



OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

TOGETHER

for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact <u>publications@unido.org</u> for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at <u>www.unido.org</u>

















10822



Distr. LIMITED ID/WG.352/3 7 October 1981 ENGLISH

United Nations Industrial Development Organization

International Experts Group Meeting on Fulp and Paper Technology Manila, Philippines, 3 - 8 November 1980

THE PULP AND PAPER SITUATION IN BANGLADESH*

Ъy

Ataur Rahman Bhuiyan**

491. JC

* The views expressed in this paper are those of the author and do not , necessarily reflect the views of the secretariat of UNIDO. This document has been reproduced without formal editing.

** Executive Director, Karnaphuli Paper and Rayon Complex, Dhandraghona, Chittagong Hill Tracts, Bangladesh.

V.81-30508

Bangladesh has a long tradition of more than three decades in the field of pulp and paper making. The pulp & paper industries are mostly in the public sector and managed by the Bangladesh Chemical Industries Corporation (BCIC). The productwise installed capacities of the enterprises are as hereunder:

Product	Capacity	Mills	Fibrous Raw Materials
Market Paper Grade Pulp	30,000 T/Y	Sylhət Pulp & Paper Mills, Sylhət	Bamboo, Jute R ee d
Market Dis- solving Pulp	3,000 T/Y	Karnaphuli Rayon & Chemicals, Chittagong Hill Tracts	Bemboo
Printing & Writing Paper	48,000 ፹/ Y	Karnaphuli Paper Mills, Ctg. Hill Trauts 30,000	Bamboo & wood
		North Bengal Paper Mills, Pabna 18,000	Bagasse
Newsprint	38,000 T/Y	Khulna Newsprint Mills, Khulna	Gene wood
Mechanical Print	10,000 1/1		
Paper Board	3,000 T/Y	Bangladesh Paper Mills Dacca	Rice Straw
Paper Products	3,000 Tons of Pap ar	Fagle Box & Carton Manufacturing, Dacca	
		Bangladesh Paper Products, Chittagong	
		Karnaphuli Paper Mills Limited, Chittagong Hills Tracts	

PULP

The present capa:ity of dissolving pulp is just sufficient to meet the internal demand in rayon & callophane making in Karnaphuli Paper Rayon & Chemicalr. The current paper grade market pulp production is only 40% (12,000 tons/year) of the capacity. At full capacity utilization, this can meet the internal demand thereby eliminating the import of pulp from abroad.

Ataur Rahman Fhuiyan is the Executive Director of Karnaphuli Paper and Rayon Complex in Bangladesh. A member of numerous learned societies, he has held various positions in the government and in the private sector for the advancement of pulp and paper technology in his country.

<u> 2152</u>

The current writing and printing paper production in the country is 35,000 tons/year. The local demand is 27,000 tons/year, leaving thereby a surplus of 8,000 tons/year which is being exported to neighbouring countries like India, Burna, Nepal, Sri Lanka, Iran, Pakistan and Malaysia.

NEWSPRINT, MECHANICAL PRINT

The present production level of newsprint is 36,000 tons and mechanical print, 5,000 tons. Domestic demand is currently 19,000 tons/year leaving an erport surplus of 22,000 tons/year. These quantities are currently being marketed to Pakistan, India, Sri Lanka, Burma & China.

PAPER BOARD

The Bangladesh Paper Mills, a private enterprise, produces around 3,000 tons of simplex board per annum. The present requirement of duplex board in the country is around 7,000 tons/year most of which is imported.

PAPER PRODUCTS

The products range from manufacturing of various types of corrugated sheets, carton boxes, paper boxes, paper tubes, etc. to printing on papers including PE laminated & other gloss papers. In all these forms, the domestic consumptions of paper boards is around 15,000 tons/year.

FUTURE PLANS

A. PULP:

1. The Sylhet Pulp & Paper Mills will be placed under a balancing and long term rehabilitation scheme to operate the mill at a rated capacity of 30,000 tens of pulp per year. After the implementation of the project, the mills would be capable of producing 30,000 tens of bleached/unbleached pulp per year. This will create a scope for earning foreign exchange through export of pulp. Implementation of the project is under way with FRG assistance. However, realization of the capacity will entail higher requirement of fibrous raw materials, i.e., jute cuttings, reeds, bamboo and wood and for which additional forest areas are being acquired and developed for plantation & mechanized extraction. The procurement of village bamboo is being intensified and steps are being taken to metivate the growers to produce more bamboo in their homesteads.

2. There is a possibility to establish a pulp and paper mill of 150 TPD capacity at Dohazari in the Chittagong District, with a view to tapping the Sangu Valley & Matamuhuri forest resources for wood & bamboo. B. PAPER:

1. Karmaphuli Paper Hills has undertaken a Balancing, Modernization and Replacement Scheme to retrieve its installed capacity and to further it by another 20 TPD. This will result in better quality paper with reduced production costs,

However, with the materialization of the scheme, higher quantity of fibrous raw material will be required. Karmaphuli Paper Mills has leased forest area of 241 square miles, predominantly a bamboo forest which is managed by a separate organization known as Road Development & Bamboo Ertraction Project. Apart from this, an area of 80 square miles has been taken under pulp wood plantation by the Government Forest Development. The species are <u>Gmelina arbores</u> (Gamar) & <u>Anthocephalus kadamba</u> (Kadam). Demand for fibrous raw materials has, therefore, been taken care of in relation to the increased production capability.

desides, Keora (<u>Sonneratia apetala</u>), a mangrove forest species is being planted in the coastal region of Chittagong, Noakhali, Barisal & Patuakhali district of Bangladesh for protection against cyclone & tidal bore.

