge u verzoeken een werkgroep samen te stellen die het EIA-summary (reeds in uw bezit) op hoofdlijnen toetst. Een aanpak zou kunnen zijn reeds in een vroeg stadium van het advies vragen te formuleren ter zake het EIA van het project die dan door het DGIS aan de WB voorgelegd kunnen worden. Afhankelijk van de antwoorden daarop kan het advies gefinaliseerd worden.

De samenstelling van de werkgroep en bijbehorende begroting worden dezerzijds ingewacht, onder verwijzing naar de overeenkomst die in maart 1993 tussen DGIS en Cie is gesloten.

DE MINISTER VOOR ONTWIKKELINGSSAMENWERKING,
Voor de Minister,

5/a



Het Hoofd van het Milieuprogramma

Dr. K.A. Koekkoek

APPENDIX 2

Project information

Proposed Activity: The Pakistan Water and Power Authority (WAPDA) intends to implement in the northern Indus river plain, between the tail waters of the Tarbela dam and the confluence of the Indus and Haro rivers, an activity named 'the Ghazi-Barotha hydropower project'. The main objective of the proposed project is to meet the acute shortage of power in Pakistan. The intended project will utilize the fall of about 76 metres of the river along a distance of about 63 kilometres. The project includes three basic elements: a barrage, a power channel and a power complex. The project will have an installed capacity of 1450 MW. The power will be transmitted to WAPDA's national grid system.

Categories: hydroelectric power projects, power transmission lines

Project numbers: WW92850-vlgnr 14, jrc. nr. 93/381(MER/94/014) Cie m.e.r. 016

Progress: The environmental assessment executive summary will be submitted to the board of directors of the World Bank. A Study Appraisal Report is in preparation at the World Bank. This report will be discussed in the board of Directors by the beginning of April 1995. A review advice on the Summary has been submitted to the Netherlands Minister for Development Cooperation on 10 April 1995.

Composition of the working group of the Commission for EIA:

Mr J.F. Agema

Mr A. van Dijk

Mr J.W. Kroon (chairman)

Mr Azher Uddin Khan acted as resource person in Pakistan.

Technical secretary: Mrs I.A. Steinhauer.

APPENDIX 3

Guidelines for EIA-Summary of the Asian Development Bank

- A. Introduction (1/2 page)**
1. This section should include the purpose of the report, extent of the EIA study and brief description of any special techniques or methods used.
- B. Description of the project (1/2 page)**
2. This section should include the type of and need for project, location, size or magnitude of operation and proposed schedule for implementation.
- C. Description of the environment (in area affected by the project) (2 to 3 pages)**
3. This section should include the physical and ecological resources, human and economic development and quality of life values. Where available, environmental standards should be used as the baseline for comparative purposes.
- D. Anticipated environmental impacts and mitigation measures (4 to 6 pages)**
4. Environmental impacts, both direct and indirect, global or local, on different environmental resources or values due to project location, as related to design, during construction and regular operation should be discussed and mitigation, offsetting or enhancement measures should be recommended.
- E. Alternatives (2 to 4 pages)**
5. For each alternative, a summary of the probable adverse impacts and its relation to the proposed project and other alternatives should be discussed with a view to determining whether the proposed project minimizes the environmental impact over all other alternatives and is within acceptable environmental impact limits.
- F. Cost-Benefit analyses (1 to 2 pages)**
6. This section should include present value of all benefits and all costs compared in the form of internal rate of return of investment, and net present value including cost-effectiveness of mitigating measures.
- G. Institutional requirements and environmental monitoring program (1 to 2 pages)**
7. This section should describe the required institutional capability (both hardware and software needs) and the monitoring or surveillance program and submission of progress reports.
- H. Public involvement (1 page)**
8. This section should include summary of scoping and public meetings and participation, press releases, notification and compliance with regulatory requirement and summary of community/interest group concerns.

APPENDIX 4

Consulted documents and individuals contacted by the Pakistan resource person

Individuals and institutions:

- Ms Zeba Ali – IUCN
- Ms Mishka Khan – Sungi
- Ms Ayesha Khan – consultant and journalist
- Mr Iftikhar Khalil, managing director NESPAK

Documents:

- Pakistan Hydro Consultants, **Environmental Assessment Summary, Ghazi Barotha Hydropower Project**, July 1992.
- Pakistan Hydro Consultants, **Report on Supplementary Environmental Studies, Ghazi Barotha Hydro Power Project**, July 1992.
- Pakistan Hydro Consultants, **Environmental Assessment: Executive Summary, Ghazi Barotha Hydro Power Project**, October 1994.
- Pakistan Hydro Consultants, **Environmental Assessment: Draft Feasibility Report; Volume 7, Ghazi Barotha Hydro Power Project**, April 1991.
- IUCN, **Environmental Site Comparison for the Barrage of the Ghazi Barotha Hydro Power Project**, June 1993.
- SUNGI Development Foundation, **A Report on the Key Issues, Ghazi Barotha Hydro Power Project**, by Ayesha Khan, Under Publication.

