

## **APPENDICES**

**with the advice for  
Terms of Reference for the  
environmental impact statement  
for the Pakistan Tanners  
Association's development  
strategy for the tannery sector of  
Sialkot, Pakistan**


**(appendices 1 to 5)**

## APPENDIX 1

### Letter from DGIS dated 16 January 1996, in which the Commission has been asked to submit an advice for Terms of Reference

Ministry of Foreign Affairs

The Hague

	Commissie voor de m.e.r. OS
INGEKOMEN 17 JAN. 1996	
nummer:	009-96
deelen:	021-1
kegde naar:	Pa/Sc/Kh/Sh

Commissie voor de m.e.r./OS  
(National Netherlands Commission for EIA)  
att. drs. J.J. Scholten  
Postbus 2345  
3500 GH Utrecht

Directorate-General  
International Cooperation

Date : 16/01/96

Re : Masterplan Sialkot Tannery Sector  
WW92850, jrc nr. 381  
vlgnr. 95/021

Ref :  
DST/ML/95/672

With reference to the agreement between DGIS and the Commission I herewith request an advice on the Terms of Reference for the elaboration of the Masterplan for the Development of the Tannery Sector in Sialkot, Pakistan. The Masterplan would in fact consist of the Environmental Impact Statement in which also the relevant socio-economic, economic-financial and institutional factors are dealt with.

From the side of Pakistan the Pakistan Tanners Association Ltd. (PTA) is the initiator. From the side of the Netherlands, the relevant department is the MILIEV-programme, for which Haskoning has applied for funds on behalf of PTA.

The Masterplan for Sialkot has to be seen in relation to a similar plan for Multan, Pakistan and the CETP in Korangi, Pakistan.

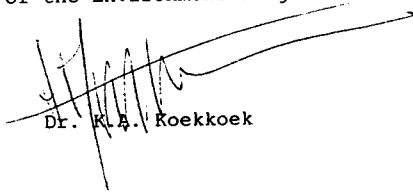
For both plans a phased approach, and a menu of options would be an approach that is flexible on the one hand and give sufficient guidance for the tanners to strengthen their environmental performance, including a possible relocation to an industrial site and preparation of this site.

This Advice will be a follow-up to a preliminary advice of the Commission concerning the tanning industry in Pakistan and will be an important asset for the development of a future programme between DGIS and the tanners in Pakistan.

In the meeting on December 20, 1995 between DPO/BL, DAL/CO, DST/TA and DST/ML you were briefed about the subject and given additional background material.

The budget and members of the working group for this advice are awaited. A combined visit tot Sialkot, Multan and Korangi might be a practicle approach.

THE MINISTER FOR DEVELOPMENT COOPERATION  
For the Minister  
Head of the Environment Programme



Dr. R. A. Koekkoek

## **APPENDIX 2**

### **Project information**

**Proposed Activity:** The Pakistan Tanners Association (PTA) proposes to define a development strategy for the tannery industry in Sialkot, Punjab, Pakistan. The final objective of the strategy is to relocate all or part of the tanneries from the residential areas of the city of Sialkot to an industrial estate outside the city. Residents of the affected areas are suffering serious negative environmental and health effects of these tanneries and increase pressure on Municipal Authorities to impose relocation. National Environmental Quality Standards (NEQS) for emissions have come into force by 1 July 1996. Both industries and municipalities must comply with these standards. Tanneries are draining their untreated effluent to the city sewers thus compromising compliance of the Municipality with NEQS. The Municipality favours relocation. The tanners, however, are reluctant to relocate.

**Categories:** Industrial development DAC/CRS code 91400, Water and sewerage DAC/CRS code 92011, Waste management and disposal DAC/CRS code 92013

**Project numbers:** DGIS: WW92850, JRC 381, vlgnr. 95/021; Commission for EIA: 021

**Progress:**

Letter requesting advice for Terms of Reference: 16 January 1996

Site visit by working group: 14 – 26 March 1996

Advice for Terms of Reference submitted: 24 September 1996

**Composition of the working group of the Commission for EIA:**

Mr J.W. Kroon (chairman)

Mr R. Ooijen

Mr Parvaiz Naim (local expert)

Mr I. van der Putte

Mr M. Siebel

Mr Shujauddin Siddiqui has contributed as resource person.

