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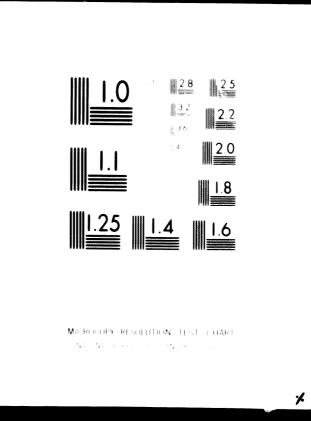
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PROJECT INFORMATION SHEET PAK-01-71

United Nations Industrial Development Organization

#### SECOND ASIAN MEETING TO

PROMOTE INDUSTRIAL PROJECTS1/

SINGAPORE, 3-11 November 1971



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#### STARCH FROM MAIZE

COUNTRY

Pakistan (West)

PROJECT

Manufacture of starch and allied

products

Total capacity: 12,750 tons annually

Total investment: \$1,964,000

FOREIGN CONTRIBUTION REQUIRED

- Loan/suppliers credit

(\$630,000) guaranteed by PICIC

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<sup>1/</sup> Sponsored by: The Economic Commission for Asia and the Far East (ECAFE)
The United Nations Industrial Development Organization (UNIDO).

#### IMPORTANT NOTICE

The basic purpose of this meeting is to provide an Exchange or Market Place for the initiation of contacts on specific industrial projects between their proponents from the Asian countries and potential suppliers of capital, finance, equipment or know-how, as the case may be, from the industrialized countries.

This Project Information Sheet has been prepared as a basis for such contacts. Its purpose is not to present detailed information about the project but to provide the recipient with an outline sufficient to determine tentative interest in principle. Any further available information on the project will be furnished on request to interested parties at the Meeting.

Experience has shown that industrialists frequently prefer to carry out their own further investigations in detail into projects in which they are interested, but assistance from UNIDO in these matters can be rendered to the Asian country concerned on request.

This Information Sheet contains only the information supplied to UNIDO by the proponent of the Project. UNIDO can therefore take no responsibility for its accuracy.

#### STARCH FROM MAIZE

#### I. INTRODUCTION

#### · The Project

The proponents propose the construction of a new factory for the manufacture of starch, liquid glucose, corn oil and cattle feed from maize. Maize is abundantly available in West Pakistan where the factory will be sited, and the entire production will be exported except the by-product, cattle feed cake, will be sold in the domestic market.

#### . Government Attitude

The government will support and assist all new enterprises, which create additional employment, utilize domestic raw material and, as in this case, is mainly export oriented. The project is sponsored by the Pakistan Industrial Credit and Investment Corporation Ltd. (PICIC), a leading financial institution, in which Pakistani private investors, the World Bank Group, and financial institutions in industrialized countries are share—holders. The repayment of the loan or suppliers credit will be guaranteed by PICIC. (Further information concerning PICIC is given in a later part of this sheet).

#### Foreign Contribution Required

The total cost of the project has been estimated at \$1,964,000. Of this, \$630,000 will be needed in foreign exchange to purchase the machinery, and the proponent is seeking assistance in the form of a loan or suppliers credit.

#### II. COMMERCIAL ASPECTS OF THE PROJECT

#### - Projected Production Capacity

	tons a year
Maize staroh	7,500
Liquid glucose	1,500
Refined cora oil	450
Cattle feed	3,300

(based on 300 working days with 3 shifts of 8 hours each)

#### - Total Domestic Consumption

The domestic consumption of starch in 1970-71 has been estimated at 45,000 tons at a value of \$12.3 million and it is expected to grow at a rate of 10% per annum resulting in a consumption of approximately

66,000 tons in 1974-75. Import of maize starch is totally banned, while substitutes like sage, farina and tapioca starch may be imported under a restricted system of export bonus voucher. The import of the substitutes will however not affect the project. The domestic market will be supplied only if exports are unable to take up the total production capacity.

#### - Prices of the Product

For maize starch only.

Proposed price:

\$273 per ton ex-factory

Local Competition:

varies from \$273 to \$294 ex-factory

#### III. PHYSICAL ASPECTS OF THE PROJECT

#### - Location

Chakkhar Tehsil Wazirabad, Gujranwala, in the Province of Punjab.

#### - Land

It is proposed to purchase 25 acres of land available at the site of the factory, of which the estimated cost is \$42,000.

#### Building

A total of 65,600 sq. ft. will be needed for the main factory building, office, storage of the raw material and product, power station, etc.

#### - Labour

Labour of varied skills is abundantly available. The estimated number of labourers required and the wages will be as follows:

Skilled:

25 workers

\$52.50 per month

Semi-skilled:

30 workers

\$31.50 per month

Unskilled:

20 workers

\$21.00 per month

#### - Infrastructure

Rail and road facilities for transport of the raw material and the finished product are available at Ghakkhar. Satisfactory arrangements will be made for disposing the effluent and waste. Neutralization pits will also be made if necessary.

#### Utilities

Power: Total power load is estimated at 600 KW which will be available without any difficulty.

Steam: The consumption of steam is estimated at 5 tons per hour, for which a boiler with an evaporation capacity of 5,000 kgs. per hour with a pressure of 250 lbs. per sq. inch is proposed to be imported. In order to supply the boiler with water free from hardness, water treatment equipment will also be imported.

Water: The water requirement will be at 25,000 gallons per day at 100% capacity. It is proposed to draw the water from a tube well.

Fuel oil: Available locally.

#### - Raw Material

Maize is available in abundant quantities in the region. The price fluctuates according to the harvest like other agro-based raw materials.