APPENDIX 5

Involvement of the local public in the EIA process

Scoping Sessions held with	Venue	Date	Total participants	Key participants
1. Civil Administration	Committee Room, GM office, Tarbela	July 16, 1990	15	<ul style="list-style-type: none"> • Deputy Commissioners of Abbottabad Swabi and Attock
2. District Council, Abbottabad	District Council Hall, Abbottabad	Nov. 13, 1990	10	<ul style="list-style-type: none"> • Deputy Commissioner, Abbottabad • Chairman, District Council, Abbottabad • Councillor, Ghazi
3. District Council, Attock	District Council Hall, Attock	Nov. 14 1990	30	<ul style="list-style-type: none"> • Deputy Commissioner, Attock • Chairman, District Council, Attock • Councillors of Ghurghushti, Khagwani, Musa, Kamra, Thikarian, Mala, Shah Dher and Rangpur
4. Local Population (male)	Isa Jallo Hasanpur Mian Dheri Ghurghushti Malak Mala Bhangi Khagwani Musa Bahadur Khan Kamra Ghazi Nurpur Karmalla Barotha	Nov. 15, 1990 Nov. 17, 1990 Nov. 18, 1990 Nov. 20, 1990 Nov. 20, 1990 Nov. 21, 1990 Nov. 24, 1990 Nov. 25, 1990 Nov. 26, 1990 Nov. 27, 1990 Nov. 28, 1990 Nov. 29, 1990 Dec. 02, 1990 Dec. 02, 1990	27 23 43 12 54 26 32 18 29 21 31 52 43 107	<ul style="list-style-type: none"> • Chairman, Union Councils of Ghazi, Ghurghushti, Bhangi, Bahadur Khan and Kamra • Vice Chairmen, Union Councils of Khagwani, Ghazi and Rumian • Members, Union Councils of Thazi, Kotehra, Qazipur, Kamra, Salam Khan • Village Notables and Farmers
5. Local Population (female)	Isa Jallo Hasanpur Ghurghushti Mian Dheri Malak Mala Barazai Walidad Khagwani Musa Jatial Kamra Nurpur Karmalla Barotha	Nov. 15, 1990 Nov. 17, 1990 Nov. 18, 1990 Nov. 20, 1990 Nov. 20, 1990 Nov. 21, 1990 Nov. 21, 1990 Nov. 24, 1990 Nov. 25, 1990 Nov. 26, 1990 Nov. 27, 1990 Nov. 28, 1990 Dec. 02, 1990 Dec. 02, 1990	23 30 91 15 44 9 39 15 17 17 17 23 18 12	<ul style="list-style-type: none"> • Notable ladies of the area • School teachers • Lady doctors • Social workers • Housewives • School girls

6.	Members of National & Provincial Assemblies	Committee Room, GM office, Tarbela	Jan. 14, 1991	15	<ul style="list-style-type: none"> · Member National Assembly from Attock · Member National from Swabi · Members Provincial Assembly from Attock (2) · Councillor, Ghurghushti
7.	Speaker National Assembly	Committee room, National Assembly	Mar. 13, 1991	5	<ul style="list-style-type: none"> · Speaker National Assembly- /Member National Assembly from Abbotabad
8.	Chief Minister, NWFP	Chief Minister's Secretariat, Peshawar	Feb. 16, 1992	10	<ul style="list-style-type: none"> · Chief Minister, NWFP · Minister for Finance, NWFP · Minister for Irrigation, NWFP · Chief Secretary, Govt. of NWFP
9.	International Union for Conservation of Nature and Natural Resources (IUCN/-Pakistan)	IUCN office at Karachi	Feb. 27, 1992	6	<ul style="list-style-type: none"> · Programme administrator
10.	World Wide Fund for Nature (WWF/Pakistan)	PHC office, Lahore	May 25, 1992	6	<ul style="list-style-type: none"> · Director, WWF, Pakistan · Director, Land and Wildlife, WWF, USA
11.	Sungl Development Foundation	Committee Room, GM office, Tarbela	July 13, 1992	14	<ul style="list-style-type: none"> · Chairman, Sunghi Development Foundation · Programme Administrator, (IUCN/Pakistan)
12.	Affected house owners	<ul style="list-style-type: none"> · Tarbela, Ghazi · Banda Feroza · Barotha 	Nov. 14, 1993 & Apr. 04, 1994	25 30 36	<ul style="list-style-type: none"> · Affectees losing houses · Affectees losing houses · Affectees losing houses