**Technical secretary:** Mr R.A.M. Post.

### APPENDIX 3

#### Programme of visit EIA Commission to Pakistan March 14 to 26, 1996

<b>Date/day</b>	<b>Time</b>	<b>Programme</b>
March 14, (Thu)	Night	Arrival of EIA Commission at Karachi and stay at Hotel Pearl Continental
March 15, (Fri)	16.00 hrs	Off day. Study of documents. Welcome to resource person Mr Shujauddin Siddiqui and working group member Dr. Parvaiz Naim
March 16, (Sat) Karachi	10.00 hrs	Presentation on PTAs Environmental Management Programme by Mr Gulzar Firoz, Chairman PTA Environmental Committee (at PTA EML office, Korangi)
	10.45 hrs	Presentation on Multan and Sialkot Leather Complexes by Dr. Junaid Ahmad, advisor PTA on environment
	11.30 hrs	Presentation on Korangi Environmental Programme by Mr Kamal Shabryar, Project Director, PTA-EML
	14.30 hrs	Visit of the Tannery Cluster and selected tanneries
March 17, (Sun) Karachi	09.30 hrs	Meeting with Secretary to Sindh Forest & Environment Dept. Mr Bahauddin Sirhindi and representative of Sindh Environmental Protection Agency (EPA), Mr Fazal A. Nizamani
	11.00 hrs	Meeting with Additional Chief Secretary Govt. of Sindh Mr Jewan Khan
	12.30 hrs	Meeting with Country Representative IUCN Ms Aban Marker Kabaraji
	14.00 hrs	Visit to Site Leather Industries
	20.00 hrs	Dinner by Pakistan Tanners Association (PTA) at Holiday Inn, Crown Plaza
March 18 (Mon) Karachi	10.00 hrs	PTA's workshop on 'Socioeconomic Dimension of the Korangi Environmental Management Programme' at PTA-EML office
	13.00 hrs.	Lunch at PTA-EML offices
	14.00 hrs	Working session with the EIA Commission and rounding off

March 19, (Tue) Multan	morning	Departure for Multan by Aero Asia (departure 07.45 hrs)
	11.30 hrs	Meeting with Multan Development Authority (Mr Sardar Nazeer)
	12.30 hrs	Meeting with Multan Municipal Corporation
	14.00 hrs 20.00 hrs	Workshop with tanners in Multan Dinner by PTA (Multan Tanners) at Holiday Inn
March 20 (Wed) Multan + Lahore	09.30 hrs	Field trip to tannery clusters and the proposed sites for Leather Complex
	18.00 hrs	Leave Multan for Lahore (by Air PK 388, departure (delayed from 18.00 hrs to 21.00 hrs) stay overnight in Lahore at Pearl Continental Hotel, Lahore
	22.30 hrs	Dinner by PTA Northern Zone at Pearl Continental, Lahore
March 21, (Thu)  Sialkot	08.30 hrs	Travel to Sialkot (by road)
	09.30 hrs	Visit to Leather Industry on Gujranwala road
	13.00 hrs	Meeting with Municipality, Sialkot
	14.00 hrs	Workshop with tanners in Sialkot
	20.00 hrs	Dinner by PTA and Sialkot tanners
March 22, (Fri) Sialkot	09.30 hrs	Field visit to tannery clusters and sites for Leather Complex
	13.00 hrs	Travel to Islamabad by road. Stay at Holiday Inn (Islamabad Hotel)
March 23, (Sat)	08.00 hrs	Pakistan Day Parade and Sightseeing Holiday
March 24, (Sun) Islamabad	11.00 hrs	Meeting with Mr Salman Farouqi, Secretary Environment Govt. of Pakistan
	12.30 hrs	Lunch with Royal Netherlands Embassy
	20.00 hrs	Dinner by Royal Netherlands Embassy
March 25, (Mon)	09.30 hrs	Travel to Karachi by PK 309
	16.00 hrs	Presentation of draft ToR to PTA
March 26, (Tue)	01.40 hrs	Departure to Holland