#### IV. ECONOMIC ASPECTS OF THE PROJECT

The Industrial Investment Schedule authorizes the construction of new factories, which in the first instance are based on local raw materials, and secondly are export-oriented. In this case government, taking also the employment of a labour force of 75 men into consideration, will, in the interest of the economic development, grant quick approval and the maximum of allowable incentives.

#### - Incentives

- Tax holiday for 3 years
- Out of import duty of 50% ad valorem on capital machinery and parts, 30% should be paid at the time of customs clearance and the rest of 20% can be paid by instalment over three years (after two years of grace period).
- Accelerated depreciation of machinery and building.

#### V. FINANCIAL ASPECTS OF THE PROJECT

Composition of Investment	(in US \$)			
	Local Cost	Foreign Exchange	Total	
Pre-operation cost	32,000	-	32,000	
Fixed Assets:				
Land	42,000		42,000	
Building	363,000	***	363,000	
Mabhinery	624,000*	630,000	1,254,000	
Other (furniture, vehicles,	etc.) 42,000	-	42,000	
Working capital	231,000	***	231,000	
Total	1,334,000	630,000	1,964,000	

(\* including payment in the local currency for import duty of 50%, inland freight, installation cost of the imported machinery, interest during construction, contingencies, etc.)

#### - Proposed Financing Plan

		(in US \$)		
	Local Currency	Foreign Exchange	<u>Total</u>	
Equity	840,000	-	840,000	
Foreign loan/suppliers credi	t* -	630,000	630,000	
Local loan	368,000	-	368,000	
Custom debenture	126,000		126,000	
Total	1,334,000	630,000	1,964,000	

<sup>\*</sup> guaranteed by PICIC

#### VI. ADDITIONAL RELEVANT INFORMATION

The project will ultimately be implemented and owned by a public limited company which will be incorporated under the name of:

Corn Products Refining Co. Ltd.

Ghakkhar, Gujranwala

by the group of Pakistan's leading entrepreneurs called "Sethi Group", whose total assets amounting to Rs 33 million (\$7 million) and total equity invested in their undertakings is over Rs 26 million (\$5.4 million). Until the company is incorporated, the proponents may be contacted through:

Pakistan Industrial Credit and Investment Corporation Ltd. Karachi, Pakistan

#### PICIC

Pakistan Industrial Credit and Investment Corporation Ltd., was established in 1957 to foster the development of industries in the private sector on sound lines. In pursuance of this objective, it is authorized to undertake the following business.

- Provide finance to the private sector of industry in the form of long or medium-term loans in local or foreign currencies or share participation or purchase of debentures.
- Underwrite any public issue of shares and debentures.
- Guarantee and counter-guarantee loans and obligations.
- Arrange for the participation in industries of local and external finance from private and institutional investors.
- Others.
- The corporation has an authorized capital of Rs. 150 million and the paid—up capital (as of 31 December 1967) of Rs. 40 million of which 60% is subscribed by private Pakistani investors and the remaining 40% is held by International Finance Corporation and investors in USA, UK, Japan and West Germany. The corporation received foreign loan and credit in local and foreign currencies totalling Rs. 30 million and \$255 million (as of 31 December 1967) including \$143.66 million from IBRD, \$33.25 million from West Germany, \$21.60 million from USA (AID) and others from Japan, France, UK, etc.

#### - List of Machinery and Equipment Required

#### - to be imported:

One complete starch manufacturing plant with accessories.

One complete glucose manufacturing plant with accessories.

Corn oil, processing plant with accessories.

One boiler with accessories.

One water treatment plant with accessories.

- total foreign cost (C and F)

**\$**530,000

#### - to be puraches locally:

One tube-well pump

One set of oil storage tanks, vessels, lye tanks receivers

One lot of steel supporters

One lot of pipes and fittings

One lot of conveying equipment

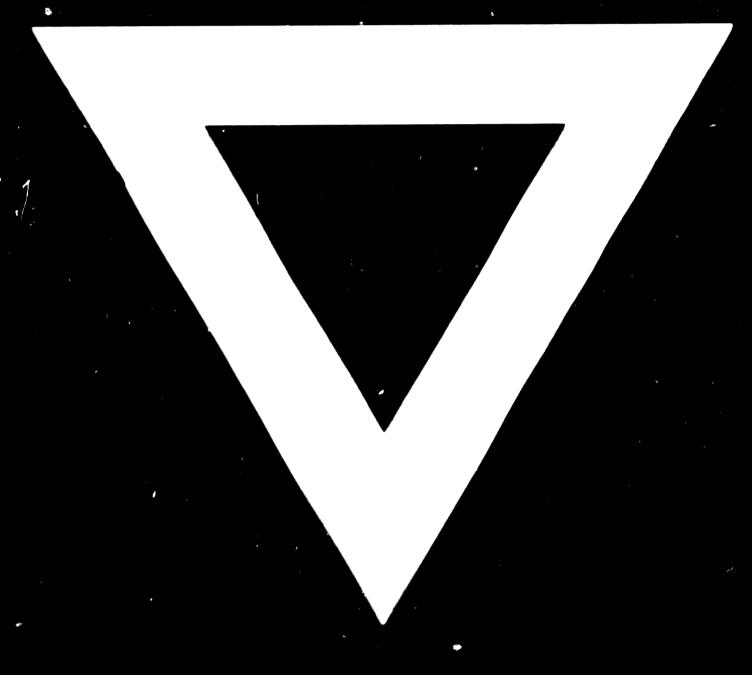
One set of filter presses

One set of expellors

Total

\$52,500

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