The afforestation will have 80% of Keora and 20% of Baen Plantation and 60-70 thousand acres have already been planted. This plantation can also be used for production of pulp and paper at K.P.M. New mills could also be set up in the coastal districts.

2. There is a small paper mill known as Creacent Paper Mill awaiting installation. When this is installed independently or in association with other paper mills, the paper production capacity will increase by 6,000 tons/year. For this mill, multifarious types of raw materials like waste gunny bags, sawdust, jute caddies, match veneers, cotton waste, etc. can be utilized without taxing upon the conventional raw materials like bamboo & wood.

3. The North Bengal Paper Mill, an integrated pulp & paper mill producing paper from bagasse, has also a BMR Plan to attain its rated capacity of 18,000 tons/year.

4-a. There is also a possibility of setting a paper mill of 100 tons/ day capacity by utilizing jute cuttings, inferior jute and juta wastes. For Bangladesh, a country where jute is produced in large quantities, this will be a very meaningful project for diversified application and utilization of jute.

b. Similarly, jute sticks which are now used as fuel by the villagers may also be utilized for making paper. Some experts at home and abroad consider that big paper mills could be established based on jute sticks in Bangladesh. Establishment of a paper mill of 100 tons per day capacity in a location in the heart of a jute growing area of Bangladesh may be considered initially.

5. Sylhet Pulp & Paper Mills is pursuing expansion by acquiring a paper machine of 50 TPD. This will create additional capacity up to 15,000 tons/year of specialty papers like bond, airmail, cigarette, and document papers.

C. NEWSPRINT:

The Khulna Newsprint Mills is taking up a rohabilitation scheme to regain its rated capacity of 48,000 tons/year. In view of the steep increasing demand of newsprint at home and abroad, a feasibility study is also under way for creating an additional production capacity of 25,000 tons per year.

D. PAPER BOARD:

The Sonali Board Mills now under construction at a site near Dacca, will be a significant new addition in duplex board production to the Bangladesh paper and pulp industry. The venture is a private undertaking by a consortium of local entrepreneurs. The mill will be initially producing 9,000 tons/year of duplex board and is designed to be readily expanded to a capacity of 30,000 tons/year.

SACK PAPERS

There is a domestic market of 3,500 tons of sack papers at present principally as a replacement for gunny bags in the cement, fertilizer and sugar industries. The demand will increase to 19,000 tons within five years when planned urea fertilizer and cement factories will be operational.

POTENTIALITIES

1. PRINTING, WRITING & WRAPPING PAPER

The coming year is expected to generate a growth in demand of 4-5% per annum to a level of around 35,000 tons by 1985 assuming a population of 100 million in 1985 from the present consumption level of 27,000 tons. However, the expected production by that time is expected to mise up to around 50,000 tons/year. In the coming year, therefore, there is an export potential of around 15,000 tons/year. If the proposed mills materialize, the export potentiality may be increased considerably.

2. NEWSPRINT

It is expected that domestic demand will develop at a somewhat slower rate of 3.5% per annum to a total of around 23,000 tons. The projected production will be 48,000 tons/year. Thus, in the years to come, Bangladesh can offer to export around 25,000 tons/year of newsprint with the existing set up. With the realization of the proposed expansion, the country can export another 25,000 tons/year.

3. PAPER BOARD

Considering all aspects, the overall demand for paper board in the country will grow at % per annum to about 27,000 tons by 1985. The production capacity is not likely to go beyond 20,000 tons by then. The Sonali Board can take care of this demand phase-wise. To sum up the discussion, it may be asserted that Bangladesh has a long tradition in making paper. Before the advent of modern technology, handmade papers were made in different areas of the country. At present, the country is self-sufficient in printing, writing and wrapping papers, and in newsprint. Specialty papers like bond, tissue, security papers and duplex are being imported.

ł

Conventional and non-conventional fibrous raw materials are being tapped to produce paper and the industry is making in-roads to the market abroad in steady strides. The average rainfall in the eastern and southern areas of the country is about 120 inches. This is most suitable for the growth of bamboo and fast growing semi-hardwood. Attempts are also being made to plant mangrove species for protection of the long coastal belt of Bangladesh. The climate is also suitable for tropical pines. The agricultural residues like straw and jute sticks are also potential raw materials.

This particular industry consumes a great amount of energy and water. Water resource in Bangladesh is abundant. In the field of energy, the natural gas which is available in Bangladesh can contribute greatly to economize the cost of production.

At present, only the Sylhet Pulp and Paper Mill has the advantage of gas supply. This facility, when extended to other enterprises, can ensure much economic production.

The pulp and paper sector can, thus, play a vital role in harnessing the indigenous raw materials, thus, creating job opportunities and contributing towards the economical development of the country.