## APPENDIX 4

### **Address of the president of the Sialkot Tanners Association to the workshop held by the Commission for EIA with the tanners of Sialkot (Chamber of Commerce, 21 March 1996)**

- \* HONOURABLE EIA COMMISSION MEMBERS
- \* VICE PRESIDENT CHAMBER OF COMMERCE/DR. JUNAID
- \* WORTHY MEMBERS OF SIALKOT TANNERS ASSOCIATION AND PTA

I welcome you all here and would like to express my deep gratitude to Dr. Junaid Ahmed Managing Director NMC, Mr. Hanif Khan senior vice president Chamber of Commerce and my tanners colleagues who assisted me to organize this important meeting to find out some ways and means to solve the environmental hazard from tanneries effluent in Sialkot .

Sialkot with the population of approximate half million peoples is the second largest foreign exchange earning city of Pakistan . The tanning industry in Sialkot comprises from very small to medium size tanneries producing leather for garments and sports products . All of the production of these tanneries sells for direct or indirect export of leather products to all over the world .

The tanning industry in Sialkot was established in big way in early 80's, and has since then grown steadily . Leather tanneries in small clusters existed in Sialkot for many years . Initially leather was obtained from Kasur and other cities and was processed into leather jackets, gloves, and other products . To meet the growing demand for leather, tanneries have been and are continuing to be established in Sialkot . Over the past eight years 135 small and medium sized tanneries have been developed in the city in nearby areas but no town planning or environmental planning consideration have been applied

#### LOCATION AND GENERAL DESCRIPTION OF TANNERIES .

- Tanneries in Sialkot located in different six areas are as follows
- Sambrial (Wazirabad Road)
  - Haji Pura, Pul Aik Daska Road
  - Pasroor Road
  - Said Pur - Gondal Road .
  - Small Industrial estate Sialkot
  - Malkay Kallan - Head Marala Road

As these tanneries are scattered in different areas and difficult to control their pollution . It was consensus on the idea to form a Sialkot tannery zone or Sialkot leather complex with all its

infrastructure at the place : distant from the city and residential area . Keeping in view the aspects of leather complex for Sialkot . The most suitable area found was Sambrial Wazirabad road where already 32 tanneries established .

The basic idea of establishment of Sialkot tannery zone at Sambrial Wazirabad on the following reasons

- 1- The biggest cluster of tanneries already established
2. Distant from the city area and residential area .
- 3- 125 Acres of land available for future expansion for new tanneries between upper and lower Chanab .
- 4- Most of proposed area already sold for tanneries .

So, all forementioned reasons and facts make Wazirabad road Sambrial the most suitable place for leather complex or STZ .

**PRINCIPAL FEATURES OF SIALKOT TANNERY ZONE OR LEATHER COMPLEX .**

The principal features of the proposed SLC would include :

- (I) Hides & Skin Market .
- (ii) Basic Infrastructure Facilities .
  - ▲ A modular Combined Effluent Treatment Plant (CEPT) .
  - ▲ A Combined Chrome Recovery Plant .
  - ▲ Solid Waste Collection and Disposal System .
  - ▲ Water Supply Installation .
  - ▲ Power Availability .
  - ▲ Internal Road Network .
  - ▲ Sewerage and Drainage .
  - ▲ Street Lighting .



(iii) **Centralized Services:**

- ▲ Research and Development Centre .
- ▲ Data Bank .
- ▲ Trade Mart .
- ▲ Training Centre
- ▲ Telecommunication Facilities .
- ▲ Export Windows / Display Centres .
- ▲ Fashion & Design Centre .
- ▲ Leather Machining Workshop.
- ▲ Chemicals .
- ▲ Warehouse .
- ▲ Social Infrastructure .

(iv) **Processing & Manufacturing Units (in modular form)**  
**Type of leather industry in.(SLC)**

- ▲ Chrome Tanneries .
- ▲ Vegetable Tanneries .
- ▲ Footwear Units .
- ▲ Footwear Component Units .
- ▲ Leather Goods Units .
- ▲ Leather Garments Units .
- ▲ By-product Units .
- ▲ Chemical Units .
- ▲ Others .

### EXPECTED INVESTMENTS .

Based on an implementation schedule over a period of 3 years, the expected investment in the Sialkot Leather Complex for the Development of Environmental Infrastructure need will explain by Dr Junaid. Facilities is estimated as per the following breakdown :

<u>S.No.</u>	<u>Area of Work</u>	<u>Amount</u> (in million Pak. Rs.)
1.	Land cost and site development for environmental infrastructure facilities .	40
2.	Water supply, storm water drainage, electricity and roads .	30
3.	30 mld waste water collection & conveyance .	30
4.	Modular CETP for tannery effluent (30 mld)	250
5.	Tertiary effluent treatment and water recycling system .	45
6.	Common Chrome recovery unit .	10
7.	Chrome recovery in individual tanneries (about 50 units @ Rupees 0.3 million each)	50
8.	CETP lab. and environmental monitoring facilities (Air, Land & Water)	20
9.	Sludge/solid and hazardous waste collection and disposal system .	30
10.	Technical advisory services (Consultancy)	80
	<b>TOTAL</b>	<b>585</b>

### ADVANTAGES OF S.T.Z ON SLC:

The main advantage of the SLC is to provide comprehensive infrastructure and support services to ensure that the flow of raw material from the hides & skins market is transformed into products with complete value additions at the Complex itself, thereby enabling to capture of a sizable portion of Pakistan's export .

The SLC is expected to provide vital role in the development of leather tanning and leather made-ups production in the lower and upper Chenab areas . Besides Sialkot it will also benefit the adjoining areas of Northern and Central Punjab including Daska, Wazirabad, Gujrat, Gujranwala etc. With the establishment of SLC, the government would be justified on notifying that tanneries may only be established in the Complex and not outside in the forementioned areas.

Sialkot Leather Complex conceived to offer complete forward and backward linkages, on-site value additions, online technological upgradation, and export dedication to attract global leather interests .

Secondly, the unhygienic conditions created due to discharge of untreated tannery effluent and the haphazard dumping of solid and hazardous wastes into the open environment surrounding the congested residential areas will be totally eradicated .

An added out come of the project would be that it would result in environmentally friendly products being generated , which would fully conform to the requirements of ECO-labeling ISO 9000 & ISO 14000 , along with meeting the National Environmental Quality Standards (NEQS) .

#### WORKING ARRANGEMENTS AND IMPLEMENTATION PLANS

It is proposed that the SLC project can be implemented under 3 phases :-

Phase 1:- Collective complete plan and development of drainage system septic tanks and lagoons etc for the whole proposed area at Sambrial Wazirabad road .

Phase 2:- Development of complete infrastructure of roads, electricity and other facilities need for SLC .

Phase 3:- Setting up a combined effluent treatment plant .

For the implementation of the Project, we suggest that an independent, non profit company with the same name of "Sialkot Leather Complex Ltd." be established, which along with participating private tanneries can form a Joint Stock Company (JSC) to jointly share the management responsibilities, particularly at the project inception phase . This JSC shall then assume the role of the coordinating agency in drawing up the implementation plan .

After establishing the basic infrastructure facilities, the JSC would manage their day to day affairs and upkeep , the charges for which shall be paid by the users or occupants of the Complex as service fee . Operational charges for the CETP shall be computed on

the basis of waste water quantity and quality according to a worked-out formula .

Sialkot Leather Complex needs very serious efforts to its implementation . Otherwise after 7 to 10 years it will be a complex problem like Kasur then it will be difficult to find some solution even spending double of its capital cost . I humbly request and expect full cooperation and assistance from EIA commission from Netherlands and Government of Pakistan . On behalf of PTA Northern Zone and Sialkot tanners association . We assure you of our best cooperation in the implementation of this vital project which will save the environment and health of half million people of Sialkot and assist to a very important leather products export centres of Pakistan to boost its export .

Thank you very much

Mian Naeem Javed  
President STA  
Vice Chairman (N.Z)  
Chairman PTA Environment committee Sialkot .

## APPENDIX 5

### General MILIEV guidelines (summary)

- **Sources and origin of the product:** At least 60 percent of the transaction value must be realized by enterprises in the Netherlands (the transaction value is not the total project cost but the total value of goods and services provided by the Netherlands supplier).
- **Pricing of suppliers:** Prices for goods and services rendered must be according to international competitive standards.
- **Prices of inputs and outputs:** Two major input components are to be distinguished: (i) investment costs; and (ii) operational costs. Investment costs are to be divided in a foreign and local component. Local investment costs include the costs of local equipment/materials, services, purchase of land, et cetera. Operational costs cover all costs related to maintenance, services, administration, insurance, costs of land lease, et cetera. Prices of outputs are not considered in this particular case.
- **Input and output volumes:** Details must be provided on the input- and output volumes of the proposed project. In this case it is worth to show the difference in the rate of contamination between input and output volume.
- **Costs and revenues of the project:** Based on the input- and output figures (prices and volumes), the operational surplus/deficit of the project is to be calculated by comparing operational costs with project revenues.
- **Accumulated cash flow, Internal Rate of Return and sensitivity analysis:** Based on the project life span (to be determined by the project designers) and in constant prices, the accumulated cash-flow is to be determined to be used to calculate the commercial, financial and economic Internal Rates of Return. Sensitivity analyses are to be carried out to indicate the sensitive points with regard to the financial and economic viability of the project.
- **Commercial viability:** One of the conditions for applications from the MILIEV programs is that financing shall not be extended to public or private projects that should normally be commercially viable if financed on market terms. A project is considered commercially non-viable if the project lacks capacity with appropriate financing on market principles, to generate cash flows sufficient to cover the project's operating costs and to service the capital employed. According to the OECD rules, the commercial lifetime of the project is to be set to 10 years from the first project year.
- **Financial sustainability:** An important criterion of the MILIEV program is that the financial analysis is to show that the project is financially sustainable during the economic lifetime of the project (including replacement of equipment). The financial analysis - whereby MILIEV financing is not to be included in the total investment costs - should therefore consist of two parts: non-financial operations (before financing), and financial operations (after financing). The financial Internal Rate of Return (fIRR) is based on non-financial operations and shows the financial viability of the project. The accumulated cash balance of the financial analysis after financing, shows the sustainability of the project.

- **Financial plan:** To be used as part of the financial sustainability analysis. The financial plan of the proposed project should clearly indicate the composition of: (i) foreign loans; (ii) domestic loans; and (iii) own capital. For all loans the (individual) rates of interest are to be shown including the repayment period of the principal.
- **Economic analysis:** The economic analysis considers the project from the point of view of the community as a whole. Prices are to be converted into international prices by taking border prices, or applying standard conversion factors, to reflect international costs. Taxes to be paid are not included in the economic analysis as these are transfers. Unlike the financial analysis, benefits such as pollution avoided must be included in the economic analysis. This means that these benefits have to be qualified, quantified and monetarized as much as possible.
- **Aspects of poverty and employment:** The impact of the project on poverty and employment is to demonstrate through clear qualification and quantification. The impact should be positive or at least be neutral.
- **Environment:** MILIEV dictates that the project impact on the environment must be positive.